

The InspecTech® I.B.I.S. (InspecTech B-SCAN Inspection System) is an ultrasonic device that is especially useful to the welded tube industry. The I.B.I.S. scans the weld zone, and monitors the quality of the inside and outside flash removal process.

The I.B.I.S. is primarily a scrap reduction tool. It displays the weld profile in engineering units and in real time on a video display. Broken, worn or chipped flash cutting tools or mismatched weld edges are easily detected and alarmed. The I.B.I.S. is also used to monitor weld profile to make sure that the overall weld thickness is within tolerance. Installing an I.B.I.S. unit on the tube mill close to the welding station can give early warning of problems and play a significant role in reducing scrap.

**Real Time Presentation of Wall Thickness Data, in engineering units, on the tube mill.**

**Scrap Reduction. Catch ID and OD flash removal problems before they become a costly encounter.**

**“Hands Free” unattended operation**

**Complete Data Logging of all on-line Test Parameters - easily stored, retrieved, hard-copied or downloaded**

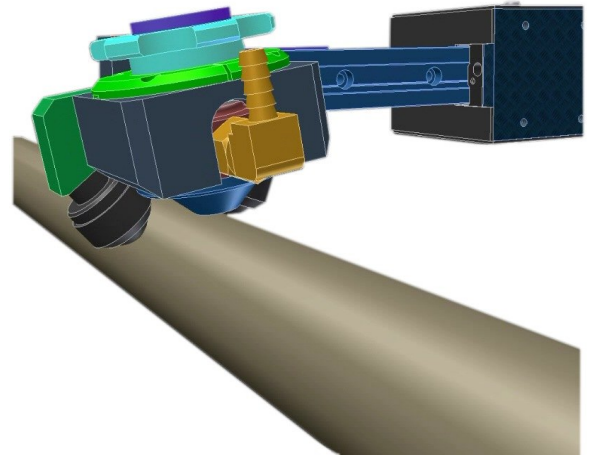
**(Optional) Weight Calculation and Cutting to Weight**

The removal of ID flash from seam-welded tube is a difficult and delicate operation. It is basically a "blind" operation since the cutting is done inside a fully formed and welded tube.

Consequently, the tube mill may produce a considerable amount of scrap material before a flash problem is discovered and corrected.

The InspectTech I.B.I.S. gives the tube mill operator a series of cross sectional views of the weld zone virtually as soon as it is trimmed. The video display is easy to interpret, and it tells the operator in real terms what the material cross section is through the weld zone.

Using this information, the mill operator can make corrections and adjustments to the ID flash tool on the fly, or if necessary, halt production for tool changes before excessive scrap material has been produced.



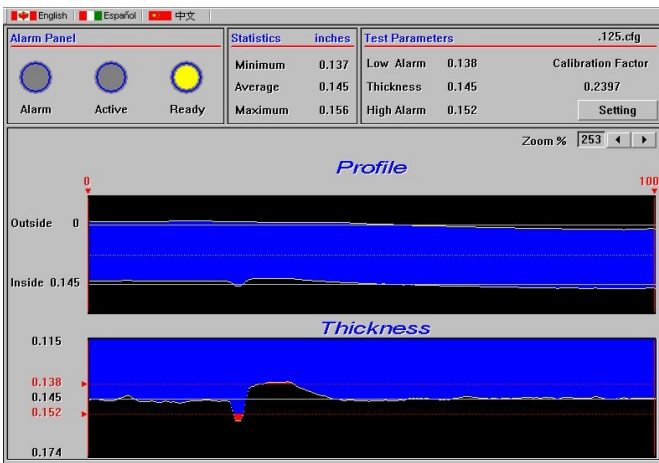
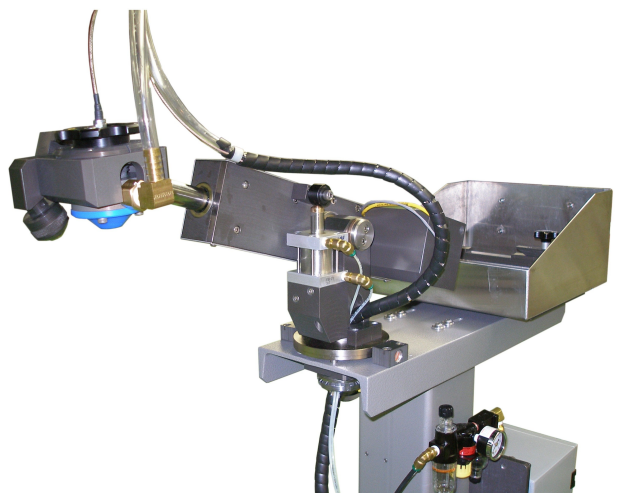
The InspectTech I.B.I.S. Is Based On InspectTech's Proprietary Thickness Gauge Technology.

The InspectTech<sup>®</sup> Thickness Gauge is a modern, user friendly and very reliable tool for on-line or off-line thickness measurement. The computer interface controls the gauge and displays thickness readings.

Although the Thickness Gauge can be used for thickness monitoring in dedicated applications, it forms an integral part of the I.B.I.S. System and also provides data communication with the Data Logger.

Features of the Thickness Gauge include:

- Very high resolution and wide measurement range.
- Remote pulser with a wide-band preamplifier.
- Easy set-up and calibration.
- Nonvolatile set-up memory.
- RF signal display.
- Operator friendly.



The InspectTech I.B.I.S. utilizes an ultrasonic transducer connected to an oscillating arm, which traverses the pipe weld area at a variable rate, usually once every 2 seconds as the pipe passes beneath it.

Data from ultrasonic thickness readings are gathered and supplied to a computer. The resulting profile or cross-sectional view of the weld area is displayed on the graphics display.

- Results are presented in engineering units (inches or mm).
- Min/Max alarm settings are adjustable.
- Average wall thickness readings can be used to calculate weight of tubing processed.