



BELLOW AND
BELLOW ASSEMBLY
CAPABILITIES

DESIGNING FUTURE TECHNOLOGIES TODAY

 **FLEX-WELD**
INCORPORATED

**GUARDIAN**
ENGINEERING AND MANUFACTURING

UNIQUE DESIGN CAPABILITIES
PROVIDE UNIQUE DESIGN SOLUTIONS

Our expertise is in the design and engineering of motion and flow control products to meet our customers' specific needs. Our products are ideally suited to perform in extreme environments of temperature, pressure, vibration, and corrosion. Formed from precision welded materials such as Stainless Steel, Monel, Inconel, Hastelloy, Titanium, or Copper Alloys, Flex-Weld's products provide superior engineered characteristics for all types of applications, including liquid oxygen, nitrogen, or acid.

SOLUTIONS FOR MECHANICAL
& HYDROFORMED BELLOWS
AND BELLOW ASSEMBLIES

- pressure sensing devices
- thermostatic controls
- mechanical seals
- packless valve construction
- expansion & volume compensators
- flexible couplings & connectors
- mechanical joints, connectors & seals
- engine/exhaust bellows
- expansion joints
- flexible metal hose
- braided pump connectors

From design concept to production

PRECISION BELLOWS



ction—faster, proven solutions for every industry.

S P E E D

CAPABILITIES:

Single to multi-ply

Wide material selection

Proprietary forming techniques produce metallic bellows of consistent quality and close tolerances

In-process testing & inspection results in the most reliable bellows

Welding: laser, lap, MIG, TIG, RSEW

Soldering

Brazing

Pressures ranging from vacuum to 10,000 psi (application dependent)

Diameters ranging from 1/8" I.D. to 280" I.D.

Temperatures ranging from cryogenic to 2800° F

Axial movements up to 14" (size dependent)

Variety of leak testing methods

Heat treating

Teflon coating

Plating

Custom flange and end component designs

Machining & stamping

Failure analysis

Cleaning

Concurrent engineering

Electro-polishing

Prototype/modeling

Special testing

CAD/CAM

MARKETS AND INDUSTRIES SERVED:

Automotive

Aerospace

Medical

Industrial

HVAC

Semiconductor

Power Generation/Distribution

Diesel

Instrumentation & Controls

Vacuum

Process

Electronic

Military

Cryogenic

Nuclear

National Labs

Valves

Valve Repair

Petrochemical

Pharmaceutical

Renewable Energy





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