THE VXtrack DYNAMIC TRACKING MODULE IS A KEY COMPONENT OF TRUaccuracy™ TECHNOLOGY, WHICH GUARANTEES THE HIGHEST PRECISION. TEAMED WITH THE C-Track DUAL CAMERA OPTICAL SENSOR, THE VXtrack MODULE CAN BE USED TO SIMULTANEOUSLY AND CONTINUOUSLY MEASURE POSITIONS AND ORIENTATIONS IN SPACE WITH GREAT PRECISION, WHICH MAKES IT POSSIBLE TO CONTROL DISPLACEMENTS, DRIVE ASSEMBLY PROCESSES OR MEASURE DEFORMATIONS.

COMBINED WITH THE HandyPROBE ARM-FREE CMM, VXtrack PROVIDES A COMPLETE PORTABLE 3D MEASURING SOLUTION OFFERING BOTH PROBING INSPECTION AND DYNAMIC MEASUREMENT CAPABILITIES. FURTHERMORE, THE PROBING STYLYUS IS VERY USEFUL FOR ALIGNING PARTS WITH RESPECT TO A REFERENTIAL (DETERMINED THROUGH A GROUP OF REFLECTORS), ALLOWING FOR MOVEMENT OR DEFORMATION MONITORING DIRECTLY ON THE PART’S REFERENTIAL.

THE VXtrack MODULE HAS NUMEROUS APPLICATIONS, INCLUDING ROBOT CALIBRATION AND GUIDANCE, MONITORING OF COMPLEX ASSEMBLY PROCESSES, REAL-TIME COMPENSATION OF MACHINING TOOL-GENERATED ERRORS AND MONITORING OF DEFORMATIONS DURING TESTING.

BENEFITS OF THE VXtrack DYNAMIC TRACKING MODULE

- TRUaccuracy™ technology that guarantees the highest precision, in the lab or on the shop floor
- Simultaneous measuring of the set of reflectors, for increased 6 DOF precision (position and orientation)
- A complete inspection and dynamic measurement solution integrating the HandyPROBE portable CMM and compatible with the MetraSCAN optical CMM 3D scanner
- Passive (wireless), low cost and ultralight (<1g) reflectors, available in adhesive or magnetic versions and 100% compatible with photogrammetric measures (for resetting with a global measure in the case of large equipment)
MAIN FEATURES

- Rate of up to 24,000 3D points per second with oversampling (3000 without oversampling)
- 6 DOF measuring (position and orientation) of a rigid set of reflectors
- Synchronous measurement of the reflector set
- Measuring volume from 3.8 to 14.8 m³ (133 ft³ to 518 ft³)
- One unique system for 3D inspection and 3D dynamic measurement
- Real-time curve display in VXelements
- Export to .csv format
- API for interfacing with third-party applications
- Acquisition synchronization capability through external trigger input

APPLICATIONS BY INDUSTRY

Aerospace:
- Assembly control and monitoring
- Deformation monitoring (wings, landing gears, tires)

Automotive:
- Movement monitoring on running parts (engine, exhaust, wheels)
- Dynamic process control (closing of doors and hood)
- Deformation monitoring (chassis, seats)
- Crash test preparation (pre-positioning)

Robotics:
- On-site calibration and assessment
- Real-time course correction
- Computerized guidance of assemblies

Biomechanics:
- Motion capture

<table>
<thead>
<tr>
<th>TECHNICAL SPECIFICATIONS</th>
<th>VXtrack + C-Track 380</th>
<th>VXtrack + C-Track 780</th>
<th>VXtrack + C-Track 1480</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEASUREMENT RATE (REFLECTORS/S) (^{(1)})</td>
<td>Up to 3,000</td>
<td>Up to 3,000</td>
<td>Up to 3,000</td>
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<tr>
<td>MEASUREMENT RATE WITH OVERSAMPLING (REFLECTORS/S) (^{(1)})</td>
<td>Up to 24,000</td>
<td>Up to 24,000</td>
<td>Up to 24,000</td>
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<tr>
<td>REPEATABILITY (mm/in.) (^{(2)})</td>
<td>Up to 0.0025 / 0.0001</td>
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<tr>
<td>VOLUMETRIC ACCURACY (mm/in.) (^{(2)})</td>
<td>0.057 / 0.0022</td>
<td>0.065 / 0.0026</td>
<td>0.130 / 0.0051</td>
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\(^{(1)}\) For 100 reflectors
\(^{(2)}\) RMS value