EXTRUDE HONE®

PRODUCT DATA SHEET

TEM
Thermal Deburring

P400

Reliable and high-production deburring system is available with a choice of chamber diameters to fit any application

The P400 thermal deburring machine is designed to be a reliable and flexible deburring system. The P400 features a chamber capacity exceeding both the "C" and "S" machine models.

The P400 thermal deburring machine, designed for a max closing pressure of 400 US tons (3558 kN), is available with five different chamber diameters – 8" (200mm), 10" (250mm), 12.6" (320mm), 16" (400mm), or 17.7" (450mm) – for perfectly meeting individual customer requirements.

Five process stations located on an indexing table allow the P400 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, three-post machine frame**
  Engineered for durability and reliability with hydraulic ram providing reliable chamber closing.
+ **Modularly constructed enclosure**
  Low-noise hydraulic power unit reduces noise into the production environment and delivers increased safety for the machine operator.
+ **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 control with touch screen interface**
  Facilitates quick set ups and fine-tuning of parameters, convenient machine monitoring and operation, and integral fault diagnostics.

EXTRUDE HONE®

TECHNICAL INFORMATION

TEM P400

P400XL measuerments in **bold.**

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	8–15 bar (116–217 psi)

Fuel can be natural gas or methane.

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 amps
Controls	
Standard PLCs	Allen Bradley SLC 500/ Siemens S7-300

CONNECTION REQUIREMENTS

Water	
Machine	approx. 4 GPM (15 L/min)
Hydraulic unit	approx. 6 GPM (23 L/min)
Temperature	not to exceed 85 °F, .300 micron
Pressure	50 psi/0,35 MPa

MACHINE SPECIFICATIONS

Available Chambers (Ø x H)	Ø 8" (200mm) x 10" (250mm) Ø 8" (200mm) x 12" (300mm) Ø 10" (250mm) x 10" (250mm) Ø 10" (250mm) x 12" (300mm) Ø 12.6" (320mm) x 12" (300mm) Ø 16" (400mm) x 12" (300mm) Ø 16" (400mm) x 19.7" (500mm) Ø 17.7" (450mm) x 19.7" (500mm)
Max Chamber Pressure	8" (200mm) – 400 psi (27 bar) 10" (250mm) – 300 psi (20 bar) 12.6" (320mm) – 212 psi (14 bar) 16" (400mm) – 145 psi (10 bar)
Part Loading (standard)	Manual loading, 5 stations/ 450mm chamber 2 stations
Cycle Time	60–90 seconds
Weight	approx. 26,000 lbs (11.800 kg)

STANDARD EQUIPMENT

Exhaust system.
Remote gas charge system adjustment.
Machine diagnostics built into PLC.
Touch screen interface with pendant.
Water-cooled chamber.
Redundant ignition detection system.

ACCESSORIES/OPTIONS

Natural gas compressor.
Closed-Loop Cooling system.
Provision for automation.
Hydrogen fuel gas.
Wet scrubber.
Double shot.
Recessed lower closure.
Automated seal cleaner.

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