



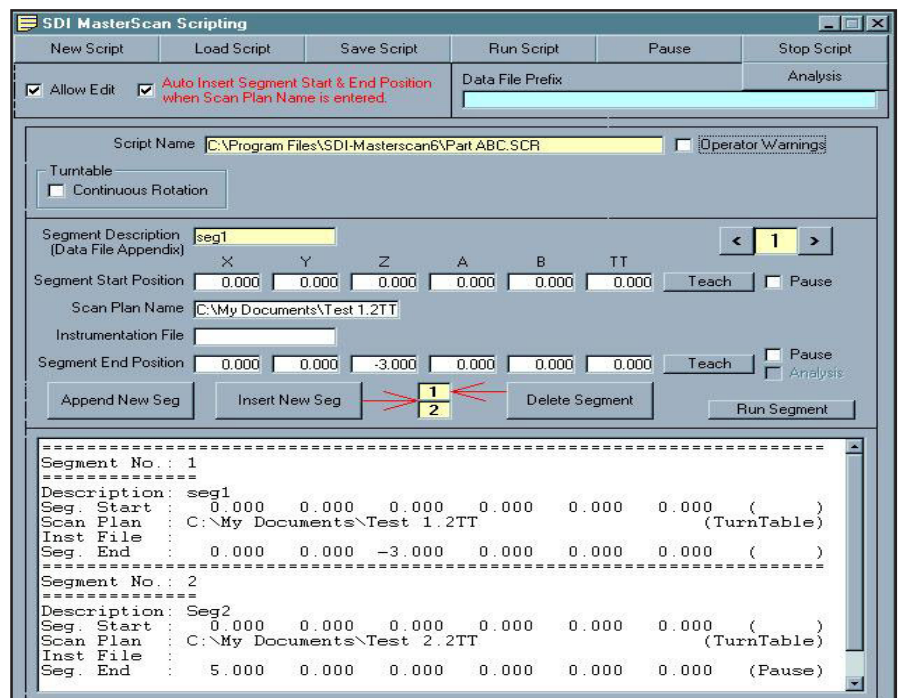
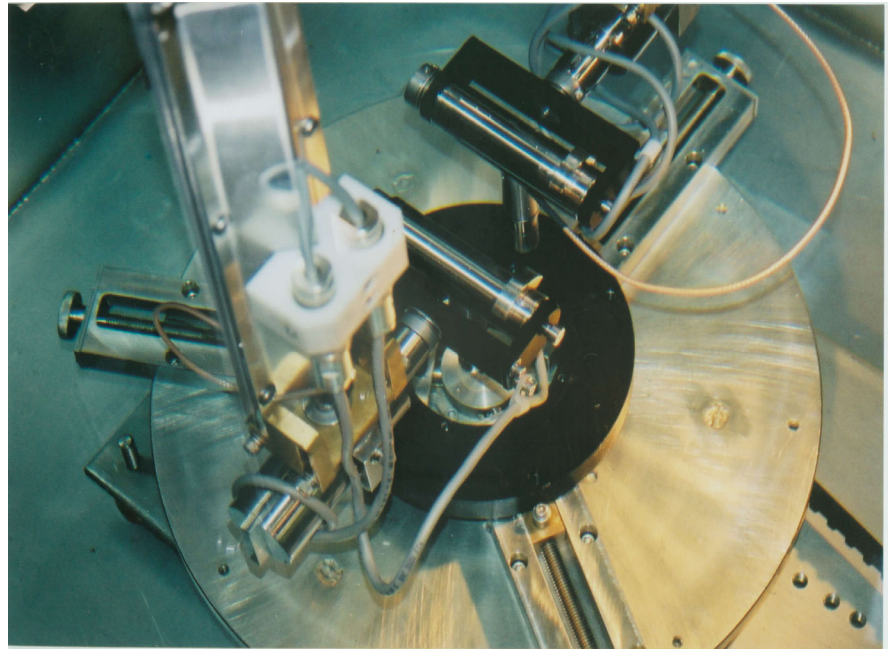
## SDI-MasterScan Motion Control and WinScan Analysis

The SDI MasterScan/WinScan suite is one of the most powerful motion control and acquisition packages available. Designed from the ground up as a true Windows 98/2000/NT application it has significant operational advantages over competitor's DOS and Unix based systems migrated to the windows platform. The well structured modular software has evolved by incorporating customer's motion control and acquisition requests into the standard product. With a user base of over 100 systems, incorporating the suggestions of technicians who spend all their time operating our equipment has resulted in the most versatile, user friendly, package in the industry. Targeted primarily at high volume test lab users, the principal operational criteria are ease of use and fastest possible inspection times. In addition to numerous custom systems, the SDI standard product range of over 14 systems types are employed in three main industry areas:

### Precision Turntable Disk Inspection Systems

In addition to being approved by all major aero-engine manufacturers, the following advanced features of SDI systems give major advantage over competitor's equipment in terms of ease of use and inspection setup and test time;

- Automatic multi-transducer inspection with different transducers on dual search tubes performing simultaneous or sequential independent scans on the same part.
- Multiple scan inspection with a series of scans being performed without operator intervention. Each scan can have a different instrument setting and produces a different data file. The scan sequence, or script, can include automatic DAC setup, and transducer characterization. If SDI instruments are used the instrument parameters, such as gate position and gain, can be changed during the scan at rep rate speeds and coordinated with the motion.
- System functional axes where the operator is able to move the transducer along its axis, or change the angle of incidence without moving the sound entry point, with a single control.



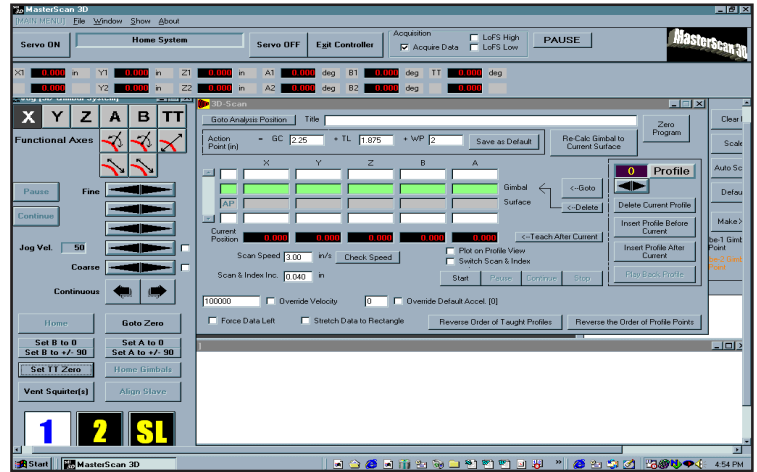
Scripted Scan Plan



## Complex Contour Composite Scanners

SDI's range of high performance complex 3D scanners is able to perform simultaneous through transmission and pulse echo inspection on complex 3D composite parts. Advanced features include;

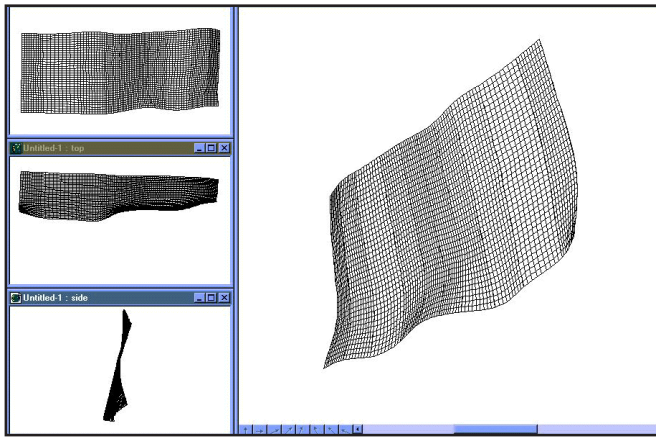
- Automatic teaching of component scan plans.
- Automatic normalization and water path adjustment.
- Import/Export of scan plans to CAD.
- Nested scan plans where multiple parts in different locations can be tested in the same sequence.
- Automatic identification of defects with the cluster analysis feature.



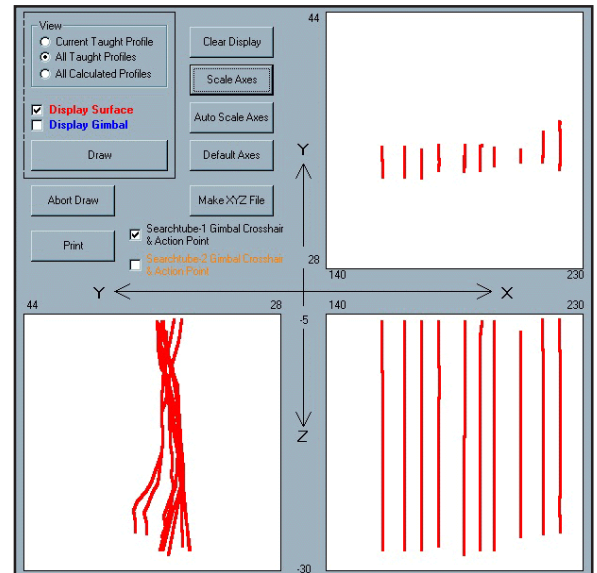
12 Axis Through Transmission 3D Contour Following Control

## Raw Material Inspection Systems

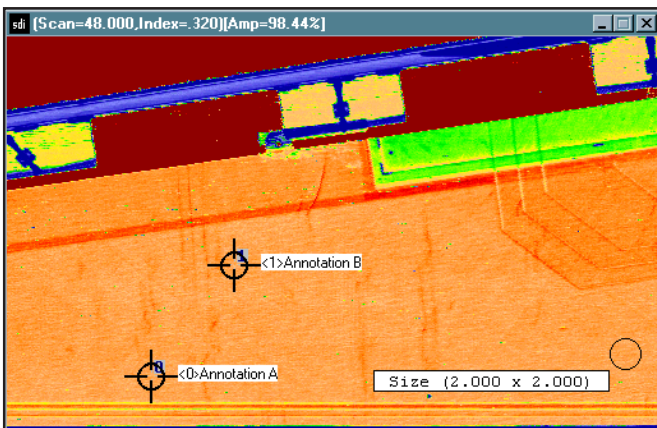
SDI's range of heavy duty plate and bar and billet inspection systems are designed for operation in harsh environments using sealed touch screen controls an air conditioned control enclosures. Typical examples are bar systems with multi-transducer bar followers performing multizone inspection on 16000# round billets and plate inspection systems with up to 32 simultaneous data acquisition channels.



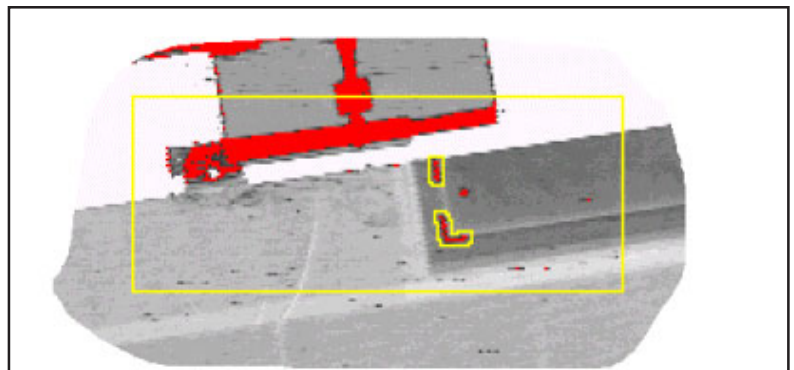
Taught Profiles Exported To CAD For Verification



MasterScan Taught Scan Profiles



C-scan of Composite Component



Cluster Analysis of Indication