

CUSTOM METAL HOSE, BELLOWS & EXPANSION JOINT ASSEMBLIES



Whitehouse Flexible Tubing supplies custom-engineered stainless steel metal hose assemblies, bellows and expansion joints for demanding industrial, process, marine and OEM applications.

Designed around your pressure, temperature, media, movement and connection requirements, assemblies can be manufactured with a range of hose constructions, braid arrangements, materials and end fittings.

Suitable for replacement assemblies, one-off requirements, prototypes and repeat production. [Contact our team with your application details for a quotation.](#)

PRODUCT DETAILS

CUSTOM METAL HOSE ASSEMBLIES, BELLOWS & EXPANSION JOINTS

Whitehouse Flexible Tubing supplies custom-built metal hose assemblies, bellows and expansion joints engineered to suit demanding industrial applications.

Rather than selecting an assembly based simply on bore and length, each application can be considered according to operating



pressure, temperature, media, movement, vibration, installation requirements and end connections. Our team can then help specify a practical flexible metal hose or expansion joint solution.

Metal Hose Assemblies

Custom flexible metal hose assemblies can be manufactured in a range of constructions and configurations to suit the application.

Options include:

- Annular corrugated stainless steel hose
- Close-pitch and standard-pitch corrugated hose
- Single and double braided hose assemblies
- 304, 316/316L and other suitable alloy options
- Plain, braided, lined and specialist hose constructions
- Custom bore sizes and assembly lengths
- Flanged, threaded, welded and bespoke end connections
- Assemblies for static, vibration, intermittent-flexing and cyclic-motion applications

Depending on the specification, assemblies can be designed for the transfer of gases, liquids, steam, oils, chemicals, exhaust gases, cooling water and other process media.

Bellows & Expansion Joints

Custom bellows and expansion joints can be supplied to accommodate movement, thermal expansion and vibration within pipework, machinery and industrial equipment.

Available configurations can include:

- Axial expansion joints
- Lateral expansion joints
- Angular expansion joints
- Universal expansion joints
- Exhaust bellows
- High-temperature flexible sections
- Pump and compressor vibration connectors
- Engine and machinery connectors
- Single-ply and multi-ply bellows
- Flanged, threaded, welded or bespoke connections

Where required, designs can also incorporate internal sleeves, liners, covers, tie rods, hinges, gimbals and other specialist features.

Industrial Applications

Custom metal hose assemblies, bellows and expansion joints can be specified for a wide variety of industries and operating environments, including:

- Marine engines and exhaust systems
- Pumps, compressors and generators
- HVAC equipment



- Chemical and process plant
- Manufacturing equipment
- Steam and hot-water systems
- Thermal-transfer lines
- Furnace and burner equipment
- High-temperature applications
- Vacuum and gas-transfer systems
- OEM machinery and equipment
- Test rigs and prototype equipment
- Pipework requiring movement or vibration isolation
- Replacement of existing rubber, PTFE or metal hose assemblies

Food, pharmaceutical and clean-process applications can also be considered subject to the individual material and operating requirements.

Stripwound & Specialist Flexible Tubing

Where a pressure-tight corrugated hose assembly is not required, Whitehouse Flexible Tubing can also advise on stripwound flexible tubing and specialist metallic constructions.

These can be suitable for applications including extraction, ducting, guarding, cable protection and other mechanical-flexibility requirements.

Made to Your Requirements

Every application can present different operating conditions, which is why custom assemblies should be specified around the actual installation.

When requesting a quotation, provide as much information as possible about the required bore, length, operating pressure, temperature, media, movement and end connections.

If you are replacing an existing assembly, you can also send photographs, drawings or details of the current installation. Our team can review the information and help identify a suitable metal hose, bellows or expansion joint solution.