

TABLE OF CONTENTS

P1ST = PUTZMEISTER SINGLE WALL ST52 MATERIAL

P1IH = PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

P2W = PUTZMEISTER TWIN WALL INDUCTION HARDENED MATERIAL

1 INTRODUCTION

2 BOOM PIPES

- 2.1 P1ST SK 125 / 5.5" 85 BAR
- 2.2 P1IH SK 125 / 5.5" 85 BAR
- 2.3 Esser 400 SK 125 / 5.5" 85 BAR
- 2.4 P2W SK 125 / 5.5" 85 BAR
- 2.5 P2W SK 117 AND SK 112 / 5.5" 85 BAR
- 2.6 Esser 660 SK 125 / 5.5" 85 BAR
- 2.7 Esser 900 SK 125 / 5.5" 85 BAR
- 2.8 Esser 900 SK 117 AND SK 112 / 5.5" 85 BAR

3 BACK-END KITS

- 3.1 Putzmeister
- 3.2 Schwing
- 3.3 Schwing Cont. and Other

4 LAYDOWN PIPES

- 4.1 P1ST HDR / 3.0" 85 BAR
- 4.2 P1ST HDR / 4.0" 130 BAR
- 4.3 P1ST HDR / 5.0" 130 BAR
- 4.4 P1IH HDR / 5.0" 130 BAR
- 4.5 Esser 400 HDR / 5.0" 130 BAR
- 4.6 P1IH HDR / 6.0" 130 BAR
- 4.7 Esser 400 HDR / 6.0" 130 BAR
- 4.8 P1ST SK 50 / 3.0" 85 BAR
- 4.9 P1ST SK 65 / 3.0" 85 BAR
- 4.10 P1ST SK 80 / 4.0" 85 BAR
- 4.11 P1ST SK 100 / 4.0" 85 BAR
- 4.12 P1ST SK 150 / 6.0" 85 BAR
- 4.13 P1ST ZX 125 / 5.5" 200 BAR
- 4.14 P1IH ZX 125 / 5.5" 200 BAR
- 4.15 P1ST ZX 150 / 6.0" 130 BAR
- 4.16 P1IH ZX 150 / 6.0" 130 BAR
- 4.17 P1ST ZX 200 / 8.0" 130 BAR

5 INDUSTRIAL APPLICATIONS

- 5.1 Esser 400 S / 6.0" Slip-On
- 5.2 Esser 400 S / 8.0" Slip-On
- 5.3 Standard Delivery Lines

6 ACCESSORIES

- 6.1 Couplings
- 6.2 Gaskets
- 6.3 Reducers
- 6.4 Elbows Twin Wall
- 6.5 Elbows Single Layer
- 6.6 T-Pipes
- 6.7 Delivery Hoses and End Hoses
- 6.8 Cleaning Accessories
- 6.9 Weld Rings
- 6.10 Valves
- 6.11 Deck Placers
- 6.12 Other

7 REFERENCE MATERIALS

- 7.1 Assembly Directions
- 7.2 Coupling Systems
- 7.3 Which Product Does a Customer Need?
- 7.4 Deck Pipe Specs
- 7.5 How to Increase Pipe System Life
- 7.6 General Pipe Information
- 7.7 Conversion Table
- 7.8 Parts Form

INTRODUCTION

PUTZMEISTER PIPE TECHNOLOGY®

Known for quality, durability and pioneering technological innovation in the concrete placing industry, Putzmeister is a global organization with manufacturing and sales operations worldwide.

Putzmeister Pipe Technology®, a division of Putzmeister America, Inc., has partnered with an innovative new supplier to introduce an exclusive line of pipes to offer high-quality, technologically advanced products at an affordable price point.

As a result, Putzmeister is able to provide solutions for even the most demanding job sites. All delivery line products are manufactured with superior materials and attention to detail. Starting with our standard P1ST (ST52) pipe to our long lasting P2W (twin wall), we are known for high-quality, wear-resistant pipeline systems that are used in the construction, power plant, petrochemical and underground industries.

SPECIAL APPLICATIONS BUSINESS

Putzmeister's Special Applications Business (SAB) is a complete systems approach that offers all products to all projects in the tunnel and mining, dams and power generation, transportation, and marine and offshore industries.

SAB is the combination of four separate divisions including the concrete products division (CPD), Putzmeister underground concrete (PUC), pre-cast applications (PCA) and large infrastructure projects (Civil).

This complete systems approach includes constant contact with the customer from the estimating stages of a project, to working with customers on delivery times, customizing confidential solutions for unique scenarios, service, parts and training, as well as maintenance of equipment.

The SAB complete systems approach is clearly being demonstrated on numerous key projects worldwide, including the Panama Canal and Olmstead Locks and Dams projects.

Another benefit to our valued customers:

Advantage Rewards

Our Advantage Rewards program offers loyal customers substantial savings on genuine Putzmeister parts, Pipe Technology delivery systems and accessories. With every qualifying purchase, members earn rewards points good for savings on future orders. The Putzmeister Advantage Rewards program offers two levels of membership designed to maximize savings based on your purchasing preferences.

Visit **PutzmeisterAmerica.com** or call **866-734-0296** for more information.



CONTACT US

PUTZMEISTER PIPE TECHNOLOGY

EMAIL PipeTech@putzam.com
PHONE (262) 886-3200
TOLL-FREE (866) 734-0296
FAX (866) 644-1527

CUSTOMER SUPPORT GROUP

EMAIL CSG@putzam.com
TOLL-FREE (800) 890-0269
FAX (262) 884-7259

UPDATES

To have updates sent to you, please send your mailing address and email address to pmr@putzam.com.



JULIE APPENZELLAR

EMAIL Appenzelle@putzam.com
PHONE (262) 884-6340



ERIC ZIMMERMANN

EMAIL ZimmermannE@putzam.com
PHONE (262) 884-6296



TIM HARMANN

EMAIL HarmannT@putzam.com
PHONE (262) 884-6388



JORGE REZA

EMAIL RezaJ@putzam.com
PHONE (262) 884-6394



TRINO SIORDIA

EMAIL SiordiaT@putzam.com
PHONE (310) 354-8000

DELIVERY LINE SYSTEMS

Pipe Systems for Truck Mounted Boom Pumps

Delivery lines need to meet many diverse demands resulting from their particular use, the medium to be conveyed, and the connected pump. For example, the pipeline system on the placing boom of a truck mounted concrete pump is required to be flexible and movable. However, the components must be extremely robust and achieve a long service life in order to keep the operating costs low and boom pump in good repair.



Stationary Delivery Line Systems

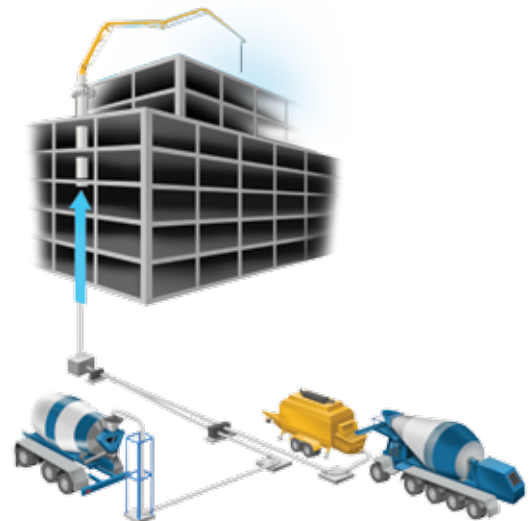
The task of a stationary delivery lines is to transport the widest range of material to wherever it is needed or further processed. When combined with stationary concrete pumps, it is high pressure that the line must withstand. At the same time, they should also be wear-resistant and it must be possible to adapt them to all conditions of use with an extensive range of accessories.



Solutions with a System

Concrete must be frequently transported over longer distances (tunnel, mining, high-rise applications) reliably, quickly and safely. This is not always easy. In most cases this involves overcoming a number of obstacles, particularly if the destination is very ambitious or far away, with restrictions to be overcome or circumvented.

This then requires complete solutions that are practical and economical. Our engineers are happy to provide you with advice about the process-oriented composition of the individual components, such as a powerful pump, delivery line and appropriate accessories.



SK DELIVERY LINE SYSTEMS

THE SK DELIVERY LINE SYSTEM – THE IDEAL COMBINATION OF ROBUSTNESS AND ADAPTABILITY

The SK quick-release coupling system is ideal if pipelines must be installed flexibly and quickly, and concrete pressures are up to 85 bar* (1233 psi). They can also be rotated axially and can be bent by up to 2° so that they can be optimally adapted to the conditions at the construction site.

*When using special seals (Trilip), this may be up to 130 bar (1885 psi).

SK DELIVERY PIPES – IN TWO VERSIONS

Single-layer SK delivery pipes are particularly economical for standard, mildly abrasive concrete compositions and moderate concrete pressures up to 85 bar (1233 psi), or in the reinforced special model with Trilip sealing inserts, up to 130 bar (1885 psi). Pipes are available that have a nominal internal diameter of 50 to 150mm. These delivery pipes are manufactured in ST52 steel either non hardened or induction hardened with factory certificate 3.1 B in accordance with DIN 2448/DIN EN 10220.

SK single-layer pipes

Single-layer SK delivery pipes are particularly economical for standard, mildly abrasive concrete compositions and moderate concrete pressures up to 85 bar (1233 psi), or in the reinforced special model with Trilip sealing inserts, up to 130 bar (1885 psi). Pipes are available that have a nominal internal diameter of 50 to 150mm. These delivery pipes are manufactured in ST52 steel either non hardened or induction hardened with factory certificate 3.1 B in accordance with DIN 2448/DIN EN 10220. P11H single wall induction hardened pipes last 2.5 times longer than ST52.

Elbows for SK lines (single-layer)

Manganese cast iron elbows: Elbows for boom pipe, which are especially wear-resistant.

Large radius elbows: Pipe elbow type for stationary concrete pumps, with thicker walls. Also for higher pressures.



SK two-layer pipes

When it comes to costs per cubic meter of pumped concrete, it may be more economical for highly abrasive materials and high outputs to invest more in the delivery line. For a longer life, Putzmeister therefore offers two-layer pipes. These consist of a hardened, especially wear-resistant inner pipe and a soft outer cladding and protective pipe.

P2W two-layer pipe

These pipes have been proven to achieve a service life which is ten times longer than that of pipes made from ST52. This is because they have an extremely high level of hardness (up to 67 HRC). Points in the line which are particularly susceptible to wear are also reinforced using special cast parts – PROCAST rings. This minimizes the expenditure that is required for modifying and maintaining the line.

Elbows for two-layer pipes

Elbows and reducers and other pipeline parts made for the same hardened or two-layer materials are available to suit all quality levels of the two-layer pipes. With these, we can offer you special quality elbows whose properties are adapted precisely to the application at hand. For example, the impact and turret elbows are manufactured in PROCAST material (special cast iron). Elbows are distinguished by a pressure-resistant steel frame and a wear-resistant cast-in insert which is reinforced at particularly critical points.





PUTZMEISTER AMERICA, INC. AND ITS SPECIAL APPLICATIONS BUSINESS (SAB) GROUP ARE PROVIDING THEIR COMPLETE GLOBAL SYSTEMS APPROACH, INCLUDING THEIR PUMPING AND MATERIAL PLACING EQUIPMENT, TO THE HISTORIC PANAMA CANAL THIRD SET OF LOCKS PROJECT (THIRD SET OF LOCKS). THE THIRD SET OF LOCKS WILL CREATE A NEW THIRD LANE OF TRAFFIC ALONG THE CANAL, DOUBLING ITS CAPACITY AND ALLOWING MORE TRAFFIC AND LONGER, WIDER SHIPS TO PASS THROUGH.

EQUIPMENT FOR THE PROJECT INCLUDES TWELVE TELEBELT® TB 130'S, ONE TELEBELT TB 200, THREE 58-METER BOOM PUMPS, ONE 52-METER BOOM PUMP, AND FOUR THOM-KATT® TK 40 TRAILER PUMPS.

Equipment from Putzmeister has been on site at the Panama Canal since August 2010. In addition to the six Telebelts® that have been working at Third Set of Locks since the beginning of the project, in fall 2012 Putzmeister sent one of its newest, large-scale Telebelts to the site. The Telebelt TB 200 offers a multitude of advantages that make it a better conveying system for high volume projects than what is currently available in the market. It offers an increased working range and superior jobsite maneuverability, with a 200-foot (61m) horizontal reach with its four-section boom arm.

Putzmeister has also sent six additional Telebelt TB 130s, which is the model that is currently being used at Third Set of Locks. In addition, four Thom-Katt® TK 40s, three 58-Meter and one 52-Meter Truck-Mounted Concrete Boom Pumps will be on the project.

The combination of the new group of equipment will be used to place the 1,400-foot (427m) long by 108-foot (55m) wide by 60-foot (18m) deep floor and walls of the canal, as well as in the construction of on-site batch plants and living quarters for construction workers.

"We're working closely with the Panama Canal Authority and the Third Set of Locks team to meet its date for completion on Aug. 15, 2014, which is 100 years to the day the initial locks on the Canal were opened," says Dave Adams, Putzmeister America's President and CEO. "Our equipment currently on site is performing impeccably and we're happy to be sending additional machines to continue work on the project."



The Canal's History

It was first determined in the 1930s that the most effective and efficient way to increase the Canal's capacity was to construct a third set of locks with larger dimensions than those of the locks built in 1914. The United States initiated the construction of the Third Set of Locks in 1939 to allow the transit of commercial and war ships that exceeded the size of the existing locks. The expansion was halted in 1942 because of the outbreak of World War II.

Interest picked back up again and studies in recent years by the Panama Canal Authority (ACP), the owner/developer of the project, pointed to the same solution as was deemed in the 1930s, that a larger, third set of locks would be the most suitable, profitable and environmentally responsible way to increase Canal capacity and allow the Panamanian maritime route to continue to grow.

Why The Third Set of Locks Are Needed

There are four objectives the ACP has put forth for this project, and they include, making long-term growing and sustainable contributions to the Panamanian society through the payments the Canal makes to the National Treasury; maintaining the Canal's competitiveness as well as the value of the Panama maritime route to the national economy; increasing the Canal's capacity in order to capture the growing demand with the appropriate level of service for each market segment; and increasing the Canal's productivity, safety and efficiency.

Project Scope

- Construction of two 1,400-foot (427m) long by 180-foot (55m) wide by 60-foot (18m) deep lock facilities. One will be in the Atlantic side and

one will be in the Pacific side of the Canal. Each of the locks will have three chambers, and each chamber will have three water reutilization basins. The basins will allow the third set of locks to reutilize 60 percent of water in each transit and use seven percent less water per transit than each of the existing lock lanes.

- Construction of access channels for the new locks and widening existing channels.
- Deepening of existing navigation channels and the elevation of Gatun Lake's maximum operating level.

Project Management

The design-build contract for the project was awarded to Consortium Grupo Unidos por el Canal, which is made up of four companies: Sacyr Vallehermoso S.A., Impregilo S.p.A., Jan De Nul n.v. and Constructora Urbana, S.A.

Putzmeister Global Resources' Involvement

Bob Weiglein, Telebelt division manager for Putzmeister America, traveled to Milano, Italy, where he was introduced to the chief commercial officer (CCO) of Impregilo S.p.A. (Impregilo) by the president of Putzmeister Italy to discuss what material placing solutions Putzmeister's SAB unit could offer for The Third Set of Locks.

"SAB is a partnership between Putzmeister Shotcrete Technology, Putzmeister Pipe Technology and Maxon Industries, Incorporated," says Weiglein. "This partnership offers a complete systems approach that offers all products to all projects around the world to customers in the tunnel and mining, dams and power generation, transportation, and marine and offshore industries."



In the meeting it was expressed that flexible, maneuverable and mobile material placing systems were key because of the job site's unstable terrain.

"The water table is very low on the Atlantic side of the Canal," explains Weiglein. "There is a lot of water and there have been land slides. The Pacific side is all rock."

After the meeting in Italy, SAB and Agreconsa, Putzmeister's local dealer for 24/7 parts, service and support in Panama, worked together to determine what system solutions would be ideal for various components of the project.

"Agreconsa is a well respected distributor who has been in Panama for seven years and takes great pride in the sale and service of Putzmeister equipment," says Weiglein. "They are committed to Panama and it's economy, and work together with us to provide exactly what customers need."

There first was a need to place concrete and gravel for the project's batching and crushing plant's foundation.

SAB and Agreconsa proposed using six Telebelt TB 130 telescopic belt conveyors for that portion of the project. Impregilo accepted the proposal.

"The reason the Telebelts were the ideal equipment choice for this portion of the job was because they do not need to be permanently mounted to the ground or a super-structure," Weiglein comments. "In the event the equipment had to move due to changing terrain conditions the TB 130's quick setup and tear down provides that flexibility and mobility that Impregilo expressed was a necessity on the job site."

"Another benefit of the Telebelt is that multiple types of material can be placed with one piece of equipment, and in the same day," explains Peter Mamopolakos. "Since both concrete and gravel are being placed on the site this feature is an invaluable asset. The Telebelts are true multi-taskers."

Don Matthews, Putzmeister's field service technician for Telebelts, went out for the first two weeks the Telebelts were on site to help start up the equipment, and ensure the customer had everything they needed.

"We always send one of our field service technicians out on new start ups for customers to ensure there is nothing in question for the customer and they feel comfortable operating their new piece of equipment," says Weiglein. "For this project, Don is on site once every quarter to check in with the customer."

Telebelts and Thom-Katts

After the initial use of the TB 130's in the rough conditions of the Panama Canal job site, six more Telebelt TB 130's were ordered for the Third Set of Locks. The additional Telebelts have helped the team stay on track with an aggressive pour schedule.

"The Telebelts are true multi-taskers and have been crucial in laying the foundation for this project," says Lucio Donadi, service manager for Agreconsa. "With their help, we are quickly finishing the bottom portion of the new locks."

Putzmeister's first TB 200 to come off the manufacturing line has been working on the "Gate Lock Head and Lock Wall Structure" on the Pacific side of the project. With a reach of 200 feet (61m), belt width of 24 inches (610mm), and high capacity output of up to 5 yd³/min (4m³/min), it is being used to reach the tallest portion of the 60-foot (18m) deep lock facilities.

The TB 200's four-section boom retracts to 74-feet, nine-inches (22.80m), providing an expansive working range. Its movement is smooth and controlled, due to its precision boom slewing control with positive stopping power. The advanced boom design with modern lattice structure made of extruded steel tubes is extremely strong, yet lightweight.



Working in conjunction with the Telebelts, six Putzmeister Jumbo Troughs are also at Third Set of Locks serving as surge hoppers for consistent concrete placement. Four Thom-Katt TK 40 shotcrete machines are also on site, being used to stabilize excavation work on both the Atlantic and Pacific sides of the project.

“While excavating the job site, it is essential to stabilize the soil walls to ensure safety moving forward,” explains Donadi. “The efficiency and ease of use of the TK 40s have been highly beneficial in this process.”

Maneuvering Challenging Terrain

While Telebelts have been used for the bottom of the locks, three Putzmeister 58-Meter and one 52-Meter Truck-Mounted Concrete Boom Pumps were brought in to help build the walls. Two boom pumps are working on each side of the project. The terrain at the Third Set of Locks has been one of the most difficult aspects of the project.

Overall, the construction team has been pleased with how the equipment has managed to maneuver the rugged terrain. “All of the Putzmeister equipment has been performing to our expectations under the difficult conditions,” says Donadi.

“However, when we have encountered any challenges, the service and support from Putzmeister has been excellent.”

Bearing a Difficult Load

In addition to the land conditions, the concrete mix used at Third Set of Locks also has proved tough to work with. One of the main mixes used to create the foundation for the locks is a Mass Aggregate, with an aggregate size from 1.5-3 inches (38-76mm), which is an extremely hard-wearing concrete and can be rough on equipment.

“Telebelts have proven to be the ideal equipment for this job, as they can place multiple types of material,” explains Donadi.

Another type of concrete, called Marine, is a pumpable mix that is being used with the boom pumps. The Marine concrete is a special mix used for any part of the locks that comes into contact with water. In addition to compressive strength and contraction, the concrete had to be formulated to guarantee at least a 100-year life span with low permeability. This is to ensure the imbedded rebar is not reached by water, which would cause it to corrode.

“The boom pumps have worked great for placing the marine concrete” says Donadi. “The Ergonic® Boom Control has been especially helpful because it allows us to set parameters that control the movement boom.”

“Putzmeister’s standard hard-chromed material cylinders, as well as exclusive multi-piston cup design, ensure a longer life of the components, less downtime and lower parts cost,” adds Weiglein. “This results in reliable pumping of hard-wearing concrete in tough conditions like we’ve seen here at the Canal.”



Demanding Pour Schedule

The sheer size of the Third Set of Locks project has added unique difficulty to the placement of the massive amount of concrete. A large number of pieces of equipment and workers are being used to place the concrete, creating a fairly congested job site.

“The target monthly average of concrete to be pumped is approximately 110,000 cubic yards (100,000 m³) at each side of the project, says Donadi. “We are placing concrete somewhere on site 24-hours-a-day. We’re pleased that the Putzmeister equipment has stood up to the challenging schedule.”

Due to the demanding pour schedule, equipment needs to be moved often. “The ease of set up of the boom pumps has been beneficial, as well,” Donadi adds. “With so many moving parts on site, having equipment that is easy to maneuver is a huge time-saver.”

“On one of the toughest projects ever attempted, machines working under difficult conditions, day and night, bearing a hard-wearing concrete mix require the highest quality engineering and reliability to move the project forward. With innovative technology, 24-hour local support, spare parts on site, and service technicians in the field, Putzmeister has brought incredible value to our team.”

Construction at Third Set of Locks started in late 2007 and the target date for completion is August 2014—100 years after the initial locks on the Canal were opened.



6

The boom pumps are being used to place a special marine mix.



7

Four Thom-Katt® TK 40 shotcrete machines are at Third Set of Locks, being used to stabilize excavation work on both the Atlantic and Pacific sides of the project.

1



A Putzmeister concrete placing system is placing tremie concrete via the in-the-wet method, a first in the U.S.

AS PART OF ONE OF THE FINAL PHASES OF THE OLMSTED LOCKS AND DAM PROJECT, A PUTZMEISTER CONCRETE PLACING SYSTEM IS PLACING UP TO 140,000 CUBIC YARDS (107,308M³) OF TREMIE CONCRETE VIA THE IN-THE-WET METHOD, A FIRST IN THE U.S., FOR THE NEW REPLACEMENT LOCKS AND DAMS NUMBERS 52 AND 53.

Located on the Ohio River, which begins in Pittsburgh, Pennsylvania and flows west 981 miles (1,579km) to the Mississippi River at Cairo, Illinois, are 20 locks and dams that provide a nine-foot (2.7m) deep year-round channel for navigation, which allows the traffic on the river to descend a total of 460 feet (140m), from 710 feet (216m) in Pittsburgh to 250 feet (76m) above sea level at Cairo, Illinois. The continued increase of water-borne commerce on the Ohio River has ultimately required periodic improvements in the waterways transportation infrastructure.

Two of the current locks and dams, numbers 52 and 53, originally built in 1929 and located on the Ohio River between Paducah, Kentucky and Cairo, Illinois, cannot meet the current and future traffic demands without significant delays because of their age and dated design.

As a result, the U.S. Army Corps of Engineers (the Corps) and the navigation industry are replacing Locks and Dams numbers 52 and 53, as one of the largest civil works projects undertaken by the Corps.

Construction of the 20th and final lock on the Ohio River, known as the Olmsted Locks and Dam Project, at river mile 964.4, was authorized by the U.S. Congress on November 17, 1988, by passage of the Water Resources Development Act of 1988 (Public Law 100-676).

2



Equipment arrived on site in spring 2010.

The Phases

Several phases make up the Olmsted Locks and Dam project:

1. Access Road/ Resident Engineers Office (Completed June 1994)
2. Lock Cofferdam (Completed December 1995)
3. Lock Construction (Completed March 2002)
4. Bulkheads (Completed July 2005)
5. Lock Approach Walls (Completed April 2004)
6. Dam Construction (Construction began spring 2004; completion date of 2015)
7. Demolition of Locks and Dams - 52 and 53 (upon completion of dam construction)

The joint venture Washington Group Alberici (WGA) was awarded the \$564 million contract from the Corps for construction of one of the last project phases, which includes constructing a 2,700-foot (823m) long concrete dam across the river. The dam will comprise five 110-foot (33.5m) tainter gates and a navigable pass section with boat-operated wicket gates, along with a fixed weir tying the dam into the Kentucky bank.

The Method

The dam is being constructed using the in-the-wet method, a first for the Corps on a dam of this size. The in-the-wet method is the construction of a dam under water. Normally, water is drained out of a cofferdam, and construction work is done in-the-dry. The in-the-wet method was used because the Corps was convinced this method would be cheaper, faster and have less impact on the environment than using conventional cofferdams.

"There is nothing standard about this job," says James Whitworth, marine engineer with WGA.

"The in-the-wet method required us to think outside of the box to figure out how we would construct the dam underwater. We had to determine which equipment would be the most efficient in this unique job environment."

The Approach

As part of the dam construction, precast shells are constructed on land adjacent to the dam location, carried into position and set underwater on a prepared bed of select fill, piles and continuity rebar grids. Once the shells are in place, tremie concrete is tremied under the precast shells to

form a continuous bond between the piles, rebar, and surface shell, and provide more strength and fuller foundation overall for the dam.

WGA consulted with Putzmeister's Special Applications Business (SAB) to help decide what equipment would be best suited to deliver the tremie concrete.

SAB is a partnership between Putzmeister America, Allentown Shotcrete Technology, Inc., Esser Pipe Technology and Maxon Industries, Inc. (Maxon).

Because of the importance of everything working correctly for the entire length of every 36-hour pour, the mix design was reviewed and trial-run testing was carried out under cold-weather conditions to determine the level of pumpability of this "sticky" mix.

"We then used the trial-run results to evaluate all of the pump equipment and the project layout prior to equipment being supplied and installed," notes Jim Bury, engineering director at Putzmeister America, also SAB member. "This attention to detail later resulted in a problem-free full system trial-run and an average output placement rate that has met the customer's expectations."

Whitworth explains, "After discussing the specific needs of the project and the environmental circumstances with SAB, we determined that they could provide us a complete concrete delivery system for dam construction. Because they manufacture and provide every component of the system, that's huge because it means less time I have to search for another company that has the other system components needed."

The Right Equipment

The equipment that SAB proposed for the project was selected and arrived on site in early spring 2010. It included:

- Two freestanding MX 43/47Z-Meter placing booms mounted on two freestanding pin towers
- One 31Z-Meter placing boom
- Two BSA 2112 skid-mounted concrete trailer pumps
- One 40Z-Meter truck-mounted concrete boom pump
- Four Maxon Maxcrete IV 18-cubic yard (13.7m³) remix hoppers
- Two DVH 5/2 diversion valves

Moving the Mix

The tremie concrete mix being used is a self-leveling mix to ensure that it fills up every square inch under the shell for ultimate strength.

"The mix's strength is 5,000 psi (34 MPa) at 90 days and has a 10-inch (254mm) slump," comments Whitworth. "It does not need any vibrating."

Placing the concrete for each of the 28 shells is a non-stop 36-hour, step-by-step process. First, a Putzmeister 40Z-Meter truck-mounted concrete pump, located on the river side of the project, delivers the concrete through slickline across the lock chambers.

"The 40Z not only helps to deliver the concrete quickly through the slickline with up to 210 cubic yards per hour (160m³/hr) output, but it also allows for smooth and controllable pumping with its free flow hydraulic system," notes Whitworth. "And that's what we need for these long pours."

In addition, the boom pump works with pressures up to 1,233 psi (85 bar).

At the end of the slickline is the Putzmeister 31Z-Meter placing boom, which delivers the concrete into the four stationary mixer drums on each of the two delivery barges. "The 31Z-Meter placing boom is perfect for customized applications like ours, providing us the utmost versatility in the concrete placement process," comments Whitworth.



SAB proposed a complete system approach made up of placing booms, truck-mounted concrete boom pumps, diversion valves, remix hoppers and trailer pumps as a solution for placing the tremie concrete.

STEP 1



The process of placing the tremie concrete begins with a 40Z-Meter boom pump that delivers the concrete from the river side through slickline across the lock chambers.

STEP 2



At the end of the slickline is a 312-Meter placing boom, which places the concrete into four stationary mixer drums on each of the two delivery barges.

NEXT, THE DELIVERY BARGES GO TO THE PLACING BARGE WHERE THE STATIONARY MIXER DRUMS DUMP CONCRETE INTO THE MAXCRETE REMIX HOPPERS. TWO DELIVERY BARGES ARE CONSTANTLY ROTATING BETWEEN THE 312-METER BOOM AND THE PLACING BARGE TO PROVIDE THE MOST EFFICIENT PLACEMENT OF CONCRETE DURING THE NON-STOP POURS.

The remix hoppers then place the concrete into the hoppers of the BSA trailer pumps. "The remix hoppers offer fast loading, fast discharge and complete remix capabilities," says Whitworth. "And those characteristics are crucial to the project given our non-stop pour process; it's almost as if this style of remixer was made specifically for this project."

"The two BSA 2112 trailer pumps performance has been outstanding," says Whitworth. "We've been averaging 100 cubic yards per hour (76m³) from each pump, but they are capable of pumping up to 142 cubic yards per hour (109m³). The rate of output from these trailer pumps has been vital in ensuring we stay on track, considering how much concrete needs to be placed."

Two DVH 5/2 diversion valves are hooked up between the BSA 2112s and MX 43/47Z placing booms. "The diversion valves have been an added support of muscle within this system," explains Whitworth. "They provide the flexibility to use either trailer pump with either placing boom, and provide cleanout routes.

STEP 3



The delivery barges then go to the placing barge where the mixer drums dump the concrete into Maxcrete remix hoppers. The remix hoppers then place the concrete into the hoppers of the BSA 2112 skid-mounted trailer pumps.

STEP 4



Two DVH 5/2 diversion valves route the concrete pumped by the BSA trailer pumps.

In addition, the valves can easily handle high pressures up to 1,885 psi (130 bar) without leaking."After the trailer pumps and diversion valves, the concrete travels up to the two MX 43/47Z placing booms. Here is where the concrete is delivered to the tremie pipes that move it underwater to its final resting place underneath the precast concrete shells.

Getting It Right

The two Z-Fold, five-section MX 43/47Z placing booms are the largest placing booms in the industry that do not require a counterweight.

"Not needing a counterweight on these placing booms saves us time and reduces labor costs," says Whitworth. "Anywhere we can save time and money is a huge benefit to us."

Both placing booms' reach proved to be invaluable on site as well. "Their monstrous 138-foot one-inch (42.09m) horizontal reach places concrete exactly where we need to into the tremie pipes," adds Whitworth. "With these pours being nonstop, we don't have time for a system that doesn't place the concrete precisely where it needs to be."

The concrete placing system has delivered 2,000 cubic yards (1,529m³) of concrete for one precast shell, and the system will deliver up to 5,000 cubic yards (3,823m³) of concrete for each of the remaining pours, until completion in 2015.

Specs

Owner/Developer

U.S. Army Corps of Engineers

General Contractor and Ready Mix Supplier

A joint venture of Washington Group and Alberici Constructors Inc., also known as Washington Group Alberici (WGA)

Putzmeister and Maxon Equipment

- MX 43/47Z-Meter placing booms (2)
- Freestanding pin towers (2)
- 31Z-Meter placing boom
- BSA 2112 skid-mounted trailer pumps (2)
- 40Z-Meter truck-mounted boom pump
- DVH 5/2 diversion valves (2)
- Maxon Maxcrete IV remix hoppers (4)



Concrete travels up to the two MX 43/47Z-Meter placing booms where it is placed into the tremie pipes that travel underwater to the concrete's final resting place underneath the precast concrete shells.



The placement of the concrete for each of the 28 shells is a non-stop 36-hour process.

2.1 BOOM PIPES

P1ST SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ A523032

PIPE LENGTH Longitud de Pipa	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.0mm		DN 125 5.5" 7.1mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER		PART NUMBER
100 - 500mm	A523031		A523083
501 - 1000mm	A523032		A523084
1001 - 1500mm	A523033		A523085
1501 - 2000mm	A523034		A523086
2001 - 2500mm	A523035		A523087
2501 - 3000mm	A523036		A523088
3001 - 3500mm	A523037		A523089
3501 - 4000mm	A523038		A523090
4001 - 4500mm	A523039		A523091
4501 - 5000mm	A523040		A523092
5001 - 5500mm	A523041		A523093
5501 - 6000mm	A523042		A523094
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	005377000		005464007
Weld Ring / Anillo	056852008		056852008
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.0mm		DN 125 5.5" 7.1mm
PIPE / Tubo	MEASUREMENT		MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm		125mm
2. Outside Diameter / Diametro Externo	133mm		139.2mm
3. Wall Thickness / Espesor	4.0mm		7.1mm
WELD RING / Anillo			
4. Outside Diameter / Diametro Externo	148mm		148mm
5. Shoulder Measurement / Espesor	17mm		17mm
LEVER COUPLING / Acople de Mango			
6. Width / Espesor	50mm		50mm
7. Outside Diameter / Diametro Externo	258mm		258mm
PIPE SYSTEM			
CAST ELBOWS / Codo Fundido		PART NUMBER	
wall thickness 16mm / espesor 16mm			
Elbow 10° 5.5" steel		088026006	
Elbow 15° 5.5" steel		057598002	
Elbow 20° 5.5" cast		245484009	
Elbow 30° 5.5" cast		258935008	
Elbow 45° 5.5" cast		057596004	
Elbow 90° 5.5" r=180		422732	
Elbow 90° 5.5" r=275		261402007	
REDUCERS / Reductor		PART NUMBER	
Reducer SK 6.0" - SK 5.5" x 200		081050008	
Reducer SK 6.0" - SK 5.5" x 500		221215001	
Reducer SK 5.5" - SK 4.5" x 1000		057604006	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.2 BOOM PIPES

P11H SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

◀ A593728

PIPE LENGTH Longitud de Pipa	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.5mm		DN 125 5.5" 6.3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER		PART NUMBER
100 - 500mm	A593717		A593780
501 - 1000mm	A593718		A593782
1001 - 1500mm	A593719		A593786
1501 - 2000mm	A593720		A593788
2001 - 2500mm	A593726		A593791
2501 - 3000mm	A593728		A593792
3001 - 3500mm	A593731		A593794
3501 - 4000mm	A593734		A593796
4001 - 4500mm	A593738		A593799
4501 - 5000mm	A593740		A593802
5001 - 5500mm	A593743		A593805
5501 - 6000mm	A593745		A593807
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A593341		A593380
Weld Ring / Anillo	A592928		A592932
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

* weight per ft/meter / peso per ft/meter

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.5mm		DN 125 5.5" 6.3mm
PIPE / Tubo	MEASUREMENT		MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm		125mm
2. Outside Diameter / Diametro Externo	134mm		137.6mm
3. Wall Thickness / Espesor	4.5mm		6.3mm
WELD RING / Anillo	MEASUREMENT		MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm		148mm
5. Shoulder Measurement / Espesor	17mm		17mm
PIPE SYSTEM			
CAST ELBOWS / Codo Fundido		PART NUMBER	
wall thickness 16mm / espesor 16mm			
Elbow 10° 5.5" steel		088026006	
Elbow 15° 5.5" steel		057598002	
Elbow 20° 5.5" cast		245484009	
Elbow 30° 5.5" cast		258935008	
Elbow 45° 5.5" cast		057596004	
Elbow 90° 5.5" r=180		422732	
Elbow 90° 5.5" r=275		261402007	
REDUCERS / Reductor			
Upon Request / Bajo Solicitud			
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.3 BOOM PIPES

ESSER 400 SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



◀ A522243

PIPE LENGTH Longitud de Pipa	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.0mm		DN 125 5.5" 7.1mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER		PART NUMBER
100 - 500 mm	A532864		A549775
501 - 1000 mm	A532865		A549776
1001 - 1500 mm	A532866		A549777
1501 - 2000 mm	A532867		A549778
2001 - 2500 mm	A532868		A549779
2501 - 3000 mm	A532869		A549780
3001 - 3500 mm	A532870		A549781
3501 - 4000 mm	A532871		A549782
4001 - 4500 mm	A532872		A549783
4501 - 5000 mm	A532873		A549784
5001 - 5500 mm	A532874		A549785
5501 - 6000 mm	A532875		A549786
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A532876		A549628
Weld Ring / Anillo	A532953		A549773
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma		DECK Plataforma
	DN 125 5.5" 4.0mm		DN 125 5.5" 7.1mm
PIPE / Tubo	MEASUREMENT		MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm		125mm
2. Outside Diameter / Diametro Externo	133mm		139.2mm
3. Wall Thickness / Espesor	4.0mm		7.1mm
WELD RING / Anillo	MEASUREMENT		MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm		148mm
5. Shoulder Measurement / Espesor	17mm		17mm
PIPE SYSTEM			
CAST ELBOWS / Codo Fundido		PART NUMBER	
wall thickness 16mm / espesor 16mm			
Elbow 10° 5.5" steel		088026006	
Elbow 15° 5.5" steel		057598002	
Elbow 20° 5.5" cast		245484009	
Elbow 30° 5.5" cast		258935008	
Elbow 45° 5.5" cast		057596004	
Elbow 90° 5.5" r=180		422732	
Elbow 90° 5.5" r=275		261402007	
REDUCERS / Reductor			
Upon Request / Bajo Solicitud			
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.4 BOOM PIPES

P2W SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



PUTZMEISTER TWIN WALL INDUCTION HARDENED MATERIAL

◀ A593630

PIPE LENGTH Longitud de Pipa	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2.5 + 1.5mm	DN 125 5.5" 3+1.5mm	DN 125 5.5" 5.6+3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
100 - 500mm	A593586	A593616	A593682
501 - 1000mm	A593588	A593620	A593685
1001 - 1500mm	A593591	A593623	A593687
1501 - 2000mm	A593594	A593625	A593689
2001 - 2500mm	A593597	A593628	A593690
2501 - 3000mm	A593598	A593630	A593691
3001 - 3500mm	A593600	A593633	A593693
3501 - 4000mm	A593603	A593636	A593696
4001 - 4500mm	A593605	A593638	A593698
4501 - 5000mm	A593608	A593641	A593700
5001 - 5500mm	A593611	A593644	A593701
5501 - 6000mm	A593613	A593647	A593704
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A593374	A593376	A593392
Weld Ring / Anillo	A592925	A592925	A592926
Weld Ring XL / Anillo XL	A576416	A576416	
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2.5+1.5mm	DN 125 5.5" 3+1.5mm	DN 125 5.5" 5.6+3mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm	125mm	125mm
2. Outside Diameter / Diametro Externo	133mm	134mm	142.2mm
3. Wall Thickness / Espesor	4mm	4.5mm	8.6mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm	148mm	148mm
5. Shoulder Measurement / Espesor	17mm	17mm	17mm
PIPE SYSTEM			
TWIN WALL ELBOWS / Codo Doble Fundido		PART NUMBER	
Elbow 10° 5.5"		A593415	
Elbow 15° 5.5"		A593416	
Elbow 20° 5.5"		A593347	
Elbow 30° 5.5"		A593417	
Elbow 45° 5.5"		A593352	
Elbow 90° 5.5" r=180		A593419	
Elbow 90° 5.5" r=275		A593423	
REDUCERS / Reductor		PART NUMBER	
Reducer 900 SK 150/6.0"-SK 125/5.5" 1070mm		A593176	
Reducer 900 SK 125/5.5"-SK 117/5.5" 3000mm		A593178	
Reducer 900 SK 125/5.5"-SK 117/5.5" 4500mm		A593177	
Reducer 900 SK 125/5.5"-SK 112/5.5" 1050mm		A594843	
Reducer 900 SK 125/5.5"-SK 112/5.5" 3000mm		A593179	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.5 BOOM PIPES

P2W SK 117 AND SK 112 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



PUTZMEISTER TWIN WALL INDUCTION HARDENED MATERIAL

◀ A593568

PIPE LENGTH Longitud de Pipa	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 117 5.5" 2+1.5mm	DN 112 5.5" 2.5+1.5mm	DN 117 5.5" 6.3+1.5mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
100 - 500mm	A593556	A593526	A593650
501 - 1000mm	A593558	A593529	A593653
1001 - 1500mm	A593561	A593531	A593656
1501 - 2000mm	A593563	A593534	A593658
2001 - 2500mm	A593565	A593536	A593663
2501 - 3000mm	A593568	A593538	A593665
3001 - 3500mm	A593570	A593541	A593667
3501 - 4000mm	A593573	A593543	A593670
4001 - 4500mm	A593576	A593546	A593673
4501 - 5000mm	A593579	A593549	A593675
5001 - 5500mm	A593582	A593551	A593678
5501 - 6000mm	A593584	A593553	A593679
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A593372	A593366	A593389
Weld Ring / Anillo	A592931	A592929	A592934
Weld Ring XL / Anillo XL	A592930		
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 117 5.5" 2+1.5mm	DN 112 5.5" 2+2mm	DN 117 5.5" 6.3+1.5mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	117mm	112mm	117mm
2. Outside Diameter / Diametro Externo	124mm	120mm	132.6mm
3. Wall Thickness / Espesor	3.5mm	4mm	7.8mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm	148mm	148mm
5. Shoulder Measurement / Espesor	17mm	17mm	17mm
PIPE SYSTEM			
CAST ELBOWS / Codo Fundido	PART NUMBER	PART NUMBER	
Elbow 10° 5.5"	A593329	A593318	
Elbow 15° 5.5"	A593405	A593319	
Elbow 20° 5.5"	A593330	A593320	
Elbow 30° 5.5"	A593331	A593321	
Elbow 45° 5.5"	A593332	A593323	
Elbow 90° 5.5" r=180	A593406	A593325	
Elbow 90° 5.5" r=275	A593333	A593324	
Elbow 90° 5.5" r=345	A593328		
REDUCERS / Reductor		PART NUMBER	
Reducer 900 SK 125/5.5"-SK 117/5.5" 3000mm		A593178	
Reducer 900 SK 125/5.5"-SK 117/5.5" 4500mm		A593177	
Reducer 900 ZXV 150/6.0"-SK 117/5.5" 1200mm		A593174	
Reducer 800 SK 125/5.5"-SK 117/5.5" 1050mm		A594844	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.6 BOOM PIPES

ESSER 660 SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



◀ A522243

PIPE LENGTH Longitud de Pipa	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2+2mm	DN 125 5.5" 2.5+2mm	DN 125 5.5" 5.6+3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
100 - 500mm	A522242	A522210	A522283
501 - 1000mm	A522243	A522211	A522284
1001 - 1500mm	A522244	A522212	A522285
1501 - 2000mm	A522245	A522213	A522286
2001 - 2500mm	A522246	A522214	A522287
2501 - 3000mm	A522247	A522215	A522288
3001 - 3500mm	A522248	A522216	A522289
3501 - 4000mm	A522249	A522237	A522290
4001 - 4500mm	A522251	A522238	A522291
4501 - 5000mm	A522252	A522239	A522292
5001 - 5500mm	A522253	A522240	A522293
5501 - 6000mm	A522254	A522241	A522294
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	506502	A513022	287683004
Weld Ring / Anillo	506483	506483	438910
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2+2mm	DN 125 5.5" 2.5+2mm	DN 125 5.5" 5.6+3mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm	125mm	125mm
2. Outside Diameter / Diametro Externo	133mm	134mm	142.2mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm	148mm	148mm
5. Shoulder Measurement / Espesor	17mm	17mm	17mm
PIPE SYSTEM			
TWIN WALL ELBOWS / Codo Doble Fundido		PART NUMBER	
Elbow 10° 5.5"		416960	
Elbow 15° 5.5"		232232002	
Elbow 20° 5.5"		240970000	
Elbow 30° 5.5"		232234000	
Elbow 45° 5.5"		224034001	
Elbow 90° 5.5" r=180		234059005	
Elbow 90° 5.5" r=275		027630000	
REDUCERS / Reductor		PART NUMBER	
Reducer 660 SK 125/5.5"-SK 112/5.5" 1000mm		A522112	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.7 BOOM PIPES

ESSER 900 SK 125 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



◀ A522193

PIPE LENGTH Longitud de Pipa	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2+2mm	DN 125 5.5" 3+1.5mm	DN 125 5.5" 5.6+3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
100 - 500mm	A522192	A522180	A522350
501 - 1000mm	A522193	A522181	A522351
1001 - 1500mm	A522194	A522182	A522352
1501 - 2000mm	A522195	A522183	A522353
2001 - 2500mm	A522196	A522184	A522354
2501 - 3000mm	A522197	A522185	A522355
3001 - 3500mm	A522198	A522186	A522356
3501 - 4000mm	A522199	A534916	A522357
4001 - 4500mm	A522200	A522187	A522358
4501 - 5000mm	A522201	A522188	A522359
5001 - 5500mm	A522202	A522189	A522360
5501 - 6000mm	A522204	A522190	A522361
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A660706	A521762	A103330
Weld Ring / Anillo	506452	A661021	438912
Weld Ring XL / Anillo XL		A522615	
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 125 5.5" 2+2mm	DN 125 5.5" 3+1.5mm	DN 125 5.5" 5.6+3mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm	125mm	125mm
2. Outside Diameter / Diametro Externo	133mm	134mm	142.2mm
3. Wall Thickness / Espesor	4mm	4.5mm	8.6mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm	148mm	148mm
5. Shoulder Measurement / Espesor	17mm	17mm	17mm
PIPE SYSTEM			
TWIN WALL ELBOWS / Codo Doble Fundido		PART NUMBER	
Elbow 5° 5.5"		430161	
Elbow 10° 5.5"		416960	
Elbow 15° 5.5"		416959	
Elbow 20° 5.5"		416958	
Elbow 30° 5.5"		416957	
Elbow 45° 5.5"		416956	
Elbow 90° 5.5" r=180		422919	
Elbow 90° 5.5" r=275		410457	
REDUCERS / Reductor		PART NUMBER	
Reducer 900 SK 150/6.0"-SK 125/5.5" 1070mm		A542370	
Reducer 900 SK 125/5.5"-SK 117/5.5" 3000mm		467509	
Reducer 900 SK 125/5.5"-SK 117/5.5" 4500mm		468761	
Reducer 900 SK 125/5.5"-SK 112/5.5" 1050mm		A523426	
Reducer 900 SK 125/5.5"-SK 112/5.5" 3000mm		487330	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

2.8 BOOM PIPES

ESSER 900 SK 117 AND SK 112 / 5.5" 85 BAR

Tuberia Para Bomba Pluma



◀ A534915

PIPE LENGTH Longitud de Pipa	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 117 5.5" 2+1.5mm	DN 112 5.5" 2+2mm	DN 117 5.5" 6.3+1.5mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
100 - 500mm	A534914	A534912	A522302
501 - 1000mm	A534915	A534913	A522303
1001 - 1500mm	A522367	A522458	A522304
1501 - 2000mm	A522368	A522459	A522305
2001 - 2500mm	A522369	A522460	A522306
2501 - 3000mm	A522370	A522463	A522307
3001 - 3500mm	A522371	A522464	A522308
3501 - 4000mm	A522372	A522465	A522309
4001 - 4500mm	A522373	A522466	A522310
4501 - 5000mm	A522374	A522467	A522311
5001 - 5500mm	A522375	A522468	A522312
5501 - 6000mm	A522376	A522469	A522313
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A521761	A521760	A521768
Weld Ring / Anillo	484444	296968008	A506772
Weld Ring XL / Anillo XL	A522364		
Lever Coupling / Acople de Mango		417249	
Gasket / Sello		055559001	
Safety Pin / Passador de Seguridad		018878004	

TECHNICAL SPECIFICATIONS Especificacion Tecnica	BOOM Pluma	BOOM Pluma	DECK Plataforma
	DN 117 5.5" 2+1.5mm	DN 112 5.5" 2+2mm	DN 117 5.5" 6.3+1.5mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	117mm	112mm	117mm
2. Outside Diameter / Diametro Externo	124mm	120mm	132.6mm
3. Wall Thickness / Espesor	3.5mm	4mm	7.8mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	148mm	148mm	148mm
5. Shoulder Measurement / Espesor	17mm	17mm	17mm
PIPE SYSTEM			
CAST ELBOWS / Codo Fundido	PART NUMBER	PART NUMBER	
Elbow 10° 5.5"	465008	453306	
Elbow 15° 5.5"	465287	453723	
Elbow 20° 5.5"	465006	453714	
Elbow 30° 5.5"	465005	453715	
Elbow 45° 5.5"	A522296	453716	
Elbow 90° 5.5" r=180	465011	445507	
Elbow 90° 5.5" r=275	465004	453717	
Elbow 90° 5.5" r=345	A510751		
REDUCERS / Reductor		PART NUMBER	
Reducer 900 SK 125 / 5.5" - SK 117 / 5.5" 3000mm		467509	
Reducer 900 SK 125 / 5.5" - SK 117 / 5.5" 4500mm		468761	
Reducer 900 ZXV 150 / 6.0" - SK 117 / 5.5" 1200mm		A109043	
Reducer 800 SK 125 / 5.5" - SK 117 / 5.5" 1050mm		A544486	
HOSES / Manguera		PART NUMBER	
Delivery Hose SK 125 / 5.5" x 2000		027643000	
Delivery Hose SK 125 / 5.5" x 3000		433497	
Delivery Hose SK 125 / 5.5" x 4000		089983009	
Delivery Hose SK 125 / 5.5" x 6000		057613000	
End Hose SK 125 / 5.5" x 3000		233649005	
End Hose SK 125 / 5.5" x 4000		242838001	
End Hose SK 125 / 5.5" x 6000		237592006	
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER	
Sponge Ball Soft		230229004	
Sponge Ball Medium		018841002	
Sponge Ball Hard		223673007	
Sponge Cube		063567001	
Sponge Pig D=150X180		253086004	
Cleaning Pig DN 125 Blue		265417001	
Cleaning Plug DN 125		253953001	
Catch Basket SK 125 / 5.5"Z CPL		276593008	

3.1 BACK-END KITS

PUTZMEISTER



BASIC PUTZMEISTER BACK-END KIT P2W

BASIC PUTZMEISTER BACK-END KIT

Kit de Codos de Salida

	PUTZMEISTER P2W	ESSER 900
	PART NUMBER	PART NUMBER
Elbow ZXM 180 / 150 90° Swing w/Clean	A593537	A522612
Elbow ZXM 180 / 150 90° Swing w/o Port		A564151
Elbow ZXM-ZXV 150 / 6.0" 74 90°	A593535	A522611
Reducer ZXV 150 / 6.0" - SK 125.5 1200mm	A595047	441016
Extended Elbow 45°	A593422	429752

BASIC PUTZMEISTER BACK-END KIT

Kit de Codos de Salida

	PART NUMBER
D Elbow PM ZXM 178 / 150 90° Swing w/Clean	417730
D Elbow PM ZXM-ZXV 150 / 6.0" - 15 90°	292079001
Reducer 660 ZXV 150 / 6.0" - SK 125 / 5.5" 1200mm	401420
D Elbow PM SK 125 / 5.5" - 62 45° 475	427190

PIPE SYSTEM		
6" (DN 150) ELBOWS FOR PUTZMEISTER BACK-END KITS / Codos de 6" (DN 150)		
	PUTZMEISTER P2W	ESSER 900
	PART NUMBER	PART NUMBER
Elbow 90° One Side		A523864
HP Ends 90° 6"		422189
Elbow 90° 6"	A593535	A522611
7" (DN 180) PUTZMEISTER ELBOWS FOR BACK-END KITS / Codos de 7" (DN 180)		
	PART NUMBER	PART NUMBER
Rear End Elbow - PUTZMEISTER		417730
Swivel Elbow - PUTZMEISTER	A593537	A522612
6" - 5" (DN 150 - DN 125) PUTZMEISTER REDUCERS / Reductores de 6" - 5" (DN 150-DN 125)		
	PART NUMBER	PART NUMBER
Reducer 1000mm		277400006
Reducer 1100mm		A522675
Reducer 1000mm 6"-5"		275104003
Reducer 1200mm		232819001
Reducer w/Clean Out 1200mm	A593173	412980
Reducer - HP Ends 1200mm		401420
Reducer 1200mm	A595047	441016
Reducer - Twin Cast 1200mm		A109043
Reducer 1300mm		A522671
Reducer 3000mm		467509
5" (DN 125) ELBOWS FOR PUTZMEISTER BACK-END KITS 660 AND 900 / Codos de 5" Para Kits de Salida 660 y 900		
	PART NUMBER	PART NUMBER
Elbow 45°	A593352	224034001
Elbow 30°		232234000
Elbow 45° 900	A593352	416956
Elbow 30° 900		416957
Extended Elbow 45° 900		429752
SPECIALTY REDUCERS FOR PUTZMEISTER AND SCHWING PUMPS / Reductores Especiales Para Putzmeister y Schwing		
	PART NUMBER	PART NUMBER
Reducer 1000mm LG	A593180	A522112
Reducer 5"-4.5" 1050mm		A523426
Reducer 5"-4.5"	A593179	487330
Delivery Pipe Elbow 900 SK 180 / ZXM 150 / 6.0" 90°	A593537	A522612
Delivery Pipe Elbow 900 ZXM-ZXV 150 / 6.0" 90°	A593535	A522611

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

3.2 BACK-END KITS SCHWING



BASIC SCHWING BACK-END KIT P2W



BASIC SCHWING BACK-END KIT Kit de Codos de Salida Schwing

	PUTZMEISTER P2W	ESSER 900
	PART NUMBER	PART NUMBER
Elbow 14° 7"	A593706	A522110
Elbow Cast 14° 7"		A578150
Swivel Elbow - SCHWING	A593528	A522111
Elbow w/Ext 90° 6"	A593401	A522108
Reducer - Twin Cast 1600mm	A593184	A523006
Elbow 45° 900	A593352	416956

PIPE SYSTEM

7" (DN 180) SCHWING ELBOWS FOR BACK-END KITS / Codos de Salida de 7" (DN 180) Para Schwing

	PART NUMBER	PART NUMBER
Swivel Elbow - SCHWING	A593528	A522111
Elbow 14° 7"	A593706	A522110

6" (DN 150) ELBOWS FOR SCHWING BACK-END KITS / Codos de Salida de 6" (DN 150) Para Schwing

	PART NUMBER	PART NUMBER
Elbow 90° 6" 660		A522097
Elbow 90° DN 150 660	A593869	A522106
Elbow w/Short Ext 90° 6"	A593399	A522105
Elbow w/Short Ext 90°	A593872	A522109
Elbow w/Ext 90° 6"	A593401	A522108
Elbow 45° 6"		A522686

PIPE SYSTEM Continued	
6" - 5" (DN 150 - DN 125) PUTZMEISTER REDUCERS / Reductores de 6" - 5" (DN 150-DN 125)	
	PART NUMBER
Reducer 500mm	A522128
Reducer 1000mm	A522121
Reducer 1240mm	A522114
Reducer - 58SX 1290mm	A522124
Reducer - Twin Cast 1290mm - PUTZMEISTER	A593182
Reducer - Twin Cast 1290mm	A523003
Reducer 1330mm	A522116
Reducer 1460mm	A522120
Reducer 1460mm	A523004
Reducer 1500mm	A522123
Reducer 1550mm	A522122
Reducer - Twin Cast 1550mm	A523005
Reducer 1600mm	A522118
Reducer - Twin Cast 1600mm	A523006
Reducer 1650mm	A522125
Reducer - Twin Cast 1650mm	A523008
Reducer 1885mm	A522117
Reducer 2540mm	A522127
Reducer 3000mm	A522126
5" (DN 125) ELBOWS FOR SCHWING BACK-END KITS 660 AND 900 / Codos de 5" Para Kits de Salida Schwing 660 y 900	
	PART NUMBER
Elbow w/Ext 90° 900	A522054
Elbow w/Ext 90° 900	A522055
Elbow 30° - PUTZMEISTER P2W	A593417
Elbow 30° 900	416957
Elbow 50° 900	A522057
Elbow w/Short Ext 45° - PUTZMEISTER	A593355
Elbow w/Short Ext 45°	A522085
Elbow w/Ext 52.5°	A522050
Elbow 45° - PUTZMEISTER P2W	A593352
Elbow 45° 900	416956
Elbow w/Ext 40° - PUTZMEISTER P2W	A593351
Elbow w/Ext 40° 900	A522058
Elbow 45° - PUTZMEISTER	A593352
Elbow 45°	224034001
Elbow w/Ext 40°	A522039
SPECIALTY REDUCERS FOR PUTZMEISTER AND SCHWING PUMPS / Reductores Especiales Para Putzmeister y Schwing	
	PART NUMBER
Reducer 1000mm LG - PUTZMEISTER	A593180
Reducer 1000mm LG	A522112
Reducer 5" - 4.5" - PUTZMEISTER	A593179
Reducer 5" - 4.5" 1050mm	A523426
Reducer 5" - 4.5"	487330

3.3 BACK-END KITS

SCHWING CONTINUED AND OTHER

PIPE SYSTEM Continued		
6" (DN 150) PIPES FOR SCHWING HARSH MIX KITS / Tubería de 6" Para Schwing "Harsh Mix" Kits		
		PART NUMBER
Make Up Pipe 6" 1600mm		A522690
Make Up Pipe 6" 1650mm		A522690
Delivery Pipe Elbow 660 SF / SM 150 / 6.0" 90° - PUTZMEISTER		A593399
Delivery Pipe Elbow 660 SF / SM 150 / 5.5" 90°		A522097
Delivery Pipe Elbow 660 SF / SM 150 / 6.0" 90°		A522105
Delivery Pipe Elbow 660 SF / SM 150 / 6.0" 90° R		A522102
Delivery Pipe Elbow 660 SF / SM 150 / 5.5" 45°		A522686
Delivery Pipe Elbow P2W SF / SM 150 / 6.0" 90° - PUTZMEISTER		A593401
Delivery Pipe Elbow 900 SF / SM 150 / 6.0" 90°		A522106
Delivery Pipe Elbow 900 SF / SM 150 / 6.0" 90°		A522108
Delivery Pipe Elbow 900 SF / SM 150 / 6.0" 90°		A522109
Delivery Pipe Elbow 900 SF / SM 180 / 7.0" 14°		A522110
Delivery Pipe Elbow P2W SF / SM 180 / 7.0" 14° - PUTZMEISTER		A593706
Delivery Pipe Elbow PM SF / SM 180 / 7.0" 14°		A536115

OTHER PIPE SYSTEM		
6" - 5" (DN 150 - DN 125) REDUCERS FOR KLEIN, SERMAC AND REICH PUMPS Reductores Para Bombas Klein, Sermac y Reich de 6"- 5" (DN 150-DN 125)		
		PART NUMBER
Reducer 1000mm	KLEIN p/n 201323	150210010101
Reducer 1070mm	SERMAC p/n 1473877	150220002800
Reducer 1000mm - REICH	REICH p/n 417087	150210001401
CIFA 6" (DN 150) ELBOW AND 6" - 5" (DN 150 - DN 125) REDUCERS FOR BACK-END KITS "Cifa" Codo de 6"(DN 150) y Reductor de 6"- 5" (DN 150-DN 125)		
		PART NUMBER
Elbow 90° 6" 660	CIFA p/n 234277-6	3460
Reducer 1286mm	CIFA p/n 234280-6 / 235147	2230/1
Reducer 1596mm	CIFA p/n 240438	150210007902

4.1 LAYDOWN PIPES

P1ST HDR / 3.0" 85 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ UPON REQUEST

PIPE LENGTH Longitud de Pipa		7 GAUGE 4.6mm	11 GAUGE 3.0mm
MAKE UP PIPE / Tuberia de Ajuste		PART NUMBER	PART NUMBER
100 - 500mm		Upon Request	A584706
501 - 1000mm		Upon Request	A584707
1001 - 1500mm		Upon Request	A584708
1501 - 2000mm		Upon Request	A584709
2501 - 3000mm		A529213	A584710
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico		A529214	A527368
Weld Ring / Anillo		A527365	A527365
Lever Coupling / Acople de Mango	528210		
Lever Coupling Forged	A531765		
Lever Coupling Cast	A522621		
Lever Coupling Adjustable	A522620		
Gasket / Sello	A527008		
TECHNICAL SPECIFICATIONS / Especificacion Tecnica			
PIPE / Tubo		MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno		76mm	76mm
2. Outside Diameter / Diametro Externo		85mm	82mm
3. Wall Thickness / Espesor		4.5mm	3.0mm
WELD RING / Anillo		MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo		106.2mm	106.2mm
5. Shoulder Measurement / Espesor		11mm	11mm

4.1 LAYDOWN PIPES

P1ST HDR / 3.0" 85 BAR

PIPE SYSTEM			
CAST ELBOWS / Codo Fundido	DEGREE OF ANGLE	CLR <i>inch / mm</i>	PART NUMBER
<i>wall thickness 16mm / espesor 16mm</i>			
DN 80-3"	90	16 / 406	A531784
DN 80-3"	45	7.5 / 190	A529150
DN 80-3"	45	48 / 1219	A531783
DN 80-3"	45	16 / 406	A531785
DN 80-3"	90	19 / 482	524407
DN 80-3"	90	114 / 2895	524473
DN 80-3"	90	39 / 1000	524408
REDUCERS / Reductor	QUALITY	LENGTH <i>ft / mm</i>	PART NUMBER
HDR 112 / 4" - HDR 80 / 3"	400IH	39 / 1000	A556506
DELIVERY HOSES / Manguera WIRE REINFORCED		LENGTH <i>ft / mm</i>	PART NUMBER
3"		10 / 3048	A579270
3"		12 / 3657	A579271
3"		15 / 4572	A579272
3"		25 / 7620	A579273
3"		50 / 15240	A579274
DELIVERY HOSES / Manguera FABRIC REINFORCED		LENGTH <i>ft / mm</i>	PART NUMBER
3"		10 / 3048	A579317
3"		12 / 3657	A579318
3"		15 / 4572	A579319
3"		25 / 7620	A579320
3"		50 / 15240	A579321
CLEANING ACCESSORIES / Accesorios de Limpieza			PART NUMBER
Sponge Ball Soft			Upon Request
Sponge Ball Medium			000246000
Sponge Ball Hard			257107002
Catch Basket			277920007
Cleaning Connection			081534003
Cleaning Lid			081886007

4.2 LAYDOWN PIPES

P1ST HDR / 4.0" 130 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ UPON REQUEST

PIPE LENGTH Longitud de Pipa	7 GAUGE 4.5mm	9 GAUGE 3.6mm	11 GAUGE 3.0mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER
1000 - 1500mm	Upon Request	A583513	Upon Request
1501 - 2000mm	Upon Request	A583514	Upon Request
3000mm	A531772	A529074	A527379
6000mm	Upon Request	Upon Request	Upon Request
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A532176	005372005	A527378
Weld Ring / Anillo	524054	524054	524054
Lever Coupling / Acople de Mango	527953		
Lever Coupling Forged	A531766		
Lever Coupling Cast	A527025		
Lever Coupling Adjustable	A532193		
Coupling Screw	A532196		
Gasket / Sello	A526533		
TECHNICAL SPECIFICATIONS / Especificacion Tecnica			
PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	102mm	102mm	102mm
2. Outside Diameter / Diametro Externo	111mm	109.2mm	108mm
3. Wall Thickness / Espesor	4.5mm	3.6mm	3.0mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	131.8mm	131.8mm	131.8mm
5. Shoulder Measurement / Espesor	13.4mm	13.4mm	13.4mm

4.2 LAYDOWN PIPES

P1ST HDR / 4.0" 130 BAR

PIPE SYSTEM				
CAST ELBOWS / Codo Fundido	wall thickness 16mm / espesor 16mm			
DEGREE OF ANGLE	CLR inch / mm	6.4	4.0	3.6
		PART NUMBER	PART NUMBER	PART NUMBER
90	48 / 1219	A529056		
90	10 / 275	A529842		
90	16 / 406	A529067		
45	48 / 1219	A529060		
45	16 / 406	A529069		
30	30 / 762		A539379	
30	32 / 812		A539382	
20	48 / 1219		A539378	
20	32 / 812		A539381	
15	48 / 1219		A539374	
15	32 / 812		A539380	
90	32 / 812			A528349
45	32 / 812			A528350
REDUCERS / Reductor	QUALITY	LENGTH inch / mm		PART NUMBER
SK 125 / 5.5"-HDR / 100 / 4.0"	ST52	39 / 1016		A109000
SK 125 / 5.5"-HDR / 100 / 4.0"	400IH	39 / 1000		A556508
HDR 125 / 5.5"-HDR / 100 / 4.0"	ST52			AT305426
DELIVERY HOSES HDR 100 / Manguera WIRE REINFORCED			LENGTH ft / mm	PART NUMBER
4"			10 / 3048	A579280
4"			12 / 3657	A579281
4"			15 / 4572	A579282
4"			25 / 7620	A579283
4"			50 / 15240	A579284
DELIVERY HOSES HDR 100 / Manguera FABRIC REINFORCED			LENGTH ft / mm	PART NUMBER
4"			10 / 3048	A579322
4"			12 / 3657	A579323
4"			15 / 4572	A579324
4"			25 / 7620	A579325
4"			50 / 15240	A579326
END HOSES HD2 100 / Manguera WIRE REINFORCED			LENGTH ft / mm	PART NUMBER
4"			10 / 3048	A583177
4"			12 / 3657	A583178
4"			15 / 4572	A583179
END HOSES HD2 100 / Manguera FABRIC REINFORCED			LENGTH ft / mm	PART NUMBER
4"			10 / 3048	A583203
4"			12 / 3657	A583204
4"			15 / 4572	A583205
CLEANING ACCESSORIES / Accesorios de Limpieza				PART NUMBER
Sponge Ball Soft				230227006
Sponge Ball Medium				016091003
Sponge Ball Hard				234053001
Sponge Cube				243861006
Sponge Scraper for Truck Mounted CP				256126000
Cleaning Scraper for Stationary Lines				253952002
Clean Out Port				A529674

4.3 LAYDOWN PIPES

P1ST HDR / 5.0" 130 BAR

Línea de Entrega Estacionaria



◀ A549617

PUTZMEISTER SINGLE WALL ST52 MATERIAL

PIPE LENGTH Longitud de Pipa	7.1mm	4.0mm	9 GAUGE 3.6mm	11 GAUGE 3.0mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
500mm	A549616	A523019	Upon Request	Upon Request
1000mm	A549617	A523020	Upon Request	A545418
1500mm	A549618	A523021	Upon Request	Upon Request
2000mm	A549619	A523022	Upon Request	A545419
2500mm	A549620	A523023	Upon Request	Upon Request
3000mm	A531773	A523024	A531771	A535485
3500mm	A549622	A523025	Upon Request	Upon Request
4000mm	A549623	A523026	Upon Request	Upon Request
4500mm	A549624	A523027	Upon Request	Upon Request
5000mm	A549625	A523028	Upon Request	Upon Request
5500mm	A549626	A523029	Upon Request	Upon Request
6000mm	A549627	A523030	Upon Request	Upon Request
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	005464007	005377000	005377000	A552031
Weld Ring / Anillo	524035	524035	524035	524035
Lever Coupling / Acople de Mango	518049			
Lever Coupling Forged	A531767			
Lever Coupling Cast	A522618			
Lever Coupling Adjustable	A522619			
Coupling Screw	A528761			
Gasket / Sello	A522711			

TECHNICAL SPECIFICATIONS / Especificacion Tecnica

PIPE / Tubo	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno	125mm	125mm	125mm	125mm
2. Outside Diameter / Diametro Externo	139.2mm	133mm	133mm	131mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo	157mm	157mm	157mm	157mm
5. Shoulder Measurement / Espesor	13.5mm	13.5mm	13.5mm	13.5mm

PIPE SYSTEM				
CAST ELBOWS / Codo Fundido	wall thickness 16mm / espesor 16mm			
DEGREE OF ANGLE	CLR inch / mm	6.4	4.0	3.6
		PART NUMBER		PART NUMBER
90	48 / 1219	A540355		
90	24 / 609	A534135		
45	48 / 1219	A544668		
45	24 / 609	A534136		
30	48 / 1219	A544669		
15	48 / 1219	A544670		
90	18 / 457			AT305459
REDUCERS / Reductor	QUALITY	LENGTH inch / mm		PART NUMBER
ZX 6.0" / HDR 5"	ST52	47 / 1200		A109017
ZX 6.0" / HDR 5"	ST52	8 / 205		A109004
ZX 6.0" / HDR 5" 90° Elbow	ST52			A104019
HDR 5" / HDR 3"	ST52	39 / 1000		A536604
HDR 5" / HDR 4"	ST52	39 / 1000		A558600
HDR 5" / HDR 4" 90° Elbow	ST52			AT305426
SK 6" / HDR 5"	ST52	10 / 254		A109023
HDR 6" / HDR 5"	ST52	8 / 205		A109022
HDR 5" / HDR 3"	400IH	39 / 1000		A556507
HDR 5" / HDR 4"	400IH	39 / 1000		A556508
HOSES / Manguera*	WIRE / FABRIC	LENGTH inch / mm		PART NUMBER
Delivery Hose	F	120 / 3048		A579332
Delivery Hose	W	120 / 3048		A579285
Delivery Hose	W	144 / 3658		A579286
Delivery Hose	W	300 / 7620		A579288
End Hose	F	120 / 3048		A583209
End Hose	F	144 / 3658		A583210
End Hose	W	144 / 3658		A583181
CLEANING ACCESSORIES / Accesorios de Limpieza				PART NUMBER
Sponge Ball Soft				230229004
Sponge Ball Medium				018841002
Sponge Ball Hard				223673007
Sponge Cube				063567001
Sponge Pig D=150X180				253086004
Cleaning Pig DN 125 Blue				265417001
Cleaning Plug DN 125				253953001
Catch Basket SK 125 / 5.5"Z CPL				276593008

*For more information on our Putzmeister Pipe Technology hose line see accessories page.

4.4 LAYDOWN PIPES

P11H HDR / 5.0" 130 BAR

Línea de Entrega Estacionaria



◀ A594282

PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

PIPE LENGTH Longitud de Pipa	4.0mm	6.3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER
500mm	A594277	A594265
1000mm	A594278	A594266
1500mm	A594279	A594267
2000mm	A594280	A594268
2500mm	A594281	A594269
3000mm	A594282	A594270
3500mm	A594283	A594271
4000mm	A594284	A594272
4500mm	A594285	A594273
5000mm	A597286	A594274
5500mm	A594287	A594275
6000mm	A594288	A594276
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	A593380	A593341
Weld Ring / Anillo	A592936	A592937
Lever Coupling / Acople de Mango	518049	
Lever Coupling Forged	A531767	
Lever Coupling Adjustable	A522619	
Coupling Screw	A532197	
Gasket / Sello	A522711	
TECHNICAL SPECIFICATIONS / Especificacion Tecnica		
PIPE / Tubo	MEASUREMENT	
1. Inside Diameter / Diametro Interno	125mm	
2. Outside Diameter / Diametro Externo	133mm	
WELD RING / Anillo	MEASUREMENT	
3. Outside Diameter / Diametro Externo	157mm	
4. Shoulder Measurement / Espesor	13.5mm	

PIPE SYSTEM					
CAST ELBOWS / Codo Fundido	QUALITY	LENGTH <i>inch / mm</i>	DEGREE OF ANGLE	RADIUS	PART NUMBER
<i>wall thickness 16mm / espesor 16mm</i>					
D Elbow	P1IH HD	5.0-6.3" / 125mm	15°	R1000	A593540
D Elbow	P1IH HD	5.0-6.3" / 125mm	30°	R1000	A593542
D Elbow	P1IH HD	5.0-6.3" / 125mm	45°	R1000	A593544
D Elbow	P1IH HD	5.0-6.3" / 125mm	90°	R1000	A593545
REDUCERS / Reductor	QUALITY	LENGTH <i>inch / mm</i>			PART NUMBER
ZX 6.0" / HDR5"	ST52	47 / 1200			A109017
ZX 6.0" / HDR 5"	ST52	8 / 205			A109004
ZX 6.0" / HDR 5" 90° Elbow	ST52				A104019
HDR 5" / HDR 3"	ST52	60 / 1524			A536604
HDR 5" / HDR 4"	ST52	36 / 915			A524432
HDR 5" / HDR 4" 90° Elbow	ST52				AT305426
SK 6" / HDR 5"	ST52	10 / 254			A109023
HDR 6" / HDR 5"	ST52	8 / 205			A109022
HDR 5" / HDR 3"	400IH	59 / 1500			A556507
HDR 5" / HDR 4"	400IH	39 / 1000			A593171
HOSES / Manguera		LENGTH <i>inch / mm</i>	WIRE / FABRIC		PART NUMBER
Delivery Hose		120 / 3048	F		A579332
Delivery Hose		120 / 3048	W		A579285
Delivery Hose		144 / 3658	W		A579286
Delivery Hose		300 / 7620	W		A579289
End Hose		120 / 3048	F		A583209
End Hose		144 / 3658	W		A583210
End Hose		144 / 3658	F		A583181
CLEANING ACCESSORIES / Accesorios de Limpieza					PART NUMBER
Sponge Ball Soft					230229004
Sponge Ball Medium					018841002
Sponge Ball Hard					223673007
Sponge Cube					063567001
Sponge Pig D=150X180					253086004
Cleaning Pig DN 125 Blue					265417001
Cleaning Plug DN 125					253953001
Catch Basket SK 125 / 5.5"Z CPL					276593008

4.5 LAYDOWN PIPES

ESSER 400 HDR / 5.0" 130 BAR

Línea de Entrega Estacionaria



◀ A532883

PIPE LENGTH Longitud de Pipa	4.5mm	7.1mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER
500mm	A532882	A549616
1000mm	A532883	A549617
1500mm	A532884	A549618
2000mm	A532885	A549619
2500mm	A532886	A549620
3000mm	A532887	A549621
3500mm	A532888	A549622
4000mm	A532889	A549623
4500mm	A532890	A549624
5000mm	A532891	A549625
5500mm	A532892	A549626
6000mm	A532893	A549627
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	A532876	A549628
Weld Ring / Anillo	A532976	A549629
Lever Coupling / Acople de Mango	518049	
Lever Coupling Forged	A531767	
Lever Coupling Adjustable	A522619	
Coupling Screw	A532197	
Gasket / Sello	A522711	
TECHNICAL SPECIFICATIONS / Specificacion Tecnica		
PIPE / Tubo	MEASUREMENT	
1. Inside Diameter / Diametro Interno	125mm	
2. Outside Diameter / Diametro Externo	134mm	
WELD RING / Anillo	MEASUREMENT	
4. Outside Diameter / Diametro Externo	157mm	
5. Shoulder Measurement / Espesor	13.5mm	

4.5 LAYDOWN PIPES

ESSER 400 HDR / 5.0" 130 BAR

PIPE SYSTEM			
CAST ELBOWS / Codo Fundido			PART NUMBER
<i>wall thickness 16mm / espesor 16mm</i>			
Elbow 10° 5.5" steel			088026006
Elbow 15° 5.5" steel			057598002
Elbow 20° 5.5" cast			245484009
Elbow 30° 5.5" cast			258935008
Elbow 45° 5.5" cast			057596004
Elbow 90° 5.5" r=180			422732
Elbow 90° 5.5" r=275			261402007
REDUCERS / Reductor	QUALITY	LENGTH <i>inch / mm</i>	PART NUMBER
ZX 6.0" / HDR 5"	ST52	47 / 1200	A109017
ZX 6.0" / HDR 5"	ST52	8 / 205	A109004
ZX 6.0" / HDR 5" 90° Elbow	ST52		A104019
HDR 5" / HDR 3"	ST52	39 / 1000	A536604
HDR 5" / HDR 4"	ST52	39 / 1000	A538600
HDR 5" / HDR 4" 90° Elbow	ST52		AT305426
SK 6" / HDR 5"	ST52	10 / 254	A109023
HDR 6" / HDR 5"	ST52	8 / 205	A109022
HDR 5" / HDR 3"	400IH	39 / 1000	A556507
HDR 5" / HDR 4"	400IH	39 / 1000	A556508
HOSES / Manguera	WIRE / FABRIC	LENGTH <i>inch / mm</i>	PART NUMBER
Delivery Hose	F	120 / 3048	A579332
Delivery Hose	W	120 / 3048	A579285
Delivery Hose	W	144 / 3658	A579286
Delivery Hose	W	300 / 7620	A579281
End Hose	F	120 / 3048	A583209
End Hose	W	144 / 3658	A583210
End Hose	F	144 / 3658	A583181
CLEANING ACCESSORIES / Accesorios de Limpieza			PART NUMBER
Sponge Ball Soft			230229004
Sponge Ball Medium			018841002
Sponge Ball Hard			223673007
Sponge Cube			063567001
Sponge Pig D=150X180			253086004
Cleaning Pig DN 125 Blue			265417001
Cleaning Plug DN 125			253953001
Catch Basket SK 125 / 5.5"Z CPL			276593008

4.6 LAYDOWN PIPES

P11H HDR 400 / 6.0" 130 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

◀ A594243

PIPE LENGTH Longitud de Pipa	12.5mm	8.0mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER
500mm	A594242	A594254
1000mm	A594243	A594255
1500mm	A594244	A594256
2000mm	A594245	A594257
2500mm	A594246	A594258
3000mm	A594247	A594259
3500mm	A594248	A594260
4000mm	A594249	A594261
4500mm	A594250	A594262
5000mm	A594251	A594263
5500mm	A594252	A594943
6000mm	A594253	A594264
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A593407	A593409
Weld Ring / Anillo	A592939	A592939
Lever Coupling Forged	A548000	
Lever Coupling Cast	A106021	
Lever Coupling Adjustable	A547999	
Gasket / Sello	A523918	

4.5 LAYDOWN PIPES

P11H HDR 400 / 6.0" 130 BAR

TECHNICAL SPECIFICATIONS Especificacion Tecnica		12.5mm	8.0mm
PIPE / Tubo		MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno		150mm	150mm
2. Outside Diameter / Diametro Externo		175mm	166mm
WELD RING / Anillo		MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo		182.9mm	182.9mm
5. Shoulder Measurement / Espesor		15.2mm	15.2mm
PIPE SYSTEM			
TWIN CAST ELBOWS / Codo Doble Fundido		wall thickness 16mm / espesor 16mm	
DEGREE OF ANGLE		CLR inch / mm	PART NUMBER
90 Twin Cast		20 / 500	
90 Twin Cast		40 / 1000	A556527
45 Twin Cast		40 / 1000	A556528
REDUCERS / Reductor		QUALITY	LENGTH inch / mm
HDR 6.0" / HDR 5.0"		ST52	8 / 205
HDR 6.0" / HDR 4.0"		ST52	36 / 915
HDR 6.0" / HDR 3.0"		ST52	36 / 915
HOSES / Manguera		WIRE / FABRIC	LENGTH inch / mm
HDR 6.0"		F	240 / 6096
CLEANING ACCESSORIES / Accesorios de Limpieza			PART NUMBER
Sponge Ball Medium			026650007
Sponge Ball Hard			406379
Sponge Cube			063597000
Cleaning Pig			253955009
Catch Basket			279238001

4.7 LAYDOWN PIPES

ESSER 400 HDR / 6.0" 130 BAR

Línea de Entrega Estacionaria



◀ A556514

PIPE LENGTH Longitud de Pipa	12.5mm	8.0mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER
500mm	A556512	A546166
1000mm	A556514	A546167
1500mm	A556515	A546168
2000mm	A556516	A546169
2500mm	A556517	A546170
3000mm	A556518	A546171
3500mm	A556519	A546172
4000mm	A556520	A546173
4500mm	A556521	A546174
5000mm	A556522	A546175
5500mm	A556523	A546176
6000mm	A556524	A546177
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A556510	A546165
Weld Ring / Anillo	A546158	A546158
Lever Coupling Forged	A548000	
Lever Coupling Cast	A106021	
Lever Coupling Adjustable	A547999	
Gasket / Sello	A523918	

4.7 LAYDOWN PIPES

ESSER 400 HDR / 6.0" 130 BAR

TECHNICAL SPECIFICATIONS Especificacion Tecnica		12.5mm	8.0mm
PIPE / Tubo		MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno		150mm	150mm
2. Outside Diameter / Diametro Externo		175mm	166mm
WELD RING / Anillo		MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo		182.9mm	182.9mm
5. Shoulder Measurement / Espesor		15.2mm	15.2mm
PIPE SYSTEM			
TWIN CAST ELBOWS / Codo Doble Fundido		wall thickness 16mm / espesor 16mm	
DEGREE OF ANGLE		CLR inch / mm	PART NUMBER
90 Twin Cast		20 / 500	
90 Twin Cast		39 / 1000	A556527
45 Twin Cast		39 / 1000	A556528
REDUCERS / Reductor		QUALITY	LENGTH inch / mm
HDR 6.0" / HDR 5.0"		ST52	8 / 205
HDR 6.0" / HDR 4.0"		ST52	36 / 915
HDR 6.0" / HDR 3.0"		ST52	36 / 915
HOSES / Manguera		WIRE / FABRIC	LENGTH inch / mm
HDR 6.0"		F	240 / 6096
CLEANING ACCESSORIES / Accesorios de Limpieza			PART NUMBER
Sponge Ball Medium			026650007
Sponge Ball Hard			406379
Sponge Cube			063597000
Cleaning Pig			253955009
Catch Basket			279238001

4.8 LAYDOWN PIPES

P1ST SK 50 / 3.0" 85 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ 081783003

PIPE LENGTH Longitud de Pipa	3.2mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
500mm	081782004
1000mm	081783003
2000mm	081784002
3000mm	081785001
4000mm	Upon Request
5000mm	Upon Request
6000mm	246804002
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	005369005
Weld Ring / Anillo	058684009
Lever Coupling / Acople de Mango	417798
Mounting Coupling / Acople	437953
Gasket / Sello	064084004
Safety Pin / Passador de Seguridad	018878004
TECHNICAL SPECIFICATIONS / Especificacion Tecnica	
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diametro Interno	50.6mm
2. Outside Diameter / Diametro Externo	57mm
3. Wall Thickness / Espesor	3.2mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diametro Externo	90mm
5. Shoulder Measurement / Espesor	16mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
6. Width / Espesor	49mm
7. Outside Diameter / Diametro Externo	175mm

PIPE SYSTEM	3.2mm
CAST ELBOWS / Codo Fundido	PART NUMBER
Elbow 15°	081781005
Elbow 30°	081780006
Elbow 45°	081779004
Elbow 90°	081777006
Elbow 15° Long Radius	000418374
Elbow 30° Long Radius	000418373
Elbow 45° Long Radius	000418371
Elbow 90° Long Radius	000418370
REDUCERS / Reductor	PART NUMBER
Reducer Pipe SK 4.0"-SK 3" x 1500	081786000
Reducer Pipe SK 4.5"-SK 3" x 1500LP	238508002
Reducer Pipe SK 4.0"-SK 3"65 x 1000	057330008
HOSES / Manguera	PART NUMBER
Delivery Hose SK 50 / 3" x 3000	050468003
Delivery Hose SK 50 / 3" x 5000	059039006
Delivery Hose SK 50 / 3" x 6000	229110001
Delivery Hose SK 50 / 3" x 10000	059040008
Delivery Hose SK 50 / 3" x 20000	059988005
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Soft	Upon Request
Sponge Ball Medium	000212005
Sponge Ball Hard	233494001
Catch Basket	277920007
Cleaning Connection	081534003
Cleaning Lid	081886007

4.8 LAYDOWN PIPES

P1ST SK 50 / 3.0" 85 BAR

4.9 LAYDOWN PIPES

P1ST SK 65 / 3.0" 85 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ 057727006

PIPE LENGTH Longitud de Pipa	3.2mm
MAKE UP PIPE / Tubería de Ajuste	PART NUMBER
500mm	224781008
1000mm	057727006
2000mm	057728005
3000mm	057729004
4000mm	Upon Request
5000mm	Upon Request
6000mm	222708009
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Básico	005370007
Weld Ring / Anillo	057712008
Lever Coupling / Acople de Mango	417798
Mounting Coupling / Acople	437953
Screw Coupling / Acople	262732006
Gasket / Sello	006084004
Safety Pin / Pasador de Seguridad	018878004

TECHNICAL SPECIFICATIONS / Especificación Técnica	
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diámetro Interno	63.6mm
2. Outside Diameter / Diámetro Externo	70mm
3. Wall Thickness / Espesor	3.2mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diámetro Externo	90mm
5. Shoulder Measurement / Espesor	16mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
6. Width / Espesor	49mm
7. Outside Diameter / Diámetro Externo	175mm

* weight per ft/meter / peso per ft/meter

PIPE SYSTEM	3.2mm
CAST ELBOWS / Codo Fundido	PART NUMBER
Elbow 15°	057760005
Elbow 30°	057759003
Elbow 45°	057758004
Elbow 90°	057756006
Elbow 15° Long Radius	Upon Request
Elbow 30° Long Radius	Upon Request
Elbow 45° Long Radius	Upon Request
Elbow 90° Long Radius	Upon Request
REDUCERS / Reductor	PART NUMBER
Reducer Pipe SK 4.5"-SK 3" x 1000	224269009
Reducer Pipe SK 4.0"-SK 3" x 1000	057330008
HOSES / Manguera	PART NUMBER
Delivery Hose SK 65 / 3" x 4500	253306001
Delivery Hose SK 65 / 3" x 5000	057886002
Delivery Hose SK 65 / 3" x 10000	059170004
Delivery Hose SK 65 / 3" x 20000	082238007
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Soft	Upon Request
Sponge Ball Medium	000246000
Sponge Ball Hard	257107002
Catch Basket	277920007
Cleaning Connection	081534003
Cleaning Lid	081886007
ACCESSORIES / Accesorios	PART NUMBER
Manual Shut-Off Valve SK 65 / 3" GVM 20bar	230644003
Manual Shut-Off Valve SK 65 / 3" GVM 130bar	401928
Wall Thickness Gauge Electronic	277434001

4.10 LAYDOWN PIPES

P1ST SK 80 / 4.0" 85 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ A573780

PIPE LENGTH Longitud de Pipa	3.2mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
0 - 500mm	A573775
501 - 1000mm	A573776
1001 - 1500mm	A573777
1501 - 2000mm	A573778
2001 - 2500mm	A573779
2501 - 3000mm	A573780
3001 - 3500mm	A573781
3501 - 4000mm	A573782
4001 - 4500mm	A573783
4501 - 5000mm	A573784
5001 - 5500mm	A573785
5501 - 6000mm	A573786
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	005371006
Weld Ring / Anillo	058394001
Lever Coupling / Acople de Mango	417798
Gasket / Sello	006084004
Safety Pin / Passador de Seguridad	018878004
TECHNICAL SPECIFICATIONS / Especificacion Tecnica	
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diametro Interno	81.7mm
2. Outside Diameter / Diametro Externo	88.9mm
3. Wall Thickness / Espesor	3.6mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diametro Externo	144.3mm
5. Shoulder Measurement / Espesor	17mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
6. Width / Espesor	49mm
7. Outside Diameter / Diametro Externo	175mm



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ 056861002

PIPE LENGTH Longitud de Pipa	3.6mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
500mm	056860003
1000mm	056861002
2000mm	056862001
3000mm	A573639
6000mm	057601009
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	005372005
Weld Ring / Anillo	056795000
Lever Coupling / Acople de Mango	431613
Mounting Coupling / Acople	445013
Screw Coupling / Acople	050984008
Gasket C / Sello	081668005
Gasket A / Sello	057341000
Safety Pin / Passador de Seguridad	018878004

TECHNICAL SPECIFICATIONS Especificacion Tecnica	3.6mm
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diametro Interno	100.8mm
2. Outside Diameter / Diametro Externo	108mm
3. Wall Thickness / Espesor	3.6mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diametro Externo	127mm
5. Shoulder Measurement / Espesor	17mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
6. Width / Espesor	38mm
7. Outside Diameter / Diametro Externo	253mm

* weight per ft/meter / peso per ft/meter

PIPE SYSTEM

CAST ELBOWS / Codo Fundido	PART NUMBER
Elbow 9° LP 275	027640030
Elbow 15° LP 275	057595005
Elbow 30°	057594006
Elbow 45°	057593007
Elbow 90° 275	056914001
Elbow 15° Long Radius	223671009
Elbow 30° Long Radius	223670000
Elbow 45° Long Radius	223669008
Elbow 90° Long Radius	223668009
REDUCERS / Reductor	PART NUMBER
Reducer Pipe SK 125 / 5.5" - SK 100 / 4.5" x 800	057603007
Reducer Pipe SK 125 / 5.5" - SK 100 / 4.5" x 1000	057604006
Reducer Pipe SK 125 / 5.5" - SK 100 / 4.5" x 1500	080617002
Reducer Pipe SK 150 / 6.0" - SK 100 / 4.5" x 1500	222792002
Reducer Pipe SK 100 / 4.5" - SK 65 / 3.0" x 1000	224269009
Reducer Pipe SK 100 / 4.5" - SK 65 / 3.0" x 2000	249437007
HOSES / Manguera	PART NUMBER
Delivery Hose SK 65 / 3" x 4500	253319001
Delivery Hose SK 65 / 3" x 5000	083389007
Delivery Hose SK 65 / 3" x 10000	057609001
Delivery Hose SK 65 / 3" x 20000	027623004
End Hose SK 100 / 4.5" x 3000	233647007
End Hose SK 100 / 4.5" x 4000	244014001
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Soft	230227006
Sponge Ball Medium	016091003
Sponge Ball Hard	234053001
Sponge Cube	243861006
Sponge Scraper for Truck-Mounted CP	256126000
Sponge Scraper for Stationary Lines	253952002
Catch Basket	276715006
Cleaning Connection	057616007
Cleaning Lid	057618005
ACCESSORIES / Accesorios	PART NUMBER
Manual Gate Valve SK 100 / 4.5" GVM 2/2 20bar	239333001
Manual Gate Valve SK 100 / 4.5" GVM 130bar	222362005
Wall Thickness Gauge Electronic	277434001



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ A544176

PIPE LENGTH Longitud de Pipa	4.5mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
100 - 500mm	A544178
501 - 1000mm	A544176
1001 - 1500mm	A544175
1501 - 2000mm	A544174
2001 - 2500mm	A544173
2501 - 3000mm	A544172
3001 - 3500mm	A544171
3501 - 4000mm	A539683
4001 - 4500mm	A550787
4501 - 5000mm	A550788
5001 - 5500mm	A550789
5501 - 6000mm	A550790
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	005374003
Weld Ring / Anillo	021701003
Screw Coupling / Acople	081530007
Screw Coupling / Acople	026794002
Gasket A / Sello	002231000
Safety Pin / Passador de Seguridad	018878004

TECHNICAL SPECIFICATIONS Especificacion Tecnica	4.5mm
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diametro Interno	150mm
2. Outside Diameter / Diametro Externo	159mm
3. Wall Thickness / Espesor	4.5mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diametro Externo	167mm
5. Shoulder Measurement / Espesor	22mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
6. Width / Espesor	38mm
7. Outside Diameter / Diametro Externo	317mm

PIPE SYSTEM

TWIN CAST ELBOWS / Codo Doble Fundido	PART NUMBER
<i>wall thickness 16mm / espesor 16mm</i>	
Elbow 15° 281	057600000
Elbow 20° 281	257140001
Elbow 30° 281	057599001
Elbow 45° 281	021845008
Elbow 90° 281	263206007
Elbow 15° Long Radius	057655000
Elbow 30° Long Radius	057654001
Elbow 45° Long Radius	057653002
Elbow 90° Long Radius	026851000
REDUCERS / Reductor	PART NUMBER
Reducer Pipe SK 150 / 6.0"Z - SK 80 / 4.0"Z x 1500	295314006
Transition Piece SK 150 / 6.0"Z - ZXM125 / 5.5"Z	271554000
Reducer Pipe SK 150 / 6.0" - SK 100 / 4.0" x 1500	081874006
HOSES / Manguera	PART NUMBER
Delivery Hose SK 150 / 6.0" x 3000	053180003
Delivery Hose SK 150 / 6.0" x 5000	088825003
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Medium	026650007
Sponge Ball Hard	406379
Sponge Cube	063597000
Cleaning Scraper for Stationary Lines	253955009
Catch Basket	279238001
Cleaning Lid	054374009
ACCESSORIES / Accesorios	PART NUMBER
Manual Gate Valve GVM 2/2 20bar	089941009
Manual Gate Valve GVM 2/2 130bar	024613004
Gate Valve GVH SK 150 / 16" HYDR	230833005
GVH 2/2 SK 150 / 6.0" w/ End Switch	089942008
GVH 2/2 SK 150 / 6.0" w/o End Switch	273303000
T-Pipe	279349000
Pressure Gauge Up to 100 Bar	401634
Lid	026715007
Wall Thickness Gauge	277434001

4.13 LAYDOWN PIPES

P1ST ZX 125 / 5.5" 200 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ A557227

PIPE LENGTH Longitud de Pipa	130 BAR 7.1mm	200 BAR 8.8mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER
500mm	A544966	A557226
1000mm	A546092	A557227
1500mm	Upon Request	A557228
2000mm	A546093	A557229
2500mm	Upon Request	A557230
3000mm	A530635	A557231
3500mm	Upon Request	A557232
4000mm	Upon Request	A557233
4500mm	A544965	A557234
5000mm	Upon Request	A557235
5500mm	Upon Request	A557236
6000mm	Upon Request	A557237
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	005464007	436105
Weld Ring ZXM	407038	407038
Weld Ring ZXV	051461009	
Coupling Two-Bolt	057329006	
Lever Coupling Adjustable	051342005	
Gasket / Sello	041323005	

TECHNICAL SPECIFICATIONS Especificación Técnica	130 BAR 7.1mm	200 BAR 8.8mm
PIPE / Tubo	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diámetro Interno	125.5mm	125.5mm
2. Outside Diameter / Diámetro Externo	139.7mm	139.7mm
WELD RING / Anillo	MEASUREMENT	MEASUREMENT
3. Outside Diameter / Diámetro Externo		175mm
4. Shoulder Measurement / Espesor		ZXM 19mm / ZXV 14.6mm
SCREW COUPLING / Acople	MEASUREMENT	MEASUREMENT
5. Width / Espesor		50mm
6. Outside Diameter / Diámetro Externo	370mm	370mm
PIPE SYSTEM		
ELBOWS / Codo	PART NUMBER	
Elbow 15° 281	080966009	
Elbow 30° 281	057180009	
Elbow 45° 281	057181008	
Elbow 90° 281	051808002	
Elbow 15° Long Radius	057644008	
Elbow 30° Long Radius	057643009	
Elbow 45° Long Radius	057642000	
Elbow 90° Long Radius	051819004	
REDUCERS / Reductor	PART NUMBER	
Reducer Pipe SK 5" - ZXV 125 x 100	053891004	
Reducer Pipe SK 5" - ZXM 125 x 100	028861001	
Reducer Pipe SK 6" - ZXV 125 x 200	081087000	
DELIVERY HOSES / Manguera	PART NUMBER	
<i>ZX delivery hoses can only be used with SK-hose nozzles</i>		
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER	
Sponge Ball Soft	230229004	
Sponge Ball Medium	018841002	
Sponge Ball Hard	223673007	
Sponge Cube	063567001	
Cleaning Pig	253953001	
Catch Basket	277402004	
Cleaning Lid	054720006	
ACCESSORIES / Accesorios	PART NUMBER	
Shut Off Valve ZX 125 w/ End Switch	089910004	
Shut Off Valve ZX 125	050342006	
Shut Off Valve GVH 4/2	024938006	
Hydr. Unit w/ Manual Pump w/o Accumulator	293604006	
Hydr. Unit w/ Electric Drive and Manual Control Valve	050485002	
Connection accessories for shut-off valve on CP <i>Consisting of control block 220 bar, hydr. hoses w/ fittings</i>	025105003	
Hydr. Connection hose RAD 12 each 5m length <i>CP shut off valve (min. 4 pcs required)</i>	042950008	
Hydr. Connection hose RAD 12 each 10m length <i>CP shut off valve (min. 2 pcs required)</i>	240583002	
T-pipe 1000mm	273228004	
Pressure Gauge ZX 100-140 250bar	056710001	

4.14 LAYDOWN PIPES

P11H ZX 125 / 5.5" 200 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

◀ A594294

PIPE LENGTH Longitud de Pipa	130 BAR 6.3mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
500mm	A594289
1000mm	A594290
1500mm	A594291
2000mm	A594292
2500mm	A594293
3000mm	A594294
3500mm	A594295
4000mm	A594296
4500mm	A594297
5000mm	A594298
5500mm	A594299
6000mm	A594300
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	A593380
Weld Ring ZXM	A594944
Weld Ring ZXV	A594945
Coupling Two-Bolt	057329006
Lever Coupling Adjustable	051342005
Gasket / Sello	041323005

TECHNICAL SPECIFICATIONS Especificación Técnica	130 BAR 7.1mm
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diámetro Interno	125.0mm
2. Outside Diameter / Diámetro Externo	137.6mm
WELD RING / Anillo	
4. Outside Diameter / Diámetro Externo	
5. Shoulder Measurement / Espesor	
SCREW COUPLING / Acople	MEASUREMENT
6. Width / Espesor	
7. Outside Diameter / Diámetro Externo	370mm
PIPE SYSTEM	
ELBOWS / Codo	PART NUMBER
Elbow 15° 281	080966009
Elbow 30° 281	057180009
Elbow 45° 281	057181008
Elbow 90° 281	051808002
Elbow 15° Long Radius P11H	A593365
Elbow 30° Long Radius P11H	A593368
Elbow 45° Long Radius P11H	A593370
Elbow 90° Long Radius P11H	A593371
REDUCERS / Reductor	PART NUMBER
Reducer Pipe SK 5" - ZXV 125 x 100	053891004
Reducer Pipe SK 5" - ZXM 125 x 100	028861001
Reducer Pipe SK 6" - ZXV 125 x 200	081087000
DELIVERY HOSES / Manguera	
<i>ZX delivery hoses can only be used with SK-hose nozzles</i>	
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Soft	230229004
Sponge Ball Medium	018841002
Sponge Ball Hard	223673007
Sponge Cube	063567001
Cleaning Pig	253953001
Catch Basket	277402004
Cleaning Lid	054720006
ACCESSORIES / Accesorios	PART NUMBER
Shut Off Valve ZX 125 w/ End Switch	089910004
Shut Off Valve ZX 125	050342006
Shut Off Valve GVH 4/2	024938006
Hydr. Unit w/ Manual Pump w/o Accumulator	293604006
Hydr. Unit w/ Electric Drive and Manual Control Valve	050485002
Connection accessories for shut-off valve on CP <i>Consisting of control block 220 bar, hydr. hoses w/ fittings</i>	025105003
Hydr. Connection hose RAD 12 each 5m length <i>CP shut off valve (min. 4 pcs required)</i>	042950008
Hydr. Connection hose RAD 12 each 10m length <i>CP shut off valve (min. 2 pcs required)</i>	240583002
T-pipe 1000mm	273228004
Pressure Gauge ZX 100-140 250bar	056710001

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

4.15 LAYDOWN PIPES

P1ST ZX 150 / 6.0" 130 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ A557213

PIPE LENGTH Longitud de Pipa	8.8mm
MAKE UP PIPE / Tubería de Ajuste	PART NUMBER
500mm	A557212
1000mm	A557213
1500mm	A557214
2000mm	A557215
2500mm	A557217
3000mm	A557218
3500mm	A557219
4000mm	A557220
4500mm	A557221
5000mm	A557222
5500mm	A557223
6000mm	A557224
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Básico	004614007
Weld Ring / Anillo ZXM	244028000
Weld Ring / Anillo ZXV	244008004

TECHNICAL SPECIFICATIONS Especificación Técnica	8.8mm
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diámetro Interno	150.7mm
2. Outside Diameter / Diámetro Externo	168.3mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diámetro Externo	205mm
5. Shoulder Measurement / Espesor	ZXV 12mm / ZXM 20mm
SCREW COUPLING / Acople	MEASUREMENT
6. Width / Espesor	50mm
7. Outside Diameter / Diámetro Externo	340mm

PIPE SYSTEM

CAST ELBOWS / Codo Fundido	PART NUMBER
Elbow 15° 281	244203003
Elbow 30° 281	244202004
Elbow 45° 281	244201005
Elbow 90° 281	244200006
Elbow 15° Long Radius	244210009
Elbow 30° Long Radius	244209007
Elbow 45° Long Radius	244208008
Elbow 90° Long Radius	244207009
REDUCERS - TRANSITION PIECES / Reductor	PART NUMBER
Transition Piece ZXV 150 / 6.0" - SK 150 / 6.0" x 250	246247009
Transition Piece ZXM 150 / 6.0" - SK 150 / 6.0" x 130	251256001
Reducer Pipe ZXM 150 / 6.0" - SK 125 / 5.5" x 1000	249233007
Del. Elbow ZXV 150 / 6.0" - SK 150 / 6.0" 90°	247341001
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1000	256968006
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1200	277401005
Reducer Pipe ZXV 150 / 6.0" - SK 100 / 4.5" x 1200	279074003
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 500	400316
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1500	401423
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1200	435338
DELIVERY HOSES / Manguera	
<i>ZX delivery hoses can only be used with SK-hose nozzles</i>	
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Medium	026650007
Sponge Ball Hard	406379
Sponge Cube	063597000
Cleaning Pig	253955009
Catch Basket	279238001
ACCESSORIES / Accesorios	PART NUMBER
Shut Off Valve ZX 125 GVH 2/2 w/ End Switch	272858006
Shut Off Valve ZX 125 GVH 4/2	258915002
Shut Off Valve GVH 4/2 w/ End Switch	258934009
Hydr. Unit w/ Manual Pump w/o Accumulator	293604006
Hydr. Unit w/ Electric Drive and Manual Control Valve	050485002
Connection accessories for shut-off valve on CP <i>Consisting of control block 220 bar, hydr. hoses w/ fittings</i>	025105003
Hydr. Connection hose RAD 12 each 5m length <i>CP shut off valve (min. 4 pcs required)</i>	042950008
Hydr. Connection hose RAD 12 each 10m length <i>CP shut off valve (min. 2 pcs required)</i>	240583002

4.16 LAYDOWN PIPES

P1IH ZX 150 / 6.0" 130 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL INDUCTION HARDENED MATERIAL

◀ A593976

PIPE LENGTH Longitud de Pipa	8.0mm
MAKE UP PIPE / Tubería de Ajuste	PART NUMBER
500mm	A593969
1000mm	A593970
1500mm	A593972
2000mm	A593973
2500mm	A593975
3000mm	A593976
3500mm	A593978
4000mm	A593979
4500mm	A593981
5000mm	A594959
5500mm	A593982
6000mm	A593983
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Básico	004614007
Weld Ring / Anillo ZXM	A594951
Weld Ring / Anillo ZXV	A594954

TECHNICAL SPECIFICATIONS Especificación Técnica	8.0mm
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diámetro Interno	150.7mm
2. Outside Diameter / Diámetro Externo	166.7mm
WELD RING / Anillo	MEASUREMENT
4. Outside Diameter / Diámetro Externo	205mm
5. Shoulder Measurement / Espesor	ZXV 12mm / ZXM 20mm
SCREW COUPLING / Acople	MEASUREMENT
6. Width / Espesor	50mm
7. Outside Diameter / Diámetro Externo	340mm

PIPE SYSTEM

CAST ELBOWS / Codo Fundido	PART NUMBER
Elbow 15° 281	244203003
Elbow 30° 281	244202004
Elbow 45° 281	244201005
Elbow 90° 281	244200006
Elbow 15° Long Radius	244210009
Elbow 30° Long Radius	244209007
Elbow 45° Long Radius	244208008
Elbow 90° Long Radius	244207009
REDUCERS - TRANSITION PIECES / Reductor	PART NUMBER
Transition Piece ZXV 150 / 6.0" - SK 150 / 6.0" x 250	246247009
Transition Piece ZXM 150 / 6.0" - SK 150 / 6.0" x 130	251256001
Reducer Pipe ZXM 150 / 6.0" - SK 125 / 5.5" x 1000	249233007
Del. Elbow ZXV 150 / 6.0" - SK 150 / 6.0" 90°	247341001
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1000	256968006
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1200	277401005
Reducer Pipe ZXV 150 / 6.0" - SK 100 / 4.5" x 1200	279074003
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 500	400316
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1500	401423
Reducer Pipe ZXV 150 / 6.0" - SK 125 / 5.5" x 1200	435338
DELIVERY HOSES / Manguera	
<i>ZX delivery hoses can only be used with SK-hose nozzles</i>	
CLEANING ACCESSORIES / Accesorios de Limpieza	PART NUMBER
Sponge Ball Medium	026650007
Sponge Ball Hard	406379
Sponge Cube	063597000
Cleaning Pig	253955009
Catch Basket	279238001
ACCESSORIES / Accesorios	PART NUMBER
Shut Off Valve ZX 125 GVH 2/2 w/ End Switch	272858006
Shut Off Valve ZX 125 GVH 4/2	258915002
Shut Off Valve GVH 4/2 w/ End Switch	258934009
Hydr. Unit w/ Manual Pump w/o Accumulator	293604006
Hydr. Unit w/ Electric Drive and Manual Control Valve	050485002
Connection accessories for shut-off valve on CP <i>Consisting of control block 220 bar, hydr. hoses w/ fittings</i>	025105003
Hydr. Connection hose RAD 12 each 5m length <i>CP shut off valve (min. 4 pcs required)</i>	042950008
Hydr. Connection hose RAD 12 each 10m length <i>CP shut off valve (min. 2 pcs required)</i>	240583002

4.17 LAYDOWN PIPES

P1ST ZX 200 / 8.0" 130 BAR

Línea de Entrega Estacionaria



PUTZMEISTER SINGLE WALL ST52 MATERIAL

◀ 028474003

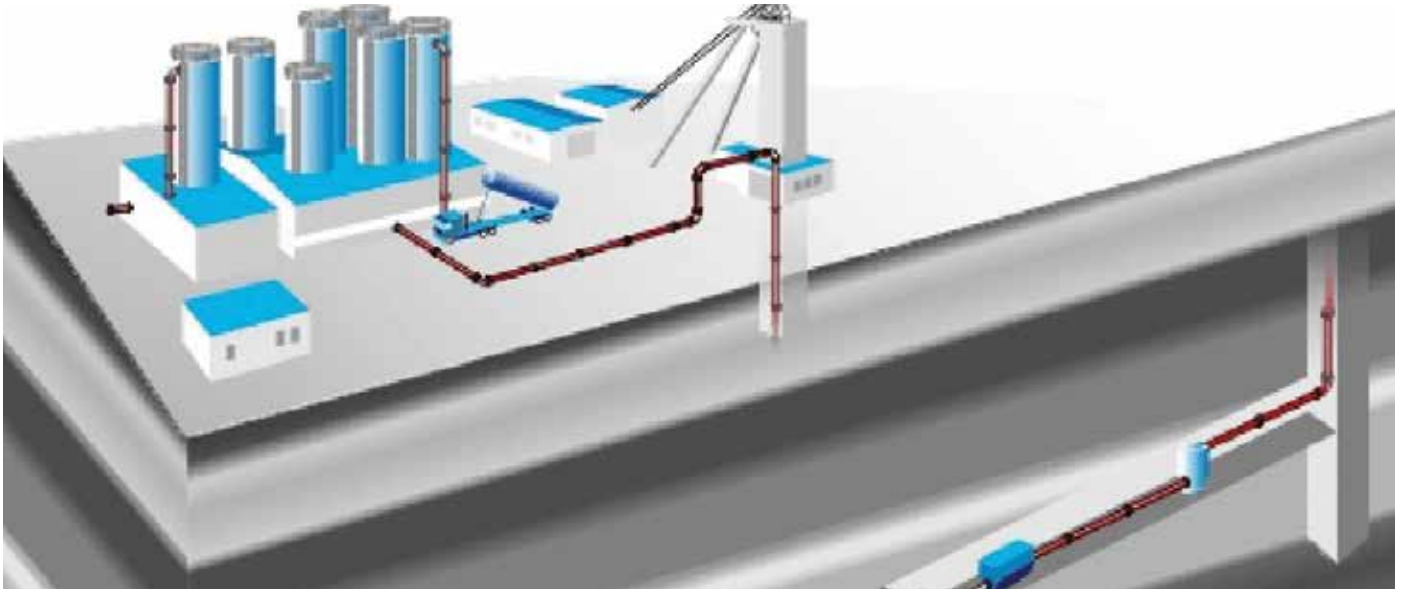
PIPE LENGTH Longitud de Pipa	8.0mm
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER
1000mm	028472005
2000mm	028473004
3000mm	028474003
6000mm	028475002
PIPE MATERIALS / Material de Tubo	PART NUMBER
Raw Material (length: 19'8" (6m)) / Material Basico	005468003
Weld Ring ZXM / Anillo ZXM	234167007
Weld Ring ZXV / Anillo ZXV	234168006
Screw Coupling / Acople	234471007
Gasket A / Sello	043520000

TECHNICAL SPECIFICATIONS / Especificacion Tecnica	
PIPE / Tubo	MEASUREMENT
1. Inside Diameter / Diametro Interno	200mm
2. Outside Diameter / Diametro Externo	216mm
WELD RING / Anillo	MEASUREMENT
3. Outside Diameter / Diametro Externo	253mm
4. Shoulder Measurement / Espesor	ZXM 24mm / 14.5mm
LEVER COUPLING / Acople de Mango	MEASUREMENT
5. Width / Espesor	64mm
6. Outside Diameter / Diametro Externo	405mm

PIPE SYSTEM			
TWIN CAST ELBOWS / Codo Doble Fundido	DEGREE OF ANGLE	CLR <i>inch / mm</i>	PART NUMBER
Elbow 15° 281	15	11 / 281	235242002
Elbow 30° 281	30	11 / 281	235241003
Elbow 45° 281	45	11 / 281	235244000
Elbow 90° 281	90	11 / 281	235243001
Elbow 30° 1000	30	39 / 1000	229114007
Elbow 45° 1000	45	39 / 1000	229113008
Elbow 90° 1000	90	39 / 1000	229112009
REDUCERS - TRANSITION PIECES / Reductor		LENGTH <i>inch / mm</i>	PART NUMBER
Reducer Pipe SK 150 / 6.0"Z-SK 80 / 4.0"Z x 1500		19 / 490	542645
Transition Piece SK 150 / 6.0"Z-ZXM 125 / 5.5"Z		19 / 490	542642
Reducer Pipe SK 150 / 6.0" - SK 100 / 4.0" x 1500		39 / 1000	229122002
Reducer Pipe SK 150 / 6.0"Z - SK 80 / 4.0"Z x 1500		39 / 1000	259142007
Transition Piece SK 150 / 6.0"Z - ZXM 125 / 5.5"Z		6 / 150	528154
Reducer Pipe SK 150 / 6.0" - SK 100 / 4.0" x 1500		6 / 150	528157
DELIVERY HOSES / Manguera			
<i>ZX delivery hoses can only be used with SK-hose nozzles</i>			
CLEANING ACCESSORIES / Accesorios de Limpieza			PART NUMBER
Sponge Ball DN220			065348008
Sponge Cube DN 180/200 for suction cleaning			086861001
Catch Basket			Upon Request
Cleaning Lid ZXV			Upon Request
ACCESSORIES / Accesorios			PART NUMBER
Shut Off Valve GVH 2/2 w/ End Switch			028634005
Shut Off Valve GVH 2/2			088451008
Shut Off Valve GVH 4/2 w/ End Switch			230054004
Shut Off Valve GVH 4/2			230068003
Hydr. Unit w/ Manual Pump w/o Accumulator			293604006
Hydr. Unit w/ Electric Drive and Manual Control valve			050485002
Connection accessories for shut-off valve on CP			025105003
<i>Consisting of control block 220 bar, hydr. hoses w/ fittings</i>			
Hydr. Connection hose RAD 12 each 5m length			042950008
<i>CP shut off valve (min. 4 pcs required)</i>			
Hydr. Connection hose RAD 12 each 10m length			240583002
<i>CP shut off valve (min. 2 pcs required)</i>			
T-Pipe 1000mm			On Request
Lid ZXV 200			220079002
Wall Thickness Gauge			277434001

5.1 INDUSTRIAL APPLICATIONS

ESSER 400 S / 6.0" SLIP-ON Aplicaciones Industriales



PIPES / Longitud de Pipa	S150	S300	S600	S150	S300	S600
Wall Thickness	7.1	7.1	7.1	12.5	12.5	12.5
Working Pressure Bar*	20	50	100	20	50	100
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
500mm	A553395	A553437	A553503	A553515	A553527	A553539
1000mm	A553394	A553436	A553502	A553514	A553526	A553538
1500mm	A553393	A553435	A553501	A553513	A553525	A553537
2000mm	A553392	A553434	A553500	A553512	A553524	A553536
2500mm	A553391	A553433	A553499	A553511	A553523	A553535
3000mm	A553390	A553432	A553498	A553510	A553522	A553534
3500mm	A553389	A553431	A553497	A553509	A553521	A553533
4000mm	A553388	A553430	A553496	A553508	A553520	A553532
4500mm	A553387	A553429	A553495	A553507	A553519	A553531
5000mm	A553386	A553428	A553494	A553506	A553518	A553530
5500mm	A553385	A553427	A553493	A553505	A553517	A553529
6000mm	A553384	A553426	A553492	A553504	A553516	A553528
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A553304	A553304	A553304	A553305	A553305	A553305
Weld Ring / Anillo	A553235	A553236	A553237	A553235	A553236	A553237

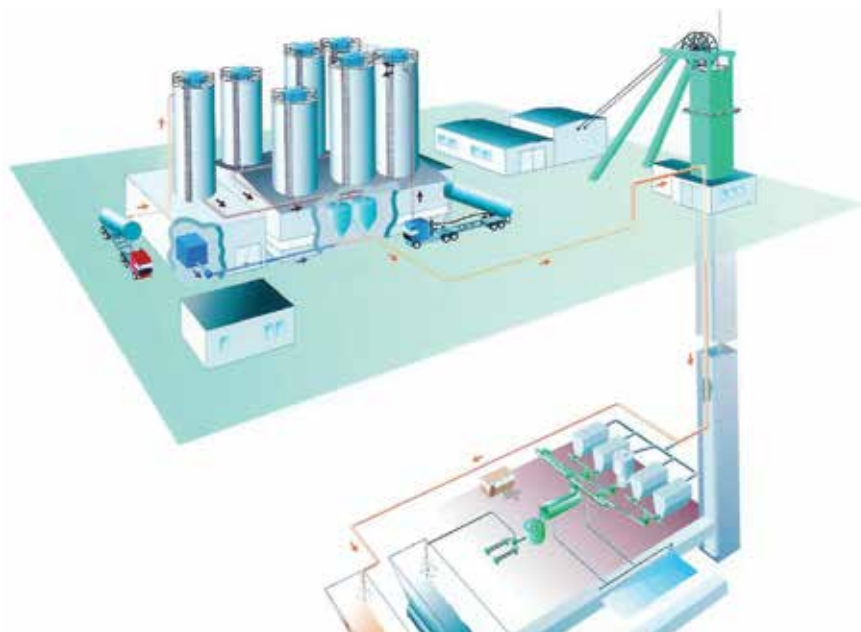
* weight per ft/meter / peso per ft/meter

TECHNICAL SPECIFICATIONS Specificacion Tecnica		S150	S300	S600	S150	S300	S600
Wall Thickness		7.1	7.1	7.1	12.5	12.5	12.5
Working Pressure Bar*		20	50	100	20	50	100
PIPE / Tubo		MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno		156mm	156mm	156mm	145mm	145mm	145mm
2. Outside Diameter / Diametro Externo		170.2mm	170.2mm	170.2mm	170mm	170mm	170mm
3. Wall Thickness / Espesor		7.1mm	7.1mm	7.1mm	12.5mm	12.5mm	12.5mm
WELD RING / Anillo		MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo		279.7mm	317.5mm	355.6mm	279.7mm	317.5mm	355.6mm
5. Shoulder Measurement / Espesor		25.4mm	36.5mm	47.8mm	25.4mm	36.6mm	47.8mm
PIPE SYSTEM							
CAST ELBOWS / Codo Fundido		wall thickness 16mm / espesor 16mm					
DEGREE OF ANGLE	CLR inch / mm	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
30	39 / 1000	A553343	A553347	A553350	A553343	A553347	A553350
45	39 / 1000	A553342	A553345	A553349	A553342	A553345	A553349
90	39 / 1000	A553340	A553344	A553348	A553340	A553344	A553348
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER					
Sponge Ball Medium		026650007					
Sponge Ball Hard		406379					
Sponge Cube		063597000					

* weight per ft/meter / peso per ft/meter

5.2 INDUSTRIAL APPLICATIONS

ESSER 400 S / 8.0" SLIP-ON Aplicaciones Industriales



PIPES / Longitud de Pipa	S150	S300	S600	S150	S300	S600
Wall Thickness	8.0	8.0	8.0	12.5	12.5	12.5
Working Pressure Bar*	20	50	100	20	50	100
MAKE UP PIPE / Tuberia de Ajuste	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
500mm	A553588	A553600	A553702	A553717	A553730	A553749
1000mm	A553587	A553599	A553701	A553716	A553729	A553748
1500mm	A553586	A553598	A553700	A553715	A553728	A553747
2000mm	A553585	A553597	A553699	A553714	A553727	A553746
2500mm	A553584	A553596	A553698	A553713	A553726	A553745
3000mm	A553583	A553595	A553697	A553711	A553725	A553744
3500mm	A553582	A553594	A553696	A553708	A553724	A553743
4000mm	A553581	A553593	A553695	A553707	A553723	A553742
4500mm	A553580	A553592	A553694	A553706	A553722	A553741
5000mm	A553579	A553591	A553693	A553705	A553721	A553740
5500mm	A553578	A553590	A553692	A553704	A553720	A553738
6000mm	A553577	A553589	A553691	A553703	A553719	A553737
PIPE MATERIALS / Material de Tubo	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
Raw Material (length: 19' 8" (6m)) / Material Basico	A553306	A553306	A553306	A553307	A553307	A553307
Weld Ring / Anillo	A553291	A553292	A553293	A553294	A553295	A553296

* weight per ft/meter / peso per ft/meter

TECHNICAL SPECIFICATIONS Specificacion Tecnica		S150	S300	S600	S150	S300	S600
Wall Thickness		8.0	8.0	8.0	12.5	12.5	12.5
Working Pressure Bar*		20	50	100	20	50	100
PIPE / Tubo		MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
1. Inside Diameter / Diametro Interno		205mm	205mm	205mm	196mm	196mm	196mm
2. Outside Diameter / Diametro Externo		221mm	221mm	221mm	221mm	221mm	221mm
3. Wall Thickness / Espesor		8.0mm	8.0mm	8.0mm	12.5mm	12.5mm	12.5mm
WELD RING / Anillo		MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT	MEASUREMENT
4. Outside Diameter / Diametro Externo		342.9mm	381mm	419.1mm	342.9mm	381mm	419.1mm
5. Shoulder Measurement / Espesor		28.4mm	41.1mm	55.6mm	28.4mm	41.1mm	55.6mm
PIPE SYSTEM							
CAST ELBOWS / Codo Fundido		wall thickness 16mm / espesor 16mm					
DEGREE OF ANGLE	CLR inch / mm	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
30	20 / 510	A553356	A553359	A553362	A553356	A553359	A553362
45	20 / 510	A553354	A553358	A553361	A553354	A553358	A553361
90	39 / 1000	A553351	A553357	A553360	A553351	A553357	A553360
30	39 / 1000	A553364	A553366	A553368	A553364	A553366	A553368
45	39 / 1000	A553363	A553365	A553367	A553363	A553365	A553367
CLEANING ACCESSORIES / Accesorios de Limpieza		PART NUMBER					
Cleaning Plug		253194006					
Sponge Ball		065348008					
Sponge Cube		086861001					

* weight per ft/meter / peso per ft/meter

5.3 INDUSTRIAL APPLICATIONS

STANDARD DELIVERY LINES Aplicaciones Industriales



DESCRIPTION	2" HDR	3" HDR	4" HDR	5" HDR	6" HDR	3" SK 50
Working Pressure*	85 BAR	85 BAR	85 BAR	130 BAR	400IH / 130 BAR	85 BAR
PRODUCT			TK 30, TKB 45, TKB 60, TKB 80	TK 40, TK 50, TK 60 HP, TK 70	BSA 100, BSA 120	
	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
Pipe 3m	A528639	A529213	A531772	A523024	A549621	081785001
Elbow Large 90°	A531774	524408	A529056	A540355	A556527	000418370
Elbow Large 45°	A531775	A531783	A529060	A544668	A556528	000418371
Elbow Standard 90°	A531776	A531784	A529842	A534135	A556526	081777006
Coupling	A531761	A527025	A527025	518049	A106021	417798
Gasket	A527010	A527008	A526333	A522711	A523918	064084004
Safety Pin	A555315	A555315	A555315	A555315	A555315	018878004
Hose	AT307562	A108003	AT307485	A108018		481172
Sponge Ball	000239004	000246000	016091003	018841002	026650007	000246000
DESCRIPTION	3" SK65	4" SK100	5.5" SK125	6" SK150	5.5" ZX125	6" ZX150
Working Pressure*	85 BAR	85 BAR	85 BAR	85 BAR	130 BAR	130 BAR
PRODUCT		TK 30	TK 40, TK 50, TK 70	BSA 100, BSA 120	TK 60 HP	
	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
Pipe 3m	057729004	056863000	A523036	A544172	A557231	A557218
Elbow Large 90°	Upon Request	223668009	223664003	026851000	051819004	244207009
Elbow Large 45°	Upon Request	223669008	223665002	057653002	057642000	244208008
Elbow Standard 90°	057756006	056914001	261402007	263206007	051808002	244200006
Coupling	417798	431613	417249	081530007	057329006	241292004
Gasket	006084004	081669004	055559001	002231000	041323005	069042009
Safety Pin	018878004	018878004	018878004	018878004		
Hose	253306001	253319001	433497	053180003		
Sponge Ball	000246000	016091003	018841002	026650007	018841002	026650007

* weight per ft/meter / peso per ft/meter

SMALL LINE TK 40 / TK 70 ACCESSORIES

ACCESSORIES / Accesorios	TYPE	PART NUMBER
90° 92 HD DN 125-5"Z / 80-3"Z-4.9	P Elbow XL	AST23799
90° 92 HD DN 125-5"Z / 100-4"Z-4.9	P Elbow XL	AST23791
HD 80 3."Z x 3048	Steel Wire Delivery Hose	A108003
ST52 Placing HDR 80-3"Z-26	Weld Ring	A527365
ST52 HD 75-3"Z / HD 65-2.5"Z 1000mm	Reducer	A558597
HD 65-2.5"Z x 7620	Fabric Delivery Hose	AT307181
ST52 HD 75-3"Z / HD 50-2"Z 1000mm	Reducer	A558596
HD 65-2.5"Z x 7620	Fabric Delivery Hose	AT307181
HDR-H 5.0" 125 HD	Forged Coupling Clamp	A531767
5" HD Delivery Pipe	Gasket	A522711
HDR-H 3.0" 80 HD	Forged Coupling Clamp	A531765
3" HD Delivery Pipe	Gasket	A527008
CPL HDR-H 2.5" 65 HD C	Coupling Clamp	A532182
2-1/2" HD Delivery Pipe	Gasket	A527009
CPL HDR-H 2.0" 50 HD C	Coupling Clamp	A532180
2" HD Delivery Pipe	Gasket	A527010

6.1 ACCESSORIES

COUPLINGS

Acople



A527025



A531767



A522619



A528757

HDR

STYLE		AVAILABLE SIZES							
		2"	2.5"	3"	4"	4.5"	5"	5.5"	6"
		PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER		PART NUMBER		PART NUMBER
LEVER	Cast	A532180	A532182	A522621	A527025		518049		A106021
	Cast w/ Gasket	A532180	A532182	A532184	A532186		A532188		
	Forged	A531762	A531764	A531765	A531766		A531767		A548000
	Forged w/ Gasket	A532181	A532183	A532185	A532187		A532189		A548001
	Adjustable		A547997	A522620	A532193		A522619		A547999
	Adjustable w/ Gasket		A548003	A532192	A532193				A548002
SCREW	Cast				A528757		A106016		A106021
GASKET		A527010	A527009	A527008	A526533		A522711		A546164



057329006



057241003

ZX

STYLE		AVAILABLE SIZES							
		2"	2.5"	3"	4"	4.5"	5"	5.5"	6"
		PART NUMBER	PART NUMBER	PART NUMBER		PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
BOLT	ZX-K	220084000	252688005				051342005	244412001	241292004
SCREW	Two Bolt Half			252679001			057241003	244410003	240514000
	Two Bolt Couple			241588006			057329006	241586008	241291005K
WEDGE	ZX-W			252693003				244419004	240948003
	Foot					249419009			

* weight per ft/meter / peso per ft/meter



SK METRIC									
STYLE		AVAILABLE SIZES							
		2"	2.5"	3"	4"	4.5"	5"	5.5"	6"
				PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
LEVER	Light			417801				285480005	
	Cast			417798	498678	431613	477744	A522617	544801
	Cast w/ Gasket					457564		220073008	
	Forged						A106005	417249	
	Adjustable						A532195		
	Foot			437953	018280003	457563	221211005	421629	477475
	Foot & Fitting				274470000	457686	054960002	424296	477476
SCREW	One Bolt				080086002	050984008	054960002	058102002	261807000
	Two Bolt							426594	026794002
	Four Bolt w/ Foot							534295	
	Two Bolt w/ Foot							430241	222068008
GASKET	A				001769007	057341000	A527308	055559001	002231000
	A Viton				080679008			257722005	
	C				051517005	081668005	051601005	081669004	051602004
	V-Lip							A527308	

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

6.2 ACCESSORIES

GASKETS

Sello



GASKETS										
STYLE	AVAILABLE SIZES									
			50	65	100		120		125	150
	2"	2.5"	3"	3"	4"	4.5"	5"	5" metric / HDR	5.5"	6"
SK										
Standard			064084004	064084004	001769007	057341000	026600002		055559001	002231000
Trilipp					051517005	081668005	051601005		081669004	051602004
Trilipp 2-Piece									484216	
V-Lip*								A106020-G	A527308	
HDR										
	A527010	A527009	A527008	A527008	A526533		A522711			A546164
ZX										
				041877001			041323005		267277003	069042009

Note: Trilipp seals C seal (081669004) are used in the boom area, only the last elbow has an A seal (055559001).

* small center lip

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

TWIN WALL REDUCERS

PRODUCT	QUALITY	NPS	SIZE	WELD-END	NPS	SIZE	WELD-END	LENGTH		PART NUMBER
								INCH	MM	
SF-SK	660	180	6.0	SF	150	6.0	SM	20	500	A522128
	660	150	6.0	SF	125	5.5	SK	39	1000	A522121
	660	150	6.0	SF	125	5.5	SK	49	1240	A522114
	660	150	6.0	SF	125	5.5	SK	51	1290	A522124
	660	150	6.0	SF	125	5.5	SK	52	1330	A522116
	660	150	6.0	SF	125	5.5	SK	57	1460	A522120
	660	150	6.0	SF	125	5.5	SK	59	1500	A522123
	660	150	6.0	SF	125	5.5	SK	61	1550	A522122
	660	150	6.0	SF	125	5.5	SK	63	1600	A522118
	660	150	6.0	SF	125	5.5	SK	65	1650	A522125
	660	150	6.0	SF	125	5.5	SK	74	1885	A522117
	660	150	6.0	SF	125	5.5	SK	100	2540	A522127
	660	125	5.5	SK	112	5.5	SK	39	1000	A593980
	660	150	6.0	SK	125	5.5	SK	43	1100	A522675
	660	150	6.0	SK	125	5.5	SK	51	1300	A522671
SK-SK	800	125	5.5	SK	117	5.5	SK	41	1050	A544486
	800	150	6.0	SF	125	5.5	SK	118	3000	A593181
	800	150	6.0	ZX	125	5.5	SK	118	3000	A539482

TWIN WALL REDUCERS										
PRODUCT	QUALITY	NPS	SIZE	WELD-END	NPS	SIZE	WELD-END	LENGTH		PART NUMBER
								INCH	MM	
SK-SK	900	150	6.0	SK	112	5.5	SK	41	1050	A523426
ZXV-SK	900	150	6.0	ZXV	117	5.5	SK	47	1200	A593174
	900	150	6.0	ZXV	125	5.5	SK	43	1100	A553971
SF-SK	900	150	6.0	SF	125	5.5	SK	51	1290	A593182
	900	150	6.0	SF	125	5.5	SK	57	1460	A522713
	900	150	6.0	SF	125	5.5	SK	61	1550	A523005
	900	150	6.0	SF	125	5.5	SK	63	1600	A593184
	900	150	6.0	SF	125	5.5	SK	65	1650	A523008
SK-HDR	P11H	120	5.0	SK		4.0	HDR	36	914	AT307496
HDR-HDR	P11H		4.0	HDR		3.0	HDR	39	991	A593170
	P11H		5.0	HDR		3.0	HDR	59	1499	A594982
	P11H		5.0	HDR		4.0	HDR	39	991	A593171
	P11H		6.0	HDR		4.0	HDR	59	1500	A594984
	P11H		6.0	HDR		5.0	HDR	39	1000	A594983
SINGLE LAYER REDUCERS										
PRODUCT	QUALITY	NPS	SIZE	WELD-END	NPS	SIZE	WELD-END	LENGTH		PART NUMBER
								INCH	MM	
HDR-HDR	ST52		4.0	HDR		3.0	HDR	36	914	A534434
	400IH		4.0	HDR		3.0	HDR	39	1000	A556506
	400IH		5.0	HDR		4.0	HDR	39	1000	A556508
	ST52		3.0	HDR		2.0	HDR	39	1000	A558596
	ST52		3.0	HDR		2.5	HDR	39	1000	A558597
	ST52		4.0	HDR		3.0	HDR	39	1000	A558598
	ST52		5.0	HDR		3.0	HDR	39	1500	A558599
	400IH		5.0	HDR		3.0	HDR	39	1000	A558507
	ST52		6.0	HDR		4.0	HDR	39	1500	A558601
	ST52		6.0	HDR		5.0	HDR	39	1000	A558602
SK-HDR	ST52	120	5.0	SK		4.0	HDR	12	305	A109029
	ST52	120	5.0	SK		4.0	HDR	36	914	AT305717
	ST52	150	6.0	SK		5.0	HDR	8	205	A109023

SINGLE LAYER REDUCERS Continued										
PRODUCT	QUALITY	NPS	SIZE	WELD-END	NPS	SIZE	WELD-END	LENGTH		PART NUMBER
								INCH	MM	
SK-SK	ST52	65	3.0	SK	50	3.0	SK	20	500	50962004
	ST52	65	3.0	SK	50	3.0	SK	39	1000	58670000
	ST52	100	4.0	SK	65	3.0	SK	39	1000	057330008
	ST52	100	4.5	SK	75	3.0	SK	39	1000	416362
	ST52	100	4.0	SK	50	3.0	SK	59	1500	081786000
	ST52	100	4.5	SK	65	3.0	SK	59	1500	427625
	ST52	100	4.5	SK	65	3.0	SK	20	500	050963003
	ST52	100	4.5	SK	65	3.0	SK	39	1000	224269009
	ST52	100	4.5	SK	75	3.0	SK	20	500	418145
	ST52	120	5.0	SK	100	4.0	SK	39	1000	053335007
	ST52	120	5.0	SK	100	4.0	SK	98	2500	083461006
	ST52	125	5.5	SK	75	3.0	SK	20	500	407394
	ST52	125	5.5	SK	75	3.0	SK	39	1000	416363
	ST52	125	5.5	SK	75	3.0	SK	59	1500	244411002
	ST52	125	5.5	SK	80	3.0	SK	39	1000	258743009
	ST52	125	5.5	SK	80	4.0	SK	39	1000	438467
	ST52	125	5.5	SK	80	4.5	SK	39	1000	266490001
	ST52	125	5.5	SK	80	4.5	SK	59	1500	273860006
	ST52	125	5.5	SK	100	4.0	SK	4	100	083374009
	ST52	125	5.5	SK	100	4.0	SK	39	1000	022216005
	ST52	125	5.5	SK	100	4.5	SK	39	1000	057604006
	ST52	125	5.5	SK	100	4.5	SK	59	1500	080617002
	ST52	125	5.5	SK	100	4.5	SK	98	2500	224031004
	ST52	125	5.5	SK	100	4.5	SK	20	500	057603007
	ST52	125	5.5	SK	112	5.5	SK	118	3000	487330
	ST52	125	5.5	SK	117	5.5	SK	118	3000	467509
	ST52	125	5.5	SK	117	5.5	SK	177	4500	468761
	ST52	125	5.5	SK	120	5.0	SK	4	100	057372007
	ST52	150	6.0	SK	120	5.0	SK	59	1500	081802007
	ST52	150	6.0	SK	125	5.5	SK	8	200	081050008
	ST52	150	6.0	SK	125	5.5	SK	20	500	221251001
	ST52	150	6.0	SK	125	5.5	SK	39	1000	476781
	ST52	150	6.0	SK	125	5.5	SK	47	1200	226561006
ZXV-ZXM	ST52	125	5.5	ZXV	100	5.0	ZXM	20	500	237340009
ZXV-SK	ST52	150	6.0	ZXV	125	5.5	SK	47	1200	401420
	ST52	150	6.0	ZXV	125	5.5	SK	47	1200	435338
	ST52	150	6.0	ZXV	125	5.5	SK	47	1200	441016
	ST52	150	6.0	ZXV	125	5.5	SK	39	1000	445072
	ST52	150	6.0	ZXV	125	5.5	SK	39	1000	277400006

** See product sheets for additional parts / Para piezas adicionales vea sección de productos



OFFSET ELBOWS, TWIN WALL, SK 5.5							
QUALITY		NOM. DIAMETER	NOM. DIAMETER	LENGTH	OFFSET	PUTZMEISTER PART NUMBER	ESSER PART NUMBER
660	7+3	120	5.5	1330	164		402463
660	7+4	125	5.5	1330	164		285692000
900	7+4	125	5.5	500	55		A102159
900	7+2	125	5.5	1335	287	A593420	423185
900	7+2	125	5.5	850	720		492175
900	7+4	125	5.5	500	55		A102159
900	7+2	120	5.5	1146	70	A593415	A522092

EXTENDED ELBOWS, TWIN WALL, SK 5.5							
QUALITY		NOM. DIAMETER	NOM. DIAMETER	DEGREE	EXTENSION LENGTH	PUTZMEISTER PART NUMBER	ESSER PART NUMBER
660		125	5.5	30	72		A528643
660		125	5.5	90	670		A525114
660	7+4	125	5.5	90	650		A525115
660	7+4	125	5.5	90	500		A525120
780 w/ Fin	7+4	125	5.5	90	615		A522041
900	7+4	125	5.5	90	655		A522047
900 w/ Fin	7+3	125	5.5	90	615		A522684
900 w/ Fin	7+3	125	5.5	90	410	A593410	A522715
900	7+2	125	5.5	40	272	A593351	A522058
900	7+2	125	5.5	45	626	A593353	A522056
900	7+2	125	5.5	45	87.3	A593354	A522085
900	7+2	125	5.5	50	305	A593355	A522057
900	7+2	125	5.5	52.5	447		A522050
900	7+2	125	5.5	90	375	A593356	A522052
900	7+2	125	5.5	90	410		A522053
900	7+2	125	5.5	90	355		A522054
900	7+2	125	5.5	90	385		A522055
900 w/ Fin	7+4	125	5.5	90	475	A593358	A522088
900		112	5.5	90	375		A522027
900		112	5.5	90	475		A522030
900		117	5.5	90	375		A510751
900	5+2	117	5.5	45	475	A593403	A104085
900	7+2	120	5.5	45	870		A522060
900	7+2	125	5.5	25	440	A593348	A522051
900	7+3	125	5.5	25	440		A522683

STANDARD ELBOWS, TWIN WALL, SK 5.5					
QUALITY		NOM. DIAMETER	DEGREE	PUTZMEISTER PART NUMBER	ESSER PART NUMBER
660		125	32.5		A522036
660		125	36		A522095
660		125	45		A522038
780	7+4	125	90		A522037
660 w/ Fin	7+4	125	90		A522042
660	7+2	125	15		A528644
660	7+2	125	90		A528645
660	7+4	125	15.9		A525112
660	7+4	125	16		A525109
660	7+4	125	20.3		A525111
660	7+4	125	20.6		A525116
660	7+4	125	27		A525113
660	7+4	125	30		A525108
660	7+4	125	7.7		A525117
660	7+4	125	90		A525033
660	7+4	125	90		A525034
780	7+4	120	20		A522035
780	7+4	125	40		A522039
900	5+2	112	25		A522026
900	5+2	112	30		A522023
900	5+2	112	32.5		A522024
900	9+2	120	14		A522046
900	9+2	120	17		A522043
900	7+2	120	25		A522049
900	9+2	120	32.5	A593340	A522044
900 w/ Flange	7+5	120	90		A522091
900	5+3	117	45		A522296
900	9+2	120	30		A522048
900	7+2	125	42		A525037
900	7+2	125	60		A525039
900	5+2	112	10		453306
900	5+2	112	15		453723
900	5+2	112	20		453714
900	5+2	112	30		453715
900	5+2	112	45	A593323	453716
900	5+2	112	90		445507
900	5+2	112	90	A593324	453717
900	5+4	117	10	A593329	465008
900	5+2	117	15		465287
900	5+2	117	20		465006
900	5+3	117	30		465005
900	5+2	117	34		494912
900	5+3	117	90	A593406	465011
900	5+3	117	90	A593333	465004
900	5+2	117	90	A593326	498618
900	7+2	125	10	A593415	416960

STANDARD ELBOWS, TWIN WALL, SK 5.5 CONTINUED					
QUALITY		NOM. DIAMETER	DEGREE	PUTZMEISTER PART NUMBER	ESSER PART NUMBER
900	7+2	125	10		088026006
900	7+2	125	15		057598002
900	7+4	125	15		232232002
900	7+2	125	15	A593416	416959
900	7+4	125	20	A593347	240970000
900	7+2	125	20	A593347	416958
900	7+4	125	30	A593417	232234000
900	7+2	125	30	A593417	416957
900	7+2	125	35		502391
900	7+2	125	35		493080
900	7+4	125	45		288115005
900	7+4	125	45	A589153	224034001
900	7+2	125	45	A593352	416956
900	7+2	125	5		430161

STANDARD ELBOWS, TWIN WALL 780, ANSI FLANGES							
QUALITY		NOM. DIAMETER	DEGREE	CLRmm	CLR inch	DEGREE	PART NUMBER
780	5+4	150	6.0	1000	39	30	A553343
780	5+4	150	6.0	1000	39	45	A553342
780	5+4	150	6.0	1000	39	90	A553340
780	5+4	200	8.0	510	20	30	A553356
780	5+4	200	8.0	1000	39	30	A553364
780	5+4	200	8.0	510	20	45	A553354
780	5+4	200	8.0	1000	39	45	A553363
780	5+4	200	8.0	510	20	90	A553351
780	5+4	150	6.0	1000	39	30	A553347
780	5+4	150	6.0	1000	39	45	A553345
780	5+4	150	6.0	1000	39	90	A553344
780	5+4	200	8.0	510	20	30	A553359
780	5+4	200	8.0	1000	39	30	A553366
780	5+4	200	8.0	510	20	45	A553358
780	5+4	200	8.0	1000	39	45	A553365
780	5+4	200	8.0	510	20	90	A553357
780	5+4	150	6.0	1000	39	30	A553350
780	5+4	150	6.0	1000	39	45	A553349
780	5+4	150	6.0	1000	39	90	A553348
780	5+4	200	8.0	510	20	30	A553362
780	5+4	200	8.0	1000	39	30	A553368
780	5+4	200	8.0	510	20	45	A553361
780	5+4	200	8.0	1000	39	45	A553367
780	5+4	200	8.0	510	20	90	A553360

6.5 ACCESSORIES

ELBOWS SINGLE LAYER

Codo Fundido



STANDARD ELBOWS, ST52 SINGLE LAYER, SK

NOM. DIAMETER	NOM. DIAMETER	CLR	DEGREE	PART NUMBER
65	3.0		45	057758004
80	4.0		45	059641009
80	4.0		90	059639008
100	4.0	275	45	018301005
100	4.0	1000	90	057704003
100	4.0	180	90	058303005
100	4.0	275	90	086110008
100	4.5	275	15	057595005
100	4.5	275	9	027640003
100	4.5	1000	90	223668009
100	4.5	275	45	057593007
100	4.5	180	90	431906
100	4.5	235	90	421329
120	5.0	181	30	021523003
120	5.0	292	45	089625008
120	5.0	1000	90	026852009
120	5.0	225.5	90	021844009
125	5.5	1000	30	223666001
125	5.5	1000	45	223665002
125	5.5	1000	90	223664003
125	5.5	218.5	20	245484009
125	5.5	218	30	258935008
125	5.5	275	45	057596004
150	6.0		20	257140001
150	6.0	1000	30	057654001
150	6.0		30	057599001
150	6.0	1000	45	057653002
150	6.0		45	021845008
150	6.0	1000	90	026851000
150	6.0		90	263206007

EXTENDED ELBOWS, ST52 SINGLE LAYER, SK

NOM. DIAMETER	NOM. DIAMETER	DEGREE	EXTENSION LENGTH	PART NUMBER
125	5.5	45	475	427190

STANDARD ELBOWS, ST52 SINGLE LAYER, HDR					
NOM. DIAMETER	WALL THICKNESS	CLR	CLR	DEGREE	PART NUMBER
2.0	3.6	16	406	45	A531777
2.0	3.6	48	1219	45	A531775
2.0	3.6	16	406	90	A531776
2.0	3.6	48	1219	90	A531774
2.5	5.2	48	1219	90	A531778
2.5	5.2	48	1219	45	A531779
2.5	5.2	16	406	90	A531780
2.5	5.2	16	406	45	A531781
3.0	5.5	7.5	191	45	A529150
3.0	5.5	48	1219	45	A531783
3.0	5.5	16	406	45	A531785
3.0	5.5	7.5	191	90	A529148
3.0	5.5	48	1219	90	A531782
3.0	5.5	16	406	90	A531784
4.0	6.4	48	1219	45	A529060
4.0	6.4	16	406	45	A529069
4.0	6.4	48	1219	90	A529056
4.0	6.4	16	406	90	A529067
4.0	4.0	32	813	15	A539380
4.0	4.0	48	1219	15	A539374
4.0	4.0	32	813	20	A539381
4.0	4.0	48	1219	20	A539378
4.0	4.0	32	813	30	A539382
4.0	4.0	48	1219	30	A539379
4.0	3.6	32	813	45	A528350
4.0	3.6	32	813	90	A528349
5.0	6.4	24	610	45	A534136
5.0	3.0	18	457	90	AT305459
5.0	6.4	48	1219	90	A540355
6.0	7.1	39	1000	15	A542569
6.0	7.1	39	1000	30	A542568
6.0	7.1	39	1000	45	A542566
6.1	7.1	39	1000	90	A542565

STANDARD ELBOWS, ST52 SINGLE LAYER, ZX

NOM. DIAMETER	NOM. DIAMETER	CLR	DEGREE	PART NUMBER
150	6.0	1000	30	244209007
150	6.0	1000	45	244208008
150	6.0	1000	90	244207009
100	5.0	1000	30	058031005
100	5.0	1000	45	058030006
100	5.0	1000	90	058029004
125	5.5	1000	15	265368008
125	5.5	1000	15	057644008
125	5.5	1000	30	057643009
125	5.5	1000	45	057642000
125	5.5	1000	90	265371008
150	6.0		30	244200006
100	5.0		90	058044005
100	5.0		45	058045004
125	5.5		30	057180009
125	5.5		45	057181008
125	5.5		90	051808002

STANDARD ELBOWS, ST52 SINGLE LAYER, SK

		15	30	45	90 / 275	90 / 180
NOM. DIAMETER	NOM. DIAMETER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER
65	3.0	057760005	057759003	057758004		
80	4.0			059641009	059639008	
100	4.0				086110008	058303005
100	4.5	057595005	057594006	057593007	421329	
120	5.0		021523003	089625008	021844009	
125	5.5	057598002	258935008	057596004	261402007	422732
150	6.0		057599001	021845008	263206007	

LARGE RADIUS ELBOWS, CLR 1000

		30	45	90
NOM. DIAMETER	NOM. DIAMETER	PART NUMBER	PART NUMBER	PART NUMBER
100	4.0			057704003
100	4.5			223668009
120	5.0			026852009
125	5.5	223666001	223665002	223664003
150	6.0	057654001	057653002	026851000



▲
T-PIPE

T-PIPES	
PRODUCT	PART NUMBER
SK125-5 1/2 x1000	057615008
SK150-6 x260	234315008
ZX125-5 x1000	057045005
ZX150-6 x1000	258940006
ST52 HD100/4Z	A528348
ST52 HDR DN 125 5.0 457mm	A557907
ST52 HDR DN 100-4Z-4.6 457mm	A557906
T-Reducing pipe ZXV6 / SK5.5 x1200	412980
Adapter SK / HDR ST52 DN 125-5Z-7.1 150mm	A564428
Adapter 3" HD - 3" SK 80	A571216
P Pipe HD-R ST52 DN 100-4.5Z-4.6X 150mm	A572271
Adapter HD-R ST52 DN 100-4.5Z-4.6 150mm	A572765

6.7 ACCESSORIES

DELIVERY HOSES AND END HOSES

Manguera



DELIVERY HOSES, CONCRETE HOSES SK

CONNECTION	SIZE	WIRE	LENGTH		PART NUMBER
			FOOT	MM	
HD	2.00	x	10	3048	A579260
HD	2.00	x	12	3658	A579261
HD	2.00	x	15	4572	A579262
HD	2.00	x	25	7620	A579263
HD	2.00	x	50	15240	A579264
HD	2.50	x	10	3048	A579265
HD	2.50	x	12	3658	A579266
HD	2.50	x	15	4572	A579267
HD	2.50	x	25	7620	A579268
HD	2.50	x	50	15240	A579269
HD	3.00	x	10	3048	A579270
HD	3.00	x	12	3658	A579271
HD	3.00	x	15	4572	A579272
HD	3.00	x	25	7620	A579273
HD	3.00	x	50	15240	A579274
HD	3.50	x	10	3048	A579275
HD	3.50	x	12	3658	A579276
HD	3.50	x	15	4572	A579277
HD	3.50	x	25	7620	A579278
HD	3.50	x	50	15240	A579279
HD	4.00	x	10	3048	A579280
HD	4.00	x	12	3658	A579281
HD	4.00	x	15	4572	A579282
HD	4.00	x	25	7620	A579283
HD	4.00	x	50	15240	A579284
HD	5.00	x	10	3048	A579285
HD	5.00	x	12	3658	A579286
HD	5.00	x	15	4572	A579287
HD	5.00	x	25	7620	A579288
HD	5.00	x	50	15240	A579289
HD	6.00	x	10	3048	A579290
HD	6.00	x	12	3658	A579291
HD	6.00	x	15	4572	A579292
HD	6.00	x	25	7620	A579293
HD	6.00	x	50	15240	A579294

DELIVERY HOSES, CONCRETE HOSES SK CONTINUED					
CONNECTION	SIZE	FABRIC	LENGTH		PART NUMBER
			FOOT	MM	
HD	1.25	x	10	3048	A579295
HD	1.25	x	12	3658	A579297
HD	1.25	x	15	4572	A579298
HD	1.25	x	25	7620	A579299
HD	1.25	x	50	15240	A579300
HD	1.50	x	10	3048	A579301
HD	1.50	x	12	3658	A579302
HD	1.50	x	15	4572	A579303
HD	1.50	x	25	7620	A579304
HD	1.50	x	50	15240	A579305
HD	2.00	x	10	3048	A579307
HD	2.00	x	12	3658	A579308
HD	2.00	x	15	4572	A579309
HD	2.00	x	25	7620	A579310
HD	2.00	x	50	15240	A579311
HD	2.50	x	10	3048	A579312
HD	2.50	x	12	3658	A579313
HD	2.50	x	15	4572	A579314
HD	2.50	x	25	7620	A579315
HD	2.50	x	50	15240	A579316
HD	3.00	x	10	3048	A579317
HD	3.00	x	12	3658	A579318
HD	3.00	x	15	4572	A579319
HD	3.00	x	25	7620	A579320
HD	3.00	x	50	15240	A579321
HD	4.00	x	10	3048	A579322
HD	4.00	x	12	3658	A579323
HD	4.00	x	15	4572	A579324
HD	4.00	x	25	7620	A579325
HD	4.00	x	50	15240	A579326
HD	4.50	x	10	3048	A579327
HD	4.50	x	12	3658	A579328
HD	4.50	x	15	4572	A579329
HD	4.50	x	25	7620	A579330
HD	4.50	x	50	15240	A579331
HD	5.00	x	10	3048	A579332
HD	5.00	x	12	3658	A579333
HD	5.00	x	15	4572	A579334
HD	5.00	x	25	7620	A579335
HD	5.00	x	50	15240	A579336

DELIVERY HOSES, CONCRETE HOSES SK						
CONNECTION	SIZE	NOM. INNER	WIRE	LENGTH		PART NUMBER
				INCH	MM	
SK	3.0	50	x	33	10000	481172
SK	3.0	65	x	33	10000	059170004
SK	3.0	65	x	66	20000	082238007
SK	3.0	65	x	15	4500	253306001
SK	4.0	80	x	16	5000	058123007
SK	4.0	80	x	20	6000	498705
SK	4.0	100	x	7	2100	220286002
SK	4.0	100	x	9	2850	016150009
SK	4.0	100	x	13	4000	089624009
SK	4.0	100	x	16	5000	001755008
SK	4.0	100	x	20	6000	27631009
SK	4.5	100	x	33	10000	285784002
SK	4.5	100	x	9	2850	057607003
SK	4.5	100	x	10	3000	253319001
SK	4.5	100	x	20	6000	027623004
SK	4.0	100	x	33	10000	001756007
SK	4.5	100	x	16	5000	057609001
SK	5.0	120	x	10	3000	021506004
SK	5.0	120	x	13	4000	083177002
SK	5.0	120	x	16	5000	021534005
SK	5.0	120	x	20	6000	054125009
SK	5.5	125	x	33	10000	259907006
SK	5.5	125	x	7	2000	027643000
SK	5.5	125	x	7	2200	224815000
SK	5.5	125	x	9	2700	225838002
SK	5.5	125	x	13	4000	089983009
SK	5.5	125	x	20	6000	057613000
SK/HD	5.5/5.0	125	x	10	3048	A108001
SK	5.5	125	x	3	1000	289167007
SK	5.5	125	x	16	5000	057612001
SK	5.5	125	x	9	2700	225839001
SK	5.5	125	x	7	2200	224812003
SK	5.5	125	x	9	2800	244290003
SK	5.5	125	x	10	3000	433497
SK	6.0	150	x	7	2000	089939008
SK	6.0	150	x	10	3000	053180003
SK	6.0	150	x	16	5000	088825003

DELIVERY HOSES, CONCRETE HOSES						
CONNECTION	SIZE	WIRE	FABRIC	LENGTH		PART NUMBER
				FOOT	MM	
Cam Lock		25	x	33	10000	207804009
Cam Lock		25	x	33	10000	207809004
Cam Lock		25	x	49	15000	211966001
Cam Lock		25	x	66	20000	207806007
Cam Lock		25	x	16	5000	207803000
Cam Lock		25	x	16	5000	207808005
Cam Lock		35	x	44	13300	207615007
Cam Lock		35	x	44	13300	207616006
Cam Lock		35	x	66	20000	209950003
Cam Lock		50	x	43	13000	207617005
Cam Lock		65	x	66	20000	443672
Cam Lock		25	x	23	7000	001602009
Cam Lock		35	x	26	8000	001603008
Cam Lock		50	x	26	8000	001605006
END HOSES, CONCRETE HOSES HDR						
CONNECTION	SIZE	WIRE	FABRIC	LENGTH		PART NUMBER
				FOOT	MM	
HD	2.0	x		10	3048	A583154
HD	2.0	x		12	3658	A583160
HD	2.0	x		15	4572	A583161
HD	2.5	x		10	3048	A583167
HD	2.5	x		12	3658	A583169
HD	2.5	x		15	4572	A583170
HD	3.0	x		10	3048	A583171
HD	3.0	x		12	3658	A583172
HD	3.0	x		15	4572	A583173
HD	4.0	x		10	3048	A583177
HD	4.0	x		12	3658	A583178
HD	4.0	x		15	4572	A583179
HD	5.0	x		10	3048	A583180
HD	5.0	x		12	3658	A583181
HD	5.0	x		15	4572	A583182
HD	1.5		x	10	3048	A583191
HD	1.5		x	12	3658	A583192
HD	1.5		x	15	4572	A583193
HD	2.0		x	10	3048	A583194
HD	2.0		x	12	3658	A583195
HD	2.0		x	15	4572	A583196
HD	2.5		x	10	3048	A583197
HD	2.5		x	12	3658	A583198
HD	2.5		x	15	4572	A583199
HD	3.0		x	10	3048	A583200

END HOSES, CONCRETE HOSES HDR CONTINUED

CONNECTION	SIZE	WIRE	FABRIC	LENGTH		PART NUMBER
				FOOT	MM	
HD	3.0		x	12	3658	A583201
HD	3.0		x	15	4572	A583202
HD	4.0		x	10	3048	A583203
HD	4.0		x	12	3658	A583204
HD	4.0		x	15	4572	A583205
HD	5.0		x	10	3048	A583209
HD	5.0		x	12	3658	A583210
HD	5.0		x	15	4572	A583211

END HOSES, HDR

CONNECTION	SIZE	NOM. INNER	WIRE	POLYURE- THANE	LENGTH		PART NUMBER
					FOOT	MM	
SK	4.5	100	x		10	3048	233647007
SK	4.5	100	x		13	3962	276233009
SK	4.5	100	x		43	13106	484693
SK	4.5	100	x		79	24079	478055
SK	5.0	120	x		10	3048	233648006
SK	5.0	120	x		13	3962	426587
SK	5.5	125	x		10	3048	233649005
SK	5.5	125	x		13	3962	242838001
SK	5.5	125	x		20	6096	237592006
SK	6.0	150	x		10	3048	262176002
HD	4.0			x	10	3048	A580363
SK	4.0			x	10	3048	A580364
HD	4.0			x	12	3658	A578634
HD	4.0			x	15	4572	A580366
SK	4.0			x	15	4572	A580367
HD	4.0			x	20	6096	A580368
SK	4.0			x	20	6096	A580369
HD	4.0			x	21	6401	A580370
HD	4.0			x	25	7620	A580371
SK	4.0			x	25	7620	A580372



The Steady End Hose – Better Safe Than Sorry

- Significantly less deflection
- Risk of injury minimized
- Gentler work at the end hose
- Less wear

STEADY END HOSE	PART NUMBER
125/5.5" 3m	480550
125/5.5" 4m	480549
100/4.5" 3m	480548
100/4.5" 4m	476899

STEADY END HOSE VARIANTS	PART NUMBER
variant 3m (1m + 2m)	589666
END HOSE SH 125=5.5Z x 2000 SPECIAL	
variant 4m (1.5m + 2.5m)	589668
END HOSE SH 125=5.5Z x 2500 SPECIAL	
variant 4m (1m + 3m)	589669
END HOSE SH 125=5.5Z x 3000 SPECIAL	

PNEUMATIC SQUEEZE VALVE	PART NUMBER
EQV DN 125	542004

Less deflection, more safety – The New Steady End Hose

The completely newly fitted SH end hose helps you reducing the risk of injury when concreting with placing booms. A wealth of experience gained in the field fed into further developing and decisively improving the Steady End Hose.

Previously, a concrete end hose responded to uncontrolled changes in pressure in the concrete (caused by air pockets or the release of a blockage) with violent sideways movement. With the new, stabilized Steady End Hose, this unforeseeable deflection, which in certain circumstances may pose a risk of injury, is substantially reduced, and becomes much weaker. The improved design of the reinforcing fabric has made it possible to minimize the risk of injury, to carry out concrete distribution in a way that protects the body more. At the same time Putzmeister has improved the wear behavior.

Accessories Variants: Safe, Clean, Steady End Hose

The benefits that the Putzmeister end hose accessories provide are also available in conjunction with the end hose. By using the end hose, working safety is increased above legal regulations.



Divided End Hose + EQV + End Hose

The combination of end hose accessories and end hose provides you with the ideal alliance of safety, speed and precision.

With the divided end hose, you have a pneumatic EQV squeeze valve at your disposal for every combination.



Your Putzmeister service branch or Putzmeister dealer will be happy to help you draw up your perfect end-hose package.



The End Hose Shut-off Valve (EQV) – Stops the Concrete Flow Immediately.

No mess, no spraying. The end hose is squeezed together when you wish to interrupt or stop the flow of concrete. This is one with such force that dripping is completely eliminated. Entirely free of metal parts which could become a hazard, it also requires very little installation work.



For Clean Concreting:

- Same valve for DN 125 and DN 100
- Simple and robust
- Closes reliably with pneumatic pressure*
- Flexible positioning along the hose
- No metal parts, minimizes the risk of injury
- Easily interchangeable with current valves
- Internal diameter: 180 mm, which means that it can be pulled over the spout on the boom tip

* The pneumatic end hose shut-off valve is connected to an existing air system at the end of the boom (operating pressure 3-4 bar). If your machine has yet to be fitted with this air system, contact the Putzmeister After Sales and Parts Service before ordering the pneumatic end hose shut-off valve. We can offer you low-cost retrofitting.



End Hose Accessories – See Just How Safe and Clean Concreting Can Be

It's often the little things that make life and work easier. This was precisely our aim when we developed the accessories for the end hose. The end result is many useful details, which we are certain you will no longer want to do without.

EQV valve

- Robust and flexible
- Pneumatically operated
- Closes reliably
- No metal parts, minimizes the risk of injury

Protective sleeve with Velcro fastener

- Lightweight and clean
- Easy to fit
- Minimizes the risk of injury at the coupling

Concrete brake

- More even, smoother flow of concrete
- No spraying
- Quick and easy assembly
- Suitable for end hoses with diameters of 100mm and 125mm

6.7 ACCESSORIES

MUDSNAKE / SERIES 2320, CONCRETE PLACEMENT HOSE



Series 2320 “Mud-Snake” is a lay flat hose made from extruded thermoplastic polyether based polyurethane (TPU) with excellent wear & tear characteristics. The circular woven reinforcement is made from an extra strong yarn. The “extrusion through the weave” production method gives a very strong bond between cover and lining, and encapsulates the woven reinforcement.

The heavily reinforced weave ensures minimum extension in length and minimum “snaking” or bending of the hose.

Features & Benefits Meets/Exceeds CPMA Requirements 1/3 the Weight Operator Friendly More Consistent Flow at Lower Placement Rates Ease of Pour in Tight Areas Brigh Color for Visibility and Safety Superior Resistance of Weather and Aging Easily Cleans Up.

MUDSNAKE / SERIES 2320, CONCRETE PLACEMENT HOSE

I.D.	WALL THICKNESS	W.P.	BURST	WEIGHT W/O CONCRETE	WEIGHT W/CONCRETE
4" (111.0+2.0MM)	0.16MM	1250 PSI	2500 PSI	1.25 LBS/FT	14.38 LBS/FT

6.8 ACCESSORIES

CLEANING ACCESSORIES

Acessorios de Limpieza

CLEANING ACCESSORIES		
PRODUCT	NOM. DIAMETER	PART NUMBER
CATCHING BASKET		
	4.5	276715006
	5.5	276593008
CLEANING LID		
	125	057619004
CLEANING PIG		
	125	265417001
	100	253952002
	125	253953001
	150	253955009
CLEANING PORT		
	SK 4.5	276711000
	SK 5.5	276591000
	ZX 5.5	086050003
	ZXV 6.0	259824008
SPONGE BALL		
Medium	20	429485
Medium	100	295904005
Medium	120	016091003
Soft	120	230227006
Hard	120	234053001
Medium	150	018841002
Hard	150	223673007
Soft	150	230229004
Medium	150	245112009
Medium	175	026650007
Hard	175	406379
Medium	220	065348008
Hard	280	239334000
Medium	70	25832008
Hard	30	000239004
Medium	45	065044001
Medium	60	000212005
Soft	60	233494001
Hard	80	000246000
Soft	80	422531
Medium	20	429483
Octagon	175	A555371
Octagon	120	A533527
SPONGE CUBE		
	125	063567001
	150	063597000
SPONGE CYLINDER		
	140X150	504034
	175X200	513102
SPONGE PIG		
	120x150	256126000
	150x180	253086004
	80x105	257107002



276593008



276591000



235217008



265417001



063567001



018841002



A555371



504034



256126000

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

6.9 ACCESSORIES

WELD RINGS

Anillo



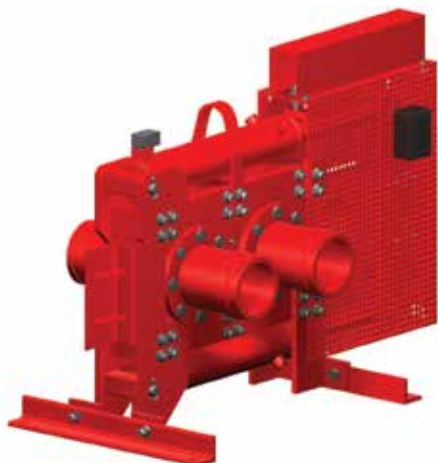
WELD RINGS						
STYLE	QUALITY	TYPE	NOM. DIAMETER	NOM. DIAMETER	WALL THICKNESS	PART NUMBER
HDR	ST52	Deck	5.0	125		524035
HDR	ST52	Boom	5.0	100		A527376
HDR	ST52	Boom	5.0	125		488022
HDR	ST52		2.0	50		A527361
HDR	ST52		3.0	80		A527365
HDR	ST52		4.0	100		524054
HDR	ST52		2.5	63		A527364
HDR	ST52		5.0			A522614
HDR	400IH		6.0	150		A546158
S150	400IH		6.0	150	7.1	A553235
S150	400IH		8.0	200	12.5	A553294
S150	400IH		8.0	200	8.0	A553291
S300	400IH		6.0	150	7.1	A553236
S300	400IH		8.0	200	12.5	A553295
S300	400IH		8.0	200	8.0	A553292
S600	400IH		6.0	150	7.1	A553237
S600	400IH		8.0	200	12.5	A553296
S600	400IH		8.0	200	8.0	A553293
SM		Schwing	6.0	150		A522687
SF		Schwing	6.0	150		A522689

WELD RINGS						
STYLE	QUALITY	TYPE	NOM. DIAMETER	NOM. DIAMETER	WALL THICKNESS	PART NUMBER
SK	660	Deck	5.5	125	5+3	438910
SK	900	Deck	5.5	125	5+3	438912
SK	900	Deck	5.5	117	6+1.5	A506772
SK	900	Boom	5.5	125	3+1.5	A661021
SK	900	Boom	5.5	117	2+1.5	484444
SK	900	Boom	5.5	117	3+1.5	A522615
SK	900	Boom	5.5	117	2+1.5XL	A522364
SK	900	Boom	5.5	112	2+2	A523863
SK	ST52		3.0	65		057712008
SK	ST52		4.0	100		018253001
SK	ST52		4.5	100		056795000
SK	900		5.5	112		296968008
SK	ST52		5.0	120		053509008
SK	ST52		5.5	125		056852008
SK	900		5.5	125		506452
SK	ST52		6.0	150		021701003
SK/ZX	ST52		6.0	150		268577003
ZXM	ST52		5.5	125		251974008
ZXM	ST52		6.0	150		240161000
ZXM	ST52		6.0	150	40	244028000
ZXM	ST52		6.0	150	5.2	244029009
ZXM	ST52		8.0	200	60	234167007
ZXM	ST52		8.0	200	216	234653003
ZXM	ST52		8.0	200	219	241575006
ZXV	ST52		4.0	100		058035001
ZXV	ST52		5.5	125	50	251973009
ZXV	ST52		5.5	125	80	255069003
ZXV	ST52			50		220086008
ZXM			5.5	125		407038
ZXV			5.0	125		051461009
ZXM				100		058037009
ZXV				140		056630000

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

6.10 ACCESSORIES

VALVES



▲
24639004



▲
524120

DIVERSION VALVES

STYLE	TYPE	QUALITY	PART NUMBER
SK	DVH 5/2	SK125/5.5	24639004
SK	DVH 5/2	SK125/5.5	223391004
HD	DVH 5/2	HD5/5	A110078
ZX	DVH 5/2	ZX100-5	242827009
ZX	DVH 5/2	ZX100-5	244936008
ZX	DVH 5/2	ZX125/5	246985002
ZX	DVH 5/2	ZX125-5	279815000
ZX	DVH 5/2	ZX125-5	279816009
ZX	DVH 5/2	ZX125-5 1/2	255983008
ZX	DVH 5/2	ZX125-5 1/2	255984007
ZX	DVH 5/2	ZX150/6.0 EC	504119
ZX	DVH 5/2	ZX150/6.0 EC	504129

GATE VALVES HYDRAULIC MANUAL

STYLE	TYPE	QUALITY	PART NUMBER
HDR	GVHM 2/2	HDR125/5.0 130	524091
ZX	GVHM 2/2	ZX125/5.5 130	524120
SK	GVHM 2/2	SK125/5.5 130	524087

GATE VALVES HYDRAULIC

STYLE	TYPE	QUALITY	PART NUMBER
W/O Rings	GVH 2/2	DN 125	437401
SK	GVH 2/2	SK 125/5.5	402112
SK	GVH 2/2	SK 125/5.5	435091
SK	GVH 2/2	SK 125/5.5-EC	435090
SK	GVH 2/2	SK 150/6.0	089942008
SK	GVH 2/2	SK125-5.5 HP	A510750
ZX	GVH 2/2	ZX 50/3.0 EC HD	438782
ZX	GVH 2/2	ZX 65/3.0 EC HD	438783
ZX	GVH 2/2	ZX 80/3.0 EC	438784
ZX	GVH 2/2	ZX 100/5.0	050317002
ZX	GVH 2/2	ZX 100/5.0	251955001
ZX	GVH 2/2	ZX 125/5.0	406682
ZX	GVH 2/2	ZX 125/5.0-EC	406681
ZX	GVH 2/2	ZX 125/5.5	442030
ZX	GVH 2/2	ZX 150/6.0	273318008
ZX	GVH 2/2	ZX 150/6.0Z	459202
ZX	GVH 2/2	ZX 150/6.0Z	459203
ZX	GVH 2/2	ZX 200/8.0	028634005
ZX	GVH 2/2	ZX 200/8.0	088451008
ZX	GVH 4/2	ZX 100/5.0	237133009
ZX	GVH 4/2	ZX 125/5.0	24938006
ZX	GVH 4/2	ZX 150/6.0	258915002
ZX	GVH 6/3	ZX 100/5.0	244710004
ZX	GVH 6/3	ZX 150/6.0	253745002
ZX	GVH 6/3	ZX 150/6.0	253802000
HD	GVH 2/2	5 HD	A110089

GATE VALVES MANUAL

STYLE	TYPE	QUALITY	PART NUMBER
HDR	GVM 2/2	5 HD	A516915K
ZX	GVM 2/2	ZX 125/5.0	261988000

S-TUBE DIVERSION VALVE HYDRAULIC

STYLE	TYPE	QUALITY	PART NUMBER
ZX	SDVH 3/2	ZX 125/5.5	562143



▲
261988000



▲
562143

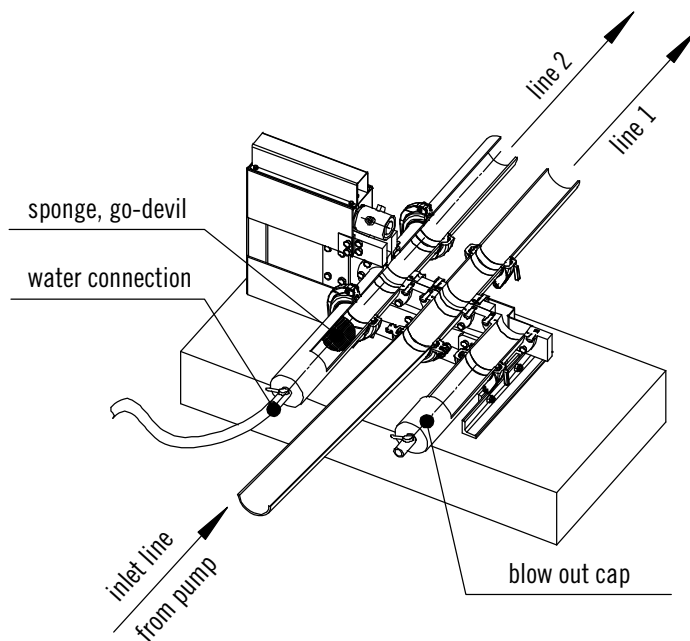
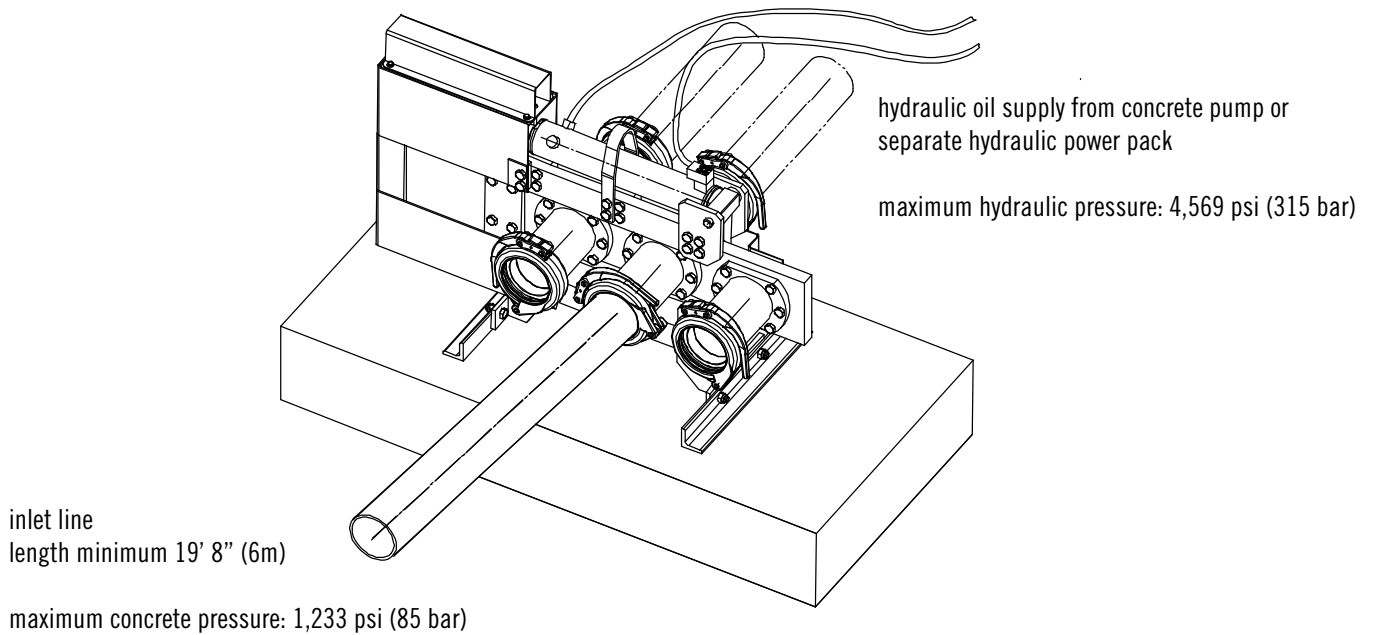


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402112

** See product sheets for additional parts / Para piezas adicionales vea sección de productos

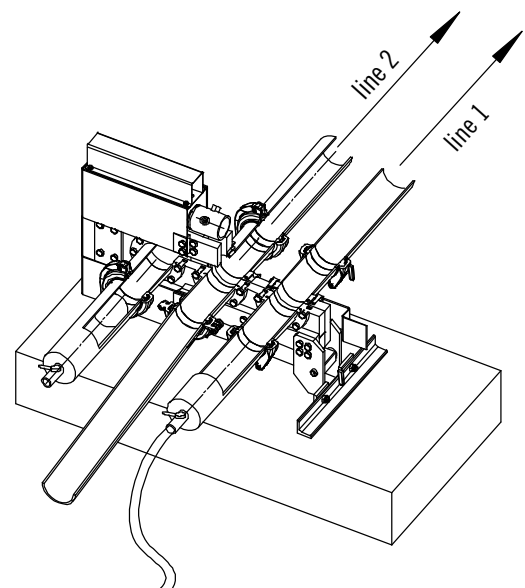
6.10 ACCESSORIES

FUNCTION OF DIVERSION VALVE DVH5/2



Position 1

Pump through line 1
Clean line 2



Position 2

Pump through line 2
Clean line 1

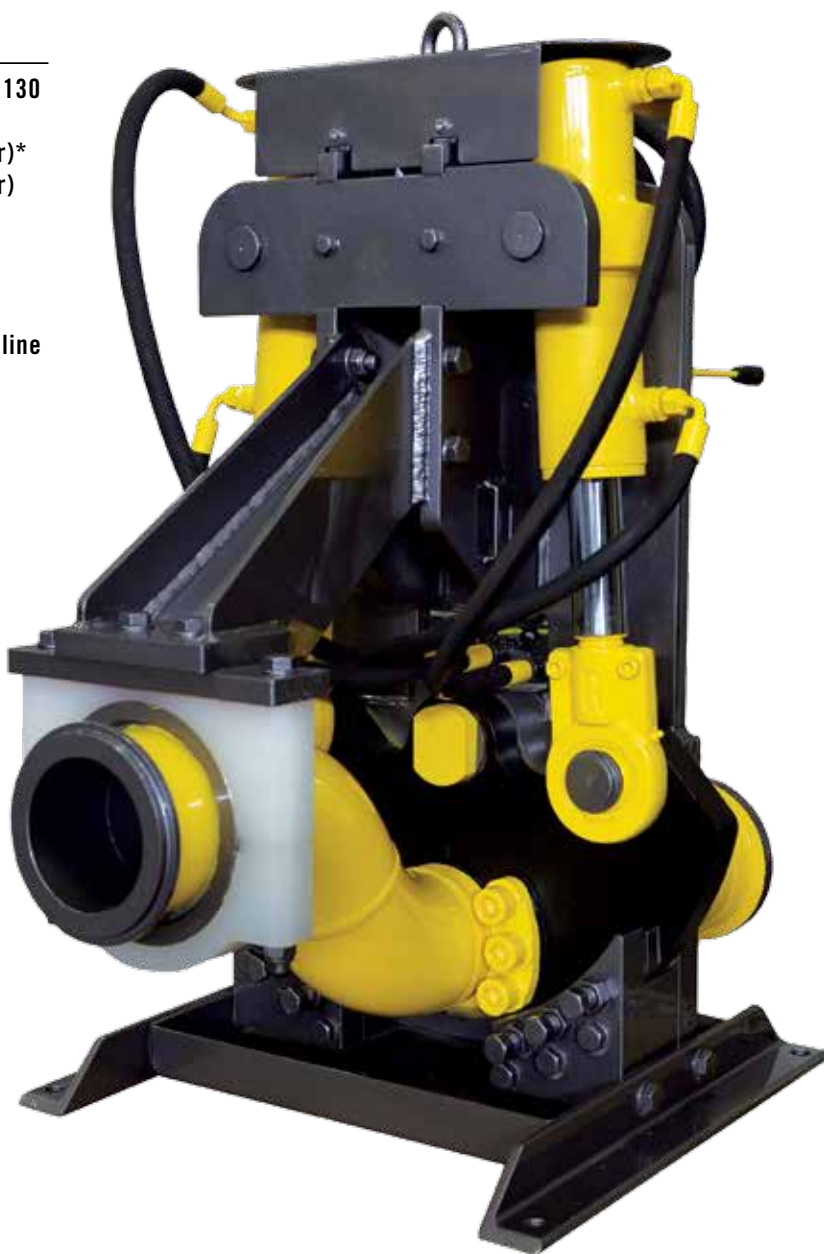
VALVE SPECIFICATIONS

Description	SDVH 3/2 125/5.5 130
Part Number	562143
Max Delivery Pressure	1,885 psi (130 bar)*
Max Hydraulic Pressure	2,900 psi (200 bar)
Pipeline Diameter	5" (127mm)
Coupling	5.50" ZX
Ports/Positions	3/2

* Standard delivery line system rated at max line pressure of 1,233 psi (85 bar)

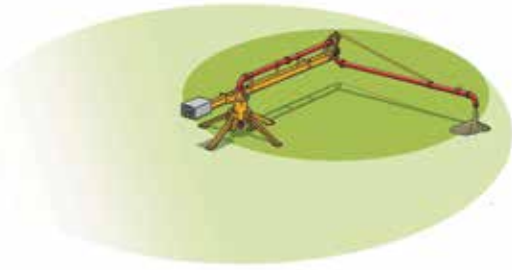
ADVANTAGES

- S-Valve Hydraulic Diversion Valve
- SDVH 3/2 with hydraulic switchover, designed for selective charging of two delivery lines
- Ideal for continuous use on demanding high-rise and long-distance pumping projects
- Leak-proof design
- Connects to 5-inch pipeline
- Works with delivery pressures up to 1,885 psi

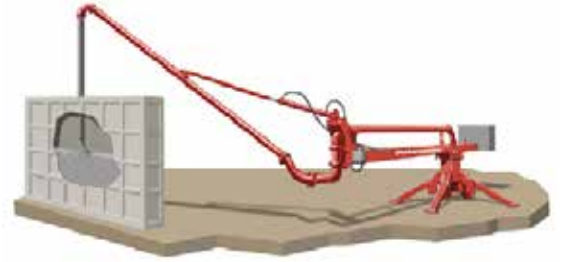


6.11 ACCESSORIES

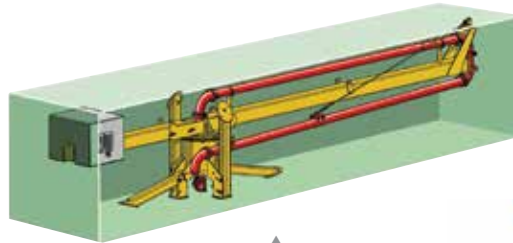
DECK PLACERS



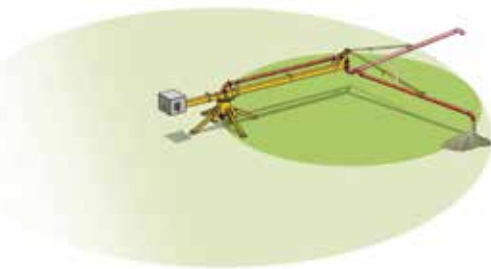
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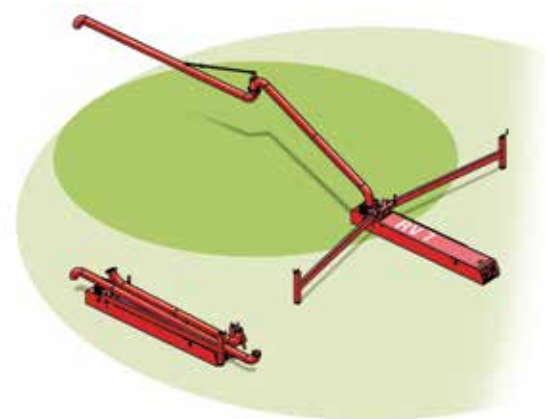
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467517



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487841



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455597

DECK PLACERS

PRODUCT	WEIGHT	PART NUMBER
Rotary distributor RV10 5.5	1568kg	426078
Rotary distributor RV12 L	2800kg	522819
Rotary distributor RV12 L 4.5	2600kg	487841
Rotary distributor RV13 5.5	2560kg	467517
Rotary distributor RV7	840kg	455597
Rotary distributor RV0	70kg	500570



THE EXTENDED ARM OF CONCRETE DISTRIBUTION

Rotary distributors fit precisely in places where others have to adapt

Because of its perfection, the circle was the focus of attention in Greek antiquity. The fascinating thing about it was, and is, that all points on its plane are the same distance from its centre. It is precisely this characteristic that makes using rotary distributors in concrete placement so effective. They can be turned through 360 degrees, in this way; they arrive at their maximum reach.

Rotary distributors are a very cost-effective alternative to truck-mounted concrete pumps, stationary booms or delivery lines, when it comes to distributing concrete over a wide range. Alternatively they are used in combination with placing systems in order to extend their areas of application. This is especially the case, since they are easy to relocate by crane once concreting a particular area is finished.

Moreover, their reach of up to 22 m is not noticed until they are set up, because during transport they are extremely modest when it comes to space requirement and weight. For this reason they are very generous in terms of the variety of products, so that you have many models available to you which outdo all others in terms of their degree of efficiency and longevity. With all these advantages, rotary distributors are the first choice when other options reach their technical or economic limits.



Sophisticated Design – Marvellously Compact, Rapid Shortening

We have designed our product range to meet your demands: From the compact, hand-held additional unit, which consists of just a hinge and two delivery line bends, to rotary distributors with a reach of up to 15 m, which can effortlessly concrete an area of up to 700 m², and hydraulically slewable rotary distributors, used mainly in precasting works.

When conditions get tight, the direct response characteristics and low weight ensure precise and comfortable working, whether in manual operation or with the support of a hydraulic drive.

A further advantage is that it is uncomplicated to transport: The RV 0 or RV 7, for example, can be transported very easily using a trailer or even on larger truck-mounted concrete pumps, thanks to its small dimensions and low weight. The design of models RV 10, RV 12/13 and RV 15 is so compact that they can be transported easily to the construction site using a truck or trailer, using a minimum of space. On the construction site itself, using a construction crane will increase the working area.

All this is available in tried and tested Putzmeister quality: robust, practical, low-wear and low-maintenance.



Rotary Distributors at a Glance

- Concreting large areas and floors that can no longer be reached or fully covered by a truck-mounted concrete pump
- Can be used when manufacturing prefabricated concrete parts
- Used in tunnel construction sites
- Comfortable handling
- Uncomplicated transport
- Quick set-up
- Practical, optional accessories
- Low-maintenance and easy to service



EVERYTHING REVOLVES AROUND YOUR APPLICATIONS

Rotary Distributors are Real All-rounders

The many different options for combining a stationary concrete pump with a wide range of outputs, and for combining rotary distributors with different reaches ensure an optimized process in many areas. Take the Belgian precasting works Eloy et Fils, for example. By means of well-considered planning and largely automated production, this Belgian manufacturer of prefabricated concrete parts has been able to rationalize and expand production. The use of rotary distributors has proved itself worthwhile in the best way possible. Devices with a reach of 13 m and two horizontally slewable pipe hangers allow several types of filling in one operation, without the need for conversion.

Another example is the construction of the Zhuhai Tunnel in China where rotary distributors, which are fitted to the tunnel formwork using lifting gear, are currently proving useful. However, the machinery can also be put to use just as economically in sewage treatment plants for example, or on various types of construction site worldwide, where rotary distributors are also used as a flexible supplement to the truck-mounted concrete pump placing booms.

A Summary of Possible Applications

- Concreting large areas and floors that can no longer be reached or fully covered by a truck-mounted concrete pump
- Concreting floors and pillars where using placing booms would be too costly
- Manufacture of precast concrete parts
- On tunnel construction sites



Equipment Features for a Wide Output Range

- If lifting gear is used, rotary distributors are very well suited to concreting in tunnels, for example
- If fitted to a rail-guided frame, rotary distributors are ideal for use in precasting works
- The lift function of the RV 12 makes it possible to reach surfaces for concreting that are up to 4.0 m higher
- Screw-on feet raise the RV 13 and RV 12 Lift by 0.5 m (optional)
- As an accessories kit, the RV 7 can be conveniently transported with a truck-mounted concrete pump
- Reducer pipe, 5.5" to 4.5", 1000 mm long for adapting to delivery lines, available as an option (no illustration)
- Hydraulic operation possible
- Delivery line with two-layer lines available (no illustration)
- Hose slide for the delivery feed pipe (no illustration)
- PVC hose 2.0 m, SK 100/4.5, available for RV 12 Lift (no illustration)

RV 0

Delivery line pipe nominal diameter	100 diameter
Transport measurements in m	0.8 × 0.5
Weight (without concrete)	68 kg

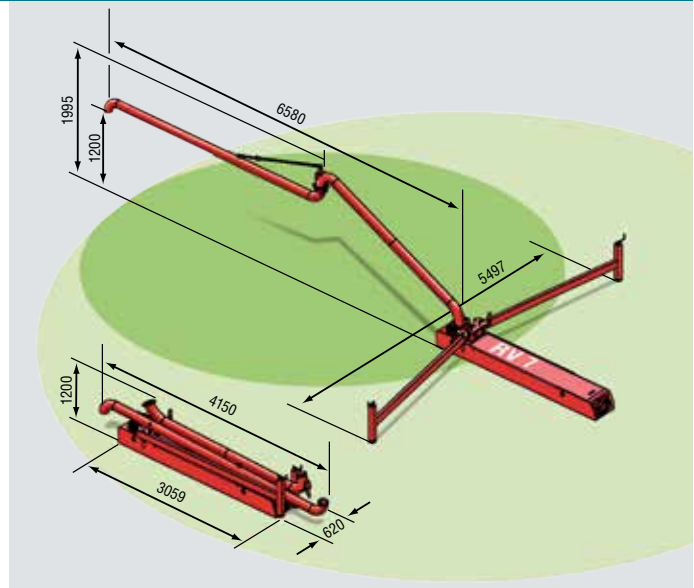
- Compact, hand-held additional unit for spreading concrete
- Ideal for tight spaces on the construction site
- Adjustable base frame with a hinge made of 2 delivery line bends
- Can be equipped with delivery line bends of many of the usual line diameters and coupling sizes
- The slewing circle is unrestricted



RV 7

Delivery line pipe nominal diameter	125 diameter
Arms	2
Reach in m	6.6
Concreting area in m²	132
Transport measurements in m	4.2 × 0.6 × 0.8
Weight (without concrete)	610 kg

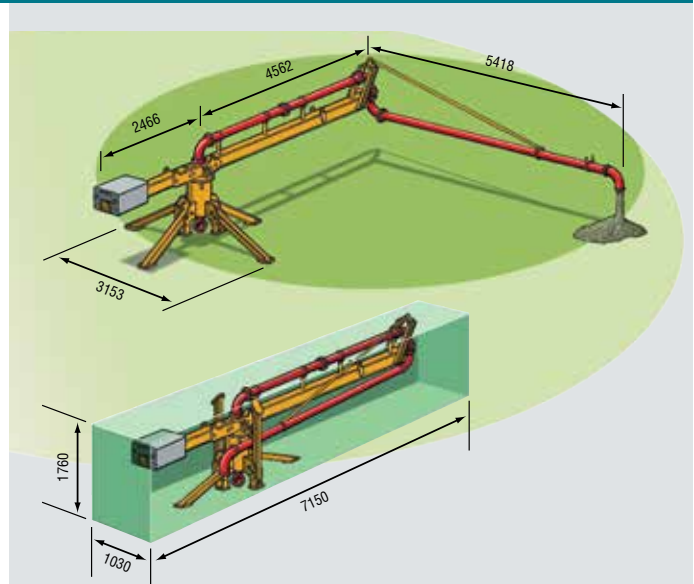
- Small, flexible piece of equipment
- Easy to transport, thanks to its compact dimensions and low weight
- Transport by trailer or on larger truck-mounted concrete pumps (fits exactly into the bracket for 3m pipes, which is present on the support feet of many machines)
- Can be made ready for use quickly
(can be set up by 2 people within 10 minutes)



RV 10

Delivery line pipe nominal diameter	124 diameter
Arms	2
Reach in m	10
Concreting area in m²	320
Transport measurements in m	7.1 × 1.0 × 1.8
Weight (without concrete)	1020 kg

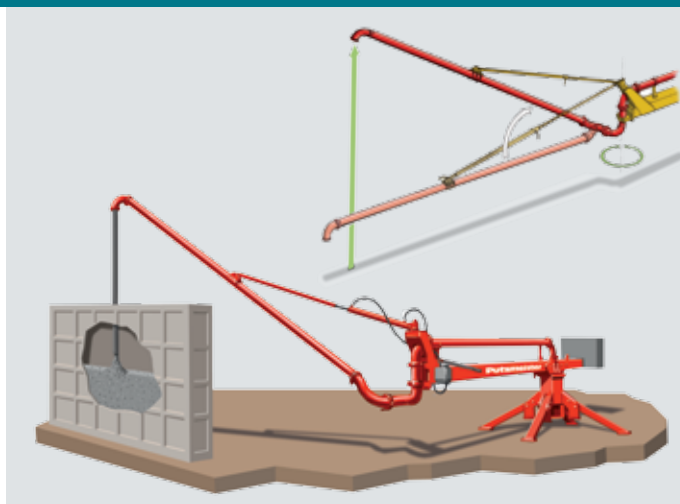
- Ideal for large areas and floors
- Large areas of up to 320m² can be concreted from one fixed location
- If the rotary distributor is moved using a construction crane, concrete areas of practically any size can be made ready for building
- In transport position, the dimensions enable easy transport to the various construction sites by truck or on a trailer, using a minimum of space



RV 12 LIFT

Delivery line pipe nominal diameter	100*/125 diameter
Arms	2
Reach in m	12
Concreting area in m ²	450
Transport measurements in m	9.1 × 1.3 × 1.8
Weight (without concrete)	2600 kg

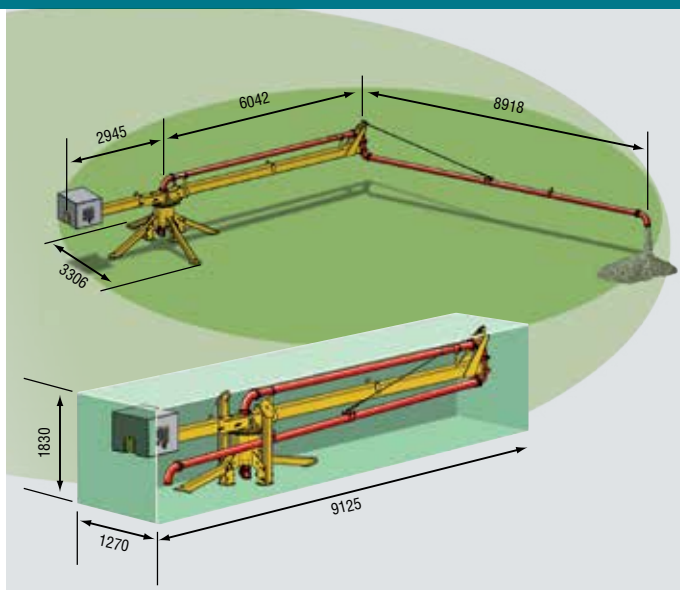
- The RV 12 Lift can reach areas for concreting and pillars that are up to 4.0m higher (to adjust the height, the last arm can be raised with a hydraulic hand pump)
- Height to be increased by 0.5m using bolt-on feet (optional)



RV 13

Delivery line pipe nominal diameter	100*/125 diameter
Arms	2
Reach in m	13
Concreting area in m ²	500
Transport measurements in m	9.1 × 1.3 × 1.8
Weight (without concrete)	2600 kg

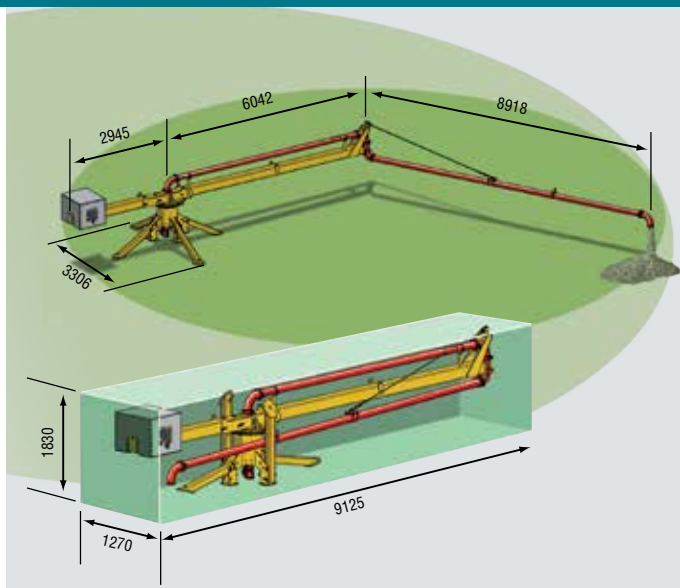
- Areas of up to 500m² can be concreted from one fixed point
- Height to be increased by 0.5m using bolt-on feet (optional)



RV 15

Delivery line pipe nominal diameter	100 diameter
Arms	2
Reach in m	15
Concreting area in m ²	700
Transport measurements in m	9.1 × 1.3 × 1.8
Weight (without concrete)	2700 kg

- Areas of up to 700m² can be concreted from one fixed point



* As Standard

6.12 ACCESSORIES

OTHER



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A850035



▲
454460



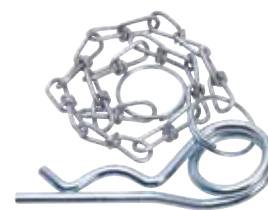
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066321008



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401954



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482464



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85014008

OTHER

PRODUCT	WEIGHT	PART NUMBER
DEHYD/FILT ISO/H2O 220V/50Hz EU	112kg	A850045
DEHYD/FILT ISO/H2O 120V/60Hz	110kg	A850035
DEHYDRATOR ME45DRI 220V/50HZ	112kg	A850020
DEHYDRATOR ME45DRI 120V/60HZ	110kg	A850021
Circlip 6 DIN11024	0.048kg	18878004
Circlip with chain 5mm	0.075kg	85014008
Cotter pin HD DEL PIPE CLAMPS	0.046kg	A522714
Hose clip Ø 121-130	0.76kg	63877005
Hose clip Ø 95	0.395kg	64175007
Hose nozzle DN50 G2	0.49kg	205466009
HOSE SKID 4 TO 5	7.3kg	482464
PIPE HOLDER DN 125 CPL	15kg	265398007
PIPE MOUNT DN 150 CPL	0.001kg	265400005
Lay down holding clamp		A563102
Safety rope	0.15kg	066321008
Sealing cover SK100/4	2.21kg	022661003
Sealing cover SK100/4.5	2.45kg	057627009
Sealing cover SK125/5.5	3.18kg	057628008
Sealing cover ZXM 100-140	3.5kg	087708008
Sealing cover ZXV125	4.5kg	054720006
Squeeze valve EQV DN 100/125	9kg	542004
Wall thickness gauge Electronic	0.8kg	277434001
Wall thickness gauge Manual		454460
End hose catch bracket	3.2kg	256683006
End hose catch bracket	5.92kg	267249002

Please consult factory for other sizes.

1.1 Routing of lines

Cables should, where possible, be routed in a straight line, but taking into account that they may expand due to changes in pressure and temperature.

Also make sure that the delivery line can be emptied before its removal from the facility.

Choose the route of the delivery line so that:

- the radius of curvature of a bend is never less than 3' 3" (1000mm) to keep the pressure loss in the line as low as possible;
- the line does not contain strong bottlenecks;
- the delivery line remains accessible, so that couplings can be retightened after commissioning;
- where possible, the line is not exposed to freezing temperatures. If this is unavoidable, the possibility of heating the pipe must be provided.

1.3 Pipeline mounts

Pipeline mounts must be securely attached to the foundation or support constructions in such a way as to prevent vibrations.

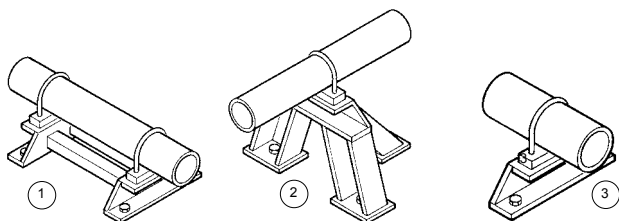
1. Double mounting bracket
2. Three-leg mounting bracket
3. Mounting bracket

Immediately downstream of the pump, the pipeline must be firmly attached to the foundation – for example with double mounting bracket (1) or a three-leg mounting bracket (2).

The rest of the delivery line should be fixed securely to the foundation or to support constructions at three metre intervals with mounting brackets (3).

Before and after each pipe bend, fix the pipeline to the foundation with a mounting bracket (1 or 3).

Caution: Never weld mounting brackets onto delivery lines.



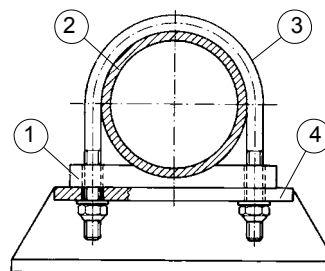
1.2 Minimum distances

Minimum distances between pipelines, taking into account all possible pipeline movement and expansion:

- between pipelines, including any insulation, and the building: 4' (100mm);
- between adjacent pipelines, including any thermal insulation: 4' (100mm);
- horizontal distance between pipelines, including insulation or accessories (such as supports), and the plant components for all operating and access paths: 2' 6" (750mm);
- free height above access paths: 7' 3" (2200mm).
- Openings in walls and ceilings must be constructed and filled according to the local building regulations.

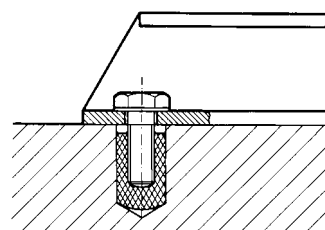
1.4 Installing the pipeline mounts

- Position the pipe seat (1) and the delivery pipe (2) and screw onto the mount (4) with a clamp (3).



Fitting mounting brackets

- Anchor stable mounting brackets for the delivery line with screws and dowels (at least M 16) in the foundation. The mounting material must meet the applicable requirements (observe building laws and regulations).



1.5 Installing the delivery line

1.5.1 Order of installation

Install the delivery line starting at the pump and in the following order:

- Align the existing delivery line so that it is not under tension anywhere.
- Fit a pipe holder to the new pipe segment.
- Fit the new pipe segment (if necessary, make an adapter pipe segment).
- Align the new pipe segment.
- Fit the new pipe segment and connect it with the coupling.
- Fit the pipe mount to the supporting structure.

1.5.2 Fit the delivery line

The delivery line should be fitted free from tension and easily accessible for maintenance work. As far as possible, use standard pipes, fitting adapter pipes only where absolutely necessary.

Caution: Welding work on the delivery line and laying of the pipeline must be carried out only by qualified specialist personnel. The customer's technical regulations and the applicable legal requirements for installing pipelines must be available and observed.

Caution: When installing the delivery pipes, make sure that the delivery pipes, couplings, welding flanges and all other additional parts are designed for the maximum delivery pressure, i.e. belong to the same pressure class.

Caution: Use only original Putzmeister parts.

Caution: In hazardous areas (areas in which a risk of explosion exists), make sure that all static electricity is safely discharged.

Lay the delivery lines so that they are not under tension at any point.

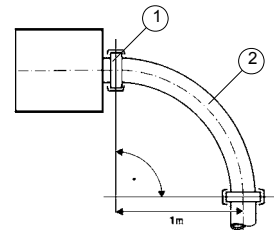
The pipelines and couplings must be completely tight.

The supports must be designed so that any deformation of the pipelines during operation and in the event of any fault does not cause impermissible tension at any point along the pipes or their mounting brackets.

1.5.3 Connecting the delivery line to the pump

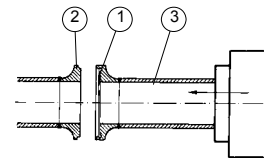
The delivery line is connected to the pump's discharge outlet via a 90° (horizontal or vertical) pipe bend. This allows you to remove the first pipe segment without dismantling the whole delivery line when you want to remove the pump from the delivery line. It also allows pump surges to be absorbed elastically. The delivery line must be installed correctly in accordance with the manufacturer's specifications.

1. Discharge outlet
2. Pipe bend

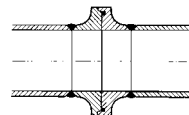
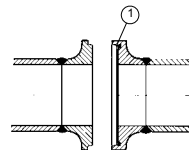


Note: The discharge outlet of a pump has a female ZX weld-on ring as standard, to which a male ZX weld-on ring is coupled.

1. Female ZX weld-on ring
2. Male ZX weld-on ring
3. Discharge outlet of the pump



- Weld the female (1) and male (2) weld-on rings each to one end of the delivery line (pump discharge outlet (3) with female ZX weld-on ring by default).



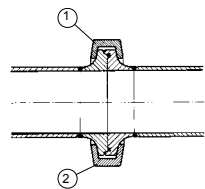
1. O-ring

- Fit the O-ring (1) into the groove in the female ZX weld-on ring.

- Connect the next pipe segment to the previous one and align it.

1. Upper section of coupling
2. Lower section of coupling

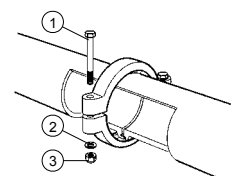
- Push both halves of the coupling (1 and 2) onto the weld-on rings. This may require the use of a hammer.



- Insert bolts (1) on both sides, place lock washers (2) under them and pretension with self-locking nuts (3).

- Tighten the bolts alternately and evenly until both halves of the coupling are firmly seated.

You may need to tap around the coupling with a hammer.



Note: Do not reuse self-locking nuts and screws.

**SK****CHARACTERISTICS:**

- Fast installation
- Can be turned axial
- Can be twisted up to 2 degrees
- For pressures up to 1233 psi

APPLICATION:

- Boom pumps
- Stationary pumps and delivery lines
- Rotary distributors

HDR**CHARACTERISTICS:**

- Fast installation
- Tapered faces draw the pipe sections together during assembly
- Can be turned axial
- Can be twisted up to 2 degrees
- For pressure up to 1233 psi-1885 psi

APPLICATION:

- Boom pumps
- Stationary pumps

ZX**CHARACTERISTICS:**

- Maximum operating pressure 2900 psi
- O-ring type joint
- Leak proof
- Male and female connection
- System connections are very rigid

APPLICATION:

- High pressure delivery lines – 1885 psi
- Tunneling

COUPLING / ACOPLES:

Two-bolt couplings are the strongest couplings and well-suited for applications where dragging and maneuvering obstructions is required. Operating pressure 3,000 psi (200 bar) or higher.

Acoples de doble tuerca son las mas fuertes y son apropiadas para aplicaciones de alto movimiento alrededor de muchas obstrucciones. Presion de operacion es de 3,000 psi (200 bar) o' mas alta.

SNAP-COUPLING:

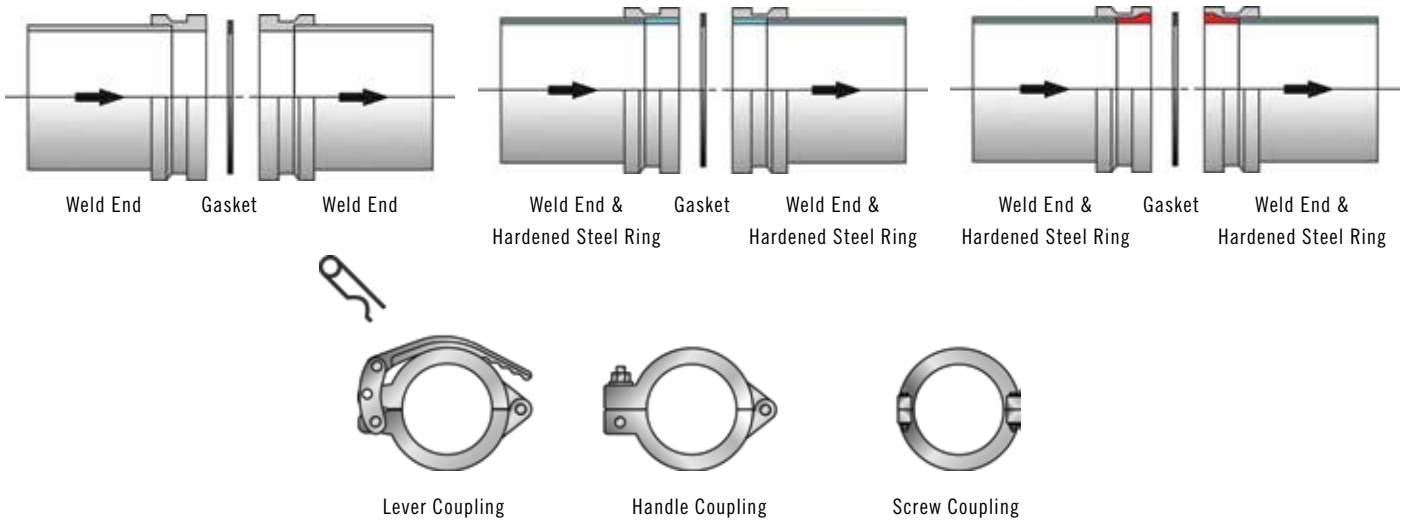
Pressure rating for snap-couplings is lower than two-bolt couplings. A safety pin should be used to prevent accidental opening. Operating pressure 1,890 psi (130 bar).

Acoples de cierre rapido trabajan a una persion mas baja que la de acoples de doble tuerca y se debe de usar un pasador de seguridad para evitar que se abran por accidente. Presion de operacion es de 1,890 psi (130 bar).

COUPLING CONNECTIONS

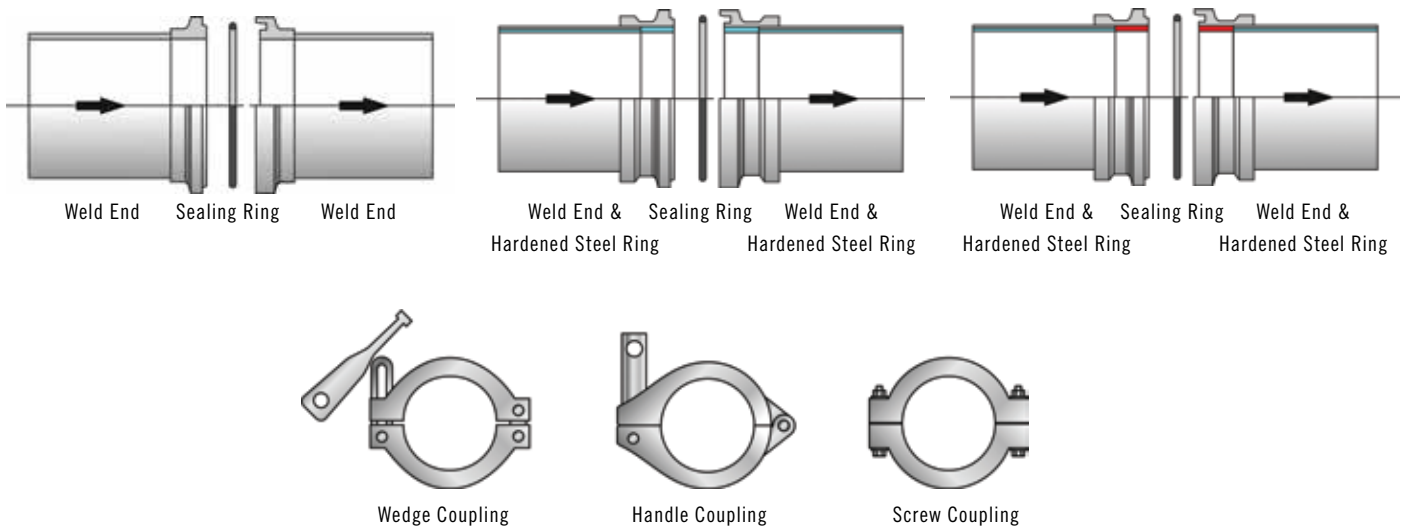
SMOOTH COUPLING CONNECTIONS

- SK or HD ends
- Quick installation
- Can be rotated up to 2°
- For pressures up to 85 bar (1233 psi)



CENTERED COUPLING CONNECTIONS

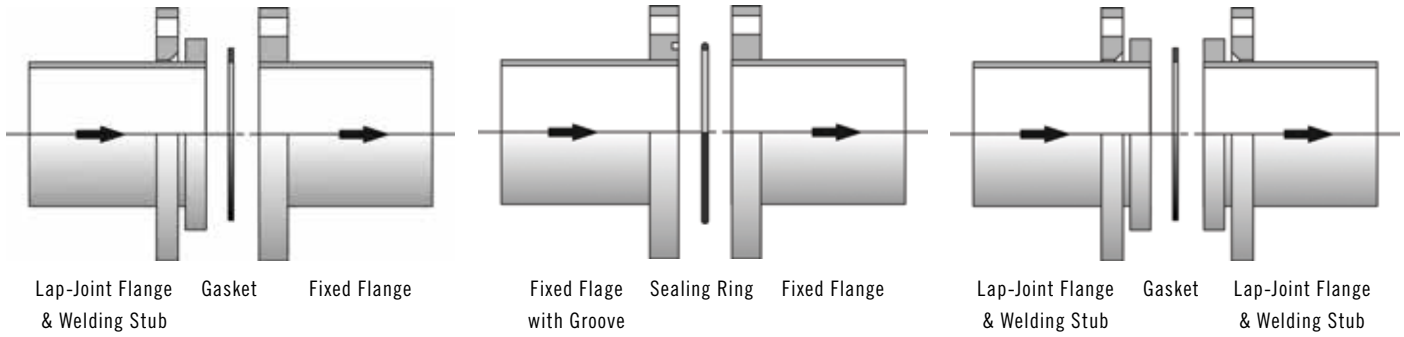
- ZX ends
- Leak proof
- Rigid connections
- For pressures up to 130 bar (1885 psi)



INDUSTRIAL & MINING SYSTEMS

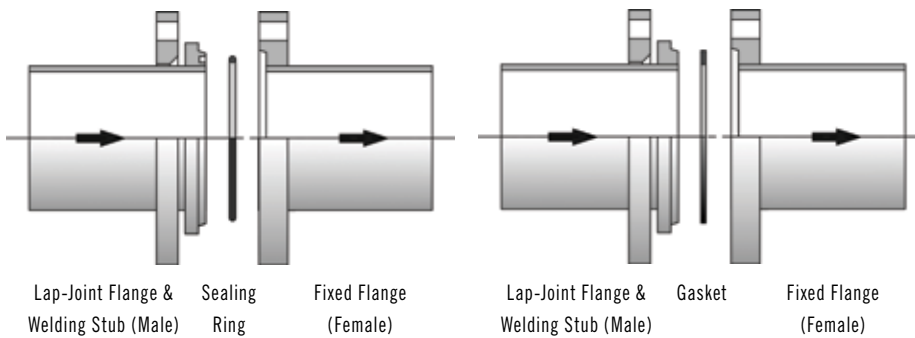
SMOOTH FLANGE CONNECTIONS

- Bolt-connections
- For pressures up to 200 bar (2900 psi)






CENTERED FLANGE CONNECTIONS

- Bolt-connections
- For pressures up to 200 bar (2900 psi)

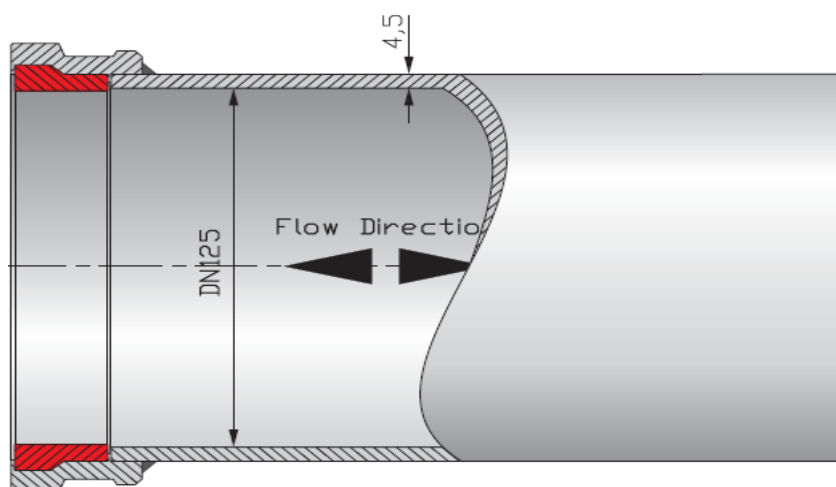


Different wear points exist depending on the pump make and type of pump cell. The wear characteristics at these points are compared by evaluating the service life of our products at several customer applications. The pipes were then improved in response to the requirements of this specific wear point on the boom by using a more suitable material based on the customers need. This process allowed us to tailor a pipeline system for each customer's need.

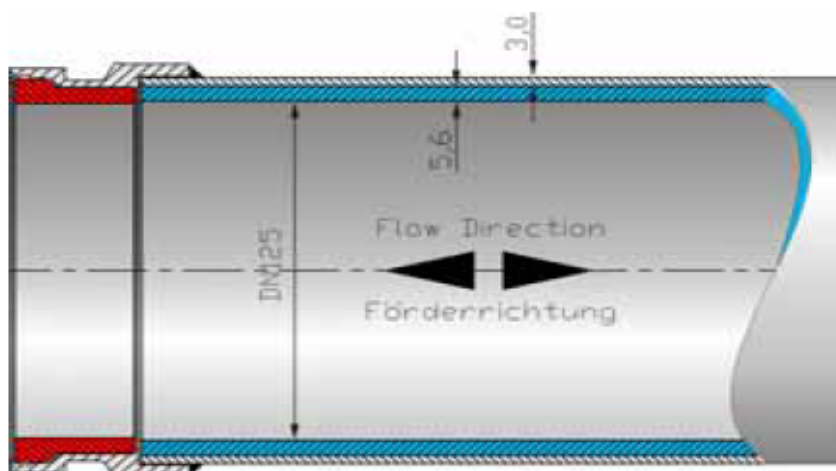
BOOM PIPE	ADVANTAGES	DISADVANTAGES
PUTZMEISTER P1ST 	<ul style="list-style-type: none"> • Easy to weld • Measuring of wall thickness from the outside • Low purchasing cost 	<ul style="list-style-type: none"> • Short service life and low protection against break down • High cost for pipe exchange • Extensive downtime of machine
PUTZMEISTER P1IH 	<ul style="list-style-type: none"> • Durability 2-2.5 times compared to ST52 • Measuring of wall thickness from the outside • Suitable for rough handling 	
PUTZMEISTER P2W 	<ul style="list-style-type: none"> • Durability 8-10 times compared to ST52 • Lowest cost pipe installation and downtime • Lowest cost ratio per cu yd of concrete pumped 	<ul style="list-style-type: none"> • Welding of pipes is only possible with a special cooling system • Measurement of wall thickness is only possible with the pipeline opened up

PUTZMEISTER P11H

- Up to twice the service life than standard ST52.
- Ends are protected by large Big Mouth flanges.

**PUTZMEISTER P2W**

- DN 125 – 4.8" (5.6 + 3.0mm)
- Service life of 8 - 10 times compared to ST52 plus.
- Hardened inner layer with a hardness up to 67 HRc

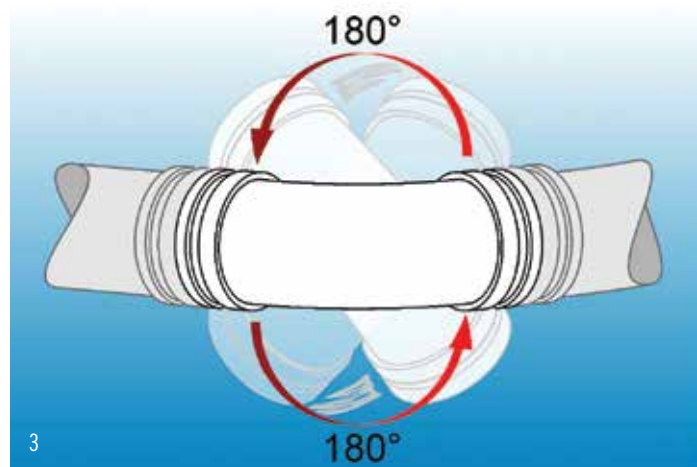
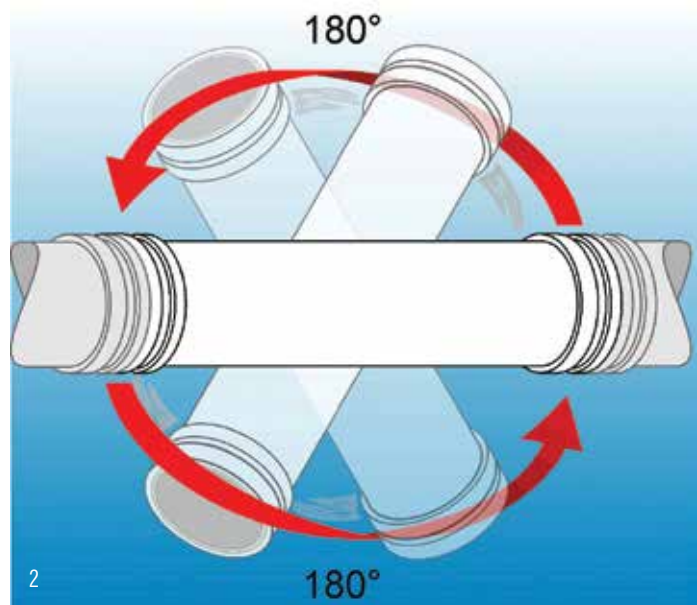


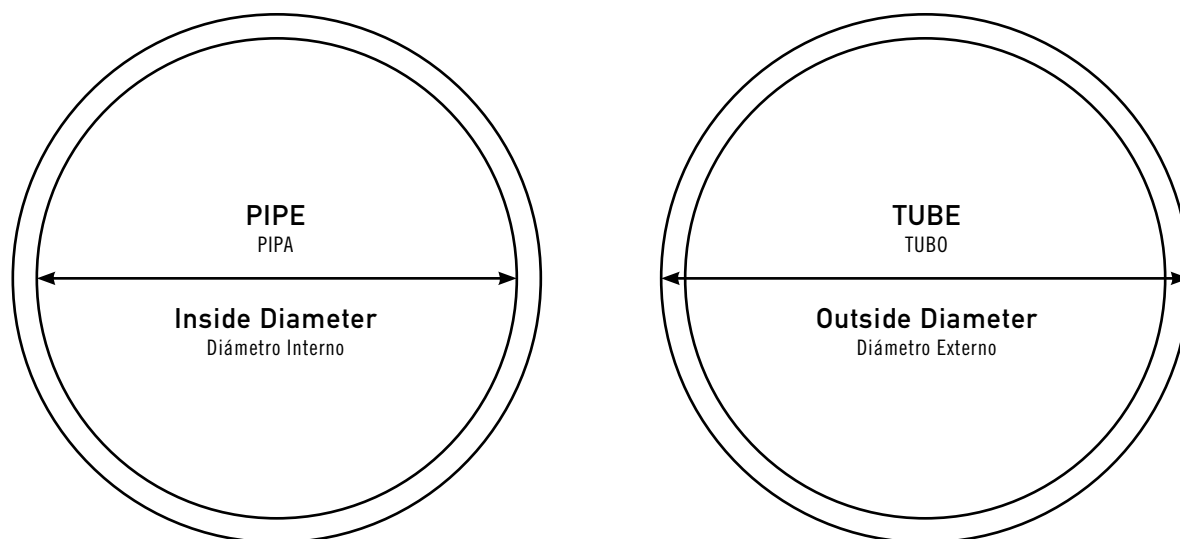
PROBLEM:

One sided wear on pipes and elbows

CORRECTIVE ACTION:

1. After 15-20% of the expected life, pipes should be rotated horiz. 120°
2. After 50% of the expected life, the straight pipes should be flipped end-over-end by 180°
3. The elbows should also be flipped end-over-end by 180°





DIFFERENCE BETWEEN PIPE AND TUBE

There is often confusion as to which the customer actually needs – pipe size or tubing size. Keep in mind that pipe size refers to nominal – not actual – inside pipe diameter. Schedule refers to the pipe's wall thickness. On the other hand, the dimensions provided for tubing on the other hand refer to the actual outside diameter. It is common to identify pipes in inches by using NPS or "Nominal Pipe Size". The metric equivalent is called DN or "diametre nominel". The metric designations conform to International Standards Organization (ISO) usage and apply to all plumbing, natural gas, heating oil, and miscellaneous piping used in buildings. The use of NPS does not conform to American Standard pipe designations where the term NPS means "National Pipe Thread Straight". The nominal dimensions of tubes are based on the outside diameter. The inside diameter of a tube will depend on the thickness of the tube. The thickness is often specified as a gauge.

DIFERENCIA ENTRE TUBO Y TUBERIA

Existe confusión en si el cliente necesita tamaño de tubo o' tamaño de tubería. Se tiene que entender que tamaño de tubería se refiere a nominal - no actual - diámetro dentro de la tubería. Schedule se refiere a lo espeso de la pared de la tubería. Las dimensiones para tubos se refieren al diámetro actual del exterior del tubo. Se identifica tubería en pulgadas como NPS (Nominal Pipe Size). El equivalente metrico se identifica como "diametre nominel". Las designaciones metricas conforman con ISO (International Standards Organization) y se aplican con todo tipo de tubería de plomería, gas y petroleo que se utiliza en edificios. El uso de NPS no se conforma a las designaciones de tubería American Standard donde la terminología NPS significa "National Pipe Thread Straight". Las dimensiones nominas de tubos son basadas en el diámetro del exterior. El diámetro interior de un tubo depende de lo espeso del tubo. Lo espeso del tubo se reconoce como el "gauge".

7.7 REFERENCE MATERIALS

CONVERSION TABLE

Materials de Referencia

QUANTITY	FROM ENGLISH UNITS	TO METRIC UNITS	MULTIPLY BY*
Length			
	mile	km	1.609347
	yard	m	0.9144**
	foot	m	0.3048**
	inch	mm	25.40**
Area			
	square mile	km ²	2.59
	acre	m ²	4047
	acre	hectare	0.4047
	square yard	m ²	0.8361
	square foot	m ²	0.09290
	square inch	mm ²	645.2
Volume			
	acre foot	m ³	1 233
	cubic yard	m ³	0.7646
	cubic foot	m ³	0.02832
	cubic foot	L (1000 cm ³)	28.32
	100 board feet	m ³	0.236
	gallon	L (1000 cm ³)	3.785
Mass			
	lb	kg	0.4536
	kip (1000 lb)	metric ton (1000kg)	0.4536
Mass / unit length			
	plf	kg/m	1.488
Mass / unit area			
	psf	kg/m ²	4.882
Mass density			
	pcf	kg/m ³	16.02
Force			
	lb	N	4.448
	kip	kN	4.448
Force/unit length			
	plf	N/m	14.59
	klf	kN/m	14.59

7.8 REFERENCE MATERIALS PARTS FORM

DETAILS

Date

Contact Person

Company

Country

Phone Number

Manufacturer

Boom Length

Pump Model

Serial Number

Quantity Pumped

Order Date

Notes

Please select model of boom or deck that comes closest to your concrete pump. If necessary, make alteration to the drawing. Please mark the location of the failure as follows:

(i) Inlet (c) Center of Pipe (o) Outlet

