RAPID3D™ TECHNOLOGY SOLUTIONS

TECHNICAL SPECIFICATIONS

CREAFORM METRASCAN BLACK ELITE

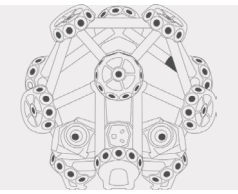
THE METRASCAN 3D OPTICAL CMM SCANNER IS SYNONYMOUS WITH SPEED, ACCURACY AND VERSATILITY. AS THE PERFECT METROLOGY SOLUTION FOR QUALITY CONTROL, QUALITY ASSURANCE, INSPECTION AND REVERSE ENGINEERING APPLICATIONS.

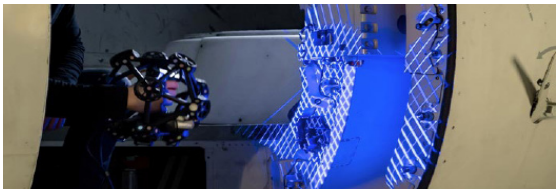
- Metrology-grade measurements: accuracy of up to 0.025 mm (0.0009 in.)
- 15 Blue Laser Crosses, No Warm Up
- 1,800,000 measurements/second
- Scan any type of material, even black, multicolored and shiny surfaces

2023 STRATEGIC PARTNER

CREAFORM

AMETEK





Creaform MetraSCAN Black Elite		
ACCURACY		Up to 0.025 mm (0.0009 in.)
VOLUMETRIC ACCURACY	**9.1 m3 (320 ft3)**	0.064 mm (0.0025 in.)
	16.6 m3 (586 ft3)	0.078 mm (0.0031 in.)
VOLUMETRIC ACCURACY WITH MAX-SHOT 3D or C-LINK	**MaxSHOT Next Elite**	0.044 mm + 0.015 mm/m (0.0017 in + 0.00018 in/ft)
MEASUREMENT RESOLUTION		0.025 mm (0.0009 in.)
MESH RESOLUTION		0.100 mm (0.0039 in.)
SCANNING AREA		310 x 350 mm (12.2 x 13.8 in.)
STAND-OFF DISTANCE		300 mm (11.8 in.)
DEPTH OF FIELD		250 mm (9.8 in.)
LIGHT SOURCE		15 blue laser crosses (+ 1 extra line)
LASER CLASS		2M (eye-safe)
MEASUREMENT RATE		1,800,000 measurements/s
WEIGHT		1.49 kg (3.28 lbs.)
DIMENSIONS (LxWxH)		289 x 235 x 296 mm (11.4 x 9.3 x 11.7 in.)
PART SIZE RANGE (recommended)		0.2–6 m (0.7–20 ft.)
SOFTWARE		VXelements
OPERATING TEMPERATURE RANGE		5–40°C (41–104°F)
OPERATING HUMIDITY RANGE (non-condensing)		10–90%
COMPATIBLE SOFTWARE		3D Systems (Geomagic® Solutions), InnovMetric Software (PolyWorks), Dassault (CATIA V5 and SolidWorks), PTC (Pro/ENGINEER), Siemens (NX and Solid Edge), Autodesk (Inventor, Alias, 3ds Max, Maya, Softimage).
OUTPUT FORMATS		.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr
(1) MetraSCAN BLACK and MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard.		(2) MetraSCAN BLACK and MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Sphere-spacing error is assessed with traceable length artefacts by measuring these at different locations and orientations within the working volume.
(3) The volumetric accuracy performance of the system when using a MaxSHOT 3D cannot be superior to the default volumetric accuracy performance for a given model		(5) Also compatible with all major metrology, CAD, and computer graphic software through mesh and point cloud import