

# TANTALINE CORROSION RESISTANT HOUSING RANGE



“

FIRST CLASS SERVICE  
WORLD CLASS FILTERS

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Amazon Filters is a leading supplier of filter housings to a wide range of industries including many where effective filtration of chemical products is critical to their operations. In order to provide enhanced support to companies who have a requirement to filter highly corrosive fluids Amazon Filters is introducing a range of filter housings that have been modified to provide a surface that is composed of pure Tantalum metal. This provides a product that has superior resistance to many corrosive chemicals than nickel alloys such as Hastelloy and a significantly more robust surface finish than coated housings.



## TANTALINE

The use of the Tantaline vapour deposition for protection against chemical attack is already being adopted for a range of process equipment including valves, pipework fittings, couplings and pump impellers. Amazon Filters is the first company to apply this technology to stainless steel housings. It is more suitable than nickel alloys for a range of chemicals including :-

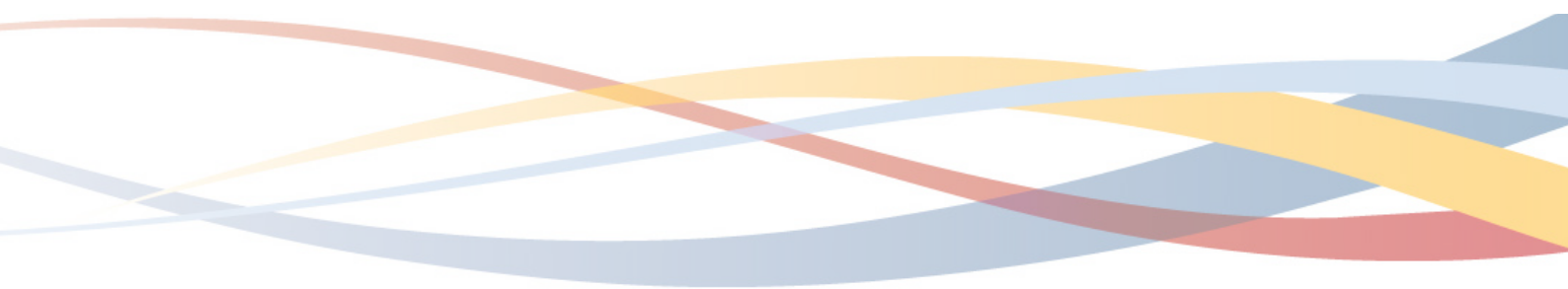
- Hydrogen iodide
- Hydrogen sulphide

and various acids including :-

- Hydrochloric acid
- Sulphuric acid
- Nitric acid
- Phosphoric acid
- Formic acid
- Acetic acid

For more information on the wide range of chemicals and solvents Tantaline housings are resistant to please contact Amazon Filters.

Unlike coating technology the deposition process produces a surface that does not suffer from separation, peeling or flaking. The Tantaline alloy deposition is approximately 50µm deep and typically a depth of only 10µm is needed for protection, therefore significant safety margin is built into the design. The Tantalum used in the processing conforms with ASTM B364-96. A certificate of conformity and raw material certificates are available on request.



## AMAZON FILTERS' HOUSING RANGE

Amazon Filters Ltd is one of the leading manufacturers of filter housings in Europe, offering the widest selection of cartridge and bag filter housings available today. Our design team is fully conversant in the increasing technical demands of pressure vessel design codes including ASME VIII, PD5500 and EN13445. All our products are ATEX and Pressure Equipment Directive (PED) 2014/68/EU compliant and we are also accredited for Self Certifying to Module H of the PED.

## TANTALINE HOUSING RANGES

We are now able to supply a number of our housings that have been through the **Tantaline** vapour deposition process, significantly enhancing their corrosion resistance. The benefits of the **Tantaline** process are maximised with certain housing designs, therefore as standard the **Tantaline** housing ranges include 50 and 70 Series housings with flanged or Triclover type inlet/outlet connections.

## APPLICABLE TO A WIDE RANGE OF INDUSTRIES

**Tantaline** processed products are already being used by a range of industries and leading companies including :-

- Pharmaceutical - Eli Lilly, Janssens, Evonik
- Chemicals – Dow, Bayer, BASF
- Petrochemical – Shell, Exxon, BP

## KEY FEATURES AND BENEFITS

- Produces housings with a pure Tantalum metal surface with all its corrosion resistant properties – the most corrosion resistant metal that is commercially available.
- More suitable than nickel alloys for a range of chemicals e.g. acids.
- More robust surface finish than coating technology.
- Tantaline surface alloy is already established with other process equipment e.g. valves, couplings, pipework fittings, etc.
- Depth of surface modification is designed to provide significant safety margin against corrosion.
- Biologically inert material so suitable for pharmaceutical and food and beverage applications.
- Only available with **Amazon Filters'** housings.
- ATEX compliant to EC 2014/34/EU, level CE Ex II 2 GD cX.

Please contact your local sales office for more information on availability.

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