



# HawkeyePedershaab

## VIHY Mastermatic Machine Series



Unique rising core compaction  
technology to maximize output and quality.

- Fully automatic production
- Multiple station operation
- In-Machine demolding
- Quick form changeover



## Mastermatic technology offers quick filling and uniform compaction

With the HawkeyePedershaab VIHY Mastermatic, Afinitas provides the perfect solution for mass producing high-quality reinforced and non-reinforced concrete pipe – in circular as well as non-circular profiles. A key benefit of Mastermatic is its sophisticated rising core compaction technology that quickly fills 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 once. The Mastermatic XT is capable of manufacturing up to 100,000 tons of product in a single shift operation.

## System Benefits

### Fully Automatic Production

For high-output, repeatable production consistency that uses minimal labor, the Mastermatic is hard to match. In fact, the Mastermatic has served as the core of numerous concrete pipe production facilities across the world. The machine's automation is driven by a simple-to-use PLC system that continuously logs production data and provides this information for overall equipment effectiveness (OEE) analysis. Here's how a typical Mastermatic production cycle flows:

- Dedicated belt feeders supply concrete to the mold at each production station of the machine.
- Using rising-core technology with a compactor rotor system (CRS), the machine rapidly fills and quickly consolidates the concrete.
- The integrated spigot forming process results in precise and uniform positioning of the profile ring throughout the fill cycle to ensure proper pipe lengths.
- Offbearing can be done automatically or with an electric cart. Pallets are fed from the back side of the machine as the finished products are offborne from the front side.

### Multiple Station Operation

Depending on the machine model and pipe size, the Mastermatic XT can produce two and even three concrete pipes at a time. As each Mastermatic station is equipped with separate feeding belts and 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.

### In-Machine Demolding Reduces Costs

When the filling, compaction and spigot-forming processes are completed, the Mastermatic automatically demolds the product ready for removal by a product cart or an automatic offbearer. No overhead crane is needed, minimizing plant space and reducing capital costs.

### Quick Form Changeover

Mastermatic's simple, quick-disconnect attachments and modular forming components eliminate the need for time-consuming form-to-machine adjustments and alignments. Forms can be changed in as little as thirty minutes, allowing pipe producers to respond to sudden market needs.

### Produce 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 small diameters. The benefit (where permitted by local standards) is that pipe producers can make different strength classes for different applications using the same mold equipment.

## Models Available

- HawkeyePedershaab VIHY Mastermatic RC 60
- HawkeyePedershaab VIHY Mastermatic XT 150
- HawkeyePedershaab VIHY Mastermatic XT 200







## HawkeyePedershaab Mastermatic Machine Series

Equipment & Automation  
HawkeyePedershaab | BFS



Forming Systems  
New Hampton | Spillman

Concrete Accessories  
CAM | HawkeyePedershaab | Spillman



Intelligent Infrastructure Solutions  
Visit [www.afinitas.com](http://www.afinitas.com) to learn more.

### Afinitas Equipment and Automation Division

#### North America

Afinitas  
506 S. Wapello St.  
Mediapolis, Iowa 52637

Phone: +1 319-394-3197  
[info@afinitas.com](mailto:info@afinitas.com)

#### Parts

Phone: +1 319-394-2240  
[hawkeyeparts@afinitas.com](mailto:hawkeyeparts@afinitas.com)

#### Service

Phone: +1 319-394-2270  
[hawkeyetech@afinitas.com](mailto:hawkeyetech@afinitas.com)

#### Denmark

Afinitas A/S  
Saltumvej 25  
9700 Brønderslev, Denmark

Phone: +45 9645 4000  
[info-DK@afinitas.com](mailto:info-DK@afinitas.com)

#### Parts

Phone: +45 9645 4172  
[aftersales@afinitas.com](mailto:aftersales@afinitas.com)

#### Service

Phone: +45 9645 4050  
[pedershaabtech@afinitas.com](mailto:pedershaabtech@afinitas.com)

#### Germany

Afinitas GmbH  
Dr. -Georg-Spohn-Str. 31  
89143 Blaubeuren, Germany

Phone: +49 7344 96030  
[info-DE@afinitas.com](mailto:info-DE@afinitas.com)

#### Parts

Phone: +49 7344 9603-77  
[bfs.spareparts@afinitas.com](mailto:bfs.spareparts@afinitas.com)

#### Service

Phone: +49 7344 9603-55  
[bfs.service@afinitas.com](mailto:bfs.service@afinitas.com)

#### Italy

Afinitas srl  
Viale Venezia 79/G  
33074 Fontanafredda, Italy

Phone: +39 0434 599211  
[info-ITA@afinitas.com](mailto:info-ITA@afinitas.com)

#### Parts

Phone: +39 0434 599211  
[info-ITA@afinitas.com](mailto:info-ITA@afinitas.com)

#### Service

Phone: +39 0434 599211  
[info-ITA@afinitas.com](mailto:info-ITA@afinitas.com)



Intelligent  
Infrastructure  
Solutions

Afinitas is a global, comprehensive and customer-oriented infrastructure equipment and services platform that brings together the expertise of HawkeyePedershaab, BFS, New Hampton Metal Fabrication, Spillman, and CAM Products.

Headquarters: 8040 Forsyth Blvd. | St. Louis, MO 63105 USA | +1 314-726-2178 | [info@afinitas.com](mailto:info@afinitas.com)