

Bright Dip

Common Names: Bright Dip, Brite Dip, Brightening

Applicable Specifications: No known Federal, Military, or Industry Specification

Description: When components made of various alloys are machined it is common to use lubricants to extend tool life and provide a fine machined finish to the parts. Often this lubricant will stain or discolor the brass. If the parts are dry machined, the brass will tarnish from exposure to the normal atmospheric conditions. This is especially true for geographic areas that normally have high humidity. The process of Bright Dip is used to remove the lubricant from the part, remove the stains, and leave a dry to the touch protective coating to prevent staining or discoloration during storage. This final protective coating does not add abrasion properties but certainly provides extended shelf life.

The process is normally processed in stainless steel baskets. We use a proprietary process that has been proven over many years. Our process utilizes an automatic device that transfers the processing baskets with parts through a cleaning process, a chemical polish process, a final protective coating, with rinses between each step. After this process, the parts are dried in a centrifugal dryer and repackaged in the customer's original packaging.

Function & Physical Finish: This process is used to clean, remove staining from lubricants or stains resulting from atmospheric exposure, and provide the brass components with extended protection from further staining. There is virtually no dimensional buildup and only a very slight removal of material from machined surfaces.

The process does restore and slightly brightens the brass coloration. The protective final coating will extend shelf life of the product under normal storage conditions but will not provide protection against the brass corroding when exposed to the extremes of weather.

Examples of Use: Small screw machine products made from various alloys of brass, brass forgings, plumbing components, spray nozzles, electrical equipment components.

Considerations and Limitations:

- **Limitations:** Cannot be used on copper or brass alloys containing beryllium
- **Suitable base materials:** Copper and Brass alloys including leaded alloys.
- **Shape of parts:** Can be used on virtually any shaped parts but is especially good on small components.
- **Size:** Normally used for small, machined components
- **Quantity:** Although quantity affects price, quantity is not a limiting factor. Price is determined by how many parts can be processed in an hour.
- **Thickness of finish:** Extremely thin
- **Masking:** Masking is not normally provided with Bright Dip
- **Heat Treat:** Brass components are not normally heat treated but Bright Dip will normally remove scale or discoloration because of heat.
- **Method of Processing:** Parts are normally processed in a stainless steel basket but larger parts could be fixtured on a processing rack.
- **Pre-Treatment:** Parts must be clean and free of oil, grease, and tape residues. Parts must be "chemically clean" prior to Bright Dipping. Normal processing includes a non-etch cleaner.
- **Post Treatment:** After the Bright Dip process, parts receive a water soluble protective coating that is ROHS compliant.
- **Packaging:** **Parts are repacked as received.** It is often necessary to provide protective packaging to prevent damage from scratching or other damage. This will be done at the customer's request.

Quality Control Process solutions are checked and analyzed following an established schedule and monitored using SPC techniques. Additional specific testing may be done at the customer's request.