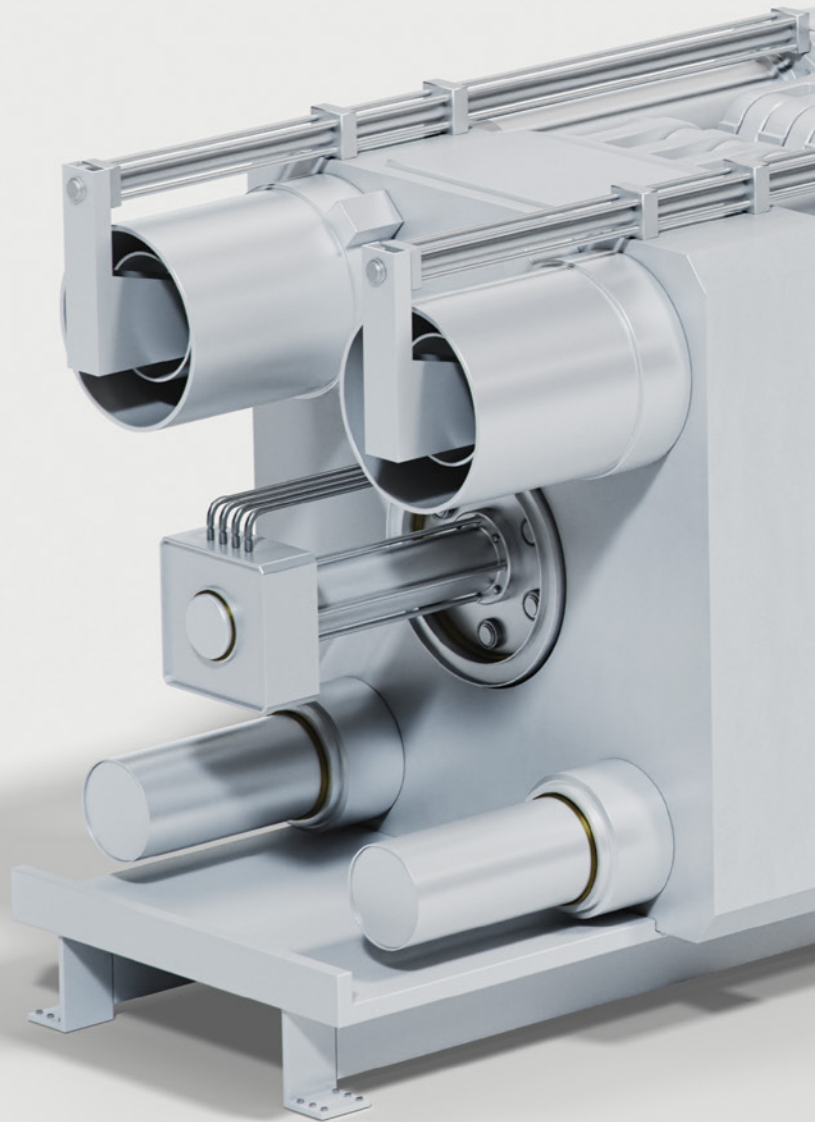


**FX  
VAC**

**FX  
JET**

**FX  
SQUEEZE**



# A FASCINATION FOR HPDC

|                                                  |       |
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## Pioneering spirit

Fondarex was originally established as a die-casting foundry in Montreux, Switzerland, in 1946. Six years later, the company developed its first vacuum system, marking the beginning of a long history of innovation. Over the decades, Fondarex's technological advancements have helped shape the vacuum die-casting industry.

In 2024, Fondarex expanded its portfolio with the introduction of FX JET and FX SQUEEZE, complementing its established FX VAC technology. These innovations are part of the company's strategy to better meet customer needs by enhancing the quality, performance, and cost-effectiveness of die-cast components.

## History

|      |                                                                                           |
|------|-------------------------------------------------------------------------------------------|
| 1946 | Fondarex is established as a pressure die-casting foundry by Mr. Fritz Hodler in Montreux |
| 1952 | Invention of the first vacuum system for the pressure die-casting industry                |
| 1971 | Launch of the OPTIVAC vacuum systems                                                      |
| 1978 | Fondarex decides to focus entirely on vacuum technology for pressure die casting          |
| 1989 | Fondarex is taken over by Mr. Konrad Baumgartner                                          |
| 1990 | Launch of the VACUPAC vacuum systems                                                      |
| 2002 | Launch of the first vacuum system for the plastic injection molding industry              |
| 2010 | Launch of the HIGHVAC vacuum systems                                                      |
| 2013 | Launch of the VACUPLAST vacuum system for the plastic injection molding industry          |
| 2014 | Mr. Dominik Baumgartner becomes CEO                                                       |
| 2020 | Launch of the MODULAR vacuum system                                                       |
| 2021 | Creation of the subsidiary company Fondarex (Wuxi) Machinery Co., Ltd in Wuxi, China      |
| 2022 | Creation of the subsidiary company Fondarex Europe GmbH in Überherrn, Germany             |
| 2024 | Launch of the FX Technologies: FX VAC / FX JET / FX SQUEEZE                               |



**Connecting Innovation, Production,  
and Performance Worldwide.**



# FONDAREX GROUP

## Switzerland

Created in 1946, Fondarex SA is the Group's headquarters, providing technical support, developing training programs, driving innovation based on market needs, and continuously optimizing product competitiveness for its partners.

In collaboration with its representatives worldwide, as well as its subsidiaries Fondarex (Wuxi) Machinery Co., Ltd and Fondarex Europe GmbH, the Fondarex Group shares one vision: to be a reliable partner for part quality and cost efficiency in die casting and plastic injection molding.

## Germany

Fondarex Europe GmbH, founded in 2022, was created to develop complementary products to the Group's existing vacuum technology, in close collaboration with Fondarex in Switzerland and China.

With the launch of FX JET and FX SQUEEZE in 2024, Fondarex further improves die-cast part quality by offering effective solutions against both gas and shrinkage porosities, delivering higher performance and added value to its customers.

## China

Fondarex (Wuxi) Machinery Co., Ltd, founded in 2021, was created to complement and strengthen production in Switzerland, increasing Fondarex's competitiveness and its ability to serve both Western and Asian markets.

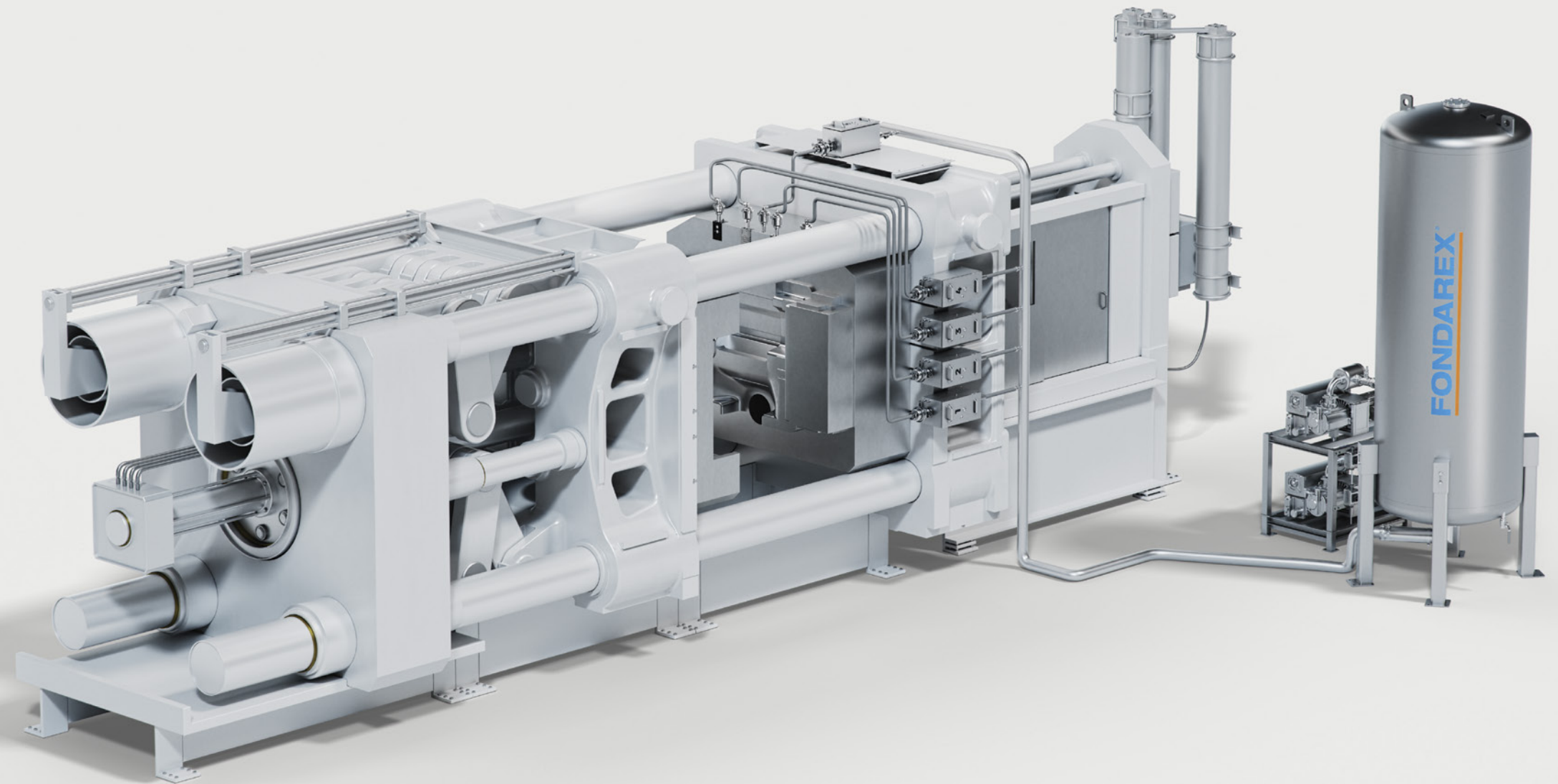
This subsidiary enables Fondarex to support its Asian customers according to the company's standards, with fast, professional technical service and efficient spare-parts delivery, reinforcing its local presence and customer support network.

## Principle of vacuum die casting

In pressure die casting, once the injection piston has passed the pouring hole, the Fondarex vacuum system can begin evacuating air either from the cavity and/or from the shot sleeve.

Evacuation from the cavity can be achieved through different solutions: a mechanical valve, a hydraulic valve, or a chill vent, available in steel or copper execution. These systems ensure efficient air removal before and during the critical filling phase.

The Fondarex vacuum system controls and monitors the entire process and manages each vacuum channel individually. The aim is to ensure consistent and repeatable evacuation performance in each cycle, according to the application and customer requirements.



# VACUUM

## Research and development

Fondarex's research & development team is continuously striving to advance and perfect vacuum technology for high-pressure die casting. Working in close collaboration with technical centers and customer partners worldwide, Fondarex benefits from the experience and feedback of more than 1,000 customers in over 50 countries.

This strong synergy between market requirements and research enables Fondarex to continuously innovate and develop technologies that meet the evolving demands of its customers. It is this commitment to innovation, combined with close customer collaboration, that has established Fondarex as the global market leader in vacuum solutions for high-pressure die casting.

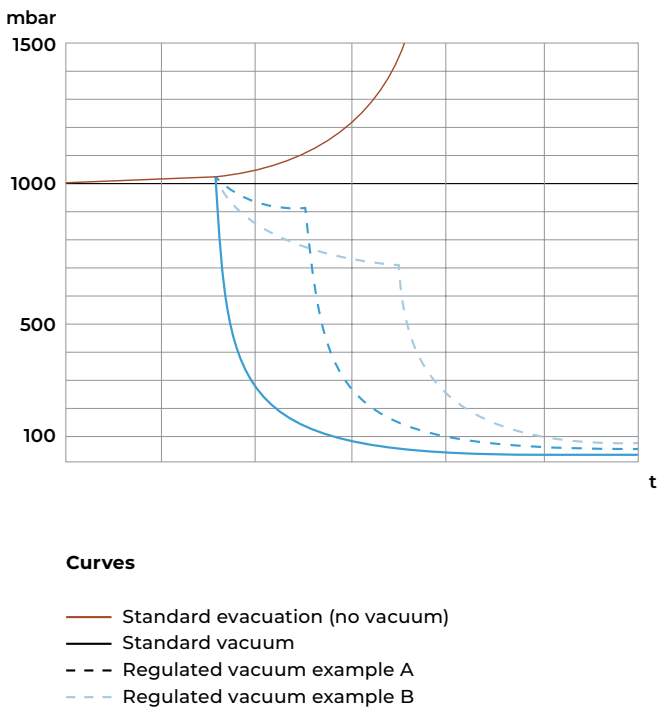
# VACUUM MAKES THE DIFFERENCE

## The specialist

Fondarex, the leading specialist in vacuum systems can help you achieve the most difficult projects, such as automobile structural parts, surface parts, heat treated parts, thin-walled parts and safety parts.

## Advantages of vacuum die casting

- Significantly reduced air and gas content, resulting in lower porosity in the die-cast aluminum structure
- Increased density and improved overall casting quality
- Excellent filling of complex mold geometries without air resistance
- Enhanced characteristics of thin-wall components and reduced porosity in thicker sections
- Easier achievement of optimal filling times and greater flexibility in process parameters
- Superior mechanical properties and overall component performance
- Improved surface quality, providing an ideal basis for subsequent surface treatments
- Compatibility with heat treatment processes (T4, T5, T6, and T7)
- Suitable for components requiring welding
- Reduced reject rates, resulting in more cost-effective and sustainable production
- Technically superior solution for demanding die-casting applications



## Fondarex efficiency curves

During an injection process, the cavity air pressure evolution is strongly influenced by how effectively air is evacuated before and during melt filling.

Different vacuum strategies lead to distinct pressure-time profiles inside the cavity: standard vacuum or regulated vacuum. Depending on the application, Fondarex is able to set the optimal vacuum curve.

Technical data HIGHVAC PROGRESS

| GENERATION                      | 2026.07                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile configuration            | Yes                                                                                                                                            |
| Cell configuration              | Yes                                                                                                                                            |
| Central configuration           | Yes                                                                                                                                            |
| Vacuum channels                 | 2                                                                                                                                              |
| Controls chill blocks           | Yes                                                                                                                                            |
| Controls mechanical valves      | Yes                                                                                                                                            |
| Controls hydraulic valves       | Optional                                                                                                                                       |
| Tank capacity                   | 500 l (Mobile configuration)<br>1000 l (Mobile/Cell configuration)<br>2000 l (Cell configuration)<br>3000 l (Cell configuration)               |
| Vacuum pump performance         | 63 m³/h (Tank 500 l)<br>100 m³/h (Tank 1000 l)<br>160 m³/h (Tank 1000 l / 2000 l)<br>200 m³/h (Tank 2000 l / 3000 l)<br>300 m³/h (Tank 3000 l) |
| HMI                             | Mobile: Remote HMI (Standard)<br>Cell: Remote HMI (Standard)                                                                                   |
| MONITORING (HMI-DISPLAY)        |                                                                                                                                                |
| Language (Standard)             | EN (US) / DE / FR / IT / SP / PT / SE /<br>CZ / SK / PL / RO / HU / TR / CN /<br>KR / JP                                                       |
| Process overview display        | Yes                                                                                                                                            |
| Vacuum in the tank              | Yes                                                                                                                                            |
| Vacuum at die side              | Per channel                                                                                                                                    |
| Pollution control (Filter)      | Per channel                                                                                                                                    |
| Profile control (Chill block)   | Per channel                                                                                                                                    |
| Evacuated air volume            | No                                                                                                                                             |
| Compressed air pressure         | Yes                                                                                                                                            |
| MONITORING (CURVE OVER TIME)    |                                                                                                                                                |
| Vacuum in the tank              | Only value                                                                                                                                     |
| Vacuum at die side              | Per channel                                                                                                                                    |
| Curve modes                     | Per shot                                                                                                                                       |
| RECORDED VALUES                 |                                                                                                                                                |
| Storage medium                  | USB-Stick                                                                                                                                      |
| Production data                 | Yes                                                                                                                                            |
| Vacuum on die side per cycle    | Per channel                                                                                                                                    |
| Pollution control per cycle     | Per channel                                                                                                                                    |
| Profile control per cycle       | Per channel                                                                                                                                    |
| Evacuated air volume per cycle  | No                                                                                                                                             |
| Vacuum active setting           | Yes                                                                                                                                            |
| Hydraulic valve closing setting | No                                                                                                                                             |
| FEATURES                        |                                                                                                                                                |
| Timer setting mode              | Yes                                                                                                                                            |
| Stroke setting mode             | No                                                                                                                                             |
| Automatic / Manual mode         | Yes                                                                                                                                            |
| Tolerance setting (Per CCAB)    | Vacuum<br>Pollution control<br>Profile control                                                                                                 |
| Vacuum control (regulation)     | No                                                                                                                                             |
| Vacuum for shot sleeve          | No                                                                                                                                             |
| Blowing function                | Yes                                                                                                                                            |
| Leak test                       | No                                                                                                                                             |
| Fault recording                 | Yes                                                                                                                                            |
| Recipe management               | Yes                                                                                                                                            |
| Stand-by mode for energy saving | Yes                                                                                                                                            |

| KEY COMPONENTS                                  |                                        |
|-------------------------------------------------|----------------------------------------|
| CPU                                             | Siemens                                |
| HMI                                             | Siemens 7"                             |
| Internal field bus technology                   | IO-Link                                |
| Pump Type                                       | Fondarex Pump                          |
| Frame material                                  | Carbon steel                           |
| Tank material                                   | Carbon steel                           |
| Protection class (MCAB)                         | IP54                                   |
| Protection class (CCAB)                         | IP54                                   |
| ENVIRONMENTAL CONDITIONS                        |                                        |
| Temperature                                     | 5–42°C                                 |
| Relative air humidity                           | 0–90% (Not condensing)                 |
| Pressurized air                                 | 5–7 bar at 3500 l/min                  |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] / WEIGHT     |                                        |
| Dimension HIGHVAC PRO-<br>GRESS Mobile 500      | 800 x 1690 x 1315 mm                   |
| Weight HIGHVAC PROGRESS<br>Mobile 500           | 425 kg                                 |
| Dimension MCAB                                  | 295 x 750 x 300 mm                     |
| Dimension CCAB                                  | 400 x 450 x 300 mm                     |
| VOLTAGE / CERTIFICATION                         |                                        |
| Voltage, max. power consumpti-<br>on (Standard) | 3 x 400V ± 10 % /<br>50/60hz           |
| Certification                                   | CE (Standard)                          |
| CONNECTORS / FITTINGS                           |                                        |
| CCAB input vacuum                               | DN40                                   |
| CCAB output vacuum                              | DN25                                   |
| CCAB M pipe fitting                             | 8L G1/4"                               |
| CCAB S pipe fitting                             | 8S G1/4"                               |
| CCAB pressurized air                            | 1/2"                                   |
| OPTIONS                                         |                                        |
| Compressed air regulator                        | Mobile = Standard /<br>Cell = Optional |
| Maintenance set                                 | Optional                               |

HIGHVAC PROGRESS®

This entry-level vacuum system is designed for reliable performance in die casting applications where consistent quality and process stability are required. It helps reduce scrap rates and supports compliance with modern manufacturing standards.

The system is available in a compact configuration with up to 2 independently controlled vacuum channels, providing essential flexibility for smaller or less complex applications while maintaining efficient cavity evacuation.



# FX VAC

## Model 4

This all-round vacuum system is essential for modern die casting operations aiming to maximize quality, minimize scrap, and meet the demanding standards of today's manufacturing industry.

Available in mobile, cell, and central configurations with up to 4 independently movable vacuum channels.

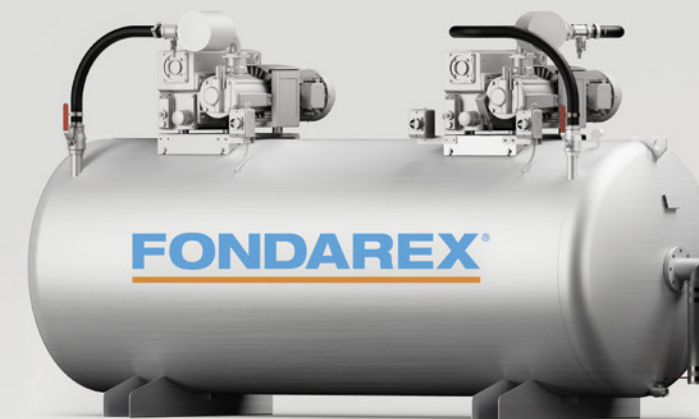


# FX VAC

## Model 12

This advanced vacuum system drives modern die casting for e-mobility and gigacasting, ensuring the precision, flexibility, and intelligence required to meet the highest automotive standards for quality and innovation.

Available in cell and central configurations with up to 12 independently movable vacuum channels.



Technical data FX VAC Model 4

| GENERATION                                                                 | 2026.07                                                                                                                   |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Mobile configuration                                                       | Yes                                                                                                                       |
| Cell configuration                                                         | Yes                                                                                                                       |
| Central configuration                                                      | Yes                                                                                                                       |
| Vacuum channels / CCABs                                                    | 1 to 4                                                                                                                    |
| Controls chill blocks                                                      | Yes                                                                                                                       |
| Controls mechanical valves                                                 | Yes                                                                                                                       |
| Controls hydraulic valves (With position sensor or with transducer sensor) | Yes                                                                                                                       |
| Tank capacity                                                              | 900 l (Mobile configuration)<br>1000 l (Cell configuration)<br>2000 l (Cell configuration)<br>3000 l (Cell configuration) |
| Vacuum pump performance                                                    | 100 m³/h (Tank 900 l)<br>160 m³/h (Tank 1000 l / 2000 l)<br>200 m³/h (Tank 2000 l / 3000 l)<br>300 m³/h (Tank 3000 l)     |
| HMI                                                                        | Mobile: Integrated HMI (Standard)<br>Cell: Remote HMI (Standard)                                                          |
| Fan for main cabinet (MCAB)                                                | Max. 42 °C                                                                                                                |
| MONITORING (HMI-DISPLAY)                                                   |                                                                                                                           |
| Language (Standard)                                                        | EN (US) / EN (UK) / DE / FR / IT / SP / PT / SE / CZ / SK / PL / RO / HU / SL / HR / GR / TR / CN / KR / JP               |
| Process overview display                                                   | Yes                                                                                                                       |
| Vacuum in the tank                                                         | Yes                                                                                                                       |
| Vacuum at die side                                                         | Per CCAB                                                                                                                  |
| Pollution control (Filter)                                                 | Per CCAB                                                                                                                  |
| Profile control (Chill-block)                                              | Per CCAB                                                                                                                  |
| Evacuated air volume                                                       | Yes                                                                                                                       |
| Compressed air pressure                                                    | Yes                                                                                                                       |
| MONITORING (CURVE OVER TIME)                                               |                                                                                                                           |
| Vacuum in the tank                                                         | Yes                                                                                                                       |
| Vacuum at die side                                                         | Per CCAB                                                                                                                  |
| Curve modes                                                                | Continuous curve<br>Defined start-end time curve<br>Frozen curve at defined time                                          |
| RECORDED VALUES                                                            |                                                                                                                           |
| Storage medium                                                             | USB-Stick / OPC-UA                                                                                                        |
| Production data                                                            | Yes                                                                                                                       |
| Vacuum on die side per cycle                                               | Per CCAB                                                                                                                  |
| Pollution control per cycle                                                | Per CCAB                                                                                                                  |
| Profile control per cycle                                                  | Per CCAB                                                                                                                  |
| Evacuated air volume per cycle                                             | Yes                                                                                                                       |
| Vacuum active setting                                                      | Yes                                                                                                                       |
| Hydraulic valve closing setting                                            | Yes                                                                                                                       |
| FEATURES                                                                   |                                                                                                                           |
| Timer setting mode                                                         | Yes                                                                                                                       |
| Stroke setting mode                                                        | Yes                                                                                                                       |
| Automatic / Manual mode                                                    | Yes                                                                                                                       |
| Tolerance setting (Per CCAB)                                               | Vacuum<br>Pollution control<br>Profile control<br>Evacuated air volume                                                    |
| Vacuum control (regulation) (Per CCAB)                                     | Yes                                                                                                                       |
| Vacuum for shot sleeve                                                     | Yes                                                                                                                       |
| Blowing function                                                           | Yes                                                                                                                       |
| Leak test                                                                  | Per CCAB                                                                                                                  |
| Fault recording                                                            | Yes                                                                                                                       |
| Recipe management                                                          | Yes                                                                                                                       |
| Stand-by mode for energy saving                                            | Yes                                                                                                                       |

| KEY COMPONENTS                              |                                        |
|---------------------------------------------|----------------------------------------|
| CPU                                         | Siemens                                |
| HMI                                         | Siemens 10"                            |
| Internal field bus technology               | I/O-Link                               |
| Pump Type                                   | Busch rotary vane vacuum pump          |
| Frame material                              | Stainless steel                        |
| Tank material                               | Stainless steel                        |
| Protection class (MCAB)                     | IP54                                   |
| Protection class (CCAB)                     | IP65                                   |
| ENVIRONMENTAL CONDITIONS                    |                                        |
| Temperature                                 | 5–42°C                                 |
| Relative air humidity                       | 0–90% (Not condensing)                 |
| Pressurized air                             | 5–7 bar at 3500 l/min                  |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] / WEIGHT |                                        |
| Dimension FX VAC MODEL 4 Mobile 900         | 2338 x 900 x 1360 mm                   |
| Weight FX VAC MODEL 4 Mobile 900            | 620 kg                                 |
| Dimension MCAB                              | 1170 x 900 x 390 mm                    |
| Weight MCAB                                 | 51 kg                                  |
| Dimension CCAB                              | 900 x 220 x 270 mm                     |
| Weight CCAB                                 | 22 kg                                  |
| VOLTAGE / CERTIFICATION                     |                                        |
| Voltage, max. power consumpti-on (Standard) | 3 x 400V ± 10% / 50hz ± 1%             |
| Voltage, max. power consumpti-on (Optional) | 3 x 480V ± 10% / 60hz ± 0,5%           |
| Certification                               | CE (Standard) / UL (Optional)          |
| CONNECTORS / FITTINGS                       |                                        |
| CCAB input vacuum                           | DN40                                   |
| CCAB output vacuum                          | DN25                                   |
| CCAB M pipe fitting                         | 8L G1/4"                               |
| CCAB S pipe fitting                         | 8S G1/4"                               |
| CCAB pressurized air                        | 1/2"                                   |
| OPTIONS                                     |                                        |
| Profinet interface to DCM                   | Optional                               |
| Profibus interface to DCM                   | Optional                               |
| Anybus                                      | Optional                               |
| Advanced communication                      | Optional                               |
| HMI remote panel                            | Mobile: Optional                       |
| Type of HMI Wein View                       | 10" (Optional)<br>20" (Optional)       |
| Analog curve display on DCM (Trace channel) | Optional                               |
| Indicator light tower deported              | Optional                               |
| Remote assistance (EWON)                    | Optional                               |
| Compressed air regulator                    | Mobile = Standard /<br>Cell = Optional |
| Air conditioner                             | Optional                               |
| Extension for power supply                  | From 25 m                              |
| Maintenance set                             | Optional                               |

Technical data FX VAC Model 12

| GENERATION                                                                 | 2026.07                                                                                                     |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Cell configuration                                                         | Yes                                                                                                         |
| Central configuration                                                      | Yes                                                                                                         |
| Vacuum channels / CCABs                                                    | 1 to 12                                                                                                     |
| Controls chill blocks                                                      | Yes                                                                                                         |
| Controls mechanical valves                                                 | Yes                                                                                                         |
| Controls hydraulic valves (With position sensor or with transducer sensor) | Yes                                                                                                         |
| Tank capacity                                                              | 1000 l to 6000 l                                                                                            |
| Vacuum pump performance                                                    | 100 m³/h<br>160 m³/h<br>200 m³/h<br>300 m³/h<br>500 m³/h                                                    |
| HMI                                                                        | Cell: Remote HMI (Standard)                                                                                 |
| Fan for main cabinet (MCAB)                                                | Max. 42 °C                                                                                                  |
| MONITORING (HMI-DISPLAY)                                                   |                                                                                                             |
| Language (Standard)                                                        | EN (US) / EN (UK) / DE / FR / IT / SP / PT / SE / CZ / SK / PL / RO / HU / SL / HR / GR / TR / CN / KR / JP |
| Process overview display                                                   | Yes                                                                                                         |
| Vacuum in the tank                                                         | Yes                                                                                                         |
| Vacuum at die side                                                         | Per CCAB                                                                                                    |
| Pollution control (Filter)                                                 | Per CCAB                                                                                                    |
| Profile control (Chill-block)                                              | Per CCAB                                                                                                    |
| Evacuated air volume                                                       | Yes                                                                                                         |
| Compressed air pressure                                                    | Yes                                                                                                         |
| MONITORING (CURVE OVER TIME)                                               |                                                                                                             |
| Vacuum in the tank                                                         | Yes                                                                                                         |
| Vacuum at die side                                                         | Per CCAB                                                                                                    |
| Curve modes                                                                | Continuous curve<br>Defined start-end time curve<br>Frozen curve at defined time                            |
| RECORDED VALUES                                                            |                                                                                                             |
| Storage medium                                                             | USB-Stick / OPC-UA                                                                                          |
| Production data                                                            | Yes                                                                                                         |
| Vacuum on die side per cycle                                               | Per CCAB                                                                                                    |
| Pollution control per cycle                                                | Per CCAB                                                                                                    |
| Profile control per cycle                                                  | Per CCAB                                                                                                    |
| Evacuated air volume per cycle                                             | Yes                                                                                                         |
| Vacuum active setting                                                      | Yes                                                                                                         |
| Hydraulic valve closing setting                                            | Yes                                                                                                         |
| FEATURES                                                                   |                                                                                                             |
| Timer setting mode                                                         | Yes                                                                                                         |
| Stroke setting mode                                                        | Yes                                                                                                         |
| Automatic / Manual mode                                                    | Yes                                                                                                         |
| Tolerance setting (Per CCAB)                                               | Vacuum<br>Pollution control<br>Profile control<br>Evacuated air volume                                      |
| Vacuum control (regulation) (Per CCAB)                                     | Yes                                                                                                         |
| Vacuum for shot sleeve                                                     | Yes                                                                                                         |
| Blowing function                                                           | Yes                                                                                                         |
| Leak test                                                                  | Per CCAB                                                                                                    |
| Fault recording                                                            | Yes                                                                                                         |
| Recipe management                                                          | Yes                                                                                                         |
| Stand-by mode for energy saving                                            | Yes                                                                                                         |

| KEY COMPONENTS                              |                                        |
|---------------------------------------------|----------------------------------------|
| CPU                                         | Siemens                                |
| HMI                                         | Siemens 10"                            |
| Internal field bus technology               | I/O-Link                               |
| Pump Type                                   | Busch rotary vane vacuum pump          |
| Frame material                              | Stainless steel                        |
| Tank material                               | Stainless steel                        |
| Protection class (MCAB)                     | IP54                                   |
| Protection class (CCAB)                     | IP65                                   |
| ENVIRONMENTAL CONDITIONS                    |                                        |
| Temperature                                 | 5–42°C                                 |
| Relative air humidity                       | 0–90% (Not condensing)                 |
| Pressurized air                             | 5–7 bar at 3500 l/min                  |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] / WEIGHT |                                        |
| Dimension MCAB                              | 1170 x 900 x 390 mm                    |
| Weight MCAB                                 | 86 kg                                  |
| Dimension CCAB                              | 900 x 220 x 270 mm                     |
| Weight CCAB                                 | 22 kg                                  |
| VOLTAGE / CERTIFICATION                     |                                        |
| Voltage, max. power consumpti-on (Standard) | 3 x 400V ± 10% / 50hz ± 1%             |
| Voltage, max. power consumpti-on (Optional) | 3 x 480V ± 10% / 60hz ± 0,5%           |
| Certification                               | CE (Standard) / UL (Optional)          |
| CONNECTORS / FITTINGS                       |                                        |
| CCAB input vacuum                           | DN40                                   |
| CCAB output vacuum                          | DN25                                   |
| CCAB M pipe fitting                         | 8L G1/4"                               |
| CCAB S pipe fitting                         | 8S G1/4"                               |
| CCAB pressurized air                        | 1/2"                                   |
| OPTIONS                                     |                                        |
| Profinet interface to DCM                   | Optional                               |
| Profibus interface to DCM                   | Optional                               |
| Anybus                                      | Optional                               |
| Advanced communication                      | Optional                               |
| Type of HMI Wein View                       | 10" (Optional)<br>20" (Optional)       |
| Analog curve display on DCM (Trace channel) | Optional                               |
| Indicator light tower deported              | Optional                               |
| Remote assistance (EWON)                    | Optional                               |
| Compressed air regulator                    | Mobile = Standard /<br>Cell = Optional |
| Air conditioner                             | Optional                               |
| Extension for power supply                  | From 25 m                              |
| Maintenance set                             | Optional                               |

# JET COOLING

## Producing quality and cost-efficient parts

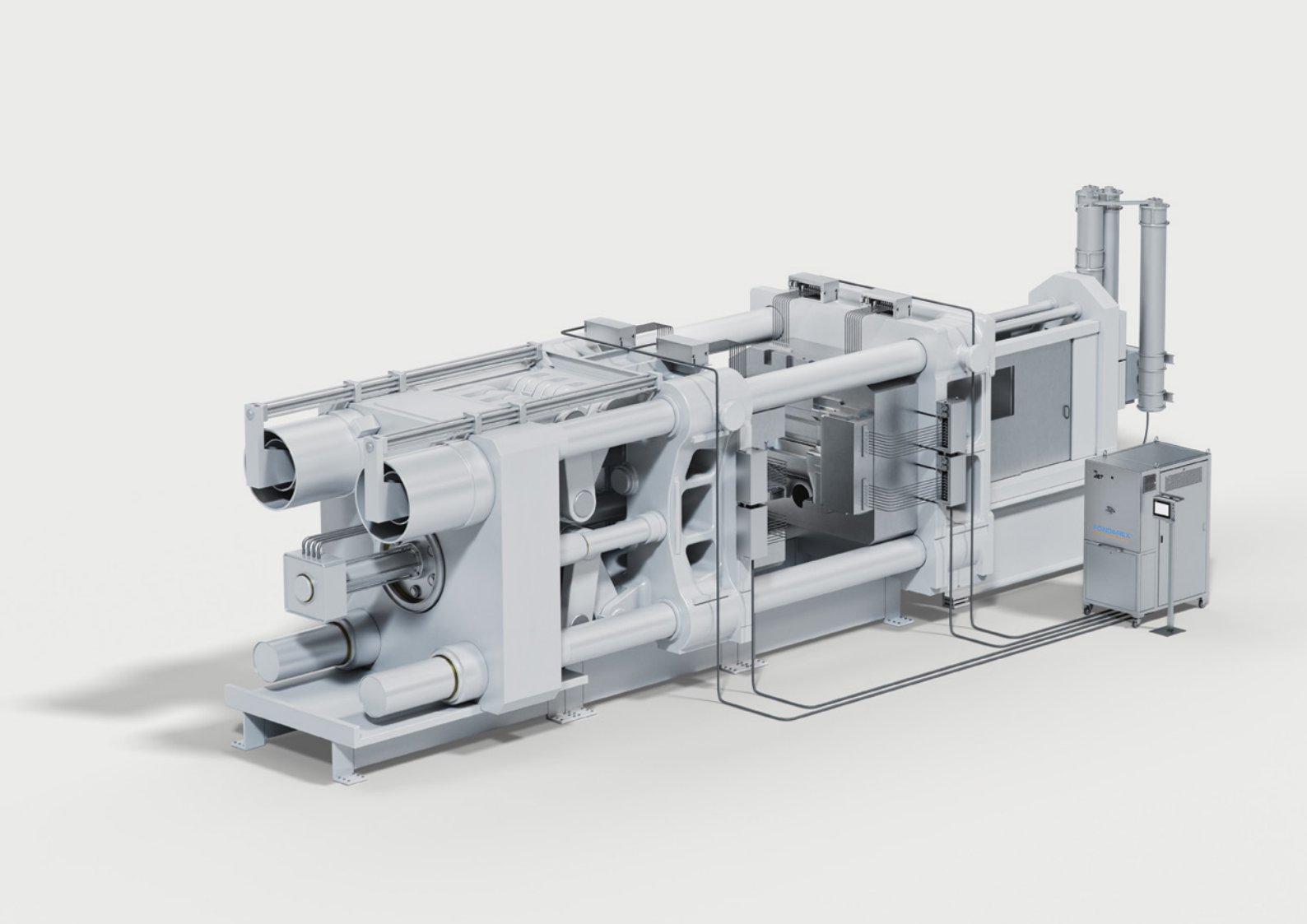
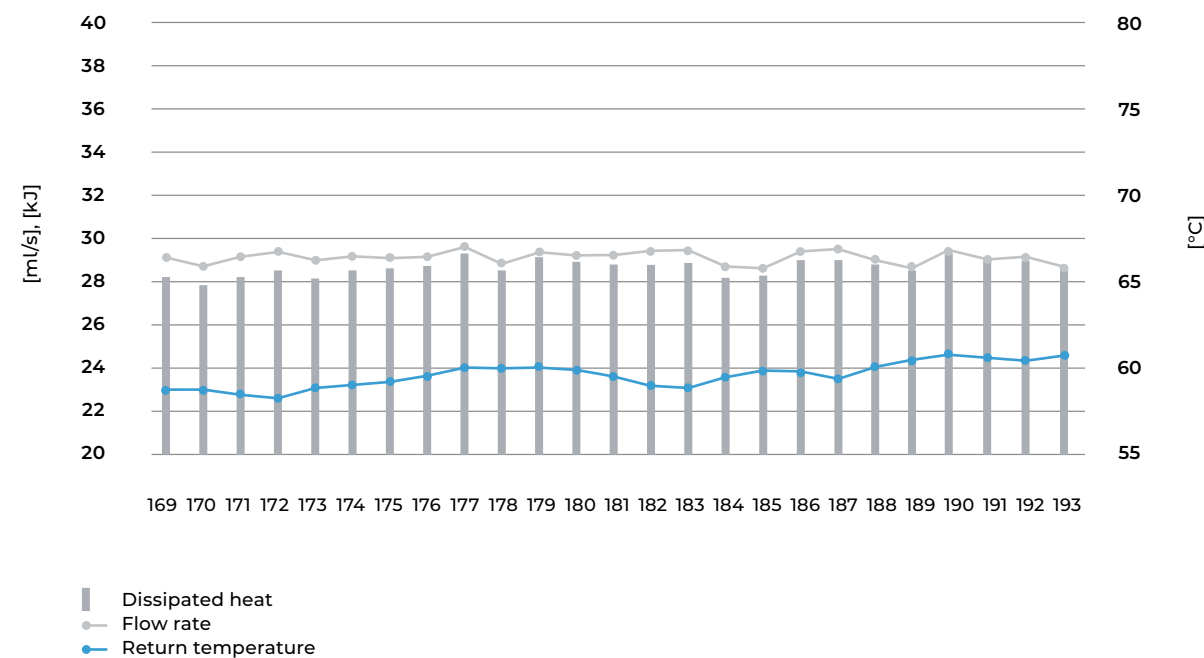
The Fondarex FX JET increases productivity and efficiency in casting processes through a modular and highly controllable cooling system.

One of its key features is its scalable design, allowing expansion from 1 to 8 independent cooling channels and enabling flexible integration into a wide range of applications. The system ensures precise monitoring

and control of the cooling process, resulting in stable performance and high process reliability.

The jet cooling system also offers high reproducibility of cooling capacity and complete traceability of process parameters.

## Cycle recording



## Features

- Reproducible cooling performance
- Pulsating operation possible
- Flow measurement for each jet nozzle
- Temperature measurement for each jet nozzle
- Display of flow and temperature curves for all jet nozzles
- Determination of the amount of heat dissipated per nozzle and cycle
- Storage of process values in internal memory
- OPC UA interface to external database
- Leak detection
- Fault diagnosis display
- Standby mode
- Reliable pressure supply via frequency-controlled centrifugal pump
- Modular design, from 1 to 8 channels
- With partial monitoring, each jet pin circuit can be divided into up to 3 sub-circuits, allowing up to 192 jet pins to be supplied with the 8C system

## FX JET Model 4

This jet and conformal cooling system provides precise control over flow, temperature, and heat dissipation at each jet nozzle.

Reliable water pressure is ensured by an energy-saving, frequency-controlled pump, delivering up to 24 bar and a maximum flow rate of 50 l/min.

The system is available in a mobile configuration with up to 4 movable distribution cabinets, each independently managing up to 8 jet nozzle – for a total of 32.



## FX JET Model 8

This jet and conformal cooling system provides precise control over flow, temperature, and heat dissipation at each jet nozzle.

Reliable water pressure is ensured by an energy-saving, frequency-controlled pump, delivering up to 24 bar and a maximum flow rate of 100 l/min.

The system is available in a mobile configuration with up to 8 movable distribution cabinets, each independently managing up to 8 jet nozzle – for a total of 64.



Technical data FX JET Model 4

| GENERATION                                | 2026.07                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Main circuits / cooling channels / DCABs  | 1 to 4                                                                                                      |
| Monitored jet nozzles / Micro channels    | 1 to 32<br>(8 per channel (DCAB))                                                                           |
| Number of nozzles per micro channel       | 1 to 3                                                                                                      |
| System pressure (from–to)                 | 10–24 bar                                                                                                   |
| Heat transfer medium                      | Demineralised water                                                                                         |
| Cooling capacity                          | 30 kW (Nominal)                                                                                             |
| Max. volume flow                          | 50 l/min                                                                                                    |
| Tank capacity                             | 250 l                                                                                                       |
| Noise level at full load                  | < 70 dB(A)                                                                                                  |
| HMI                                       | Integrated HMI (Standard)                                                                                   |
| Fan for main cabinet (MCAB)               | Max. 42 °C                                                                                                  |
| MONITORING (HMI-DISPLAY)                  |                                                                                                             |
| Language (Standard)                       | EN (US) / EN (UK) / DE / FR / IT / SP / PT / SE / CZ / SK / PL / RO / HU / SL / HR / GR / TR / CN / KR / JP |
| Process overview display                  | Yes                                                                                                         |
| Water (tank) temperature                  | Yes                                                                                                         |
| Return flow temperature                   | Per micro channel                                                                                           |
| Flow rate                                 | Per micro channel                                                                                           |
| Pump pressure                             | Yes                                                                                                         |
| In-flow water pressure                    | Per DCAB                                                                                                    |
| Compressed air pressure                   | Yes                                                                                                         |
| Water conductivity                        | Yes                                                                                                         |
| Tank fill level                           | Max. 42 °C                                                                                                  |
| MONITORING (CURVE OVER TIME)              |                                                                                                             |
| Return flow temperature                   | Per micro channel                                                                                           |
| Flow rate                                 | Per micro channel                                                                                           |
| RECORDED VALUES                           |                                                                                                             |
| Storage medium                            | USB-Stick, OPC-UA                                                                                           |
| Production data                           | Yes                                                                                                         |
| Water tank temperature                    | Yes                                                                                                         |
| Mean water temperature per cycle          | Per micro channel                                                                                           |
| Mean flow rate per cycle                  | Per micro channel                                                                                           |
| Extracted heat per cycle                  | Per micro channel                                                                                           |
| Cooling duration per cycle                | Per DCAB                                                                                                    |
| Temperatur / Flow rate – curves over time | Per micro channel                                                                                           |
| FEATURES                                  |                                                                                                             |
| Water change                              | Automatic                                                                                                   |
| Inegrated demineralisation unit           | Yes                                                                                                         |
| Leak test                                 | Per DCAB                                                                                                    |
| Pin-break monitoring                      | Yes                                                                                                         |
| Fault recording                           | Yes                                                                                                         |
| Pulse operation mode                      | Optional                                                                                                    |
| Frequency controlled pump                 | Yes                                                                                                         |
| Stand-by mode for energy saving           | Yes                                                                                                         |
| Recipe management                         | Yes                                                                                                         |
| Automatic / Manual mode switch            | Yes                                                                                                         |
| Heat exchanger can be switched on and off | Yes                                                                                                         |
| Pressure drop monitored filter            | Yes                                                                                                         |
| Tolerance setting (Per micro channel)     | Flow, return temperature, extracted heat                                                                    |

| KEY COMPONENTS                                        |                                                         |
|-------------------------------------------------------|---------------------------------------------------------|
| CPU                                                   | Siemens                                                 |
| HMI                                                   | Siemens 10"                                             |
| Main pump type                                        | Centrifugal pump, stainless steel, (50 l/min at 24 bar) |
| By-pass-pump                                          | Immersion pump, stainless steel, (10 l/min at 4 bar)    |
| Flow meters                                           | Vortex (0.5–10 l/min)                                   |
| Heat-exchanger                                        | Stainless steel                                         |
| Water tank                                            | Stainless steel                                         |
| Water conductivity sensor                             | 0.05–1000 µS                                            |
| Internal field bus technology                         | I/O-Link                                                |
| Protection class (MCAB)                               | IP54                                                    |
| Protection class (DCAB)                               | IP65                                                    |
| ENVIRONMENTAL CONDITIONS                              |                                                         |
| Temperature                                           | 5–42 °C                                                 |
| Relative air humidity                                 | 0–90 % (Not condensing)                                 |
| Pressurized air                                       | 5–6 bar at 3500 l/min                                   |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] / WEIGHT           |                                                         |
| Dimension FX JET MODEL 4                              | 800 x 1780 x 1300 mm                                    |
| Weight FX JET MODEL 4                                 | 570 kg                                                  |
| Dimension DCAB                                        | 600 x 260 x 250 mm                                      |
| Weight DCAB                                           | 20 kg                                                   |
| VOLTAGE / CERTIFICATION                               |                                                         |
| Voltage, max. power consumpti-on (Standard)           | 3x 400V ± 10 % / 50hz ± 1 %, 8 kW                       |
| Voltage, max. power consumpti-on (Optional)           | 3x 480V ± 10 % / 60hz ± 0,5 %, 10 kW                    |
| Max. current                                          | 32 A                                                    |
| Certification                                         | CE (Standard) / UL (Optional)                           |
| CONNECTORS / FITTINGS                                 |                                                         |
| Compressed air                                        | 1/2"                                                    |
| Cooling water                                         | 3/4"                                                    |
| DCAB – MCAB (Water)                                   | 1/2"                                                    |
| DCAB – MCAB (Pressurized air)                         | 1/2"                                                    |
| Tank – Water drain                                    | 1/2"                                                    |
| Tank – Water supply                                   | 1/2"                                                    |
| OPTIONS                                               |                                                         |
| DCAB with 8 monitored micro channels                  | Optional                                                |
| DCAB without micro channel monitoring                 | Optional                                                |
| DCAB MANIDRIVE with flow rate and pressure monitoring | Optional                                                |
| DCAB MANIDRIVE without monitoring                     | Optional                                                |
| Profinet interface to DCM                             | Optional                                                |
| Profibus interface to DCM                             | Optional                                                |
| Anybus                                                | Optional                                                |
| Advanced communication                                | Optional                                                |
| HMI remote panel                                      | Optional                                                |
| Type of HMI Wein View                                 | 10" (Optional)<br>20" (Optional)                        |
| Indicator light tower deported                        | Optional                                                |
| Remote assistance EWON                                | Optional                                                |
| Compressed air regulator                              | Optional                                                |
| Air conditioner                                       | Optional                                                |
| Maintenance set                                       | Optional                                                |

Technical data FX JET Model 8

| GENERATION                                | 2026.07                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Main circuits / cooling channels / DCABs  | 1 to 8                                                                                                      |
| Monitored jet nozzles / Micro channels    | 1 to 64<br>(8 per channel (DCAB))                                                                           |
| Number of nozzles per micro channel       | 1 to 3                                                                                                      |
| System pressure (from–to)                 | 10–24 bar                                                                                                   |
| Heat transfer medium                      | Demineralised water                                                                                         |
| Cooling capacity                          | 30 kW (Nominal)                                                                                             |
| Max. volume flow                          | 2 x 50 l/min                                                                                                |
| Tank capacity                             | 250 l                                                                                                       |
| Noise level at full load                  | < 70 dB(A)                                                                                                  |
| HMI                                       | Integrated HMI (Standard)                                                                                   |
| Fan for main cabinet (MCAB)               | Max. 42 °C                                                                                                  |
| MONITORING (HMI-DISPLAY)                  |                                                                                                             |
| Language (Standard)                       | EN (US) / EN (UK) / DE / FR / IT / SP / PT / SE / CZ / SK / PL / RO / HU / SL / HR / GR / TR / CN / KR / JP |
| Process overview display                  | Yes                                                                                                         |
| Water (tank) temperature                  | Yes                                                                                                         |
| Return flow temperature                   | Per micro channel                                                                                           |
| Flow rate                                 | Per micro channel                                                                                           |
| Pump pressure                             | Yes                                                                                                         |
| In-flow water pressure                    | Per DCAB                                                                                                    |
| Compressed air pressure                   | Yes                                                                                                         |
| Water conductivity                        | Yes                                                                                                         |
| Tank fill level                           | Max. 42 °C                                                                                                  |
| MONITORING (CURVE OVER TIME)              |                                                                                                             |
| Return flow temperature                   | Per micro channel                                                                                           |
| Flow rate                                 | Per micro channel                                                                                           |
| RECORDED VALUES                           |                                                                                                             |
| Storage medium                            | USB-Stick, OPC-UA                                                                                           |
| Production data                           | Yes                                                                                                         |
| Water tank temperature                    | Yes                                                                                                         |
| Mean water temperature per cycle          | Per micro channel                                                                                           |
| Mean flow rate per cycle                  | Per micro channel                                                                                           |
| Extracted heat per cycle                  | Per micro channel                                                                                           |
| Cooling duration per cycle                | Per DCAB                                                                                                    |
| Temperatur / Flow rate – curves over time | Per micro channel                                                                                           |
| FEATURES                                  |                                                                                                             |
| Water change                              | Automatic                                                                                                   |
| Inegrated demineralisation unit           | Yes                                                                                                         |
| Leak test                                 | Per DCAB                                                                                                    |
| Pin-break monitoring                      | Yes                                                                                                         |
| Fault recording                           | Yes                                                                                                         |
| Pulse operation mode                      | Optional                                                                                                    |
| Frequency controlled pump                 | Yes                                                                                                         |
| Stand-by mode for energy saving           | Yes                                                                                                         |
| Recipe management                         | Yes                                                                                                         |
| Automatic / Manual mode switch            | Yes                                                                                                         |
| Heat exchanger can be switched on and off | Yes                                                                                                         |
| Pressure drop monitored filter            | Yes                                                                                                         |
| Tolerance setting (Per micro channel)     | Flow, return temperature, extracted heat                                                                    |

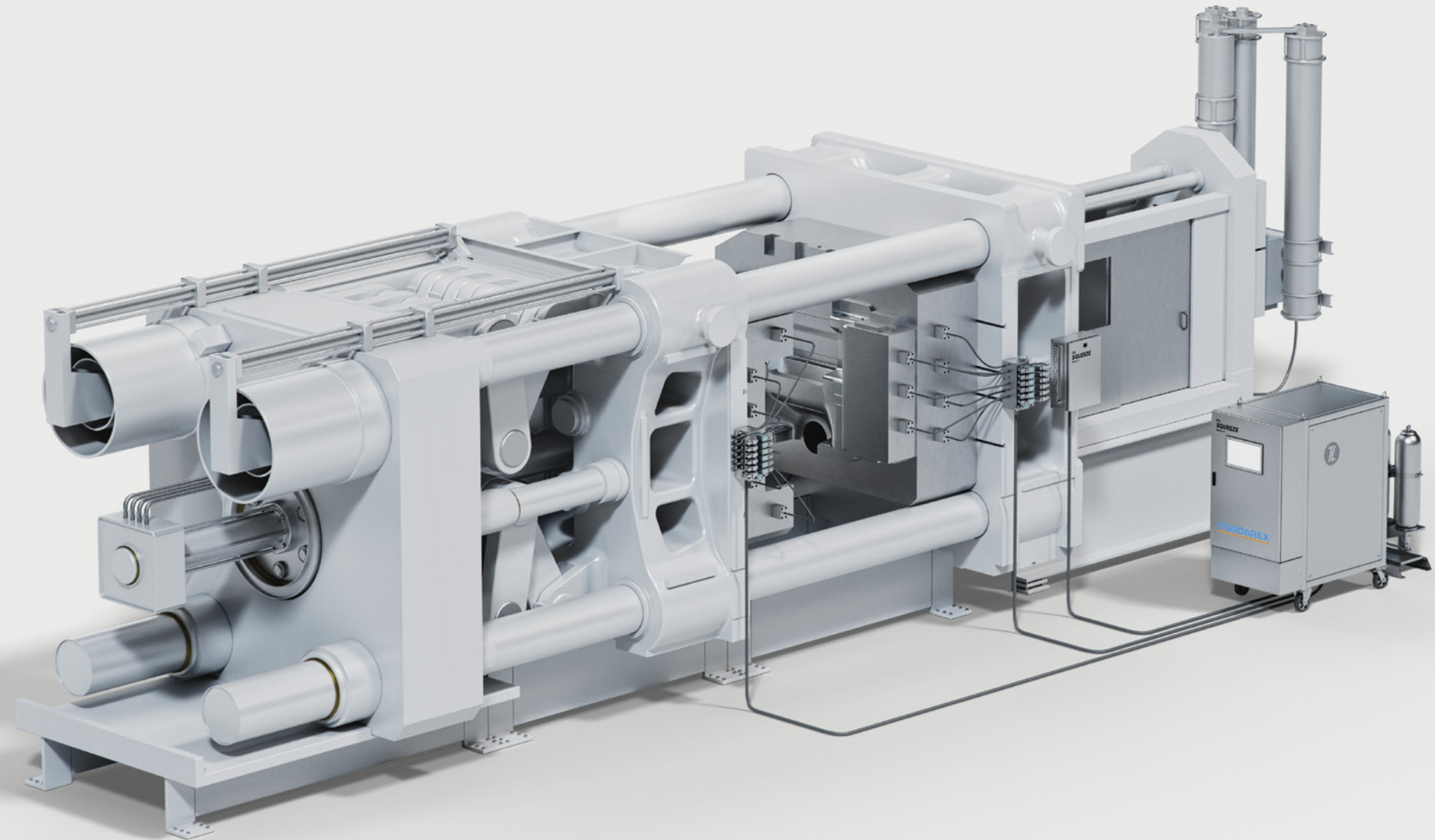
| KEY COMPONENTS                                        |                                                             |
|-------------------------------------------------------|-------------------------------------------------------------|
| CPU                                                   | Siemens                                                     |
| HMI                                                   | Siemens 10"                                                 |
| Main pump type                                        | 2 x Centrifugal pump, stainless steel, (50 l/min at 24 bar) |
| By-pass-pump                                          | Immersion pump, stainless steel, (10 l/min at 4 bar)        |
| Flow meters                                           | Vortex (0.5–10 l/min)                                       |
| Heat-exchanger                                        | Stainless steel                                             |
| Water tank                                            | Stainless steel                                             |
| Water conductivity sensor                             | 0.05–1000 µS                                                |
| Internal field bus technology                         | I/O-Link                                                    |
| Protection class (MCAB)                               | IP54                                                        |
| Protection class (DCAB)                               | IP65                                                        |
| ENVIRONMENTAL CONDITIONS                              |                                                             |
| Temperature                                           | 5–42 °C                                                     |
| Relative air humidity                                 | 0–90 % (Not condensing)                                     |
| Pressurized air                                       | 5–6 bar at 3500 l/min                                       |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] / WEIGHT           |                                                             |
| Dimension FX JET MODEL 8                              | 800 x 1780 x 1300 mm                                        |
| Weight FX JET MODEL 8                                 | 570 kg                                                      |
| Dimension DCAB                                        | 600 x 260 x 250 mm                                          |
| Weight DCAB                                           | 20 kg                                                       |
| VOLTAGE / CERTIFICATION                               |                                                             |
| Voltage, max. power consumpti-on (Standard)           | 3x 400V ± 10 % / 50hz ± 1 %, 8 kW                           |
| Voltage, max. power consumpti-on (Optional)           | 3x 480V ± 10 % / 60hz ± 0,5 %, 10 kW                        |
| Max. current                                          | 32 A                                                        |
| Certification                                         | CE (Standard) / UL (Optional)                               |
| CONNECTORS / FITTINGS                                 |                                                             |
| Compressed air                                        | 1/2"                                                        |
| Cooling water                                         | 3/4"                                                        |
| DCAB – MCAB (Water)                                   | 1/2"                                                        |
| DCAB – MCAB (Pressurized air)                         | 1/2"                                                        |
| Tank – Water drain                                    | 1/2"                                                        |
| Tank – Water supply                                   | 1/2"                                                        |
| OPTIONS                                               |                                                             |
| DCAB with 8 monitored micro channels                  | Optional                                                    |
| DCAB without micro channel monitoring                 | Optional                                                    |
| DCAB MANIDRIVE with flow rate and pressure monitoring | Optional                                                    |
| DCAB MANIDRIVE without monitoring                     | Optional                                                    |
| Profinet interface to DCM                             | Optional                                                    |
| Profibus interface to DCM                             | Optional                                                    |
| Anybus                                                | Optional                                                    |
| Advanced communication                                | Optional                                                    |
| HMI remote panel                                      | Optional                                                    |
| Type of HMI Wein View                                 | 10" (Optional)<br>20" (Optional)                            |
| Indicator light tower deported                        | Optional                                                    |
| Remote assistance EWON                                | Optional                                                    |
| Compressed air regulator                              | Optional                                                    |
| Air conditioner                                       | Optional                                                    |
| Conformal cooling                                     | Optional                                                    |
| Maintenance set                                       | Optional                                                    |

## Adaptive alloy feeding for demanding die casting

The FX SQUEEZE is the ideal complement to FX VAC and FX JET for improving casting quality and process stability.

The system enables targeted local feeding of the alloy during solidification and helps reduce or eliminate shrinkage-related defects in critical casting areas.

Each squeeze cylinder can be individually controlled, ensuring flexible and precise adaptation to the specific requirements of the casting process. This results in a highly adaptable and robust solution for demanding die casting applications.



# SQUEEZE

## Features

- Independent of the hydraulic system of the die casting machine
- Individual control of each squeeze cylinder, up to 12 (start time, force, pressure ramp, and holding time until retraction are fully adjustable)
- Adjustable ramp-shaped force increase for each cylinder
- Real-time display of process parameters
- Display of pressure curves for all channels
- Measurement of achieved squeeze stroke
- Visualization of process values
- Storage of process data in internal memory
- OPC UA interface to external database

Technical data FX SQUEEZE Model 12

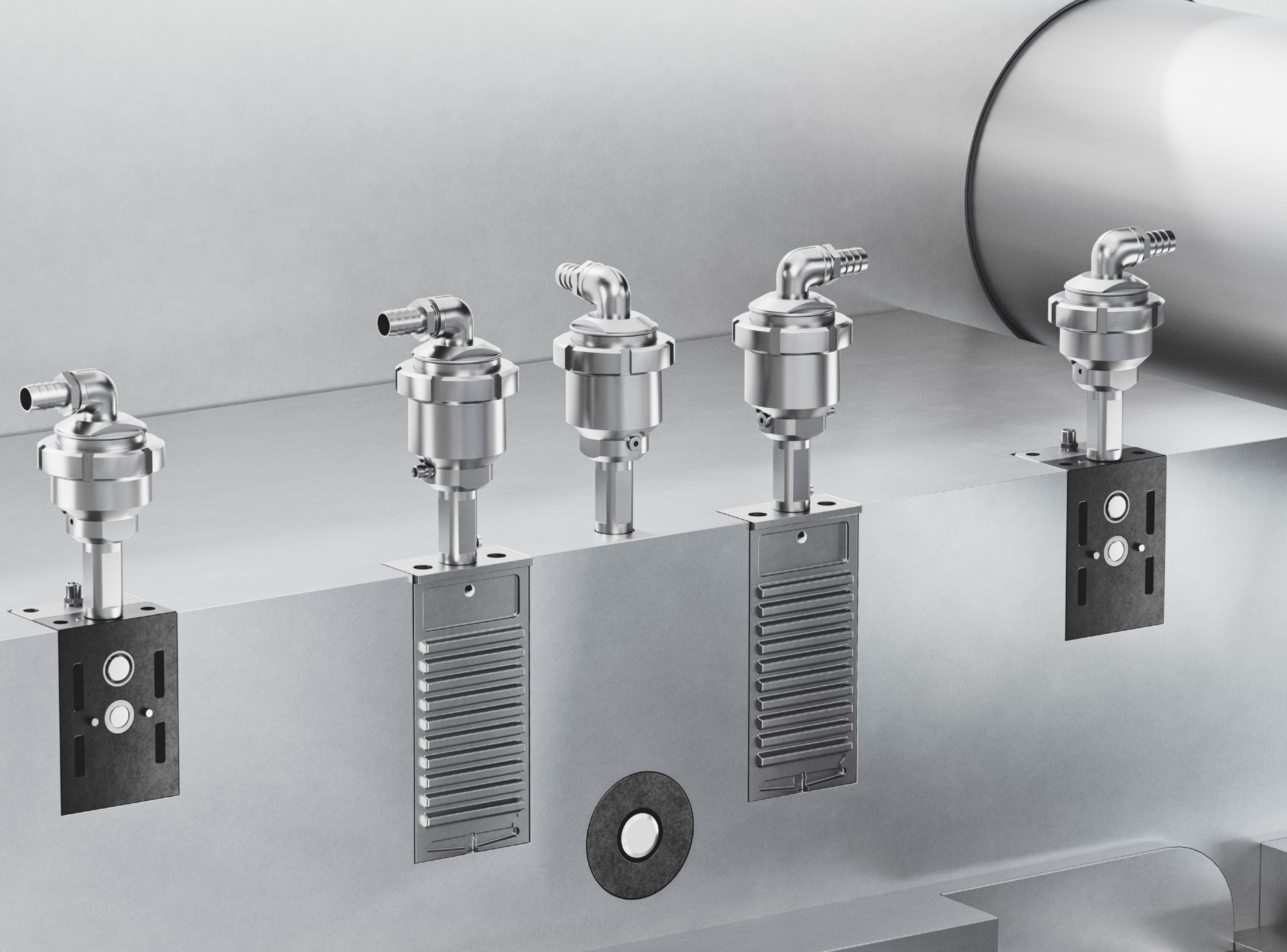
| GENERATION                         |  | 2026.07                                      |
|------------------------------------|--|----------------------------------------------|
| Mobile configuration               |  | Yes                                          |
| Cylinder control blocks            |  | 1 to 4                                       |
| Squeeze cylinder                   |  | 1 to 12                                      |
| System pressure                    |  | 30 – 320 bar                                 |
| Hydraulic medium                   |  | Water-glycol                                 |
| Pump capacity                      |  | 11 kW                                        |
| Cooling capacity                   |  | 3 kW                                         |
| Tank volume                        |  | 100 l                                        |
| Accumulator volume                 |  | 40 l                                         |
| Noise emission                     |  | < 70 dB(A)                                   |
| Max. ambient temperature           |  | 42°C                                         |
| MONITORING (HMI MONITOR)           |  |                                              |
| Languages                          |  | EN/DE                                        |
| Process overview                   |  | Yes                                          |
| Oil temperature                    |  | Yes                                          |
| Working pressure (real time)       |  | Per squeeze cylinder                         |
| Return pressure (real time)        |  | Per squeeze cylinder                         |
| Cylinder stroke                    |  | For cylinders with stroke measurement system |
| MEASUREMENT RECORDING              |  |                                              |
| Medium                             |  | OPC/UA                                       |
| Production data                    |  | Yes                                          |
| Start time                         |  | Per squeeze cylinder                         |
| End time                           |  | Per squeeze cylinder                         |
| Achieved stroke                    |  | For cylinders with stroke measurement system |
| MEASURED VALUES (CURVES OVER TIME) |  |                                              |
| Pressure curves                    |  | Per squeeze cylinder                         |
| Squeeze stroke curve               |  | For cylinders with stroke measurement system |
| Return pressure                    |  | Per squeeze cylinder                         |
| RECOMMENDED APPLICATION RANGE      |  |                                              |
| Squeeze pin diameter               |  | 4 – 40 mm                                    |
| Squeeze stroke                     |  | Up to 40 mm                                  |
| Squeeze pressure (in the metal)*   |  | 400 – 4000 bar                               |

| COMPONENTS                         |                                   |
|------------------------------------|-----------------------------------|
| CPU                                | Bosch-Rexroth                     |
| HMI touch screen                   | Bosch Rexroth (17")               |
| Hydraulic pump                     | External gear pump                |
| Pump control                       | Frequency-controlled              |
| Hydraulic tank                     | Stainless steel                   |
| Internal fieldbus                  | I/O Link                          |
| Protection class (control blocks)  | IP65                              |
| Protection class (unit)            | IP54                              |
| AMBIENT CONDITIONS                 |                                   |
| Temperature                        | 5 – 42°C                          |
| Air humidity                       | 0 – 90% (non-condensing)          |
| DIMENSIONS [WIDTH X HIGHT X DEPTH] |                                   |
| Unit                               | 800 x 1700 x 1400 mm <sup>3</sup> |
| Control blocks                     | 300 x 410 x 320 mm <sup>3</sup>   |
| Electrical cabinet                 | 400 x 600 x 210 mm <sup>3</sup>   |
| Accumulator                        | 600 x 1320 x 400 mm <sup>3</sup>  |
| MEDIA CONNECTIONS                  |                                   |
| Power supply                       | 3 x 400 V 32 A 50 Hz              |
| Cooling water                      | 22 l                              |
| ADJUSTABLE PROCESS PARAMETERS      |                                   |
| Squeeze start                      | Per squeeze cylinder              |
| Squeeze pressure                   | Per squeeze cylinder              |
| Pressure rise time                 | Per squeeze cylinder              |
| Progressive pressure profile       | Per squeeze cylinder              |
| Degressive pressure profile        | Per squeeze cylinder              |
| Pressure holding time              | Per squeeze cylinder              |
| Return force                       | Per squeeze cylinder              |
| INTERFACE                          |                                   |
| Profinet                           | Yes                               |
| Cable interface                    | Optional                          |

FX  
SQUEEZE  
Model 12

The ideal complement to FX VAC and FX JET for reducing shrinkage porosity inside the casting. The FX SQUEEZE can control and operate up to 12 independent squeeze cylinders to locally feed alloy shrinkage during solidification.







### Technical data Steel Vents

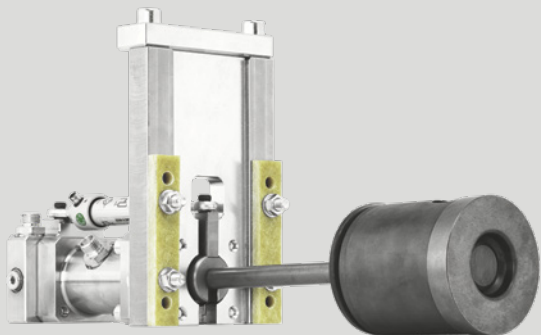
| MODEL               | SCCZ 12-1     |      | SCS 30-1      |     | SCS 60-1   |     | SCS 100-1  |     | SCS 140-1   |     |
|---------------------|---------------|------|---------------|-----|------------|-----|------------|-----|-------------|-----|
| Section [mm²]       | 12            |      | 30            |     | 60         |     | 100        |     | 140         |     |
| DCM tonnage [t]     | < 200 approx. |      | < 400 approx. |     | 200 – 1200 |     | 800 – 2800 |     | 1600 – 4500 |     |
| Shot weight Al [kg] | /             |      | 0.1 – 1.5     |     | 0.7 – 10   |     | 5 – 22     |     | 10 – 40     |     |
| Shot weight Mg [kg] | 0.05 – 0.8    |      | 0.07 – 1      |     | 0.5 – 6    |     | 3 – 12     |     | 6 – 26      |     |
| Shot weight Zn [kg] | 0.1 – 3       |      | 0.2 – 4       |     | 1 – 20     |     | /          |     | /           |     |
| Dimensions          | A             | B    | C             | D   | E          | F   | G          | H   | I           | J   |
| Width [mm]          | 63            | 63   | 63            | 63  | 100        | 100 | 140        | 140 | 150         | 150 |
| Depth [mm]          | 63.4          | 63.5 | 50            | 50  | 50         | 50  | 60         | 60  | 80          | 80  |
| Height [mm]         | 100           | 99   | 150           | 149 | 250        | 249 | 300        | 299 | 360         | 359 |

\* Larger evacuation sections available on request.



### Technical data Kinetic Valves

| MODEL            | KINETIC VALVE 12 |    | KINETIC VALVE 40/25      |    | KINETIC VALVE 100 / 75     |     | KINETIC VALVE 300 / 200 |      |
|------------------|------------------|----|--------------------------|----|----------------------------|-----|-------------------------|------|
| Profile [mm²]    | 12               |    | 25<br>40                 |    | 75<br>100                  |     | 200<br>300              |      |
| DCM tonnage [t]  | 20 – 200         |    | 80 – 800                 |    | 200 – 2000                 |     | 1200 – 6000             |      |
| Shot weight [kg] | ZN 0.1 – 2       |    | ZN 0.2 – 8<br>AL 0.2 – 5 |    | ZN 0.8 – 14<br>AL 0.6 – 15 |     | AL 7 – 50               |      |
| Dimensions       | A                | B  | C                        | D  | E                          | F   | G                       | H    |
| Width [mm]       | 40               | 40 | 55                       | 55 | 100                        | 100 | 125                     | 125  |
| Depth [mm]       | 44               | 20 | 50                       | 25 | 75                         | 50  | 95.5                    | 57.5 |
| Height [mm]      | 50               | 50 | 65                       | 65 | 125                        | 125 | 175                     | 175  |



### Technical data Hydraulic Valve

| MODEL                             | MOLD VACUUM VALVE (A)                |          |                    |
|-----------------------------------|--------------------------------------|----------|--------------------|
| Section [mm²]                     | 300                                  |          |                    |
| DCM tonnage [t]                   | 6000                                 |          |                    |
| Shot weight [kg]                  | AL 7 – 50                            |          |                    |
| Vacuum valve body dimensions [mm] | 80ø x 95                             |          |                    |
| Vacuum valve body attachment      | 4 x M8 90 x 50                       |          |                    |
| Vacuum piston rod diameter [mm]   | Up to 900                            |          |                    |
| Diameter vacuum piston rod [mm]   | 20 ø                                 |          |                    |
| MODEL                             | HYDRAULIC CYLINDER WITH COUPLING (B) | MANIFOLD | ELECTRICAL CABINET |
| Length [mm]                       | 187                                  | 266      | 400                |
| Width [mm]                        | 110                                  | 139      | 210                |
| Height [mm]                       | 200                                  | 268      | 300                |

FX  
JET  
Nozzles

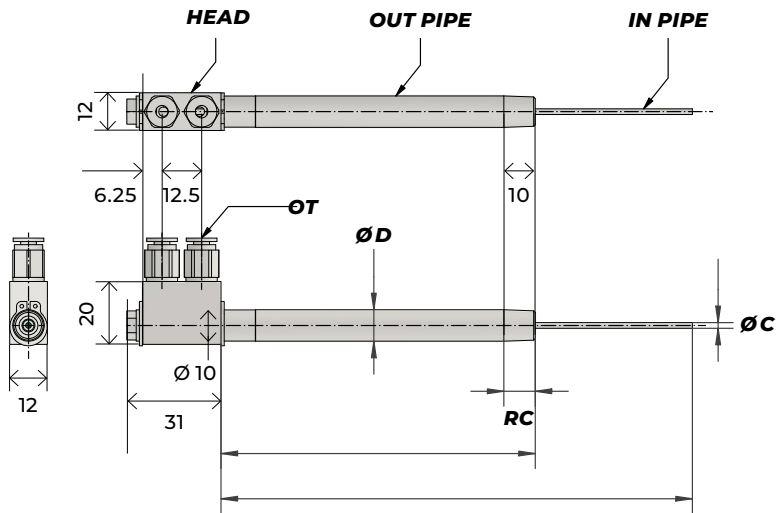


The jet nozzles from Fondarex, produced in collaboration with Wonjin, are distinguished by their material quality, precision manufacturing, and long-term process stability.

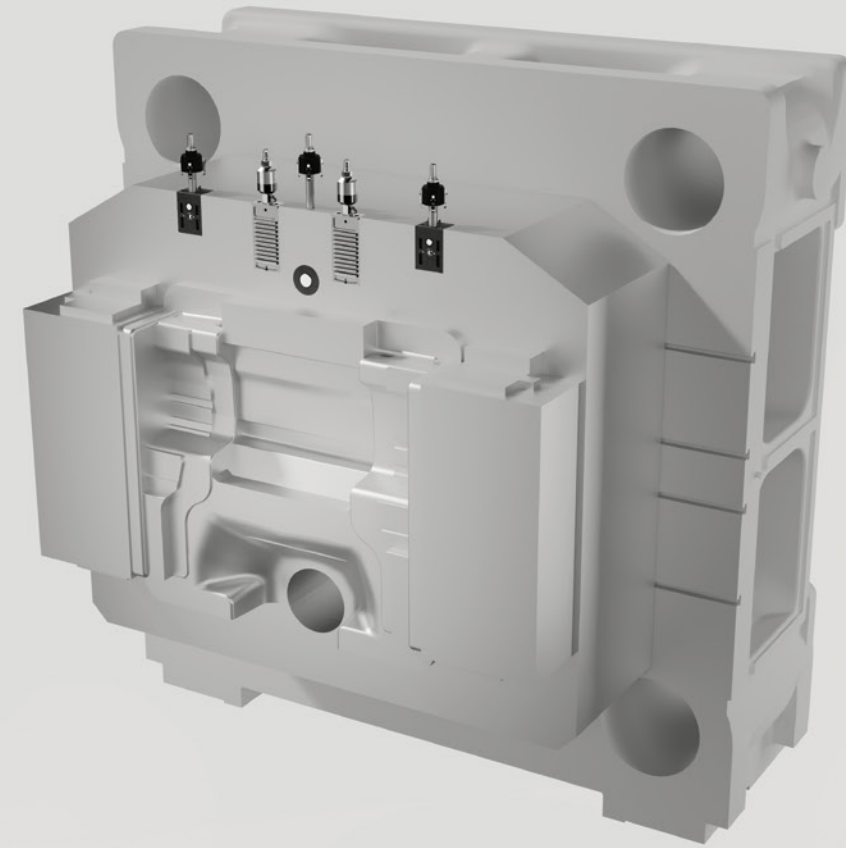
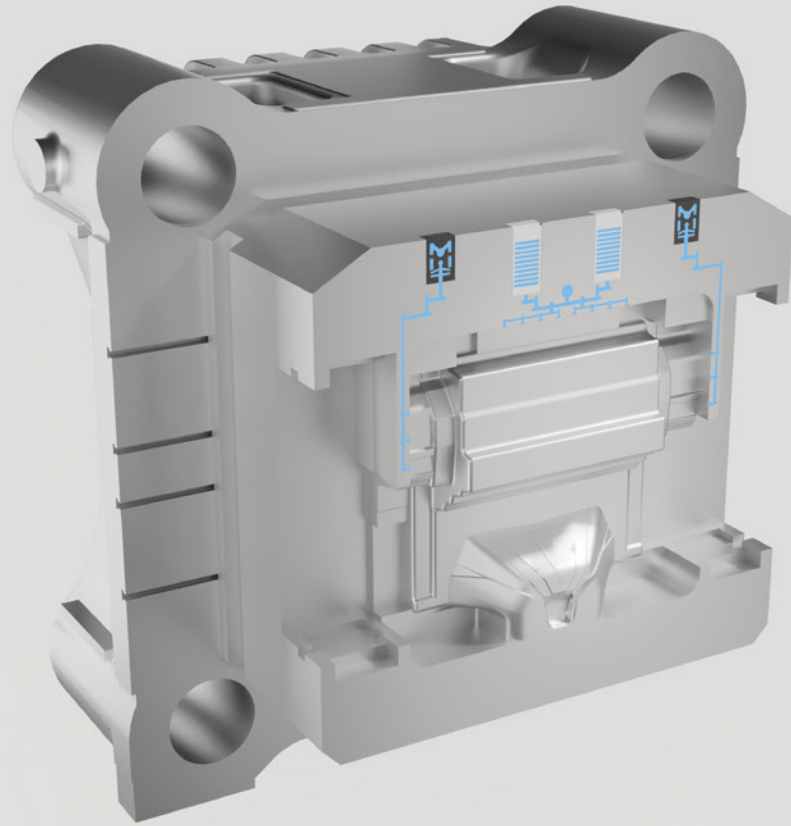
These stainless steel jet nozzles offer high durability, precise and stable cooling performance, corrosion resistance, and low maintenance requirements, making them well-suited for demanding die casting jet cooling applications where process consistency is critical.



Technical data FX JET Nozzles



| TYPE                             |                                    | DRC              |  |
|----------------------------------|------------------------------------|------------------|--|
| Order code                       | DRC - RC - A - B - C - OT          |                  |  |
| Example                          | DRC - PT1/8 - 100 - 150 - 1,8 - D6 |                  |  |
| RC                               | DIAMETER OUT PIPE                  | DIAMETER IN PIPE |  |
| M4                               | D4 x 1                             | D1,2             |  |
| M6                               | D6 x 1,5                           | D1,2 D1,8 D2,0   |  |
| M8                               | D8 x 1,5                           | D1,2             |  |
| PT 1/16                          | D8 x 1,5                           | D1,8             |  |
| M10                              | D10 x 2                            | D2,0             |  |
| PT 1/8                           | D10 x 2                            | D2,3             |  |
|                                  |                                    | D3,0             |  |
| MATERIAL                         |                                    |                  |  |
| IN PIPE                          | 1.4301<br>SUS304                   |                  |  |
| OUT PIPE                         | 1.4301<br>SUS304                   |                  |  |
| HEAD                             | 1.4301<br>SUS304                   |                  |  |
| FITTING ONE TOUCH (OT) - PUSH-IN |                                    |                  |  |
| None (PT1/8")                    |                                    |                  |  |
| D4                               |                                    |                  |  |
| D6                               |                                    |                  |  |



# OUR EXPERTISE

## Channel design

Vacuum application studies are essential for achieving optimal integration of vacuum technology into die-casting processes. Proper channel design ensures efficient air evacuation, stable process conditions, and consistent part quality.

With over 5,000 successful projects, Fondarex is a leading specialist in vacuum channel design, supporting customers in developing highly efficient and reliable vacuum solutions tailored to their applications.

# AT YOUR SERVICE

## Technical support

Fondarex provides fast and efficient technical service through its team of engineers, supporting production sites worldwide. With a strong international presence, Fondarex maintains close relationships with its customers to ensure reliable and responsive assistance.

Fondarex also offers maintenance contracts, retrofit services for existing systems, software upgrades, and technical training. This comprehensive support helps ensure maximum productivity from vacuum systems, jet cooling systems, or squeeze systems, providing a clear competitive advantage.

## Remote assistance

Our experts provide real-time instructions and guidance to support faster troubleshooting and efficient problem resolution. Fondarex remote assistance ensures immediate technical support, helping customers minimize downtime and maintain stable, high-quality production performance.

## Training

Fondarex regularly organizes training sessions on vacuum, jet cooling, and squeeze technologies.

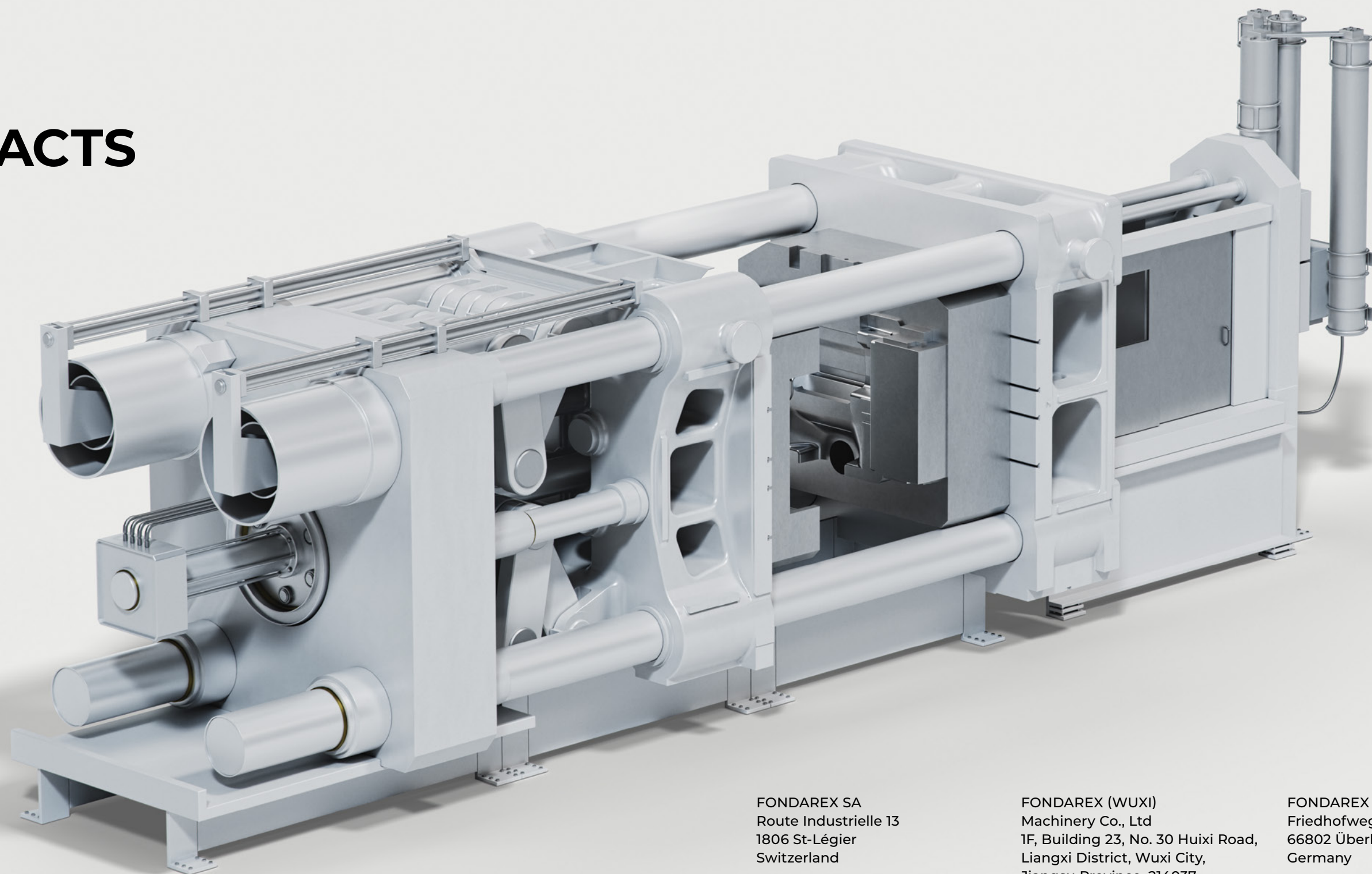
These training programs are tailored to the needs and interests of participants, whether operators, service technicians, engineers, or managers. Sessions can be conducted either on-site or at Fondarex facilities, ensuring flexible and practical learning opportunities.



# REPRESENTATIVES

|                                                                  |                                                                                    |                                                                                                               |
|------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <p>AUSTRIA<br/>FONDAREX EUROPE GMBH<br/>Stefan Jenal</p>         | <p>PORTUGAL<br/>CONIEX S.A.<br/>António Aguiar</p>                                 | <p>UNITED STATES<br/>(IN, KY, MI, OH, NC, PA, SC, TN)<br/>RICHARDSON SALES LTD.<br/>John Pierson</p>          |
| <p>BULGARIA<br/>TECHNOCOMMERCE ENG. OOD<br/>Stanimir Iliev</p>   | <p>ROMANIA<br/>SC LIXLAND SRL<br/>Mihai Lixandra</p>                               | <p>UNITED STATES<br/>(IA, IL, MN, MO, ND, SD, WI)<br/>FERRELL METALCASTING<br/>SOLUTIONS<br/>Doug Ferrell</p> |
| <p>CZECH REP.<br/>HYDAC SPOL. S R.O.<br/>Miloslav Mares</p>      | <p>SCANDINAVIA<br/>SWISSTEC SKANDINAVIEN<br/>Bob Schuler</p>                       | <p>CHINA<br/>FONDAREX (WUXI) MACHIN-<br/>ERY CO., LTD.<br/>Markus Winter</p>                                  |
| <p>ENGLAND<br/>FENCO-ALDRIDGE (BARTON) LTD.<br/>Simon Hinson</p> | <p>SLOVENIA<br/>TC LIVARSTVO D.O.O.<br/>Sebastjan Kastelic</p>                     | <p>INDIA<br/>ULTRASEAL (INDIA) PVT. LTD.<br/>Ashay Shastri</p>                                                |
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