CREAFORM™
ACADEMIA

3D MEASUREMENT SOLUTIONS
DESIGNED FOR THE ACADEMIC WORLD

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CREAFORM

AMETEK®
ULTRA PRECISION TECHNOLOGIES

ARE YOU READY TO TAKE YOUR TEACHING OR RESEARCH TO A WHOLE NEW LEVEL?

Discover Creaform ACADEMIA™, a solution suite for forward-thinking teachers and researchers looking to inspire, collaborate, and push the innovation envelope forward using the latest advancements in 3D measurement technologies.

With this educational program, Creaform goes beyond delivering didactic tools and provides a complete and collaborative skill-nurturing academic solution. The suite lets you choose from our full line of 3D scanners and portable CMM, free application software, complimentary add-ons as well as useful tools tailored to get you started with industrial 3D measurement solutions.

ACADEMIA

TEACHING

INDUSTRY ADVANCEMENTS WAIT FOR NO ONE— NOT EVEN IN EDUCATION

THE ACADEMIA TEACHING PACKAGE INCLUDES

- ACADEMIA professional-grade 3D scanner (multi-unit packages available)
- 5-year ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software modules
- Self-training documentation on ACADEMIA 3D scanners

FEATURES YOUR TEACHING CURRICULUM CAN BENEFIT FROM

- Turnkey solution with all the necessary add-ons to enrich your syllabus
- The industry's most affordable professional-grade 3D scanner dedicated to teaching applications
- Software to use 3D scans in real-world engineering workflows
- Portable, fast, and easy-to-use 3D measurement solutions: become an expert in no time!

ACADEMIA

RESEARCH

ADVANCE YOUR MOST DEMANDING RESEARCH PROJECTS USING 3D MEASUREMENT SOLUTIONS

THE ACADEMIA RESEARCH PACKAGE INCLUDES

- Metrology-grade portable 3D scanner(s) and portable CMM
- 5-year ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software modules

FEATURES TO HELP YOU TOWARDS YOUR NEXT RESEARCH BREAKTHROUGH

- Turnkey solution designed to carry out complex projects
- Complete portfolio of metrology-grade 3D scanners and a portable CMM at a special pricing for researchers
- Portable, fast, and easy-to-use 3D measurement solutions

50
FREE 50-SEATS
NETWORK LICENSE

FREE
TEACHING KITS

COMPLEMENTARY DIDACTIC MATERIAL[1]

Ready-to-use material that is in line
with today's industry requirements, all of which covers
three main themes:

FREE
SOFTWARE

CREAFORM ACADEMIA SOFTWARE PACKAGE

Scanning is the first step. Powerful and fully integrated,
our complementary 3D application software[2] suite
provides the tools you need to tackle any type of
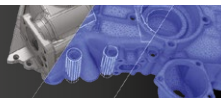conventional or ahead-of-the-curve engineering workflows.

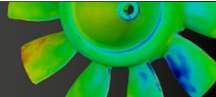|	
3D SCANNING	**3D MEASUREMENT SOFTWARE PLATFORM** VXelements™
REVERSE ENGINEERING	**SCAN-TO-CAD SOFTWARE MODULE** VXmodel™
INSPECTION	**DIMENSIONAL INSPECTION SOFTWARE MODULE** VXinspect|Elite™

**Bring your classes to the next level
with Creaform ACADEMIA**

- Customizable teaching presentations
- Video tutorials and self learning documentation
- Pre-built lab exercises with sample datasets
  for real hands-on experience with 3D files

THE ULTIMATE STARTER KIT
FOR EASY INTEGRATION
INTO ENGINEERING CLASSES

(1) Creaform ACADEMIA documentation is available in English only.
(2) With the purchase of a 3D measurement solution from Creaform.

TECHNICAL SPECIFICATIONS

	ACADEMIA™			Go!SCAN 3D™	HandySCAN 3D™ (1)		MetraSCAN 3D™ (1)	
	ACADEMIA 10™	ACADEMIA 50™	ACADEMIA 20™	Go!SCAN SPARK™	HandySCAN 307™	HandySCAN BLACK™|Elite	MetraSCAN 357™	MetraSCAN BLACK™|Elite
PART SIZE RANGE (recommended)	0.3–3 m (1–10 ft)		0.05–0.5 m (2–20 in)	0.1–4 m (0.3–13 ft)	0.1–4 m (0.3–13 ft)	0.05–4 m (0.3–13 ft)	0.2–6 m (0.7–20 ft)	
ACCURACY	Up to 0.250 mm (0.01 in) (2)	Up to 0.1 mm (0.004 in) (2)		Up to 0.050 mm (0.0020 in) (2)	Up to 0.040 mm (0.0016 in) (2)	0.025 mm (0.0009 in) (3)	Up to 0.040 mm (0.0016 in) (2)	0.025 mm (0.0009 in) (3)
VOLUMETRIC ACCURACY (4) (based on working volume) — 9.1 m³ (320 ft³)	N/A	N/A	N/A	N/A	N/A	N/A	0.086 mm (0.0034 in)	0.064 mm (0.0025 in)
— 16.6 m³ (586 ft³)							0.122 mm (0.0048 in)	0.078 mm (0.0031 in)
VOLUMETRIC ACCURACY (based on part size)	0.500 mm/m (0.020 in/ft) (5)	0.300 mm/m (0.012 in/ft) (5)		0.050 mm + 0.150 mm/m (0.0020 in + 0.0018 in/ft) (5)	0.020 mm + 0.100 mm/m (0.0008 in + 0.0012 in/ft) (6)	0.020 mm + 0.040 mm/m (0.0008 in + 0.0005 in/ft) (6)	N/A	
MEASUREMENT RESOLUTION	0.500 mm (0.020 in)	0.250 mm (0.010 in)	0.100 mm (0.0039 in)	0.100 mm (0.0039 in)	0.100 mm (0.0039 in)	0.025 mm (0.0009 in)	0.100 mm (0.0039 in)	0.025 mm (0.0009 in)
MESH RESOLUTION	0.500 mm (0.020 in)		0.100 mm (0.004 in)	0.200 mm (0.0078 in)	0.200 mm (0.0078 in)	0.100 mm (0.0039 in)	0.200 mm (0.0078 in)	0.100 mm (0.0039 in)
SCANNING AREA	380 x 380 mm (15 x 15 in)		143 x 108 mm (5.6 x 4.3 in)	390 x 390 mm (15.4 x 15.4 in)	275 x 250 mm (10.8 x 9.8 in)	310 x 350 mm (12.2 x 13.8 in)	275 x 250 mm (10.8 x 9.8 in)	310 x 350 mm (12.2 x 13.8 in)
STAND-OFF DISTANCE	400 mm (15.75 in)		380 mm (15 in)	400 mm (15.75 in)	300 mm (11.8 in)		300 mm (11.8 in)	
DEPTH OF FIELD	250 mm (10 in)		100 mm (4 in)	300 mm (11.8 in)	250 mm (9.8 in)		200 mm (7.9 in)	250 mm (9.8 in)
LIGHT SOURCE	White light (LED)			White light (99 stripes)	7 red laser crosses	11 blue laser crosses (+ 1 extra line)	7 red laser crosses	15 blue laser crosses (+ 1 extra line)
LASER CLASS	N/A	24 bits		N/A	2M (eye safe)		2M (eye safe)	
TEXTURE RESOLUTION		50 to 150 DPI	50 to 250 DPI	50 to 200 DPI	N/A		N/A	
POSITIONING METHODS	Geometry and/or targets	Geometry and/or targets and/or texture		Geometry and/or targets and/or texture	Targets		Targets (optional)	
MEASUREMENT RATE	550,000 measurements/s			1,500,000 measurements/s	480,000 measurements/s	1,300,000 measurements/s	480,000 measurements/s	1,800,000 measurements/s
WEIGHT	0.85 kg (1.9 lb)	0.95 kg (2.1 lb)		1.25 kg (2.7 lb)	0.85 kg (1.9 lb)	0.94 kg (2.1 lb)	Scanner: 1.38 kg (3.0 lb) C-Track: 5.7 kg (12.5 lb)	Scanner: 1.49 kg (3.28 lb) C-Track: 5.7 kg (12.5 lb)
DIMENSIONS (LxWxH)	96 x 140 x 258 mm (3.8 x 5.5 x 10.2 in)	150 x 171 x 251 mm (5.9 x 6.7 x 9.9 in)	154 x 178 x 235 mm (6 x 7 x 9.2 in)	89 x 114 x 346 mm (3.5 x 4.5 x 13.6 in)	77 x 122 x 294 mm (3 x 4.8 x 11.6 in)	79 x 142 x 288 mm (3.1 x 5.6 x 11.3 in)	Scanner: 289 x 235 x 296 mm (11.4 x 9.3 x 11.7 in) C-Track: 1031 x 181 x 148 mm (40.6 x 7.1 x 5.8 in)	
OPERATING TEMPERATURE RANGE	5–40°C (41–104°F)							
OPERATING HUMIDITY RANGE (non-condensing)	10–90%							
CERTIFICATIONS	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with rechargeable batteries (when applicable), IP50, WEEE							

FEATURE COMPARISON

	ACQUISITION MODULES (7)	APPLICATION MODULES	
	VXscan™ / VXprobe™ / VXshot™	VXmodel™	VXinspect|Elite™
MULTIPLE MEASUREMENT MODE	●		
MESH EDITING		●	
ALIGNMENT	●	●	●
GEOMETRIC ENTITIES	●	●	●
NURBS SURFACE		●	
TRANSFER-TO-CAD SOFTWARE		●	
CAD IMPORT		●	●
REPORTING			●

(1) Other models of HandySCAN 3D and MetraSCAN 3D are also available.
(2) Typical value for diameter measurement on a calibrated sphere artefact.
(3) HandySCAN BLACK|Elite and MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Probing error performance is assessed with diameter measurements on traceable sphere artefacts.
(4) 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. MetraSCAN 357: Value for sphere spacing measurement on calibrated.

(5) With positioning targets or with an object presenting adequate geometry and/or color texture for positioning.
(6) HandySCAN 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.
HandySCAN 307: Value for spheres spacing measurement on a calibrated length artefact.
(7) Acquisition modules are included with all Creaform technologies.