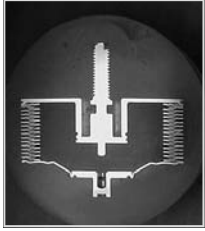


Flexible Solutions  
**DURAFLEX**™ INC.  
 for Rigid Applications

## EDGE-WELDED BELLOWS



### MARKETS ■ APPLICATIONS

Duraflex™, Inc. EDGE-WELDED BELLOWS are used in a wide variety of applications & in virtually every market from Aerospace exploration to Zirconium processing. Some of the more popular markets & applications are shown below. Samples can be provided from each product type upon request.

#### INDUSTRIES / USERS

- AEROSPACE
- AGRICULTURE
- AUTOMOTIVE
- CHEMICAL
- COMMUNICATIONS
- CRYOGENIC
- DEEP WELL
- DISPENSING
- ELECTRICAL
- FOOD PRESERVATION
- GAS DELIVERY
- GOVERNMENT
- HVAC
- INDUSTRIAL
- INSTRUMENTATION
- MACHINE DESIGN
- MARINE / OCEANOGRAPHIC
- MEDICAL
- METAL REFINING
- MILITARY
- NATIONAL LABORATORY
- OPTICAL
- PETROCHEMICAL
- PHARMACEUTICAL
- PAPER
- PROCESS
- RESEARCH & DEVELOPMENT [R&D]
- SEMICONDUCTOR
- ULTRA HIGH VACUUM [UHV]
- UNIVERSITY RESEARCH
- VACUUM
- VALVE

#### MECHANICAL SEALING

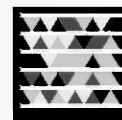


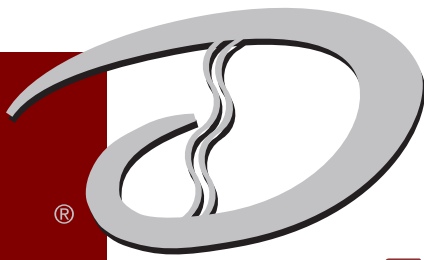
#### UHV

[Ultra High Vacuum]

#### PRODUCT NAMES / TYPES

- ACCUMULATORS
- ADAPTORS
- ANEROIDS
- ACTUATORS
- BEAM LINE COMPONENTS
- BELLOWS
- COMPENSATORS:
  - Volume ■ Motion ■ Pressure
- CONNECTORS
- COUPLERS
- CONTROLLERS
- EXPANSION JOINTS
- FEEDTHROUGHS
- MANIPULATORS
- MECHANICAL FACE SEALS
- MEDIA CONVEYANCE ASSEMBLIES
- METERING DEVICES
- ORIENTING DEVICES
- PRESSURE VESSELS
- PUMPS
- RESERVOIRS
- ROBOTIC INTERFACES
- SEALS
- SENSORS
- SHIELDS
- SHOCK ABSORBERS
- SWITCHES
- VIBRATION DAMPNERS
- WAFER LIFTERS
- WATER HAMMER ARRESTORS
- WOBBLE STICKS





Flexible Solutions

# DURAFLEX<sup>TM</sup> INC.

for Rigid Applications

## EDGE-WELDED BELLOWS

### QUALITY

*Duraflex quality is measured in our ability to meet our customers' requirements; from design to in - service performance!*

### LEAD TIMES

Lead Times for tooling, prototypes, bellows are shortest / most reliable in the industry!

### TESTING

- Nesting configuration check of individual diaphragms.
- Metallurgical cross-sections of welds during Production.
- Helium mass spectrometer leak testing of sub-assemblies.
- Helium mass spectrometer leak testing of final assembly to customer specification.

### MATERIALS

- |                    |                 |
|--------------------|-----------------|
| ■ Stainless Steels | ■ Inconel       |
| ● T- 347           | ● 625 / 625 LCF |
| ● T-304 (L)        | ● 600           |
| ● T- 316 (L)       | ● 718           |
| ● T-321 (L)        | ● X-750         |
- Titanium: Grades 1 - 4, ASTM B-265
  - AM 350
  - Haynes: 242 / 230
  - Monel: 400
  - Hastelloy: C-276
  - Diaphragm Thickness starts at .001"

### SERVICES

- Design & Engineering
- Prototyping
- Bellows Production
- Flange / Fitting Production
- Assembly – Welding or Joining
- Leak Testing
- Performance Testing
- Specialized Cleaning
- Specialized Packaging

### DESIGN

**Duraflex<sup>TM</sup>, Inc.** specializes in the most demanding & difficult edge-welded bellows applications. Our engineers are proven leaders in the edge-welded bellows industry; enabling **Duraflex<sup>TM</sup>, Inc.** to perform extensive design & engineering required for bellows & assemblies.

### TOOLING

**Duraflex<sup>TM</sup>, Inc.** tooling used is uniquely different than what is produced or purchased by other edge-welded bellows companies.

Our tooling is designed specifically to produce a PROPRIETARY bellows diaphragm configurations which enables the highest level of repeatability in production & in use. The design results in consistent / precise spring rates & reliable loads at lengths.

### TOOL SIZES & TYPES

**Duraflex<sup>TM</sup>, Inc.** has a wide range of tool sizes & types for every application / market listed.

We are able to produce round, oval or complex configuration bellows to fit each unique application. Tooling can be designed to produce both single or multi-ply bellows.

**Duraflex<sup>TM</sup>, Inc.** strives to minimize our customers' investment by utilizing existing diaphragm & bellows tooling. Generally we are able to maintain the same end fittings or flanges, but adjust to a pre-existing tool size.

Current ID bellows tooling ranges from .1/8" to 26", with both short & wide span OD's.

### SPECIALIZE / FOCUS

**Duraflex, Inc.<sup>TM</sup>** produces all of our edge-welded bellows (including the tooling) in one facility separate from our other product lines. Edge-welded Bellows are our most technical product. These parts require unique dedication and precision!

**Duraflex, Inc.<sup>TM</sup>** specializes in **mechanical face seals**. We do not believe any other edge-welded bellows company has an equal ability to produce a comparable high cycle life, precise & highly repeatable - mechanical face seal.

### EXTENDED LIFE

### RELIABILITY HIGH PSI

