



# 2024-2025 PRODUCT CATALOG

METALLOGRAPHIC EQUIPMENT AND CONSUMABLES

ABRASIVE & PRECISION CUTTING  
COMPRESSION & CASTABLE MOUNTING  
GRINDING & POLISHING  
MICROSCOPY & ANALYSIS  
HARDNESS TESTING  
LAB FURNITURE

# COMPRESSION MOUNTING

TERAPRESS TP-7100S MOUNTING PRESS



TERAPRESS TP-7100S

## TERAPRESS TP-7100S

### Pneumatic Compression Mounting Press

- Pneumatic (air pressure) press
- Automatic
- Programmable
- 1000 & 2000 Watt heaters
- Water cooling (temperature, time and manual)
- Non-Interchangeable molds or Interchangeable mold cylinder (optional)
- Mold sizes (1, 1.25, 1.5 and 2-inch / 25, 30 and 40 mm)
- High resolution display
- Highly reproducible mounts
- Robust and durable design
- Economical

TERAPRESS TP-7500S MOUNTING PRESS



TERAPRESS TP-7500S

## TERAPRESS TP-7500S

### Hydraulic Compression Mounting Press

- Hydraulic force
- Automatic
- Programmable
- 1000 & 2000 Watt heaters
- Water cooling (temperature, time and manual)
- Non-Interchangeable molds or Interchangeable mold cylinder (optional)
- Mold sizes (1, 1.25, 1.5 and 2-inch / 25, 30 and 40 mm)
- High resolution display
- Highly reproducible mounts
- Robust and durable design
- Economical

WTP-TANK Coolant System



TP-TANK

## TERAPRESS TP-TANK

### Variable Speed Table Saw

- Eco-friendly recirculating tank
- Colling heat exchanger with programmable thermostat
- 24V pump (connected to 110V power supply)
- 1.3 GPM maximum flow
- Easy to operate
- Economical

# COMPRESSION MOUNTING PRESSES

## Pneumatic Metallographic Compression Mounting Press

FEATURE	TERAPRESS TP-7100S DESCRIPTION
Control	Touch screen
Mount sizes	1, 1.25, 1.5 and 2-inch (25, 30 and 40 mm)
Mold Cylinders	Single
Force	Pneumatic force
Incoming Pressure	Max. 95 psi
Heater Specification	1000 Watts (110V 15 amp), 2000 Watts (220V 10 amp)
Maximum Temperature	392°F (200°C)
Cooling System	Water with manual, temperature or time control
Dimensions (WxDxH)	21 x 19 x 19-inches (530 x 48 x 48 mm)
Weight	69 lbs (32 kg)
TP-TANK	Recirculating / Cooling Tank (14 gallon) with pump (optional)
Catalog Number	TP-7100S-110V & TP-7100S-220V

**2** year warranty  
Limited Warranty

### Benefits:

- ◆ Fast cycle times
- ◆ Interchangeable or fixed size molds
- ◆ 7-inch touchscreen
- ◆ Soft Start capabilities
- ◆ Custom procedures list
- ◆ Heating graph for monitoring temperature and cycle progress

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## Hydraulic Metallographic Compression Mounting Press

FEATURE	TERAPRESS TP-7500S DESCRIPTION
Control	Touch screen
Mount sizes	1, 1.25, 1.5 and 2-inch (25, 30 and 40 mm)
Mold Cylinders	Single
Force	Hydraulic force
Maximum Force	32 MPa (4500 psi)
Heater Specification	1000 Watts (110V 15 amp), 2000 Watts (220V 10 amp)
Maximum Temperature	392°F (200°C)
Cooling System	Water with manual, temperature or time control
Dimensions (WxDxH)	21 x 19 x 19-inches (530 x 480 x 480 mm)
Weight	108 lbs (50 kg)
TP-TANK	Recirculating / Cooling Tank (14 gallon) with pump (optional)
Catalog Number	TP-7500S-110V & TP-7500S-220V

### Benefits:

- ◆ Fast cycle times
- ◆ Hydraulic
- ◆ Interchangeable or fixed size molds
- ◆ Up to 32 MPa pressure at the mount
- ◆ Soft start capabilities
- ◆ Quiet operation
- ◆ 7-inch touchscreen
- ◆ Custom procedures list
- ◆ Heating graph for monitoring temperature and cycle progress

## Recirculating / Coolant System

FEATURE	TP-TANK DESCRIPTION
Cooling	Programmable
Pump	24VDC, 75W Diaphragm Pump, 0.86 GPM (3.25L/ minute)
Dimensions (W x D x H)	16 x 28 x 26-inch (410 x 710 x 660 mm)
Electrical specification	110 / 240V (50/60 Hz)
Tank Volume	14 gallons (53 L)
Weight	28 lbs (13 kg)

### Benefits:

- ◆ Environmentally smart
- ◆ Allows for TP-7500S to be mobile
- ◆ More controlled cooling temperature



Machinery Directive 2006/42/EC  
2014/35/ EU Low Voltage Directive  
2014/30/EU Electromagnetic Compatibility Directive

# COMPRESSION MOUNTING

## TERAPRESS Mold Assemblies

### 1-inch Mold Assembly



1.0-inch interchangeable mold assembly contains mold sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-0100**

### 1.25-inch Mold Assembly



1.25-inch interchangeable mold assembly contains mold sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-0125**

### 1.5-inch Mold Assembly



1.5-inch interchangeable mold assembly contains mold sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-0150**

### Interchangeable Molds:

- ◆ Allows for easy changing of mold size. Simply replace mold, sleeve and rams
- ◆ Available in 1, 1.25 and 1.5-inch as well as 25, 30 and 40 mm molds

### 25 mm Mold Assembly



25 mm interchangeable mold assembly contains sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-25**

### 30 mm Mold Assembly



30 mm interchangeable mold assembly contains sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-30**

### 40 mm Mold Assembly



40 mm interchangeable mold assembly contains sleeve, lower/upper ram (spacer optional)  
**Catalog no. TP75-40**

### Fixed Block Molds:

- ◆ The heater/cooler is manufactured to match the size of the mold (does not require a mold sleeve)
- ◆ Reduces cooling times for producing faster mounts
- ◆ Available in 1, 1.25, 1.5 and 2-inch as well as 25, 30, 40 and 50 mm sizes

### Mold Assemblies for Interchangeable Mold Heater

TERAPRESS Molds	Flat Ram Catalog no.	Chamfered Ram Catalog no.
1-inch diameter mold assembly	TP75-0100	TP75-0100C
1.25-inch diameter mold assembly	TP75-0125	TP75-0125C
1.5-inch diameter mold assembly	TP75-0150	TP75-0150C
25 mm diameter mold assembly	TP75-25	TP75-25C
30 mm diameter mold assembly	TP75-30	TP75-30C
40 mm diameter mold assembly	TP75-40	TP75-40C

### Mold Spacers

TERAPRESS Spacers	Flat Ram Catalog no.	Chamfered Ram Catalog no.
1-inch diameter spacer	TPS-0100	TPS-0100C
1.25-inch diameter spacer	TPS-0125	TPS-0125C
1.5-inch diameter spacer	TPS-0150	TPS-0150C
2-inch diameter spacer	TPS-0200	TPS-0200C
25 mm diameter spacer	TPS-25	TPS-25C
30 mm diameter spacer	TPS-30	TPS-30C
40 mm diameter spacer	TPS-40	TPS-40C
50 mm diameter spacer	TPS-50	TPS-50C



# COMPRESSION MOUNTING CONSUMABLES



	PHENOLICS	ACRYLIC	EPOXY (glass-filled)	DIALLYL PHTHALATE
Type	Thermoset	Thermoplastic	Thermoset	Thermoset
Cost	Low	Moderate	Moderate	Moderate
Ease of Use	Excellent	Moderate	Good	Good
Color	Black, red, green	Clear	Gray	Blue
Cycle Time (1.25-inch mount) TERAPRESS TP-7500S (minimum)	4-5 minutes	8-10 minutes	5-7 minutes	5-7 minutes
Edge Retention	Fair	Good	Excellent	Excellent
Clarity	None	Excellent	None	None
Hardness	Low	Medium	High	High

	PHENOLICS	ACRYLIC	EPOXY (glass-filled)	DIALLYL PHTHALATE
Shore-D hardness	82	80	88	88
Shrinkage (in/in)	0.006	0.001-0.003	0.001-0.003	0.001-0.003
Chemical resistance	Glycol, petrochemicals, solvents, acids	Alcohol, dilute acids, solvents	Solvents, acids, alkalis & oxidizers	Solvents, acid and alkalis

## Phenolic Compression Mounting



PACE Product Name	Catalog Number	Qty	Price (\$)
Black Phenolic powder (5 lbs)	CM-2001B-5	5 lbs	28.00
Black Phenolic powder (25 lbs)	CM-2001B-25	25 lbs	125.00
Red Phenolic powder (5 lbs)	CM-2001R-5	5 lbs	30.00
Red Phenolic powder (25 lbs)	CM-2001R-25	25 lbs	135.00
Green Phenolic powder (5 lbs)	CM-2001G-5	5 lbs	30.00
Green Phenolic powder (25 lbs)	CM-2001G-25	25 lbs	135.00

### TIP: Phenolic Colors

Use different phenolic colors to code jobs, specimen types or for different test dates. For example, changing the phenolic color each month will show which samples or jobs are getting old

If the color dye in the mount bleeds out when rinsing with alcohol, this is an indication that the mount was not fully cured either at a high enough temperature or for the proper length of time

## Phenolic PREMIUM Compression Mounting with Mold Release Agent



PREMIUM Phenolic Powders

PACE Product Name	Catalog Number	Qty	Price (\$)
Black PREMIUM Phenolic powder (2.5 kg)	CM-2500B-2	2.5 kg	38.00
Black PREMIUM Phenolic powder (7.5 kg)	CM-2500B-8	7.5 kg	155.00
Red PREMIUM Phenolic powder (2.5 kg)	CM-2500R-5	2.5 kg	45.00
Red PREMIUM Phenolic powder (7.5 kg)	CM-2500R-8	7.5 kg	165.00
Green PREMIUM Phenolic powder (2.5 kg)	CM-2500G-5	2.5 kg	45.00
Green PREMIUM Phenolic powder (7.5 kg)	CM-2500G-8	7.5 kg	165.00

# COMPRESSION MOUNTING CONSUMABLES

## Acrylic Clear Compression Mounting

PACE Product Name	Catalog Number	Qty	Price (\$)
TRANSACRYLIC clear compression mounting powder (5 lbs)	CM-2101A-5	5 lbs	115.00
TRANSACRYLIC clear compression mounting powder (25 lbs)	CM-2101A-25	25 lbs	505.00



### TIP: Acrylic Mounts

A common problem with acrylic mounts, known as the "cotton ball" effect, can occur with thermoplastic acrylic resins. The cause is due to the following:

Heating the compression mounting resin too fast or to a temperature which causes a liquid layer to form around the non-melted powder. This creates trapped air that cannot escape. It is recommended for the high heating efficiency of PACE Technologies mounting presses, that the mounting press use a maximum curing temperature that does not to exceed 130°C. Note: All mounting presses provide a different rates of heating so results may vary from one manufacturer to another.

## Acrylic PREMIUM Clear Compression Mounting

PACE Product Name	Catalog Number	Qty	Price (\$)
TRANSACRYLIC clear compression mounting powder (1 kg)	CM-2101A-1	1 kg	52.50
TRANSACRYLIC clear compression mounting powder (2.5 kg)	CM-2101A-2	2.5 kg	125.00
TRANSACRYLIC clear compression mounting powder (7.5 kg)	CM-2101A-8	7.5 kg	365.00



## Diallyl Phthalate Compression Mounting



PACE Product Name	Catalog Number	Qty	Price (\$)
Diallyl Phthalate blue compression mounting powder (5 lbs)	DY-2301A-5	5 lbs	155.00
Diallyl Phthalate blue compression mounting powder (25 lbs)	DY-2301A-25	25 lbs	605.00

# TERAPRESS Heating/Cooling Blocks

## 1.0-inch Fixed Sized Heater / Mold Assembly



1.0-inch Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-0100H**

## 1.25-inch Fixed Sized Heater / Mold Assembly



1.25-inch Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-0125H**

## 1.5-inch Fixed Sized Heater / Mold Assembly



1.5-inch Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-0150H**

## 2.0-inch Fixed Sized Heater / Mold Assembly



2.0-inch Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-0200H**

## 25 mm Fixed Sized Heater / Mold Assembly



25 mm Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-25H**

## 30 mm Fixed Sized Heater / Mold Assembly



30 mm Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-30H**

## 40 mm Fixed Sized Heater / Mold Assembly



40 mm Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-40H**

## 50 mm Fixed Sized Heater / Mold Assembly



50 mm Heating / Cooling block with lower & upper rams (spacer optional)  
**Catalog no. TP75-50H**

### Mold Assemblies for Interchangeable Mold Heater

TERAPRESS Fixed sized Heater / Molds	Flat Ram Catalog no.	Chamfered Ram Catalog no.
1-inch diameter fixed heater / cooler assembly	TP75-0100H	TP75-0100HC
1.25-inch diameter fixed heater / cooler assembly	TP75-0125H	TP75-0125HC
1.5-inch diameter fixed heater / cooler assembly	TP75-0150H	TP75-0150HC
2-inch diameter fixed heater / cooler assembly	TP75-0200H	TP75-0200HC
25 mm diameter fixed heater / cooler assembly	TP75-25H	TP75-25HC
30 mm diameter fixed heater / cooler assembly	TP75-30H	TP75-30HC
40 mm diameter fixed heater / cooler assembly	TP75-40H	TP75-40HC
50 mm diameter fixed heater / cooler assembly	TP75-50H	TP75-50HC

### Recirculating / Cooling Tank



Recirculating / Cooling tank for TERAPRESS-S Metallographic Compression Mounting Presses  
**Catalog no. TP-TANK**



## Glass Filled Epoxy Compression Mounting



PACE Product Name	Catalog Number	Qty	Price (\$)
EPOCOMP Epoxy Resin powder (5 lbs)	EP-2201A-5	5 lbs	145.00
EPOCOMP Epoxy Resin powder (25 lbs)	EP-2201A-25	25 lbs	580.00
EPOCOMP Fine Epoxy Resin powder (5 lbs)	EPF-2201-5	5 lbs	155.00
EPOCOMP Fine Epoxy Resin powder (25 lbs)	EPF-2201-25	25 lbs	610.00

### TIP: Glass Filled Mounts

- ◆ Glass filled epoxies and diallyl phthalates are excellent mounting compounds for protecting the specimen edges during grinding and polishing
- ◆ Glass filled resins can be expensive, so to reduce the cost per mount, it is recommended that the epoxy or diallyl phthalate be used at the specimen interface and then layered with a lower cost mounting compound such as a phenolic. A common combination is red phenolic / glass filled epoxy.

## PREMIUM Glass Filled Epoxy-Phenolic Compression Mounting



PACE Product Name	Catalog Number	Qty	Price (\$)
PREMIUM Glass Filled Epoxy-Phenolic edge retention compression mounting resin (2.5 kg)	EPF-2500-2	2.5 kg	195.00
PREMIUM Glass Filled Epoxy-Phenolic edge retention compression mounting resin (8 kg)	EPF-2500-8	7.5 kg	725.00

# COMPRESSION MOUNTING CONSUMABLES

## Conductive Compression Mounting



PACE Product Name	Catalog Number	Qty	Price (\$)
Conductive (graphite) powder (1 lb)	CONDUCTO-1P	1 lb	40.50
Conductive (graphite) powder (5 lbs)	CONDUCTO-5P	5 lbs	195.00
Conductive (graphite) powder (25 lbs)	CONDUCTO-25P	25 lbs	760.00
Conductive (copper) powder (1 lb)	CONDUCTO-CU-1	1 lb	72.00
Conductive (copper) powder (5 lbs)	CONDUCTO-CU-5	5 lbs	295.00
Conductive (copper) powder (25 lbs)	CONDUCTO-CU-25	25 lbs	1350.00

### TIP: Conductive Mounts

- ◆ Conductive mounts are used to provide conductivity to the mount for use with electron microscopy
- ◆ Conductive mounts use either graphite powder or copper as the conductive filler

## Conductive Premium Compression Mounting

PACE Product Name	Catalog Number	Qty	Price (\$)
Conductive Premium (graphite) powder (1 kg)	CONDUCTO-G1000	1 kg	105.00
Conductive Premium (graphite) powder (2.5 kg)	CONDUCTO-G2500	2.5 kg	210.00
Conductive Premium (graphite) powder (7.5 kg)	CONDUCTO-G7500	7.5 kg	575.00
Conductive Premium (copper) powder (1 kg)	CONDUCTO-CU1000	1 kg	135.00
Conductive Premium (copper) powder (2.5 kg)	CONDUCTO-CU2500	2.5 kg	295.00
Conductive Premium (copper) powder (7.5 kg)	CONDUCTO-CU7500	7.5 kg	815.00



## Miscellaneous Compression Mounting Accessories



MR-1000



GLOVES



MKLIP



SKLIP



KLIP



MULTIKLIP



UNIKLIP



MS-1000-30



SCRIBE



Disposable Gloves

PACE Product Name	Catalog Number	Qty	Price (\$)
Mold release (8 oz)	MR-1000-08	8 oz	19.50
Mold release (16 oz)	MR-1000-16	16 oz	29.50
Mold release (1 gallon)	MR-1000-128	1 gallon	135.00
Utility heat protective gloves (pair)	GLOVES	pair	12.50
Small disposable protective gloves (100/box)	GLOVES-S100	100/box	25.00
Medium disposable protective gloves (100/box)	GLOVES-M100	100/box	25.00
Large disposable protective gloves (100/box)	GLOVES-L100	100/box	25.00
Metal MKLIP specimen clips (100/pkg)	MKLIP-0100	100/pkg	70.50
Plastic SKLIP spring specimen clips (100/pkg)	SKLIP-0100	100/pkg	39.00
Plastic SKLIP spring specimen clips (1000/pkg)	SKLIP-1000	1000/pkg	305.00
Plastic KLIP specimen clips (100/pkg)	KLIP-0100	100/pkg	42.00
Plastic MULTIKLIP specimen clips (100/pkg)	MULTIKLIP-0100	100/pkg	55.50
Plastic UNIKLIP specimen clips (100/pkg)	UNIKLIP-0100	100/pkg	35.00
30 ml measuring scoop	MS-1000-30	each	3.00
Scribing tool	SCRIBE	each	35.00

### Compression Mounting Recommended Procedures:

- ◆ Clean specimens to remove cutting and handling residue
- ◆ Remove debris from mold assembly
- ◆ Apply thin coat of mold release compound to mold assembly
- ◆ Raise mold ram to up position
- ◆ Center specimen on ram
- ◆ Lower ram assembly
- ◆ Pour predetermined amount of resin into mold
- ◆ Lock mold assembly cover
- ◆ Slowly raise ram into up position
- ◆ Apply recommended heat and maintain force for specified period of time
- ◆ Cool to near room temperature
- ◆ Remove mounted specimen
- ◆ Clean mold and ram assembly