FlexTrackTM

Highly Flexible Aerospace Inspection Scanner





COMPOSITE INSPECTION WITHOUT COMPROMISE, VERSATILE AUTOMATED XY SCANNER

The FlexTrack scanner comprises of a motorized actuator installed on a module that moves on a flexible track. It allows for raster scanning in both directions with the arm being the scan axis and the track the index axis, and vice versa.

The probe is installed on a suspension and can be oriented parallel or perpendicular to the arm. The arm can be removed from the track displacement module for transportation, storage, and installation on components.

The scanner is provided with one or two flexible tracks. The tracks can be linked together creating an infinite track while scanning; when the scanner is on the next track, the first one can be disconnected and placed in front of the scanner. The tracks feature vacuum cups so they can be put on a composite surface, for example. Each cup has an independent Venturi system so if one or a few cups do not have a full seal, it won't affect the remaining suction cups.



Highly Flexible

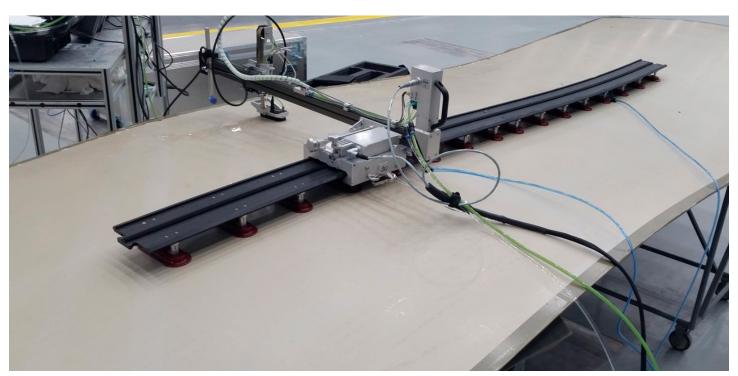
- · Parallel or perpendicular probe orientation.
- Two flexible tracks included. (can be linked together to create an infinite track while scanning)

Automated

 Motorized 609-mm (24-in) stroke actuator moving on a flexible track.

Optimal Design

- Easy arm removal. (track module displacement, storage, installation on components)
- Eight independent suction cups per track and strong enough to support the scanner overhang position.



SPECIFICATIONS

INSTRUMENT	
Maximum recommended speed for arm axis (#1)	100 mm/s (4 in/s)
Maximum recommended speed for track axis (#2)	25 mm/s (1 in/s)
Maximum stroke on the arm axis (#1)	810 mm (32 in)
Maximum usable stroke on the arm axis (#1) (when installed on the track)	610 mm (24 in)
Probe suspension maximum stroke	180 mm (7.2 in)
Suction cup material	Polyurethane (PU40)
Suction cup dimensions	59 mm x 154 mm (2.32 in X 6.06 in)
Track length	1370 mm (54 in)
Track width	145 mm (5.7 in)
Arm total length	1039 mm (40.9 in)
Motor cable length	13.7 m (45 ft)
Couplant and air tube length	13.7 m (45 ft)
Air pressure required for suction cups	5.5 bar (80 psi)
Maximum radius of curvature of track	2540 mm (100 in)
Motor maximum allowed current	2A
Scanner arm weight	4.67 kg (10.3 lb)
Track weight	5.49 kg (12.1 lb)
Track and motorized module weight	8.12 kg (17.9 lb)
Cables weight	2.58 kg (5.7 lb)

