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Finish Quality

MJ Metal Finishers have worked across many industries from Pharmaceutical to Nuclear. Each industry has its own exacting standards which we are asked to work to. We have procedures to suit most applications, if we don't have one we will create one. We can conduct samples trials for customer before the work goes ahead.





In todays industry where the standards of quality and finish are continuously being raised and challenged it is not unusual for customers to turn towards a more robust and reliable means of measuring the quality of the surface finish.



This is usually done with a surface measuring device such as an Ra meter. The use of a gloss meter may be called upon to ensure the reflectivity is NOT to high for safety.

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Our Statement

When you commission MJ Metal Finishing you are choosing the finest finishing specialists, Specialists accustomed to meeting the highest specifications, in any parameters, including RA values, CLA values, Delta Q values or your own specification. A company fully conversant with a wide range of materials, including stainless steel, brass and bronze. A company that is already the first choice of N.E.I Thompson, Fairey Engineering, Jordan Engineering and other major contractors to the nuclear industry, the CEGB and the Ministry of Defence, as well as the household names of pharmaceutical, chemical, food and brewing industries. The company dedicated to quality, reliability and service, For you.

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MJ Metal Finishers Ltd.

Specialist Polishers of Stainless Steel and Exotic Metals

Mechanical Polishing Specialist



- Oil & Gas
- Food
- Pharmaceutical
- Nuclear
- Petro-Chemical
- Pulp & Paper
- Water

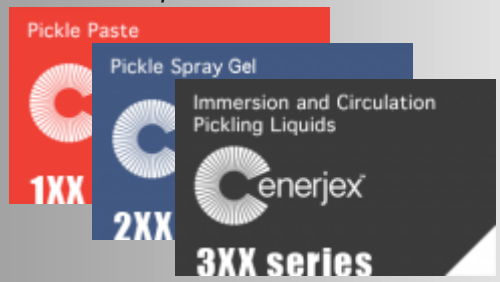
*Established in 1988 **MJ Metal Finishers** specialise in the mechanical polishing of metals, in particular stainless steel. The Halifax shop floor area is approximately 7000 square feet with 10 tonne cranage and therefore has the facilities to undertake 'in-house' a wide range of products - from small machined components to heavy fabrication/ vessels. The Manchester site has similar resources across 2 industrial units. The company can also undertake on site work if requested.*

Company 'assets' include a work force of skilled personnel each with a broad experience of work types across most market sectors from pharmaceutical, food, water oil & gas and architectural to general fabricators.

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2 Pickling / Passivation

Stainless steel pickling is the most common pickling process used at our facility. We can pickle any part that can be transported to our workshops using our "out of tank" facility. This ensures that our pickling capabilities are second to none and gives us unique capabilities allows processing of oversized / extremely large parts that most other companies would not even consider.



The surface is initially descaled of organic matter which removes visibly thick oxide scale from the stainless steel surface and then and degreased.

The etching or dissolution of the stainless steel surface results in a relatively small loss, typically 5 - 10µm, thus rendering the surface free from contamination which otherwise would inhibit the pickling process.



The most common application is to pickle and passivate in a single step which removes heat tint and weld scale while simultaneously passivating the surface. However, where required, pickle and passivate can be performed in two complete and separate steps.

3 Grinding

The mechanical polishing process involves grinding first followed by polishing and buffing.

Generally grinding allows for a far more aggressive abrading action than polishing.



Grinding* *is considered to be an abrasive machining operation. The process removes substantial amounts of metal and is capable of producing a fine finish. Grinding is accomplished by using abrasives with a firm rigid backing, typically a disk grinder.*

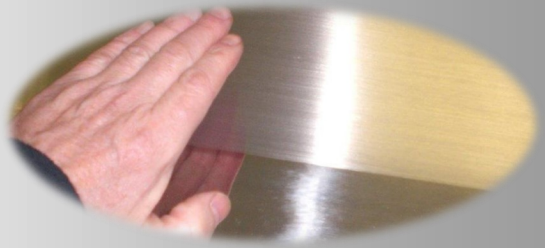
The requirement for highly skilled labour with years of experience and a thorough knowledge of the art of their craft is essential and related directly to the finish achieved.

4 Polishing / Buffing

Polishing is used to improve the surface finish after grinding and utilises abrasives attached to a flexible backing such as a wheel, belt or orbital motion tool. This produces a lustrous but not mirror-like finish and is used to remove or smooth grinding lines, pits, scratches, parting lines, tool marks and other surface defects that would otherwise adversely affect appearance or performance.



Usually, buffing is the final process using abrasives and/or compounds that adhere loosely to a flexible medium such as a cloth wheel. Buffing is used to remove fine scratches and material thus a buffed surface is typically smooth, reflective and mirror-like.



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