

# **CTM-CI**

## **CERAMIC INJECTION MACHINE**

**QUALITY - PERFORMANCE - RELIABILITY**

THE NEW CTM CERAMIC INJECTION MACHINE IS DESIGNED  
TO PRODUCE HIGH QUALITY CERAMIC CORES

- Cleveland Tool and Machine produces a line of 4-Post and C-Frame Ceramic Slurry Injection Machines that range in sizes from 25 to 100 Tons with die working area of 14 to 40 inches.

\* LARGER SIZES AVAILABLE UPON REQUEST

### **STANDARD FEATURES**

#### **INJECTION SYSTEM:**

- Our in-line injection system allows the ceramic to be injected in a straight line from the injection chamber through our unique nozzle design and into the die. This insures a smooth laminar flow that prevents turbulence.
- Hardened components to resist wear
- Auto purge of ceramic after each cycle
- Auto ceramic charge between cycles
- 4 zones of temperature control

#### **PRESS:**

- T-Slots on bottom and moving platen
- Low oil level alarm/shutdown
- High temperature alarm/shutdown
- Ultra quiet pumping system
- Panels around machine
- Independent platen cooling

#### **OPERATOR:**

- All functions on easy-to-use interface
- No pressure operator buttons
- Built to NFPA, ANSI, & OSHA safety standards



**CTM-CI 25** (25 TON STANDARD CERAMIC INJECTOR SHOWN)

### **CONTACT**

Cleveland Tool and Machine  
5240 Smith Road  
Brook Park, OH 44142  
Tel: (216) 267-6010  
Fax: (216) 267-6011  
E-mail: [info@clevtool.com](mailto:info@clevtool.com)  
[www.clevtool.com](http://www.clevtool.com)

### **WARRANTY**

Machines will carry a full  
1 year warranty on all  
materials and workmanship.

# CTM 4-Post CERAMIC INJECTION MACHINE SPECIFICATIONS

Machine Model	CTM-CI 25	CTM-CI 50	CTM-CI 100
Clamp Force - tons	0-25 ton (0-22.7)	0-50 ton (0-45.4)	0-100 ton (0-90.7)
Press closing speed	1.5 in./sec (3.8cm/sec)	1.5 in./sec (3.8cm/sec)	1.5 in./sec (3.8cm/sec)
Press opening speed	1.5 in./sec (3.8cm/sec)	1.5 in./sec (3.8cm/sec)	1.5 in./sec (3.8cm/sec)
Die mounting	1/2 in T-Slots	1/2 in T-Slots	1/2 in T-Slots
Water cooled platens	Included	Included	Included
Wax reservoir capacity	7.5 Gal. (28 Liter)	7.5 Gal. (28 Liter)	20 Gal. (75 Liter)
Shot size	100 cu.in (1639cc)	100 cu.in (1639cc)	346 cu.in (5670cc)
Injection pressure	0-800 psi (56 bar)	0-800 psi (56 bar)	0-800 psi (56 bar)
Injection flow rate maximum	15 cu.in/sec (245cc)	15 cu.in/sec (245cc)	25 cu.in/sec (408cc)
Injection cycle time	0-999 sec.	0-999 sec.	0-999 sec.
Nozzle tip size	3/8 rad. (.95cm)	3/8 rad. (.95cm)	3/8 rad. (.95cm)
Heating system	120 volt- 4 zones	120 volt- 4 zones	120 volt- 4 zones
Hydraulic system pressure	2500 psi (102 bar)	2500 psi (102 bar)	2500 psi (102 bar)
Hydraulic pump type	Press. compensated	Press. compensated	Press. compensated
Hydraulic reservoir capacity	20 Gal. (74 Litre)	20 Gal. (74 Litre)	30 Gal. (111 Litre)
Hydraulic cooling system	Water cooled	Water cooled	Water cooled
Min. cooling water flow	3 GPM (11 LPM)	3 GPM (11 LPM)	3 GPM (11 LPM)
Max. cooling water temperature	80-F (27C)	80-F (27C)	80-F (27C)
Cooling water connection	1/2 inch NPT	1/2 inch NPT	1/2 inch NPT
Standard Electric	460V 3Ph 60HZ 30@	460V 3Ph 60HZ 30@	460V 3Ph 60HZ 45@
Approximate weight	5000 Lbs (2272Kgs)	6500 Lbs (2950Kgs)	14000 Lbs (6363Kgs)
A Height	88 in. (223cm)	98 in. (249cm)	117 in. (297cm)
B Width	75 in. (190cm)	90 in. (228cm)	100 in. (254cm)
C Floor to table	34.5 in (88cm)	34.5 in (88cm)	34.5 in (88cm)
D Press opening	3-20 in. (5-51 cm)	3-24 in. (5-61 cm)	3-36 in. (5-91 cm)
E Press area	20 in. (51 cm)	30 in. (76 cm)	40 in. (102 cm)
F Nozzle in/out	0-6.12 in. (0-15.5cm)	2-8 in. (5-20cm)	2-12 in. (5-30cm)
G Nozzle up/dn	2-8 in. (5-20cm)	2-8 in. (5-20cm)	0-12 in. (0-30.5cm)
H Depth	56 in. (142cm)	69 in. (175cm)	80 in. (204cm)
I Work table	15 in. (38cm)	15 in. (38cm)	N/A
J With shuttle table	28 in. (71cm)	40 in. (102cm)	46 in. (102cm)

Dimensions are subject to change without notice.  
Metric dimensions shown in ( ).

