

# CREAFORM™

ACADEMIA

**3D MEASUREMENT SOLUTIONS  
DESIGNED FOR THE ACADEMIC WORLD**



**CREAFORM**

**AMETEK®**  
ULTRA PRECISION TECHNOLOGIES



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

Discover Creaform ACADEMIA™, a brand-new 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 new educational program, Creaform goes beyond delivering didactic tools and provides a complete and collaborative skill-nurturing academic solution. The suite let's 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

- 3 units of ACADEMIA professional-grade 3D scanners (other options available)
- 5-year worry-free ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software
- 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 worry-free ACADEMIA Customer Care Plan
- Software suite including our reverse engineering and inspection software

### 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





Start gaining ground with a **Creaform ACADEMIA FREE PACKAGE!**  
**NO PURCHASE NECESSARY!**



## FREE TEACHING KITS

### COMPLEMENTARY DIDACTIC MATERIAL

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 suite provides the tools you need to tackle any type of conventional or ahead-of-the-curve engineering workflows.

3D SCANNING



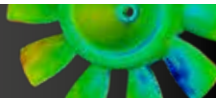
3D MEASUREMENT SOFTWARE PLATFORM  
VXelements™

REVERSE ENGINEERING



SCAN-TO-CAD SOFTWARE MODULE  
VXmodel™

INSPECTION



DIMENSIONAL INSPECTION SOFTWARE MODULE  
VXinspect™

### 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**

## TECHNICAL SPECIFICATIONS

|                                                                        | ACADEMIA™                                                                                  | Go!SCAN 3D™                          |                    | HandySCAN 3D™ <sup>(1)</sup>     | MetraSCAN 3D™ <sup>(1)</sup>        |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------|--------------------|----------------------------------|-------------------------------------|
|                                                                        | ACADEMIA 3D scanner™                                                                       | Go!SCAN 20™                          | Go!SCAN 50™        | HandySCAN 700™                   | MetraSCAN 750™ Elite                |
| <b>PART SIZE RANGE</b><br>(recommended)                                | 0.3–3 m                                                                                    | 0.05–0.5 m                           | 0.3–3 m            | 0.1–4 m                          | 0.2–6 m                             |
| <b>ACCURACY</b> <sup>(2)</sup>                                         | Up to 0.250 mm                                                                             | Up to 0.100 mm                       |                    | Up to 0.030 mm                   | Up to 0.030 mm                      |
| <b>VOLUMETRIC ACCURACY</b> <sup>(3)</sup><br>(based on working volume) | 9.1 m <sup>3</sup>                                                                         | N/A                                  |                    | N/A                              | 0.064 mm                            |
|                                                                        | 16.6 m <sup>3</sup>                                                                        | N/A                                  |                    | N/A                              | 0.078 mm                            |
| <b>VOLUMETRIC ACCURACY</b><br>(based on part size)                     | 0.500 mm/m <sup>(4)</sup>                                                                  | 0.300 mm/m <sup>(4)</sup>            |                    | 0.020 mm + 0.060 mm/m            | N/A                                 |
| <b>RESOLUTION</b>                                                      | 0.500 mm                                                                                   | 0.100 mm                             | 0.500 mm           | 0.050 mm                         | 0.050 mm                            |
| <b>SCANNING AREA</b>                                                   | 380 x 380 mm                                                                               | 143 x 108 mm                         | 380 x 380 mm       | 275 x 250 mm                     | 275 x 250 mm                        |
| <b>STAND-OFF DISTANCE</b>                                              | 400 mm                                                                                     | 380 mm                               | 400 mm             | 300 mm                           | 300 mm                              |
| <b>DEPTH OF FIELD</b>                                                  | 250 mm                                                                                     | 100 mm                               | 250 mm             | 250 mm                           | 200 mm                              |
| <b>LIGHT SOURCE</b>                                                    | White light (LED)                                                                          | White light (LED)                    |                    | 7 laser crosses (+ 1 extra line) | 7 laser crosses (+ 1 extra line)    |
| <b>LASER CLASS</b>                                                     | N/A                                                                                        | N/A                                  |                    | 2M (eye safe)                    | 2M (eye safe)                       |
| <b>TEXTURE RESOLUTION</b>                                              |                                                                                            | 50 to 250 DPI                        | 50 to 150 DPI      | N/A                              | N/A                                 |
| <b>POSITIONING METHODS</b>                                             | Geometry and/or targets                                                                    | Geometry and/or color and/or targets |                    | Targets                          | Targets (optional)                  |
| <b>MEASUREMENT RATE</b>                                                | 550,000 measurements/s                                                                     | 550,000 measurements/s               |                    | 480,000 measurements/s           | 480,000 measurements/s              |
| <b>WEIGHT</b>                                                          | 850 g                                                                                      | 0.93 kg                              | 0.95 kg            | 0.85 kg                          | Scanner: 1.38 kg<br>C-Track: 5.7 kg |
| <b>DIMENSIONS</b> (LxWxH)                                              | 96 x 140 x 258 mm                                                                          | 154 x 178 x 235 mm                   | 150 x 171 x 251 mm | 77 x 122 x 294 mm                | 289 x 235 x 296 mm                  |
| <b>OPERATING TEMPERATURE RANGE</b>                                     | 5–40°C                                                                                     |                                      |                    |                                  |                                     |
| <b>OPERATING HUMIDITY RANGE</b><br>(non-condensing)                    | 10–90%                                                                                     |                                      |                    |                                  |                                     |
| <b>CERTIFICATIONS</b>                                                  | EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), IP50, WEEE |                                      |                    |                                  |                                     |

## FEATURE COMPARISON

|                                                          | ACQUISITION MODULES <sup>(5)</sup> | APPLICATION MODULES <sup>(6)</sup> |            |
|----------------------------------------------------------|------------------------------------|------------------------------------|------------|
|                                                          | VXscan™ / VXprobe™ / VXshot™       | VXmodel™                           | VXinspect™ |
| <b>MULTIPLE MEASUREMENT MODE</b>                         | ●                                  |                                    | ●          |
| <b>MESH EDITING</b>                                      |                                    | ●                                  |            |
| <b>ALIGNMENT</b>                                         | ●                                  | ●                                  | ●          |
| <b>GEOMETRIC ENTITIES</b>                                | ●                                  | ●                                  | ●          |
| <b>NURBS SURFACE</b>                                     |                                    | ●                                  |            |
| <b>TRANSFER-TO-CAD SOFTWARE</b>                          |                                    | ●                                  |            |
| <b>CAD IMPORT</b>                                        |                                    | ●                                  | ●          |
| <b>GEOMETRIC DIMENSIONING AND TOLERANCING (GD&amp;T)</b> |                                    |                                    | ●          |
| <b>REPORTING</b>                                         |                                    |                                    | ●          |

(1) Other models of HandySCAN 3D and MetraSCAN 3D are also available.

(2) Typical value for diameter measurement on a calibrated sphere artefact.

(3) Based on the ASME B89.4.22 standard. Performance is assessed with traceable length artefacts by measuring these at different locations and orientations within the working volume of the C-Track™ (value = maximum deviation). Performance of the HandyPROBE Next™ and MetraSCAN 3D is dependent on the working volume in which the measurement is made: 9.1 m<sup>3</sup> or 16.6 m<sup>3</sup>.

(4) With positioning targets or with an object presenting adequate geometry/color texture for positioning.

(5) Acquisition modules are included with all Creaf orm technologies.

(6) ACADEMIA versions of VXmodel and VXinspect do not support mesh import. Only available with Creaf orm technologies.