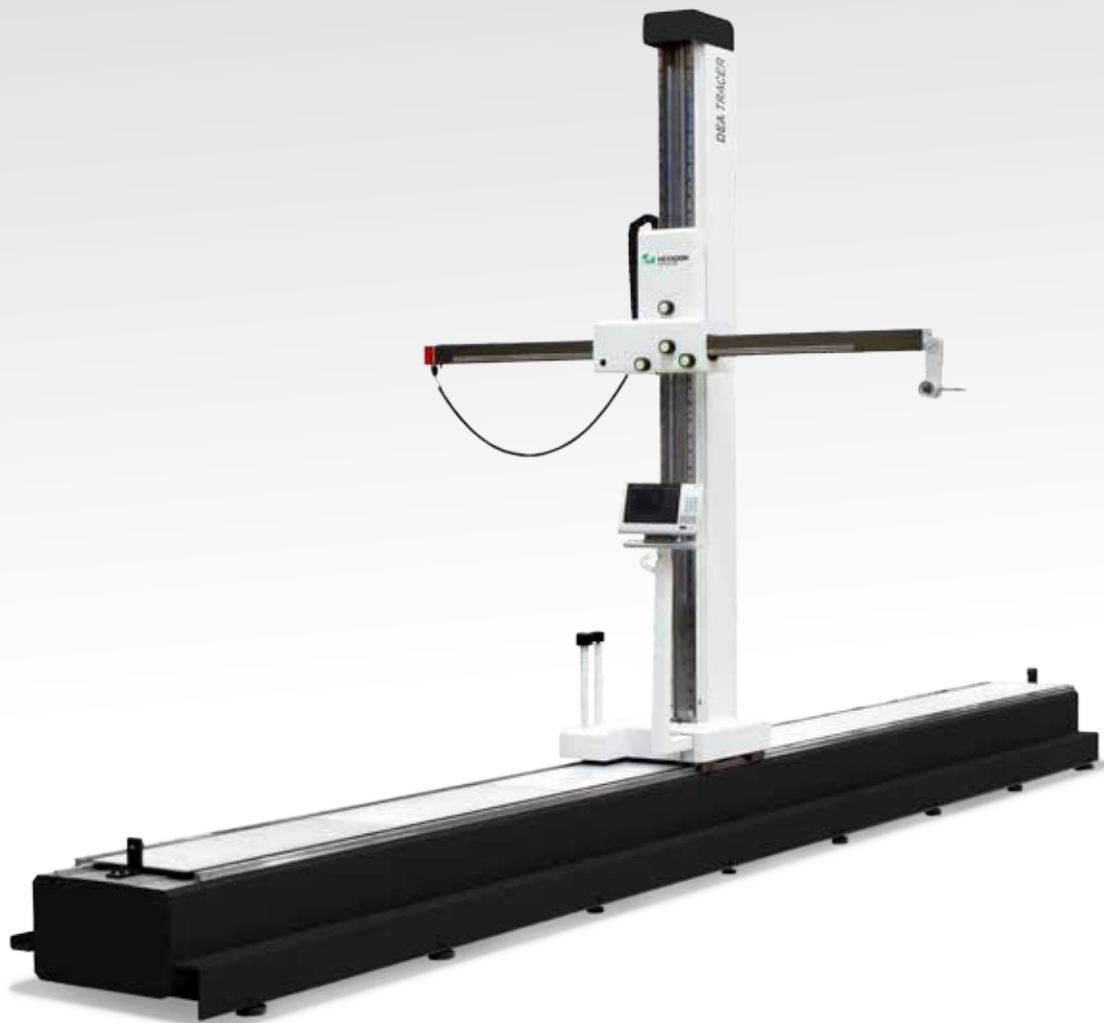




# DEA TRACER

Horizontal arm coordinate measuring machine and scribing tool



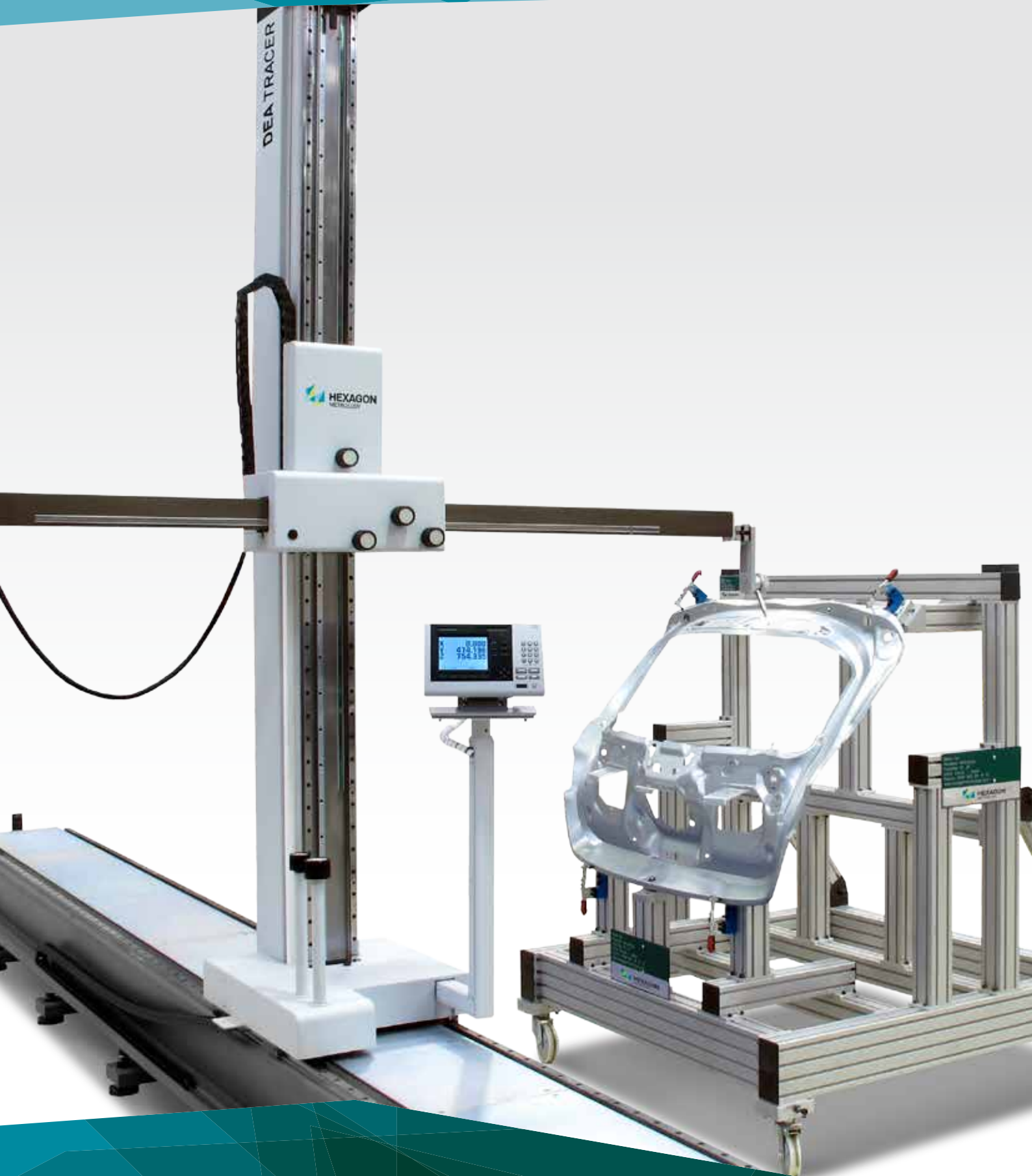
# ALL YOU NEED IS DEA TRACER

DEA TRACER is the ideal tool for small and medium-sized companies – such as design studios, metal-working companies or joineries. This horizontal arm coordinate measuring machine enables you to manage both: measuring and scribing. Easy and fast.

Thanks to its open structure DEA TRACER measures and scribes medium- to large-sized workpieces such as design models, mould and die cores, carpentry structures or sheetmetal parts. The basic model of DEA TRACER consists of a simple single-arm configuration optimized for easy manual motion. The horizontal arm is always balanced out, thus, you can position the arm precisely without fatigue, even after extensive use. Also a digital readout and the HH-I probe head are part of the standard package.

## **Simple concept. Open for change.**

Simplicity is at DEA TRACER's core. However, it is flexible enough to satisfy also more demanding needs – whether when it comes to measuring or scribing. Optionally DEA TRACER is available as a dual arm version. Also special work tables, a scribing kit and the measurement software PC-DMIS extend the CMM's usability even further.



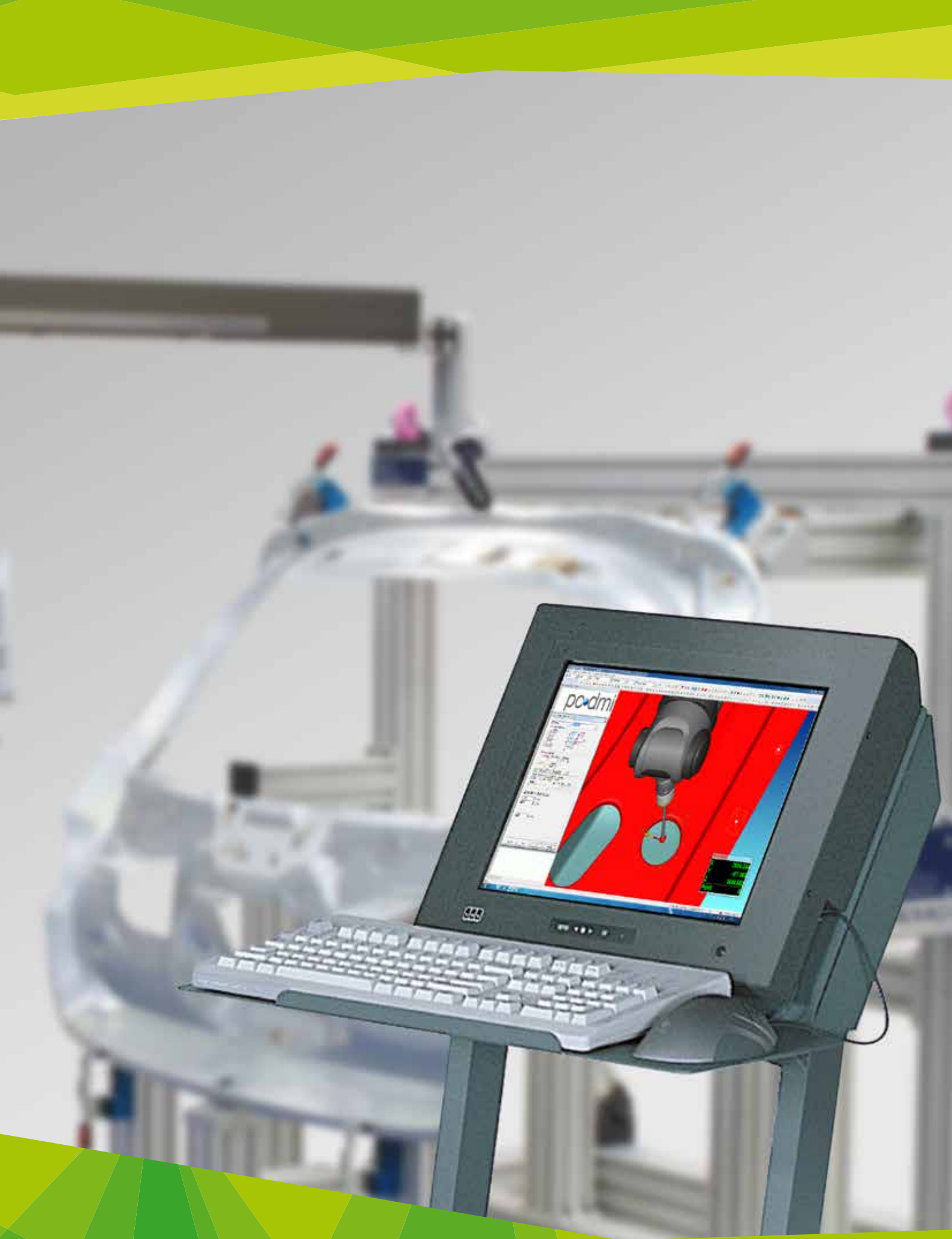
# MEASURE...

When it comes to measuring DEA TRACER is as reliable as the most advanced CMMs. At the same time it is easier to use than many other CMMs thanks to its manual handling. In its basic form DEA TRACER offers simple or advanced digital readouts with various functions to visualize measurement data. For more complex geometric inspection jobs we equip DEA TRACER with our measurement software PC-DMIS which is available in different versions:

- PC-DMIS PRO is the baseline version of PC-DMIS offering a full range of measurement, evaluation and reporting functions. It's ideal for those who don't use CAD in their inspection process.
- PC-DMIS CAD brings CAD to the inspection process. PC-DMIS CAD lets you create inspection programs and evaluate measurement results taking full advantage of your CAD models.
- Upgrade to PC-DMIS CAD++ if you want to compare your measurement data directly against the CAD model. This software version lets you measure the most complex parts with unsurpassed speed and accuracy.

Mobile remote terminals are also available as an interface to the PC-DMIS software. They allow interaction with the software from any point in the work volume.

Each PC-DMIS version is carefully tailored to meet your needs. Also, PC DMIS offers a wide range of optional modules for specific tasks. Fine-tune the software exactly as you need it.



## ...AND MORE!

With a flick of the wrist your measuring machine transforms into a scribing tool. Simply remove the probe head and substitute it with the scribing holder. Your device is ready for comfortable and precise scribing in no time.

Tungsten carbide tips are available to create particularly clean-cut lines even on the most difficult surfaces. DEA TRACER also tackles hard-to-reach surfaces with the help of the special 5-way-tool-holding-cube plus extensions and angular adapters.

The standard scribing kit, in addition to straight line scribers, includes a compass for the drawing of circles and a special retractable tip. Additional accessories can be manufactured according to your specific scribing requirements.



# HIGHLIGHTS & BENEFITS

- Best price-performance-ratio in its class.
- Ideal for manual measurements and scribing of pieces with medium to low tolerances.
- Various ranges for X, Y and Z axes.
- Horizontal single or double arm structure allows easy loading and unloading of parts.
- Working plane available as an option. Working plane also available with special machining (hole pattern, U-slot, T-slot, or other special machining).
- Minimum installation time thanks to simple construction.
- Axes slide on linear guideways and recirculating bearings, no air supply required.
- Axes are manually handled via control knobs, independent brakes on all axes to lock and unlock every axis separately.
- Scales and linear optical transducers on all axes.
- Mechanical horizontal arm counterbalance system with fall-stop safety system.
- Standard electronic probe head for measurement applications.
- Available with optional scribing kit and accessories for any kind of scribing application.
- Wide range of simple or advanced digital readouts, alternatively PC-DMIS measurement software for direct check of measurements even on the mathematical reference model.



# TECHNICAL SPECIFICATIONS

## **Mechanical Structure**

Manual horizontal arm coordinate measuring machine. Runway-type configuration.  
Main X-axis and vertical Z-axis made from stabilized electrowelded steel. Horizontal Y-axis made from extruded anodized aluminium alloy.

## **Sliding System**

X-axis and Z-axis with linear guideways and recirculating bearings. Y-axis with bearings drive system on friction shaft.  
All axes offer control knobs and independent brakes.

## **Horizontal Arm Counterbalance System**

Mechanical, with fall-stop safety system.

## **Air Supply**

Not required.

## **Measuring System**

Scales and linear optical transducers on all axes.

## **Operator Interface**

Heidenhain QUADRA CHEK ND1103 coordinate digital readout.

## **Electronic Probe Head**

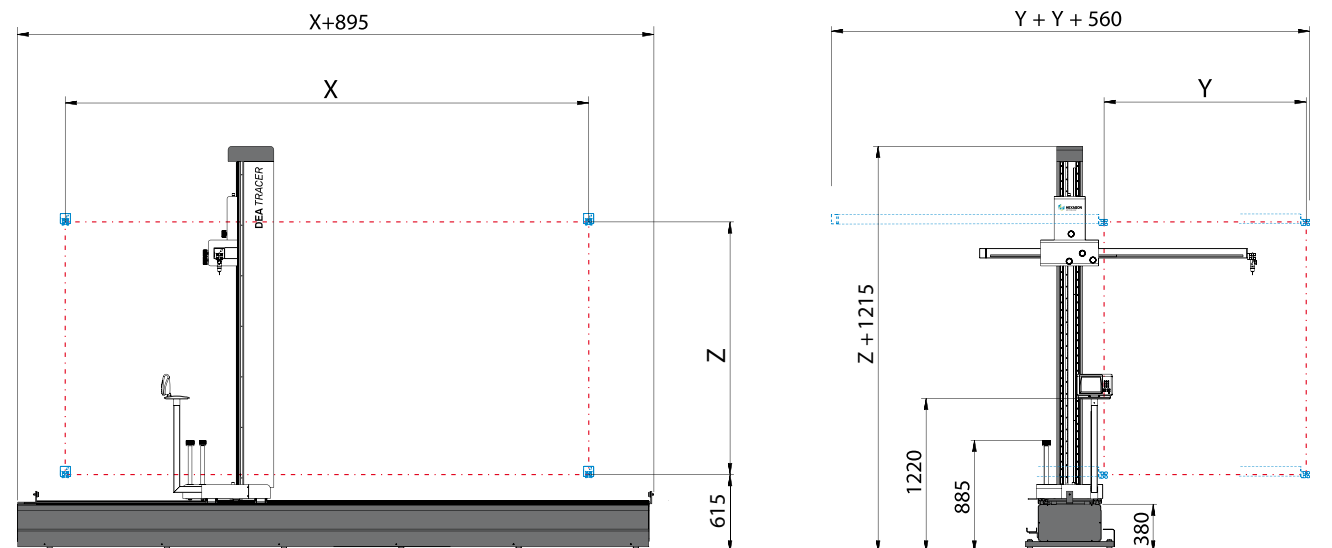
HH-I probe head with a stylus kit and qualification sphere complete with a pillar.

## **Metrological Specifications according to ISO 10360-2**

$MPE_e = 45 + 30L \mu\text{m}$  (L in meters)

## **Environmental Conditions**

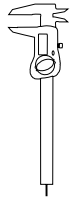
Temperature range for measurement operations:  $20 \text{ }^\circ\text{C} \pm 6 \text{ }^\circ\text{C}$ .



Strokes (in mm)		
X	Y	Z
from 2000 to 12000 (step 500 mm)	from 1000 to 2000 (single arm) from 2000 to 4000 (double arm) (step 100 mm)	from 1000 to 3000 (step 100 mm)

## Main Options

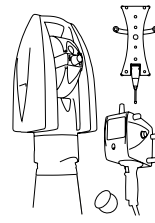
- Heidenhain QUADRA CHEK ND1404 digital coordinate readout
- PC-DMIS PRO, PC-DMIS CAD or PC-DMIS CAD++ measurement software
- Scribing Kit
- HH-MI probe head or HH-MI-M indexable probe head with HP-TM probe
- Dual arm configuration
- Work tables with standard drilling, U-slots, T-slots or other special machining
- Installation of the ram on an existing table (retrofit solution)



PRECISION MEASURING INSTRUMENTS



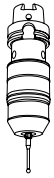
PORTABLE MEASURING ARMS



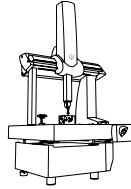
LASER TRACKERS & STATIONS



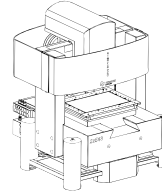
WHITE LIGHT SCANNERS



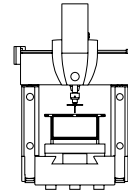
SENSORS



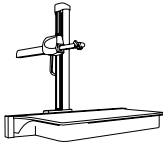
BRIDGE CMMS



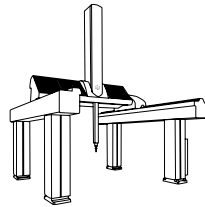
MULTISENSOR & OPTICAL SYSTEMS



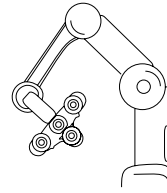
ULTRA HIGH ACCURACY CMMS



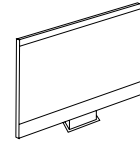
HORIZONTAL ARM CMMS



GANTRY CMMS



AUTOMATED APPLICATIONS



SOFTWARE SOLUTIONS



## HEXAGON METROLOGY

Hexagon Metrology offers a comprehensive range of products and services for all industrial metrology applications in sectors such as automotive, aerospace, energy and medical. We support our customers with actionable measurement information along the complete life cycle of a product – from development and design to production, assembly and final inspection.

With more than 20 production facilities and 70 Precision Centers for service and demonstrations, and a network of over 100 distribution partners on five continents, we empower our customers to fully control their manufacturing processes, enhancing the quality of products and increasing efficiency in manufacturing plants around the world.

For more information, visit [www.hexagonmetrology.com](http://www.hexagonmetrology.com)

Hexagon is a leading global provider of information technologies that drive productivity and quality across industrial and geospatial applications. Hexagon's solutions integrate sensors, software, domain knowledge and customer workflows into intelligent information ecosystems that deliver actionable information. They are used in a broad range of vital industries.

Hexagon (Nasdaq Stockholm: HEXA B) has more than 15,000 employees in 46 countries and net sales of approximately 2.6bn EUR.

Learn more at [www.hexagon.com](http://www.hexagon.com)

© 2015 Hexagon Metrology. Part of Hexagon

All rights reserved. Due to continuing product development, Hexagon Metrology reserves the right to change product specifications without prior notice.

Printed in Germany, January 2015