Avdel Metal Finishing

Since 2002 our facility has provided the highest quality finishes on metal products going into some of the world’s biggest companies. We pride ourselves in our ability to assist our clients from design to mass production ensuring that the finished product always exceeds expectations.

We specialize in:

- Electroplating
- Heat Treatment
- Lubrication
- Cleaning

The full on-site laboratory and testing facilities allow AMF to ensure hardness, plating thickness, corrosion resistance and more. Compliance-based tests can be carried out to your individual specifications.

We offer a complete service tailored to a client's individual needs. Our 40,000 square foot facility in Warrington, UK has a wide range of capability and can plate even the smallest parts.

To obtain samples of any of our finishes, please contact our customer care team on 01925 856 494.
Plating Capabilities

The modern barrel plating facilities allow AMF to provide a variety of metal finishes to our customers’ exact specifications. We specialize in the following finishes, and can plate other finishes on request:

- Zinc Plating
- Trivalent Passivation
- ZinKlad® System (MacDermid Approved)
- Zinc Alloy Plating
- Nickel Alloy Plating
- Electroplated Tin
- Clear and Black Passivation

*Corrosion resistance up to 1000 hours red rust is available in a variety of colours.*

We plate to industry standard AIAG CQI-11 and are an approved MacDermid plater. The three barrel-plating lines, varying in volume and capacity, provide industry-leading cost effectiveness, flexibility, speed and efficiency. Statistical process control (SPC) is used on all solutions, pH and concentrations, and allows us to produce certificates of conformity and full batch traceability.

Colours can be applied to products both during and after plating. A fully computerised, recipe-controlled coating system achieves a high quality finish.
Heat Treatment

AMF has invested in new heat treatment machinery, including belt and batch furnaces, to increase capacity and ensure the highest quality.

Parts are heat treated to standard AIAG CQI-9. If you have any specific requirements, please call our customer service team on 01925 856 494 to find out how we can help.

**Full Annealing of Steel**
- Large 42” mesh belt furnace
- Computerised control and monitoring data recorder
- Full batch traceability of heat treatment parameters (temperature, belt speed, etc.)

**Full Annealing of Aluminium**
- Small mesh belt furnace
- Three large batch furnaces
- Computerised control and monitoring data recorder
- Full batch traceability of parameters

**Solution Treatment and Ageing of Aluminium**
- Three large batch furnaces
- Computerised control and monitoring data recorder
- Full batch traceability of parameters
Wash and Degrease

Three wash plants are available to wash and degrease all products entering the plant including the shipping containers.

**WMV Wash**
Large wash plant with 15 tonnes per day capacity. The plant uses intermediate mesh baskets for large size, high volume products. Cleaning is carried out using caustic-based cleaners for steel products.

**Steimel Wash**
Smaller wash plant with 4.5 tonnes per day capacity. Finer mesh baskets are used for intermediate sized products. Caustic-based cleaners are used to clean steel or aluminium.

**Spinner**
Small spinner paraffin wash plant for very small parts, low volume products or aluminium.

The Steimel wash plant.
Lubrication

Lubricants and sealants can be applied to parts using a fully computerised recipe control system, which uses a dip-spin technique to coat products.

AMF offers a wide variety of lubricants for you to choose from, including brand name products:

- TNT15
- Gleitmo® 2145V
- MacLube 9775 TX

If the particular lubricant you require is not listed, please contact us on 01925 856 494 for further information.

Our lubrication system has statistical process control (SPC) to give full control of chemical solutions and key process parameters.
Inspection / Quality Assurance

Parts are inspected at each process step, with a final inspection prior to dispatch. Our modern testing facilities include:

- Vickers / Brinell / Rockwell hardness testing to industry standards BS 427, BS EN ISO 6507.1
- Break load testing
- XRF plating for composition and thickness testing
- Tensile strength testing is carried out to BS EN 10002.1 (2001)
- Microscopic examination and measurement
- Wet analysis laboratory
- Salt spray testing chamber to standards ASTM B117, DIN EN 150, NSS, AN53
- Solderability Testing to J-STD-002C
- Dimensional Testing

We can provide certificates of conformity and full batch traceability.

A full-time chemist works in the dedicated laboratory adjacent to the shop floor to ensure the plating mixes are to the highest quality.

The XRF machine uses state-of-the-art x-ray technology to test plating thickness.
Packaging and Transport

We offer a full range of packaging services to meet the individual customer’s needs. Our calibrated scales allow accurate measuring of the goods into specified box sizes.

We are able to pack the finished products into a customer’s own containers and into volumes specified by the customer.

Our own transport enables us to respond quickly and deliver cost effectively. Daily trips are made to the Midlands for pick up and delivery.

To arrange a pick-up or delivery, please contact our customer service department.

We welcome all current and potential clients to visit our plant to see our modern facilities and discuss how we can assist you. The facility is ideally located for easy transport of goods with the M6, M60, M56 and M62 motorways nearby.

For more details on how we can meet your individual needs, please contact our customer service department on 01925 856 494.