



## Babcock & Wilcox Canada

# Nondestructive Examination Services



## Total Solutions For All Your NDE Needs

B&W's NDE Services offers the techniques, equipment, and necessary expertise to meet all your nondestructive testing needs. Our technicians are certified to the Canadian General Standards Board (CGSB), and to SNT-TC-1A requirements of the American Society for Nondestructive Testing (ASNT). We provide the quality solutions you require.

Insist on B&W's NDE Services when your business has these demands:

- Nondestructive testing performed by qualified and certified personnel
- ASNT and CGSB Level III Services
- In-house training programs
- Examinations requiring the use of high capital cost equipment
- Inspections carried out to satisfy regulatory, insurance, or customer specifications and/or codes
- Full examinations of your materials prior to shipping to a secondary processing facility
- Inspections conducted on your repair work

# Proven Equipment and Expertise

## ▼ Positive Material Identification

The Texas Nuclear-Alloy Analyzer can identify a material without the destruction or burning of the part. Its battery operation makes it ideal for remote field locations where a power source may not be readily available. With its library containing more than 100 of the alloys commonly used today, the analyzer can quickly and precisely determine the percentage of alloying metals in a material, saving you valuable time and money on the job site.



**B&W swiftly provides you with verification of weld overlay constituents with our Texas Nuclear-Alloy Analyzer—just one of its many applications.**



**B&W offers you convenient railcar access to the 4 MeV linear accelerator, ensuring rapid turnaround time on large components.**



## ◀ Manual Ultrasonic Inspection

- ASNT and CGSB Level III Services

B&W can perform manual testing on your casting, forging, piping, plate, structural steel and pressure vessels. We use portable, up-to-date ultrasonic flaw detectors and a wide variety of transducers. In order to meet today's stringent code and specification requirements, B&W's NDE Services stocks various reference test blocks. We also supply you with professional, concise reporting of your inspection results.

# Convenient, Efficient Solutions

## ◀ Radiography

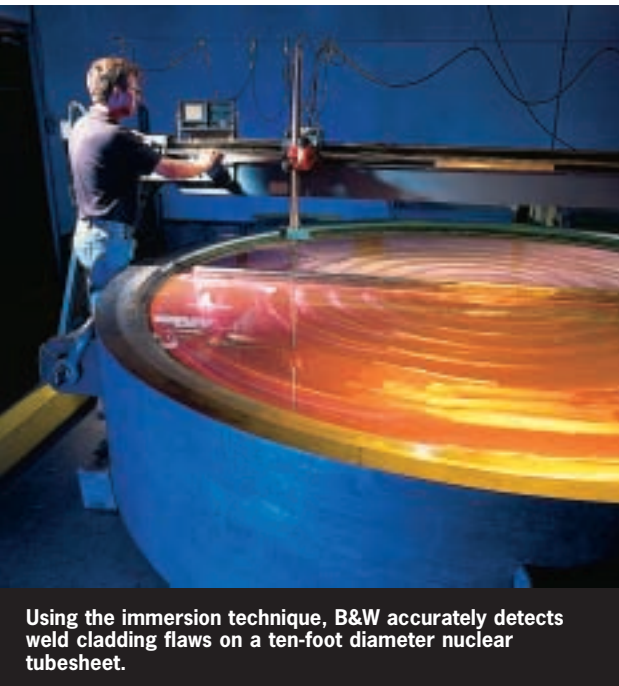
- ASNT and CGSB Level III Services

B&W provides in-house radiographic services on materials that have an equivalent thickness of up to 13 inches of carbon steel. With a complement of automatic film processing, and the largest exposure room in Canada, B&W can turn around any size component quickly. Whether you need a 4 MeV linear accelerator, a 250 KV spot X-ray tube, or cobalt and iridium gamma ray sources, B&W's NDE Services has the equipment.

B&W offers three separate radiographic facilities in Cambridge, Ontario with railcar, truck or crane access for more efficient handling of your components.

## ▼ Immersion Ultrasonic Inspection

B&W offers a ten-foot wide gantry bridge for in-house immersion ultrasonic inspection of large or small components. This NDE system provides you with probe manipulation as well as precision indexing.



Using the immersion technique, B&W accurately detects weld cladding flaws on a ten-foot diameter nuclear tubesheet.



The Tomoscan® system's robotic scanner easily makes simultaneous, multiple scans, stores your data, and gives you complete coverage of a circumferential weld seam.

## ▲ Tomoscan® Digital Ultrasonic Imaging System

B&W's Tomoscan® system can save you time and money, because its multi-channel operation allows several ultrasonic scans to be accomplished simultaneously. A-Scan data stored from all the channels can be presented in numerous formats, allowing you convenient viewing of your inspection results.

The Traker® robotic scanner is suitable for monitoring corrosion as well as for examining cladding, plate and forging materials. And, when you need to examine vessel and piping welds, the Traker® can use both pulse-echo and TOFD techniques.

The use of complicated or time consuming fixtures is not necessary—the Traker® attaches to your test piece with magnetic wheels. The Traker® will also follow a magnetic strip around most configurations, or can be controlled by a joystick and console.

You can analyze your examination data using the Tomoscan® system, or off-line using the Tomoluis® P.C. based software. Resulting data can be formatted easily to suit your specific reporting or presentation requirements. The data is stored for you on magneto-disc, or it may be transferred to CD and retained for future use.

# Portable NDE Solutions

## Liquid Penetrant Inspection

- ASNT and CGSB Level III Services
- Visible and fluorescent dyes

## Magnetic Particle Inspection

- ASNT and CGSB Level III Services
- Portable prods and yoke equipment
- Visible and fluorescent particles

## Visual Inspection

- ASNT Level III Services
- Boroscope, dimensional and visual inspection

## ▼ Remote Video Inspection

B&W's portable visual inspection system is particularly suited for internal examinations of piping. Its 50-foot fibre-optic illumination/video camera reel allows you easy access into difficult-to-reach areas. In addition, the high-resolution colour video gives you instant results as well as documented, recordable images in VHS format.



Internal examination of the weld root 16 feet from the access point is simplified with B&W's portable video camera reel. And in this VHS format, your results are recordable.



Minute leaks in a welded-on cap are identified using the detector probe technique with B&W's helium mass spectrometer.

## ▲ Helium Mass Spectrometer Leak Detection

- ASNT Level III Services

B&W is one of a few suppliers to offer fully portable helium leak test equipment to detect minute leaks in both pressure vessels and evacuated systems.

# Put B&W's NDE Services to Work for You

Discover how Babcock & Wilcox Canada can help you meet your nondestructive testing needs. For more information contact:

Manager, Nondestructive Examination Services  
Babcock & Wilcox Canada  
581 Coronation Boulevard  
Cambridge, Ontario  
N1R 5V3

tel: (519) 621-2130

fax: (519) 621-2916



a McDermott company

*Tomoscan®, Traker® and Tomoluis® are registered trademarks of R/D Tech.*

*The information contained herein is provided for general information purposes only and is not intended to be construed as a warranty, an offer, or any representation of contractual or other legal responsibility.*

© 1998 Babcock & Wilcox Company. All rights reserved.

E101-3173 2MMM8I