EAGLE PRECISION FACILITIES

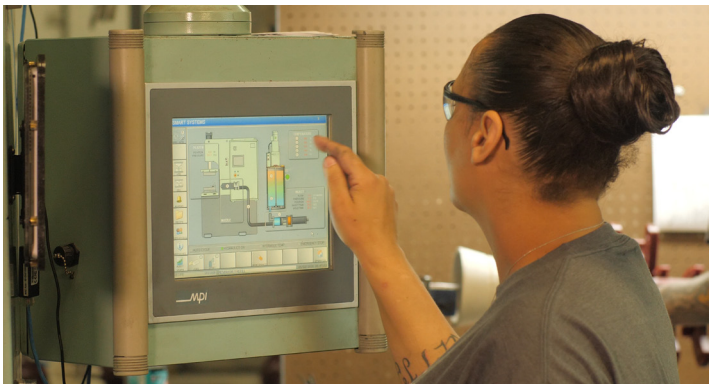
Eagle Precision's facilities comprise 67,500 square feet of manufacturing and warehouse space and a wide range of investment casting, finishing and quality control equipment.

Wax Injection Equipment

- 6 MPI 20 Ton Paste Wax Injection Machines
- 2 MPI 20 Ton Paste Wax Injection Machines
- 2 MPI 25 Ton Paste Wax Injection Machine
- MPI 50 Ton Paste Wax Injection Machine
- MPI 12 Ton Automatic Wax Injection Machine
- Chiller

Dip & Molding Equipment

- 2 Romco Fluidized Beds
- 5 Ceramic Dip Tank Systems
- 2 Rainfall Sanders
- Climate Controlled Ceramic Drying Room
- 2 Pneumatic Mold Manipulators
- Fanuc Robot & Mold Conveyor System
- 2 48 x 60 Autoclave Units

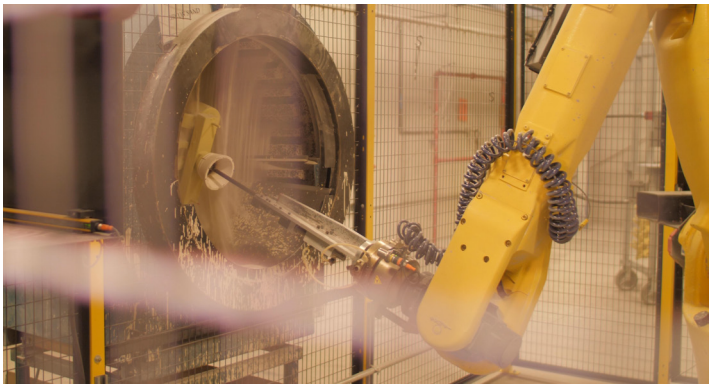


Melting & Pouring Equipment

- Pillar Mark VIII, 250 KW, 500 lb. & 1,000 lb. Induction Furnace
- Pillar Mark VIII, 250 KW Power Unit with 300 lb., 500 lb., & 1000 lb. Furnaces
- Pillar Mark VIII, 300 KW, 500 lb. & 1000 lb. Induction Furnaces
- 7 Ceramic Mold Preheat Ovens

Cleaning & Finishing Equipment

- Herschal Knockout Hammer
- 2 Ramco Ceramic Leach Tanks
- Pressure Blast Cabinet
- 2 Ruemelin Sand Blast Cabinets
- 2 Goff Tumbleblast – 6 Cubic Foot
- Wheelabrator Tumbleblast – 3 Cubic Foot
- Goff Tumbleblast – 1 Cubic Foot
- Ener-Pac 5 Ton Press
- Dake – 25 Ton Press
- 2 Double End Belt Grinders
- Techmatic Rise & Fall Grinder
- AW Bell Belt Grinder
- AW Bell Saw
- Hot Pressing Oven



Quality Control & Testing Equipment

- Wilson 3JR Rockwell Hardness Tester
- Detroit Testing Machine PH-1 Brinell Hardness tester and Newage Brinell Scope
- Full ceramic testing laboratory
- Continuous temperature and humidity recording of shellroom and drying room environment
- Continuous temperature recording of mold burn-out/pre-heat oven temperatures
- Pantak HF320 X-Ray System capable of foundry-control radiographic testing of up to 2" thick steel
- 2 Leco GDS-500A Spectrometers capable of analyzing ferrous and non-ferrous alloys
- Assorted measurement equipment for dimensional inspection including pin gages, calipers, surface plates, and custom-designed gages
- Brown & Sharpe CMM with PC-DMIS
- Creaform ExaScan 3-D scanner with GeoMagic Inspection
- One seat of Solidworks 3-D modeling software
- One seat of MagmaSoft Casting Simulation Software

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MATERIALS POURED

The induction melting process used at Eagle Precision can accommodate most ferrous and non-ferrous alloys. Below is a representative sample of alloys produced.

CARBON STEEL	ANNEALED	HARDENED	CHARACTERISTICS
1010 / AISI 1010 IC 1010	50-55 Rb	N/A	Electrical applications
1018 / AISI 1018 IC 1018	65-80 Rb	N/A	Carburizing steel for general applications
1020 / ASTM A732 IC 1020	80 Rb	N/A	Inexpensive with wide range of applications
1025 / ASTM A216 WCA/WCB/WCC	80 Rb	20-50 Rc	Valves, flanges, or other pressure containing parts
1025 / ASTM A216 LCA/LCB/LCC	80 Rb	20-50 Rc	Valves, flanges, or other pressure containing parts. Higher impact resistance
1030 / ASTM A732 1030	75 Rb	20-50 Rc	Hardenable/Medium Strength
1040 / ASTM A732 IC 1040	85 Rb	22-52 Rc	Hardenable/Medium Strength
1045 / IC 1045	100 Rb	25-57 Rc	Hardenable/Medium Strength
1050 / ASTM A732 IC 1050	100 Rb	30-60 Rc	Hardenable/Medium Strength
1060 / ASTM A732 IC 1060	100 Rb	33-60 Rc	Hardenable/Medium Strength

ALLOY STEEL	ANNEALED	HARDENED	CHARACTERISTICS
4130 / ASTM A487 Gr 9	100 Rb	18-50 Rc	Structural applications Good weldability
4140 / ASTM A732 IC 4140	100 Rb	29-57 Rc	Good toughness and fatigue resistance
4340 / ASTM A732 IC 4340	20 Rc	20-55 Rc	High strength with fatigue resistance
6150 / ASTM A732 IC 6150	100 Rb	30-60 Rc	High abrasion and shock resistance
8620 / ASTM A487 Gr 4	100 Rb	20-45 Rc	Carburizing used for gears, crankshafts, etc
8630 / ASTM A732 IC 8630	100 Rb	25-50 Rc	Often used for machine parts

AUSTENTIC STAINLESS	ANNEALED	HARDENED	CHARACTERISTICS
303 / ASTM A743 CF16Fa	90 Rb	N/A	Corrosion resistant Good machinability
304L / ASTM A351/A743 CF3	90 Rb	N/A	Better corrosion resistance
304 / ASTM A351/A743 CF8	90 Rb	N/A	Better corrosion resistance
316L / ASTM A351, A743 CF3M	90 Rb	N/A	Very good corrosion resistance
316 / ASTM A351, A743 CF8M	90 Rb	N/A	Very good corrosion resistance
347 / ASTM A351 CF8C	90 Rb	N/A	Good corrosion resistance
N60 / ASTM A351 CF10SMnN	90 Rb	N/A	Good corrosion resistance
CK3MCuN / ASTM A351 CK3MCuN	90 Rb	N/A	Good corrosion resistance
CN7M / ASTM A351 CN7M	90 Rb	N/A	Good corrosion resistance

MARTENSITIC STAINLESS	ANNEALED	HARDENED	CHARACTERISTICS
15-5 / ASTM A747 CB7Cu-2	90 Rb	29-42 Rc	High strength, Corrosion resistant and machinable
17-4 / ASTM A747 CB7Cu-1	90 Rb	29-42 Rc	High strength, Corrosion resistant and machinable
CA6NM / ASTM A352 CA6NM	90 Rb	13-25 Rc	Good corrosion resistance utilized for valves, flanges, or other pressure containing parts
410 / ASTM A743 CA15	100 Rb	15-45 Rc	Good hardness with corrosion resistance
420 / ASTM A743 CA40	25 Rc	30-52 Rc	Higher hardness with corrosion resistance
440C / AMS 5352 IC 440C	35 Rc	40-60 Rc	Good toughness, Higher hardness

SUPER DUPLEX	ANNEALED	HARDENED	CHARACTERISTICS
F255 / UNS S32550	90 Rb	20-28 Rc	Higher strength, corrosion resistance, and wear resistance

NICKEL BASE	ANNEALED	HARDENED	CHARACTERISTICS
Hastelloy C / ASTM A494 CW6M	90 Rb	N/A	Heat and corrosion resistant
Inconel 625 / ASTM A494 CW6MC	90 Rb	N/A	Heat and corrosion resistant
CW12MW / ASTM A494 CW12MW	90 Rb	N/A	Heat and corrosion resistant
Monel / ASTM A494 M35-1	90 Rb (as cast)	N/A	Highly corrosion resistant
Monel / ASTM A494 M30C	90 Rb (as cast)	N/A	Highly corrosion resistant

TOOL STEEL	ANNEALED	HARDENED	CHARACTERISTICS
A2 / ASTM A597 CA-2	20 Rc	47-60 Rc	Medium machinability, toughness and wear resistance
A6 / ASTM A597 CA-2	20 Rc	47-60 Rc	Medium machinability, toughness and wear resistance
D2 / ASTM A597 CD-2	35 Rc	50-59 Rc	Very good wear resistance. Lower machinability and toughness
H13 / ASTM A597 CH-13	100 Rb	45-53 Rc	Medium machinability and wear resistance. Very good toughness
S7 / ASTM A597 CS-7	100 Rb	35-57 Rc	Medium machinability and wear resistance. Very good toughness

BRONZES	TENSILE	YIELD	CHARACTERISTICS
C95400/ ASTM B148 C95400 (Al-Bz)	As-cast: 75 min	As-cast: 30 min	Good corrosion resistance, heat treatable
	Heat treated: 90 min	Heat treated: 45 min	Good corrosion resistance
C95500 / ASTM B148 C95500 (Ni-Al-Bz)	As-cast: 90 min	As-cast: 40 min	Good corrosion resistance, heat treatable
	Heat treated:110 min	Heat treated: 60 min	Good corrosion resistance
C87500 / ASTM B271 C87500 (Si-Bz)	As-cast: 60 min	As-cast: 24 min	Good corrosion resistance, fair castability
C86500 / ASTM B271 C86500 (Mn-Bz)	As-cast: 65 min	As-cast: 25 min	Good corrosion resistance, fair castability

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