

# Product Specification Pole Coil Brazing Machine AT-PCBM

**Product:** Pole Coil Brazing Machine for hydro rotor pole windings  
**Type:** AT-PCBM  
**Edition:** 12/15

## 1. Description

The semi-automatic Pole Coil Brazing Machine PCBM is build for manufacturing of pole coils by inductive brazing of the coil angles. The machine is designed with 4 brazing towers with integrated hydraulic brazing joint press.

## 2. Special Features

- Manufacturing of trapez- and all other geometrical designs without additional equipment
- Longitudinal and lateral undercarriage for adjustment of the coil dimensions
- 4 brazing heads incl. inductor, pyrometer, press device and suction, adjustable to the coil shape
- Pneumatically fixing of the copper conductors
- Automatically brazing of the winding, manually post- brazing feasible
- Program-controlled lowering of brazed winding
- Accessibility from all sides which ensures an optimum operator view and an easy assembly of insulation
- Integrated cooling of the copper conductors for fast insulation assembly
- High accuracy due to inner angle fixation
- No turning table which results in a shorter cycle time and no risk for the operator
- Temperature control by pyrometers
- Central PLC with touch screen display for program selection, data input and control
- Tracking of main process data
- Fast setup

## 3. Technical Data of the machine

Machine length:	approx. 6.000 mm (incl. cooling aggregate)
Machine width:	approx. 6.000 mm (incl. cooling aggregate)
Machine height:	approx. 2.400 mm (incl. cooling aggregate)
Machine weight:	approx. 2.000 kg
Working level for brazing:	1.250 mm (from foundation)

Max. apparent power:	approx. 45 kVA
Continuous output power:	40 kW (75 kW on request)
Frequency range:	10 to 25 (40) kHz
Electrical connection:	380 – 415 V (3xL,N,PE), 50/60 Hz

#### 4. Technical Data of the pole coil

Dimensions of the pole coil to be manufactured on a standard PCBM are as follows:

Pole Coil inner length:	800 to 3.000 mm (500 to 4.000 mm on request)
Pole Coil inner width:	200 to 800 mm (120 to 800 mm on request)
Copper width:	40 to 120 mm (40 to 150 mm on request)
Copper depth:	3 - 15 mm
Max. pole coil weight:	2.500 kg
Max. pole coil height:	330 mm (400 mm on request)

#### 5. Packshot

