Features at a Glance

The ISCAN-6 scanner is the first scanner to incorporate miniature 24V DC motors and encoders into an XY manual scanner. This unique capability allows three modes of scanning, XY manual, XY motorized, and XY hybrid. This new hybrid mode allows the operator to guide the transducer through the scan stroke by hand with quick motorized indexing at the end of each stroke. This scanning mode is useful when proper coupling can only be achieved by hand.

A very flexible system can be configured by adding ultrasonic hardware and software, such as the PCUS 10/11 ultrasonic cards and CPS™ or Winspect® data acquisition/analysis software. Eddy current inspections can also be performed by adding suitable (PC-based) eddy current components.

Scanner Characteristics

The scanner is suitable for automated and/or semi-automated scanning of flat or cylindrical components with diameters of 8" and larger.

Scanner tracks are available in lengths of 320mm (12.8") with a usable scanning length of 300mm (12"). Tracks can be delivered as magnetic tracks, suction-cup tracks, or strap-on stainless steel tracks. Scanner arms are available in lengths from 200mm to 500mm.

The motor/encoder/gear-box unit is splash proof.

Specifications:

- Motors:
  24 V, DC servo motors, 3.2W, 7250 RPM
- Encoders:
  Quadrature encoders, resolution 0.037mm/pulse for track (index) direction, 0.024mm/pulse for arm (scan) direction
- Material:
  Anodized aluminum construction
- Weight:
  approx. 2kg (4.4 lbs.)
- Dimensions:
  400 x 140 x 60mm (15.8" x 5.5"x 2.4") without track

Controller/Amplifier:

- Dimensions:
  130 x 100 x 60mm (5.1" x 3.9" x 2.4")
- Interface to Controller:
  Direct connection to the Galil DMC1700 series controller cable or any controller providing a +/-10V servo command signal
- Output:
  +/-24VDC @ 2A protected by current limiting (adjustable) and thermal shutdown