FlexTrack™ Scanner

Automated Aerospace Scanner Offering New Levels of Flexibility

FlexTrack is a versatile, automated X-Y scanner on a flexible track that can be configured for many inspection applications of aerospace structures, in production and maintenance.

The FlexTrack scanner comprises of a motorized actuator installed on a module that moves on a flexible track. It allows for raster scan 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 to the arm or perpendicular. 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 full seal, it won't affect the remaining suction cups.

FEATURES & BENEFITS

▶ **Automated**

- Motorized 24" stroke actuator moving on a flexible track

▶ **Highly Flexible**

- Parallel or perpendicular probe orientation
- Two flexible tracks included (can be linked together, creating an infinite track while scanning)

▶ **Optimal Design**

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

Independent suction cups

Specifications

Parameter	
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 mm (45 ft)
Couplant and air tube length	13.7 mm (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 lbs)
Track weight	5.49 kg (12.1 lbs)
Track and motorized module weight	8.12 kg (17.9 lbs)
Cables weight	2.58 kg (5.7 lbs)

Ordering Info

Part Number	Short Description	Detailed Description
10056225	ZGN-SCN-FLEX-MOT-2TRACK-KIT	Automated FlexTrack scanner with suction cups. Motorized stroke actuator with easy arm removal and fixation for parallel or perpendicular probe orientation. Include 2 flexible tracks with 8 suction cups each for infinite track scanning - Motor controller sold separately
10059029	ZGN-SCN-FLEX-MOT-1TRACK-KIT	Automated FlexTrack scanner with suction cups. Motorized stroke actuator with easy arm removal and fixation for parallel or perpendicular probe orientation. Include 1 flexible tracks with 8 suction cups - Motor controller sold separately
10059030	ZGN-SCN-FLEX-SPARE TRACK	Spare flexible track for use with the FlexTrack scanner. Each track has 8 independent suction cups strong enough to support the scanner
10056828	ZGN-SCN-FLEX-MOT	Automated FlexTrack scanner with suction cups. Motorized stroke actuator with easy arm removal and fixation for parallel or perpendicular probe orientation. Compatible with the track system
10057207	ZGN-ACC-PUMP-DUAL-DIAPH-01	Dual pumps mechanism for couplant feed and recuperation. Compatible with multiple scanning mechanisms capable of feeding and recuperating water
10036297	ZGN-CTR-ZMC2	Precision motion control unit, 2-axis drive for 1 or 2 axis scanners, 24V or 48V, including remote control and standalone software

For more information about the FlexTrack scanner, contact your local Zetec representative, email us at info@zetec.com or visit www.zetec.com

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Zetec holds ISO 9001 and ISO/IEC 17025 certifications

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