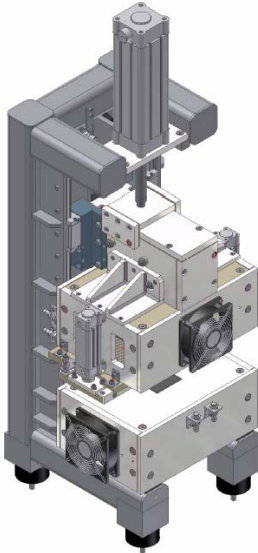


## UMH of the line „S“



### Heating machine

At the UMH (Uniform Magnetic Heating) process the work piece to be heated is placed into an alternating magnetic field. The changing of the polarization generates friction losses in the part and therefore heat. This innovative process is excellent controllable. Amongst others it offers a great flexibility when integrated in industrial production processes due to its high heating speed. The advantage of heating through hysteresis losses is the homogeneous heating of the work pieces. Compared to the conventional heating systems, the UMH process avoids internal tensions deformations. Conventional heat processes which heat the work piece by heating the surface and heat conduction or heat radiation in direction of the core suffer from internal heat gradients.

The UMH line “S” (small) was designed as a very compact machine. It is preferably applied as an integration module in Laser- and EB welding systems in order to preheat gears.

### Technical data

#### Machine parameters

power	25 - 37 kW
working frequency	50 - 400 Hz
current of coil	ca. 75 A
voltage	400 (50 Hz) V

#### Installation conditions

length	1200 mm
width	1200 mm
height	2100 mm
installation area	2 m <sup>2</sup>

## Core

dimensions (cross-section) 50x50, 75x75 mm  
core distance 130 mm

## Work piece

max. dimensions: length 120 mm  
max. dimensions: width 120 mm  
max. dimensions: height 100 mm  
min. dimensions: height 10 mm  
max. weight of work piece ≤ 5 kg  
material of work piece ferromagnetic, paramagnetic

## Heating parameter

heating time up to 20 K/s  
temperature variation ± 10 °C  
Δ residual magnetism < 15 μT

## Media

supply voltage 3 x 400V, ± 10%, 50Hz; TN-S System  
compressed air 6 bar ± 10%

## Certificates

Manufacturer's Declaration or  
EC Declaration of Conformity

## Accessories

core adapter  
core changer  
work piece changer  
down holder  
operator protection

## Options

noise insulation  
separate PLC control panel  
measurement technique

Additional features and special design are available on request.

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