

# M a s t e r m a t i c X T



# Mastermatic XT

## Unique rising core compaction technology maximizes pipe output and quality

The Mastermatic XT machine series is the perfect solution for mass producing high-quality reinforced and non-reinforced concrete pipe – circular as well as non-circular profiles. Its sophisticated rising core compaction technology permits forms to be filled and demolded fast - and uniformly consolidates the concrete throughout the entire length of the pipe.

### Capacity

Depending on the machine model and the pipe sizes being manufactured, up to three different pipe sizes can be produced at-a-time. The Mastermatic XT is capable of manufacturing up to 100,000 tons of product in a single-shift operation.

### System Benefits

#### Rising Core Compaction Technology

Mastermatic XT's rising-core technology with compactor rotor system (CRS) rapidly fills and consolidates the concrete to quickly manufacture pipe of high concrete density with a minimum cement content. And the integrated spigot forming process results in very precise and uniform pipe lengths.

#### Fully Automatic Operation

The Mastermatic XT's production sequence is fully automatic, reducing labor costs and permitting precisely repeatable production cycles to assure that each product is as high-quality as the next. And as the pipes are demolded within the machine, the need for a factory overhead crane is

eliminated, thereby saving building and equipment costs.

#### Reinforced and Non-reinforced Pipe

Since concrete is filled into the entire opening of the outer mold and then distributed and compacted by the rising core, the Mastermatic XT is able to produce reinforced pipe as efficiently as non-reinforced pipe – even in the small diameters. If the local pipe design standards allow it, the benefits of this are that the pipe producer can produce different strength classes for different applications using the same mold equipment.

#### Multiple Station Production

Depending on model and pipe size the Mastermatic XT can produce two and even three pipes at a time. As each station is equipped with separate feeding belts and separate control parameters the machine can produce different diameters on each station without compromising the quality. The benefits are lower initial investment in mold equipment and higher manufacturing flexibility.

#### Designed for Total Plant Automation

The Mastermatic XT machine's high output capabilities can be secured with automation. The machines are easy to automate as pallets are presented from the backside while the finished pipes are offborne from the front side. The benefits of automation are not only savings in labor but also consistent high quality and throughput day after day.

#### Quick Mold Changeover

Equipped with modular fast mold changeover, forms can be changed in as little as thirty minutes each allowing the pipe producer to respond to sudden market needs.

#### Operation

The production cycle is fully automatic. Dedicated belt feeders supply concrete to the mold at each production station of the machine. In the mold the concrete is distributed and compacted as the vibrating core rises. The core continues to rise through the outer mold, completely filling the form set and compacting concrete up and under the profile ring to form the pipe's spigot. The profile ring is accurately and securely positioned throughout the fill cycle to insure very accurate and consistent pipe lengths.

Offbearing can be done by an electric cart or by an automatic offbearer as part of an integrated handling solution. The machine is controlled by a PLC control system and the production parameters can easily be changed and stored from the touch screen display. Furthermore, the PLC continuously logs all the production data and provide this information for OEE analysis.

#### Models Available

- Mastermatic XT 150
- Mastermatic XT 200

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