



# TEM Thermal Deburring



## C250

### Reliable and fast deburring system concentrates maximum economy into minimum machine space

The C250 thermal deburring machine is designed to be a reliable and flexible deburring system. The C250 features a "C" throat press frame with a ram and toggle style locking mechanism that allows for fast cycle times and increased throughput.

The C250 thermal deburring machine, designed for a max closing pressure of 250 US tons (2,224 kN), is available with three different chamber diameters – 7" (175mm), 8" (200mm), or 10" (250mm) – for perfectly meeting individual customer requirements.

Five process stations located on an indexing table allow the C250 to perform high production deburring, while a stainless steel upper combustion chamber surrounded by a continuous flow water cooling ring ensures reliable operation.

### FEATURES and BENEFITS

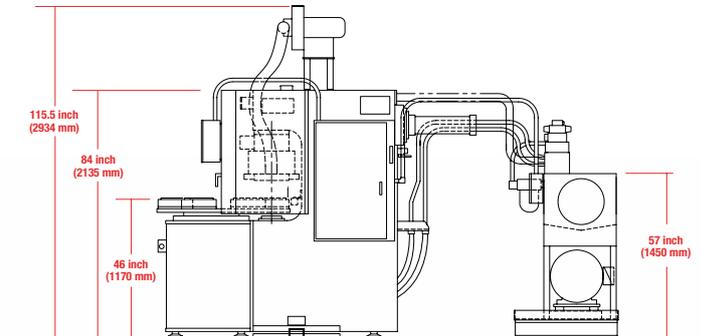
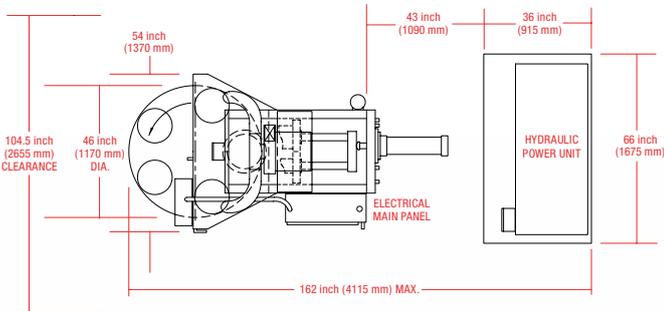
- + **Robust machine frame**  
Ram and toggle provides mechanical locking of combustion chamber and fast cycle times.
- + **Water cooling of the deburring chamber**  
Enables system to be used in continuous operation.
- + **Hydraulically operated gas charging system**  
Achieves consistent quality with high-precision gas delivery system.
- + **User-friendly HMI with touch screen interface**  
Facilitates quick set ups and fine-tuning of parameters, convenient machine monitoring and operation, and integral fault diagnostics.
- + **Touch screen interface**  
Convenient machine monitoring and operation.
- + **Robust design**  
Hundreds in use in harsh environments.
- + **Enhanced safety**  
Redundant ignition detection by thermocouple and accelerometer feedback.





# TECHNICAL INFORMATION

## TEM C250



### ELECTRICAL SPECIFICATIONS

The operator interface is located in the front of the machine, with the control cabinet mounted to the side. The machine control unit is a Programmable Logic Controller (PLC). Working cycle can either be sequenced manually in single step mode or started in automatic mode.

#### Electrical

Supply Voltage	460 VAC/3 PH/60 Hz or 380 VAC/3 PH/50 Hz
Control & Valve Voltage	24 V DC
Power	25 kVA
Main Switch	50 A fused disc

#### Controls

Standard	Allen Bradley SLC 500
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### CONNECTION REQUIREMENTS

#### Water

Pressure	0,35 MPa
Machine approx.	2.3 GPM (11 L/min)
Hydraulic unit approx.	6 GPM (23 L/min)
Temperature	30 °C max, 300 micron clean

### APPROXIMATE VALUES FOR GAS MIXTURE PRESSURES

Material	Natural Gas
Steel	8–20 bar (116–290 psi)
Cast Iron	5–20 bar (73–290 psi)
Zinc	5–10 bar (73–145 psi)
Aluminum	5–10 bar (73–145 psi)
Brass	8–25 bar (116–363 psi)

Fuel can be natural gas or methane.

NOTE: Specifications and availability are subject to change without notice.

### MACHINE SPECIFICATIONS

Loading Height from Floor	1170mm (46")
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Available Chambers (Ø x H)	Ø 7" (175mm) x 6" (150mm) Ø 8" (200mm) x 6" (150mm) Ø 10" (250mm) x 6" (150mm)
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Max Chamber Pressure	7" (175mm) – 325 psi (22,4 bar) 8" (200mm) – 250 psi (17,2 bar) 10" (250mm) – 165 psi (11,4 bar)
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Part Loading (standard)	Manual loading, 5 stations
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Cycle time	30 seconds
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Weight	approx. 16,000 lbs (7260 kg)
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### STANDARD EQUIPMENT

- Exhaust system.
- Remote gas charge system adjustment.
- Machine diagnostics built into PLC.
- Touch screen interface.
- Water-cooled chamber.
- Grease containment tray.
- Modem.

### ACCESSORIES/OPTIONS

- Natural gas compressor.
- Closed-Loop Cooling system.
- Provision for automation.
- Hydrogen fuel gas.
- Operator pendant.
- Six station.
- Reverse index.
- Wet scrubber.
- Recessed lower closures.