ANDEC - ULIT System

Ultrasonic Laserweld Inspection Technology

Computer controlled automatic laser weld testing system

Each system usable for different parts with exchangeable fixturing

Key Advantages of Andec **ULIT** System:

- Testing with or without immersion in liquid
- Fully automatic testing after manual or automated loading
- Testing sequence completed in less than 10 seconds
- System pre- calibrated only once with standard welded assembly
- Automatic display of accept/reject with manual or automated load/unload
- Accept/reject result passed on to line PLC with automated load/unload
- All weld defects, as well as a displaced weld and misaligned assembly are detected
- Location of defect in weld circumference is identified
- Dimensions of each defect are indicated
- Percentage of weld defects is calculated and displayed





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Over many years, a variety of Andec's in-house-developed Ultrasonic Laserweld Inspection Technology (ULIT) systems, have been installed in many automotive assembly welding lines. They are available with robotic or overhead pick and place, load/unload, or, manually, with surround guarding and safety light curtains.

The Andec 'ULIT' system assures the quality and integrity of each laser welded assembly in a welding line, at production speeds, with automatic or manual loading/unloading.

Employing it's unique 'laminar Link' liquid coupling device which is custom made for each different gear assembly, the coupling liquid slightly wets only the surface of the assembly near the weld, while the rest of the assembly remains dry.

The self locating part loading assembly, with the dedicated coupling device, can be replaced quickly. This allows each 'ULIT' system to be utilized for various different gear assemblies, eliminating the need to purchase a separate system for each different assembly.

The 'ULIT' system detects, displays on a large colour monitor, and records the test results and all weld defects, such as lack of fusion or penetration, voids or shrinkage cracks, porosity or slag inclusions, as well as a displaced weld or mis-aligned assembly.

