

WE'RE **all**  
**about**  
**PRECISION.**



**Alloy Bellows**  
& Precision Welding

Nondestructive Testing Services

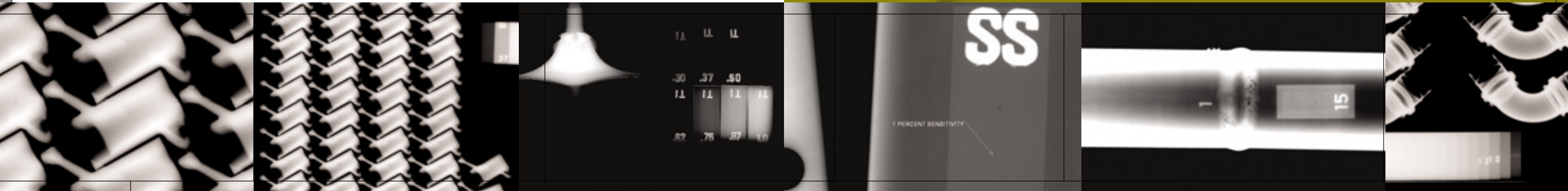
# precision IT'S what we do.

## Radiographic (X-ray) Testing and Fluorescent Penetrant Inspection (FPI).

You demand the highest quality. Trusted inspection techniques such as radiography and FPI are becoming the preferred methods for testing that quality on a variety of projects. Alloy Bellows & Precision Welding offers you both a state-of-the-art radiographic laboratory and an FPI line operated by a certified NDT Level III Inspector.

In 2007, we incorporated a leading-edge x-ray testing system using Computer Radiography (CR) – the very latest

in imaging technology. This 320 KV system offers versatile testing for a wide range of parts and assemblies. And because it provides digital (filmless) test results, our CR system gives you shorter cycle times and faster inspection reports. Digital imaging also means your archiving and retrieval can now be done electronically – with no need for traditional film storage. In other words, radiographic testing gives you a powerful combination of advanced technology and added convenience.



World-class quality is a key component of every product and service at Alloy Bellows & Precision Welding. Your assurance of quality starts with our ISO9001:2000, ASTM E1417 and ASME Section V and IX certifications; it continues with our wide array of in-house testing and inspection services.

All of our nondestructive testing services are designed to give you the peace-of-mind that comes with maximum quality, while also reducing costs and shortening delivery times. We offer a range of testing capabilities from conventional methods to more advanced, state-of-the-art inspection techniques, including:

- ▶ Radiographic (x-ray) testing
- ▶ Fluorescent Penetrant Inspection (FPI)
- ▶ Visual inspection
- ▶ Cycle fatigue testing
- ▶ Spring rate testing
- ▶ Helium mass spectrometry (to  $1 \times 10^{-9}$  cc/second)
- ▶ Pressure testing
- ▶ Dimensional inspection

Common applications requiring radiographic testing include:

- ▶ Detecting discontinuities in:
  - ▶ Welds
  - ▶ Weld overlays
  - ▶ Forgings
  - ▶ Castings
  - ▶ Pressure vessels
  - ▶ Aircraft components
- ▶ Detecting internal and external corrosion in:
  - ▶ Valves
  - ▶ Pressure vessels
  - ▶ Piping

If at any time you have questions about this new technology, our inspectors are available to help you get the answers you need.

Like radiographic testing, Fluorescent Penetrant Inspection (or FPI) is one of today's most popular nondestructive testing methods. With FPI, your part or assembly is cleaned then a fluorescent dye solution is applied and allowed to penetrate. Once the excess dye is removed, a developing solution is applied. The developer draws any dye out of the tiny surface flaws, indicating the presence of imperfections.

Fluorescent Penetrant Inspection is currently required by many important industry sectors – including aerospace, automotive and power generation. Alloy Bellows is proud to offer FPI services for all your production runs – whether high or low volume – for added quality assurance and peace of mind.

### Committed To What We Do. And Who We Do It For.

Precision, quality and efficiency are all very important to everyone at Alloy Bellows. Equally important is the customer at the other end of our products. We don't believe our commitment to your satisfaction should end once your order is shipped. Potential problems can be caught before they even happen, leaving you free to concentrate on other things, confident that your job is being done right on our end.

Since 1935, Alloy Bellows & Precision Welding has been supplying the world with metal bellows, bellows assemblies, thin-wall seam-welded tubing, welding, soldering, brazing and nondestructive testing services. Our dedication to providing first-rate products and services on-time and on-budget has allowed us to become a leading supplier to companies, both large and small. Our unique capabilities, flexible manufacturing environment and, most importantly, our staff have allowed us to meet out



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