

Prinzing-Pfeiffer GmbH, 89143 Blaubeuren, Germany

Future oriented testing and handling systems for optimised concrete pipe production

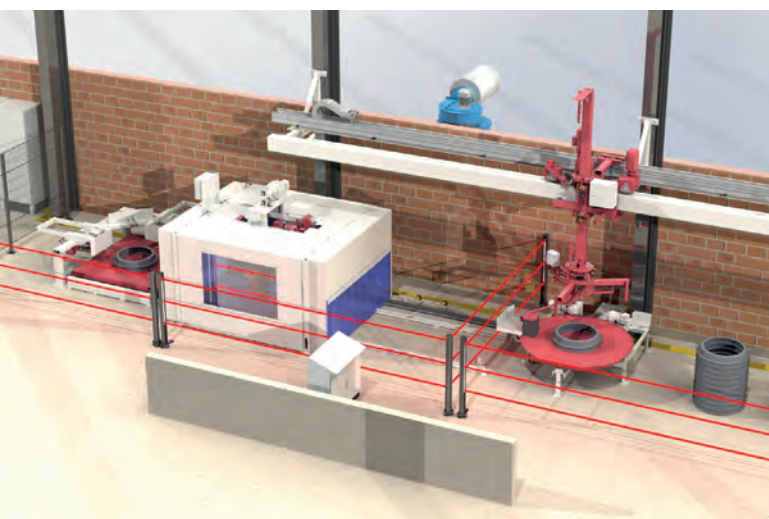
Prinzing-Pfeiffer offers customers modular base pallet handling systems and pipe testing lines for optimised quality control of concrete pipes and the perfecting of concrete pipe production. Suitable for most manufacturing systems and designed for future competition.

The Prinzing-Pfeiffer pallet line manages the handling of base pallets within the concrete pipe production. Base pallets of different sizes in sheet metal, steel or cast-iron can be managed from extraction, cleaning, oiling and stacking to insertion in the concrete pipe machine. This is fully automated and computer-controlled. The sequence of different stations is freely configurable and can be assembled in accordance with customer requirements.

The scope of the base pallet handling system includes the base pallet extraction station for driving the base pallet out of the concrete pipe quickly and safely and adjustable to the different nominal widths of the base pallets as well as a cleaning station for powerful brush cleaning of the internal diameter, the seal section and both ring faces. It also includes an extraction system to prevent dust formation and a base pallet oiling station for lubricating the cleaned base pallets with a release oil for corrosion protection and easier extraction in subsequent pipe production.

For optimised handling, the company also offers fully automatic stacking and de-stacking equipment for transporting and stacking base pallets in the pallet line area. The base pallet packages can be inserted or discharged from the pallet line with insertion and discharge points. The assembly tables for easy mounting of integrated seals on the base pallets ensures subsequent reliable delivery into the automated pallet line using the base pallet insertion equipment. It guarantees automatic delivery of a base pallet from the pallet line to a defined holding location in a pipe machine. The electrical control system ensures easy, reliable control of individual stations. The proven Siemens S7 control technology and a visualisation system that quickly and efficiently processes data from the latest sensor and measurement hardware are used here.

Quality assurance is and remains a very important issue in concrete pipe production. To increase pipe quality, Prinzing-Pfeiffer offers a pipe testing line that is designed and suitable for most manufacturing systems. Here, too, the stations can be freely configured in relation to each other and thus arranged appropriately for the customer and the plant. In addition to the pipe storage and alignment station for precise positioning of the pipes being tested - optionally equipped with a laser measuring device for exact determination of pipe length - there is a deburring station for grinding the interior and exterior bell diameters and post processing of the spigot.



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Fully automatic base pallet insertion equipment



Base pallet extraction station



Prinzing-Pfeiffer offers a pipe testing line to monitor pipe quality

This is expandable with a supplementary milling cutter to create a seal groove at the spigot. This makes it possible to produce a pipe with a subsequently installed gasket. The automatic leak test is carried out with a vacuum pipe testing device using the vacuum differential method. A pipe labelling device is used to identify the pipes in accordance with customer requirements. In addition to standards and production data, this also allows application of the company name or additional information.

The flexible and versatile configuration allows adaptation to customer needs and further optimisation of concrete pipe production in the future. ■



Vacuum pipe testing device for the leak test



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Deburring station for processing internal and external bell diameters and the spigots of concrete pipes