



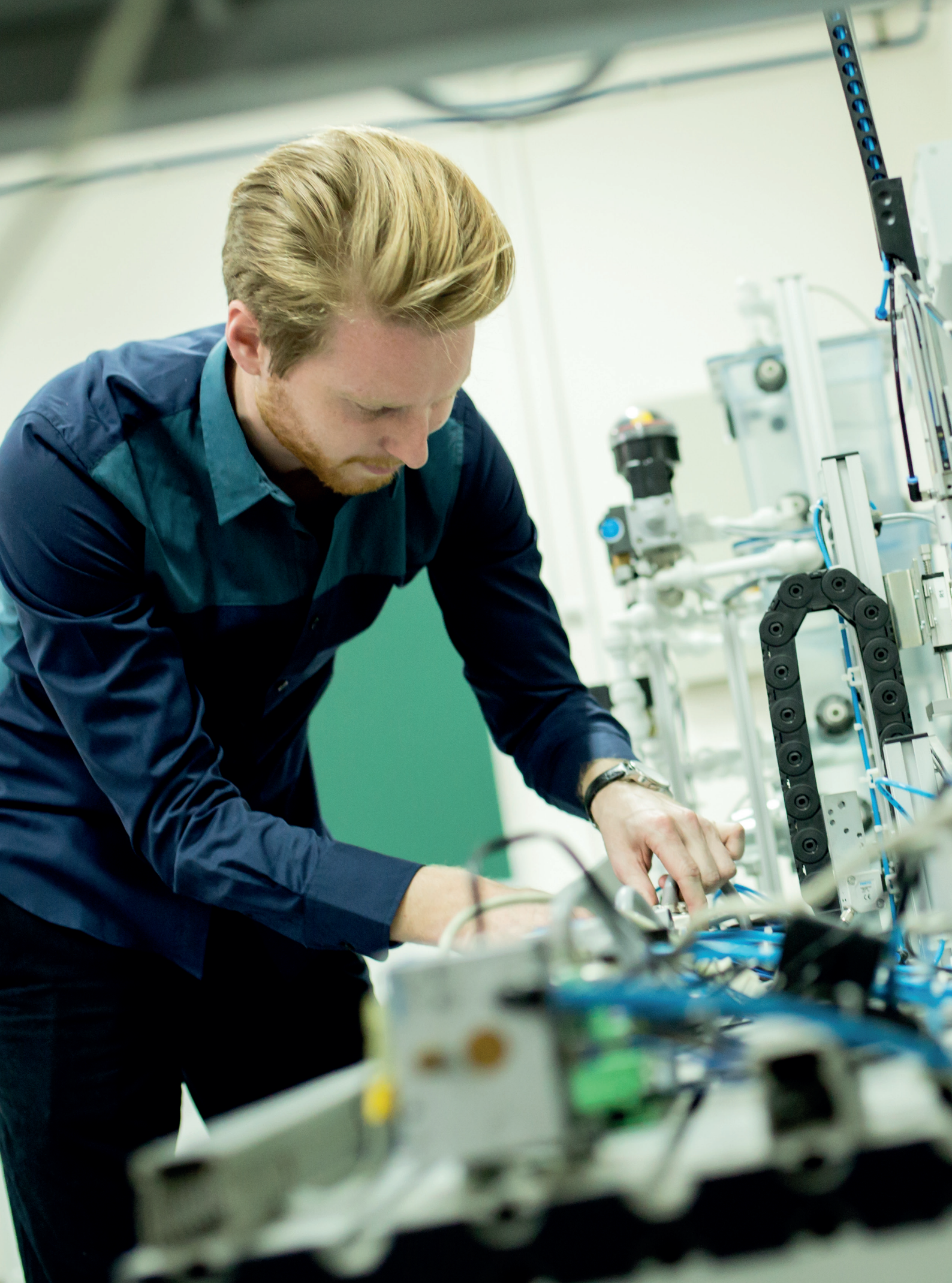
FinnSonic

# FINNSONIC CORUS

Ultrasonic cleaning units for maintenance



**cleaner • safer • smarter**







# FinnSonic Corus

**Core values for maintenance  
cleaning**


**An ultrasonic cleaning machine cleans  
even the most demanding parts  
efficiently and saves working hours**

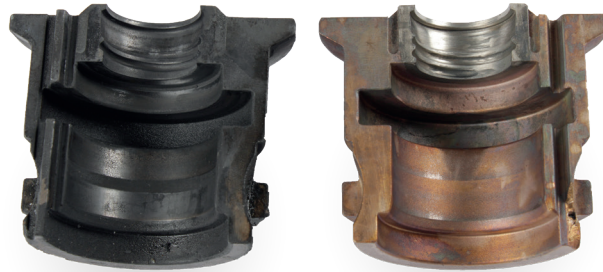
Undoubtedly, ultrasonic cleaning has many advantages in industrial maintenance cleaning of production equipment

- » Fast and powerful – saves time and labour
- » Gentle – non-abrasive to the base material
- » Precise – cleans also complex structures with holes and channels
- » Environmentally friendly - low energy and water consumption
- » Ergonomic - user-friendly design
- » Safe – a controlled cleaning process in an enclosed space

## **New FinnSonic Corus – best value**

The new FinnSonic Corus line has been designed for both the general industrial maintenance cleaning and for mould and tool cleaning. FinnSonic Corus is a smart product line with flexible configurations for an optimal cleaning result.





Before

After

## Main benefits

With labour saving ultrasonic cleaning, you can count on the production equipment's reliable operation and achieving a high level of cleanliness.

- » FinnSonic Genius ultrasonic technology - constant maximum performance and high level of cleanliness
- » Modular – flexible process configuration for an optimal cleaning result
- » Value for money
- » Safe and pleasant working environment with good ergonomics and low noise level

## Three main versions

- » **FinnSonic Corus** standard modules for general maintenance cleaning
- » **FinnSonic Corus HD** standard modules for mould and tool cleaning
- » **FinnSonic Corus X** customer tailored modules for maintenance cleaning

# Examples of maintenance cleaning applications

## Corus

- » Filters, sieves, heat exchangers
- » Vehicle repair: carburetors, chains, nozzles, cylinder heads, filters
- » Mechanical industry: bearings, blades, nozzles, valves, sensors
- » Process industry: valves, nozzles, sealings, measuring devices, pump parts, pneumatic and hydraulic parts
- » Dye, ink, paint, urethane, epoxy removal

## Corus HD

- » Plastic injection moulds
- » Glass moulds
- » Die casting moulds
- » Extrusion tools
- » Press tools
- » Punch tools
- » Saw blades, wood cutters

## Corus X

- » Items with special dimensions, for example pipes



# FinnSonic Corus

For general maintenance cleaning

FinnSonic Corus is optimized for industrial maintenance cleaning of complex parts. It replaces the laborious and often abrasive mechanical manual cleaning.



## FinnSonic Corus modules

|           | Wash basket internal dimensions | Load capacity | US effect | Tank volume | Heating effect |
|-----------|---------------------------------|---------------|-----------|-------------|----------------|
| Corus 120 | 300 x 538 x h442 mm             | 100 kg        | 1,2 kW    | 135 l       | 3 kW           |
| Corus 240 | 604 x 400 x h516 mm             | 200 kg        | 2,4 kW    | 286 l       | 5 kW           |
| Corus 360 | 808 x 600 x h658 mm             | 300 kg        | 3,6 kW    | 670 l       | 9 kW           |
| Corus 480 | 1208 x 800 x h658 mm            | 350 kg        | 4,8 kW    | 1200 l      | 18 kW          |

### Main benefits

- » Superior cleaning result
- » Short cleaning process
- » Safe and easy to operate
- » Reduces manual labour

### Complementary options

- » Wash basket – safe parts handling
- » Hinged tank lid – contains vapour, sound and heat
- » Pneumatic lid actuation - enhances operator safety
- » Bath maintenance options - extend bath life and cleaning quality
- » Ventilation rim - reduces exposure to vapours
- » Noise suppression kit - reduces sound level by up to 10 dB
- » Rinse module - enables rinsing off detergent and contamination residues for a clean and safe result
- » Air bubble agitation for rinse tank - increases rinsing efficiency

# FinnSonic Corus HD

## Superior benefits for injection mould and press tool cleaning

Ultrasonic mould cleaning can remove stubborn dry or wet contamination from metallic surfaces, yet being gentle and non-abrasive to the base material. Ultrasonic cleaning replaces the heavy mechanical work done by the operator.



40–50% cost  
savings in mould  
maintenance

### Main benefits in production

- » Prolonged mould life; no abrasion of the mould's sharp edges, forms or surface
- » Superior cleaning result of the moulds
  - » longer mould productivity
  - » steady production speed
  - » reduced handling time of the final product
  - » high product quality
  - » minimum percentage of rejected parts

### Main benefits in the cleaning process

- » Short cleaning process – short treatment time
- » Safe and easy to operate
- » Savings on labour costs, little operator involvement
- » Short payback time
- » Environmentally friendly water based detergents
- » Reliable technology

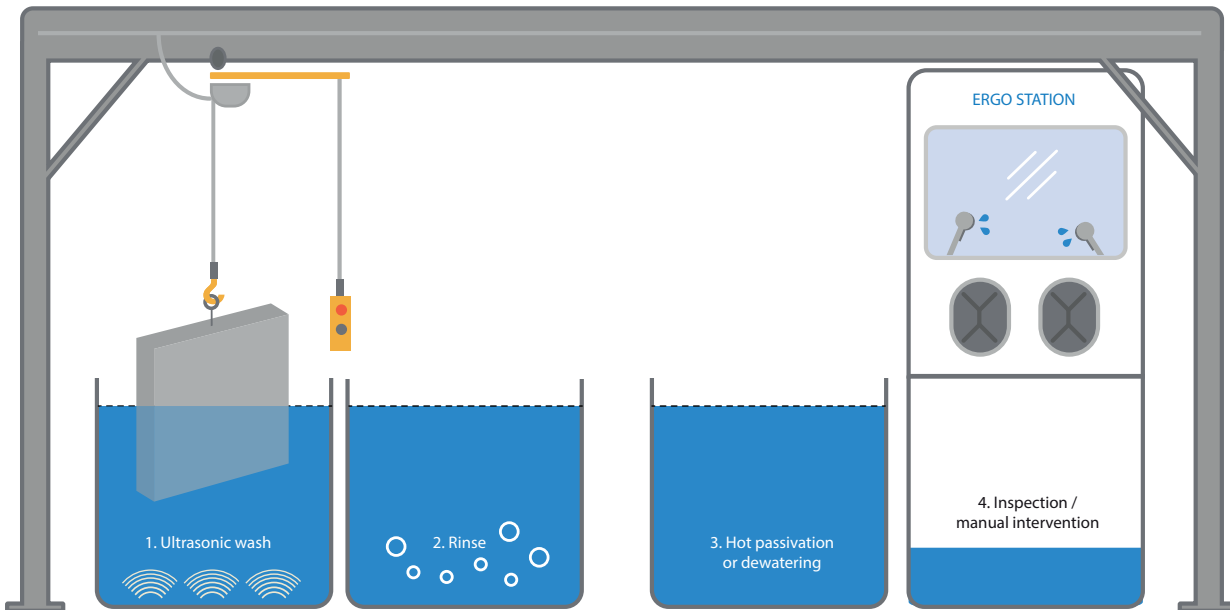


# Complete Mould Cleaning Process Solution

1. Ultrasonic wash at 80°C for about 5-15 minutes
2. Rinsing with air bubble agitation for about 1 minute

## Optional

3. Preservation with dewatering or hot passivation for about 1 minute
4. Inspection / manual intervention



OPTIONAL

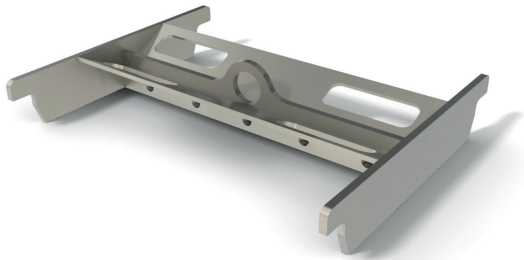
## Optimal cleaning chemistry is vital

The right detergent plays a key role in achieving the desired level of cleanliness. In an ultrasonic wash process, a high alkaline cleaner, for example FinnSonic Cavitec HD Pro, is powerful against organic residue that has burned onto the steel moulds and tools. A corrosion inhibitor, for example FinnSonic Norust 1, provides temporary corrosion protection in the rinse bath. An acidic product, for example FinnSonic Cavitec Disco, is used for removing oxidation and lime scale.



# Options for mould handling

A lifting beam or basket is used for supporting the mould parts during the washing process. Tanks are equipped with support bars that are compatible with both the lifting beam and basket, and allow detaching the hoist and closing the tank lid for the duration of the cleaning.



## Lifting beam for mould plates

- » The mould is hung on the beam with shackles.
- » A matching interface for the support bars in the tank.
- » One point lifting for convenient handling with a chain hoist



## Basket for mould plates / parts

- » One point lifting for convenient handling with a chain hoist, thanks to detachable lifting accessory.

**Dedicated baskets with mesh are also available for cleaning small items.**



## FinnSonic Chain Hoist

- » Compatible with the cleaning line
- » Ergonomic load handling
- » A ready-to-use floor fitted chain hoist makes the purchasing and installation a straight forward process.
- » The complete system is CE marked.

## FinnSonic Ergo Station

FinnSonic Ergo Station is an innovation for the manual rinsing, flushing, drying and inspection of moulds. Its main advantages include a high level of safety and ergonomics thanks to a fully enclosed, brightly lit and ventilated working chamber. Operating the machine is safe and easy as parts are loaded through a sliding side door and supported with a hoist during the treatment.



## FinnSonic Corus HD modules

|              | Max recommended mould size | Tank effective dimensions | Basket internal dimensions | Load capacity | US effect | Tank volume | Heating effect |
|--------------|----------------------------|---------------------------|----------------------------|---------------|-----------|-------------|----------------|
| Corus 120HD  | 400 x 250 x h400 mm        | 340 x 645 x h484 mm       | 300 x 538 x h435 mm        | 100 kg        | 1,2 kW    | 135 l       | 3 kW           |
| Corus 240HD  | 450 x 300 x h450 mm        | 654 x 449 x h603 mm       | 604 x 400 x h516 mm        | 200 kg        | 2,4 kW    | 286 l       | 5 kW           |
| Corus 360HD  | 600 x 400 x h600 mm        | 724 x 473 x h758 mm       | 668 x 400 x h658 mm        | 300 kg        | 3,6 kW    | 410 l       | 9 kW           |
| Corus 480HD  | 800 x 400 x h600 mm        | 924 x 473 x h758 mm       | 868 x 400 x h658 mm        | 500 kg        | 4,8 kW    | 500 l       | 9 kW           |
| Corus 600HD  | 1000 x 400 x h800 mm       | 1200 x 500 x h1000 mm     |                            | 1000 kg       | 6 kW      | 840 l       | 18 kW          |
| Corus 720HD  | 1200 x 400 x h900 mm       | 1400 x 500 x h1100 mm     |                            | 1300 kg       | 7,2 kW    | 1100 l      | 18 kW          |
| Corus 840HD  | 1000 x 700 x h800 mm       | 1200 x 800 x h1000 mm     |                            | 1600 kg       | 8,4 kW    | 1300 l      | 27 kW          |
| Corus 1200HD | 1200 x 700 x h900 mm       | 1400 x 800 x h1100 mm     |                            | 2000 kg       | 12 kW     | 2200 l      | 36 kW          |

# FinnSonic Corus X

When special dimensions are needed, FinnSonic Corus X is the answer. The modules can be tailor made according to the customer's current needs. The modules are designed with smart design automation that is based on a parametric model. In turn, this produces cost-efficiency and fast delivery times.



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FinnSonic maintains certified quality and environmental programs ISO 9001:2008 and ISO 14001:2004.