

Equipment for Mechanical Plating and/or Galvanizing

The primary components of a mechanical plating or galvanizing system include:

Plating Barrel(s)

The most effective plating barrels are those with a "tulip" design. They are constructed from carbon or stainless steel and lined with an acid-resistant and abrasion-resistant lining such as neoprene, polypropylene or two-part solvent free polyurethane.

Surge Hopper

This item accepts the load of plated parts and feeds the separator, allowing the operator to begin plating another load.

Separator

The separator separates the parts and the media. The most primitive separators are merely a screen with water sprays; more complex separators are vibratory separators and magnetic separators (which is the currently preferred process).

Media Handling System

The media handling system returns glass impact media from the sump underneath the separator to an overhead media reservoir. Most platers utilize two loads of media. It also includes a water recirculation system and decants for barrels.

Chromator

For optimum corrosion protection, a chromate is applied to the deposit using a spray or dip process. Generally, dipping in baskets gives better results. In addition, they can be used to apply a sealant either over the chromate or over the mechanical coating to provide additional corrosion resistance.

Dryer

The parts may be dried in a "toss-catch" dryer, a belt dryer, or in a centrifugal dryer. Generally centrifugal dryers are preferred because they use less energy and produce a higher quality product.

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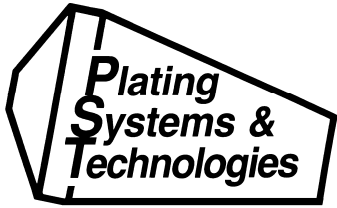
Approximate Cost of Twin 10 Cubic Foot System

2 Barrels @ \$65,000 each	\$130,000
2 Loaders @ \$16,000 each	\$32,000
1 Surge Hopper @ \$28,000	\$28,000
1 Magnetic Separator @ \$24,000	\$24,000
1 Demagnetization Unit @ \$8,000	\$8,000
1 Media Handling System @ \$37,000	\$37,000
1 Hoist and Rail @ \$5,000	\$5,000
1 Centrifugal Dryer @ \$28,000	\$28,000
4 Spin Baskets @ \$1,000 each	\$4,000
1 Control Panel @ \$16,000	\$16,000
Operator Platform @ \$15,000	\$15,000
Tanks (4) and Heaters (2)	\$15,000
TOTAL	\$342,000

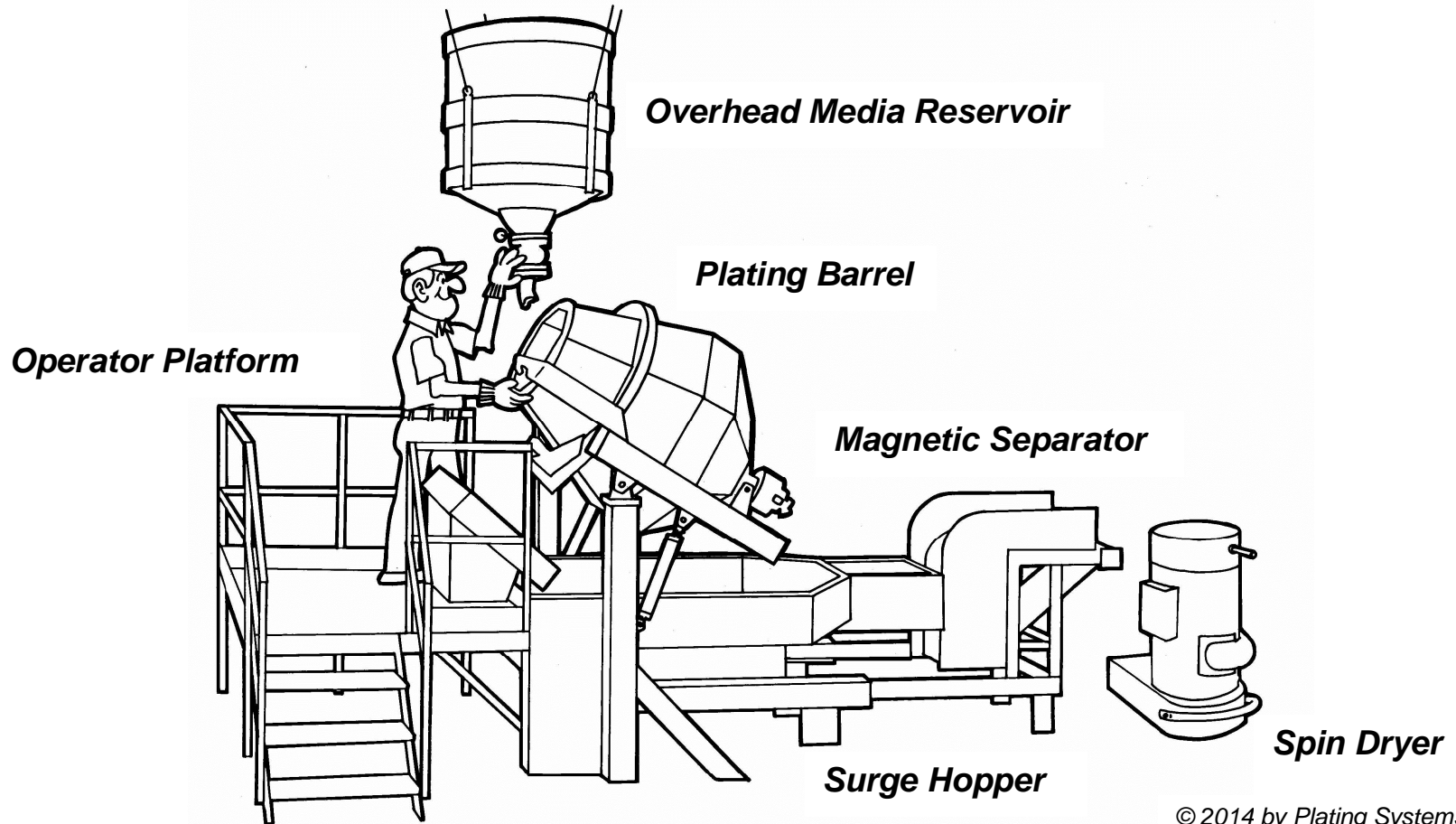
This information is courtesy of Dynamic Systems, LLC. It describes a common Twin M10 installation with a magnetic separator and a centrifugal dryer; many other configurations are possible.

For a part type with a bulk density of 75 pounds per cubic foot (which would be typical), this system is capable of processing about 12,000 pounds per 8-hour shift.

For further details, contact John Kobe at Dynamic Systems, Telephone: (262) 352-8388, Facsimile: (262) 549-1200 or E-mail: jkobe@dyn-sys.net. You can also find Dynamic Systems at www.dyn-sys.net.



Typical Mechanical Plating and/or Galvanizing Installation



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