

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

VIHY Mastermatic RC60 • VIHY Mastermatic XT150 • VIHY Mastermatic XT200



**Hawkeye Pedershaab**  
Concrete Technologies Worldwide™

- High productivity and flexibility
- Fully automatic operation • Rising core compaction
- Quick mold changeover • No overhead crane required

# Mastermatic XT

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

The Mastermatic XT is the perfect solution for mass producing high-quality reinforced and non-reinforced concrete pipe. Its sophisticated rising core compaction technology permits forms to be filled and demolded up to 45% faster than with conventional fixed core processes; and uniformly consolidates the concrete throughout the entire length of the pipe. To maximize production flexibility, up to three different pipe sizes can be produced at-a-time on certain machine models. Equipped with Quick-Mold changeover components, molds can be changed in as little as thirty minutes each.

### System Benefits

**Rising Core Compaction.** Mastermatic's patented rising-core compactor rotor system (CRS) rapidly fills and consolidates concrete to quickly manufacture pipe with maximum concrete density and minimum cement content.

**Fully automatic operation.** The Mastermatic'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.

**Hawkeye Pedershaab**  
Concrete Technologies Worldwide™

**High productivity and flexibility.** Mastermatic operations can produce 80,000 to 100,000 tons of product in a single-shift operation. Depending on the machine model and the pipe sizes being manufactured, up to three different pipe sizes can be produced at-a-time. For production rates, see chart on back page.

**Quick mold changeover.** Equipped with modular Quick-Mold changeover components, forms can be changed in as little as thirty minutes each.

**No overhead crane required.** Pipe are produced and demolded within the machine, saving building and equipment costs by eliminating the need for a factory overhead crane.

### Operation

All Mastermatic pipe-making processes are computer-controlled and fully automatic. Additionally, the finished pipe can be automatically discharged from the machine or transported with a pipe cart. The Mastermatic can be installed as a stand-alone machine or integrated into a completely automatic facility.

### Standard Features

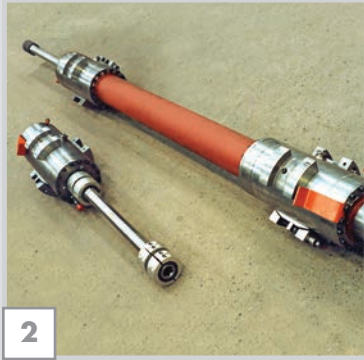
- Heavy-duty machine frame
- Pedershaab rising core technology
- Compactor rotor system (CRS)
- Individual concrete hopper and feed conveyors
- Hydraulic pressing system with individual heads
- Integrated demolding system
- Central Falcon control console



### Optional Features

The Mastermatic can be equipped with the following additional features:

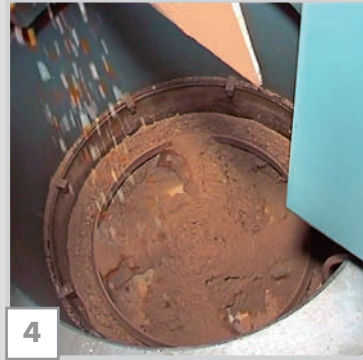
- Pipe offbearer
- Quick-Mold changeover components
- VARIO vibrator with in-process infinite regulation of amplitude
- Automatic pallet/cage feeder with oiler
- Automatic header/top ring feeder
- Reinforcement centering
- Pipe transport truck
- Noise screen



2



3



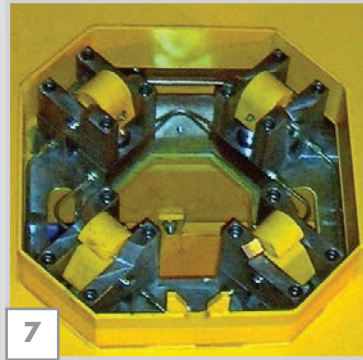
4



5



6



7



8



9



10

### 1. Demolding

Pipe are immediately demolded within the machine. The Mastermatic's demolding sequence is 40% faster than conventional fixed-core vibration machines.

### 2. VIHY Vibration

The VIHY core vibrator is the industry's leading vibrator. Its precision build quality and dry-sump, oil-lubricated design allows for speeds and powers unmatched by competitive vibrators – permitting maximum compaction power, reduced cement consumption and maximum concrete densities.

### 3. Product Removal Cart

When installed in a stand-alone, semi-automatic configuration, an electric-powered cart quickly and simply moves products from the Mastermatic machine. Automatic, robotic handling systems are also available.

### 4. Compactor Rotor System

To ensure optimum filling speed and concrete density, the load on the compactor rotor is continuously monitored and communicated to the concrete feed system. The compactor rotor advances the entire length of the pipe to ensure uniform density.

### 5. Individual Concrete Feeders

Individual concrete feeders with dedicated holding hoppers are used to feed each form. Dedicated feeders allow mix designs to be optimized for each pipe size.

### 6. Control Console

Central PLC based console with touch-screen interface for easy entry of machine settings, video display monitor, and closed-loop control system to ensure optimum filling speed and concrete density.

### 7. Quick-Change Mold System

An optional mold cassette system coupled with hydraulic mold-to-machine locks allow for 30-minute mold changes for single-pipe production and 60-minute mold changes for double-pipe production.

### 8. Stay-in-Place Headers

For the production of spigots with precise tolerances and glass-like finishes, the Mastermatic can be equipped for use with stay-in-place top spigot-forming rings.

### 9. Automatic Pipe Offbearer

Pipe can be automatically removed from the Mastercast and placed on a moving floor system. Offbearer allows easy integration with a fully automated pipe plant.

### 10. Quality Pipe

The Mastermatic's advanced rising core production technology and patented Compactor Rotor System mass-produces concrete pipe of the highest quality.

Mastermatic		Model RC60	Model XT150		Model XT200		
Diameter		Pipe/Hour	Pipe/Hour		Pipe/Hour		
mm	inch	Form Configuration	Form Configuration		Form Configuration		
		1 Mode	1 Mode	2 Mode	1 Mode	2 Mode	3 Mode
Pipe x 2.5 ML							
300	12	19	21	42	21	42	63
400 – 600	15 – 24	20	22	44	22	44	66
800	30 – 33	x	20	x	20	40	x
1000	39 – 42	x	18	x	18	36	x
1200	48	x	16	x	16	x	x
1500	54 – 60	x	13	x	13	x	x
1800	66 – 72	x	x	x	10	x	x
2000	78	x	x	x	9	x	x

*Production rates are based on the manufacture of ASTM C76(M)  
B-Wall x 2.5M (8') concrete pipe.*

*Production rates may vary for specific applications and plants.*



The Americas  
506 S. Wapello Street  
Mediapolis, Iowa 52637 USA  
Phone: +1 (319) 394-3197  
Telefax +1 (319) 394-3977

Africa, Asia, Australia, Oceania, Europe  
Saltumvej 25  
9700 Brønderslev – Denmark  
Phone: +45 9645 4000  
Telefax: +45 9645 4040

info@hawkeyepedershaab.com  
www.hawkeyepedershaab.com

