



Pickling and Polishing

Pickling

Common stainless steel will not rust when exposed to normal atmospheric conditions. Many of the heads we produce, however, will be subject to acids or other conditions that may increase the risk for corrosion. Stainless steel has a protective layer that forms when the steel surface reacts to oxygen. This protective layer can be disturbed during head fabrication.

Pickling is the final process for stainless steel and certain alloys. It removes specific surface defects and contaminants, and restores the corrosion resistance to the same level as the basic material. After forming, the heads are completely submerged into a heated 25 foot tank. This tank holds a pickling solution consisting of 10% nitric acid and 1.5% ammonium bifluoride. After pickling, the heads are sprayed with a high temperature steam cleaner. Without pickling as the final process, the integrity of the steel could be diminished over time.

Not only is pickling part of our stainless head forming process, but we also welcome your pickling needs for stainless plate, piping systems, or other stainless spare parts.



Polishing

Brighton Tru-Edge is committed to manufacturing the highest quality polished heads in the industry. Whether you require a standard uniform finish or a near mirror finish, we have the equipment and personnel to accomplish the task. Our polishing equipment is capable of spin-polishing heads as large as 252" in diameter and producing up to a 3 RA finish (across grain) on the OD and ID. A tracking mechanism follows the contour of the head for a smooth transition from the dish radius into the knuckle portion of the head.

Surface finishes were initially described by polish numbers such as a #4 or #7, or by a grit finish, which is not a measurable standard. For precise and consistent results, surface finish is now specified in terms of a Roughness Average (RA) value. This is normally expressed in microinches and is measured with a surface analyzer called a profilometer. A #4 polish is recognized as a 25 RA max and a #7 as a 10 RA max.

Brighton has a long history of polishing heads for many diverse industries such as food & beverage, chemical processing, pharmaceutical, architectural, and bioprocessing.

