



**SEMPRE**  
CONNECTED METROLOGY

**INDUSTRIAL  
METROLOGY**

**INDUSTRIAL  
SOFTWARE**

**MEASURING  
INSTRUMENTS**

**ENGINEERING  
SERVICES**

**LEAN  
ENTERPRISE**

[TheSempreGroup.com](http://TheSempreGroup.com)

UNIT 1 & 2 BALBRIGGAN  
BUSINESS CAMPUS,  
HARRY REYNOLDS RD,  
BALBRIGGAN,  
CO. DUBLIN

THE LODGE,  
37 BARNETT WAY  
BARNWOOD  
GLOUCESTER  
GL4 3RT

**FIRST OPENING MARCH  
2022 OUR IRELAND  
METROLOGY CENTRE**  
SEE THE LATEST IN  
METROLOGY SYSTEMS AND  
SOFTWARE IN ACTION AND  
BENEFIT FROM OUR LOCAL  
IRISH SUPPORT TEAM.



Contact Us:

+44(0)1452 632 712

IRE 086 0355649

[sales@thesempregroup.com](mailto:sales@thesempregroup.com)

[service@thesempregroup.com](mailto:service@thesempregroup.com)

Our Accreditations:



Our Trade Associations:



# Contents

## INDUSTRIES

Automotive.....	3
Aerospace.....	4
Medical Devices.....	5
Precision Engineering.....	6
Packaging.....	7
Electronics.....	7

## INDUSTRIAL METROLOGY

Optical Shaft Measurement.....	9
Instant 2D Profile Measurement.....	10
CMM Systems.....	11
Multi-Sensing CMMs.....	12
Non-Contact, Automated 3D Measurement.....	13
Articulated Measurement Arms.....	14
2D Field Of View Measurement.....	15
3D White light Scanning & Reverse Engineering.....	16
Roughness And Contour.....	17
Portable Roughness And Contour.....	18
Roundness And Form.....	19
3D Optical Profiling.....	20
Tube And Bore Inspection.....	21
Air Gauging & In-Process Gauging.....	22
Process Automation.....	23
Quality Management Software.....	25
HighQA Software Application Options.....	26
Industrial Data Acquisition Software.....	27
Machine Tool Offset Instruction Software.....	29

## MEASURING INSTRUMENTS

Hand Tools.....	31
Height Gauges.....	32
Tachometers, Stroboscopes & Data Loggers.....	33
Force And Torque.....	34
Thread Depth And Plug Gauges.....	35
Linear Digital Measuring Systems.....	36
Wireless Data Transfer For Gauges.....	37

## ENGINEERING SERVICES

Metrology Fixtures.....	39
Sub-Contract Measurement Services.....	40
Service & Calibration.....	41
UKAS Accredited Verification.....	42
In House Repairs & Calibrations.....	43
Training.....	44
Support Agreements.....	45

## LEAN ENTERPRISE

Operator Guidance & Lean Assembly.....	47
Visual Factory And Factory Furniture.....	48

## OUR EMPLOYEES

## OUR PARTNERS

# The Sempre Group

**Connecting metrology** with your manufacturing to improve productivity and demonstrate industry standards compliance.

## Values

---

**COLLABORATIVE.** We Listen first.

**RESPONSIVE.** We start solving now.

**TAILORED.** We find your answer not an answer.

**INDEPENDENT.** Your solution is unique to you.

# AUTOMOTIVE

*“Thanks to The Sempre Group for all your efforts we received the parts and completed the first cycle of our production run this afternoon, the customer service received is greatly appreciated, please pass on our gratitude.”*

Ralph Gray | Operations Support & MRO  
Manager | Mobile Hydraulic Systems Division  
Europe | Parker Hannifin Manufacturing Ltd

## WE CAN MEASURE:

- ▼ ELECTRIFICATION
- ▼ INJECTION SYSTEMS
- ▼ CYLINDER BLOCKS
- ▼ CYLINDER HEADS
- ▼ POWER TRAIN
- ▼ CRANK SHAFTS
- ▼ DRIVE SHAFTS
- ▼ CAM SHAFTS
- ▼ FASTENERS
- ▼ GEAR BOX
- ▼ CONRODS
- ▼ VALVES
- ▼ ENGINES
- ▼ PISTONS





# AEROSPACE

- ▼ MAJOR AIRFRAME COMPONENTS
- ▼ ALUMINIUM COMPONENTS
- ▼ AERO ENGINES
- ▼ FAN BLADES
- ▼ ACTUATORS
- ▼ LANDING GEAR
- ▼ CABIN STRUCTURES
- ▼ ROTOR ASSEMBLIES, FUEL PIPES, PICO TUBES, ISOLATOR VALVES, FASTENERS AND SEALS



“All the personnel I had contact with were both professional and polite. The products should make a significant impact on our business beyond first expectations. We're happy with the data in the graphical reports and summary status outlining method. It has been a pleasure working with The Sempre Group on this project. We would be keen to use The Sempre Group again if we have any further queries which we need additional support.”

Leading Aircraft Manufacturer

# MEDICAL DEVICES



- ▼ HIP JOINTS
- ▼ PINS
- ▼ BONE SCREWS
- ▼ STENTS
- ▼ BLOOD GLUCOSE TEST STRIPS
- ▼ MEDICAL CUTTERS
- ▼ CATHETERS

*“I would personally like to thank The Sempre Group for your support in providing our new Micro-Vu measurement systems. Your Applications Manager Iain was with us the last couple of days installing the two Micro-Vu systems, he was very professional and helpful in his training with us and a great asset to your company.”*

Engineering Technician |  
Medical Devices Company





# PRECISION ENGINEERING

- ▼ FASTENERS
- ▼ MUNITION
- ▼ ISOLATOR VALVES AND SPOOLS
- ▼ GASKETS AND SEALS
- ▼ SHEET METAL AND FABRICATED PARTS
- ▼ OIL AND GAS EQUIPMENT
- ▼ MOULDS AND DIES
- ▼ TURNED PARTS

*“The service we have received has been faultless in every way from measurement trials at The Sempre Group, on-site appraisal of the machine at PBML through to purchasing and commissioning.”*

Jon Waghorn | Manufacturing Director |  
Perfect Bore Manufacturing Ltd

# PACKAGING

- ▼ BOTTLES
- ▼ CANS
- ▼ VACUUM MOULDED PARTS
- ▼ CONTAINERS
- ▼ CAPS, TAPS AND SEALS
- ▼ PRODUCTION TEMPLATES

“Time taken to measure a part was reduced from 15mins to 4mins per can. The support has been excellent and the staff are always helpful when I ring up.”

UK Leading Can Manufacturer

5.0  
RATING



Plastics Company

Great customer service - very efficient and professional

# ELECTRONICS

- ▼ CIRCUIT BOARDS
- ▼ WAFERS
- ▼ MICROCHIPS
- ▼ CONNECTOR PINS
- ▼ PCB PRINT

# INDUSTRIAL METROLOGY

---

- ▼ OPTICAL SHAFT MEASUREMENT
- ▼ INSTANT 2D PROFILE MEASUREMENT
- ▼ CMM SYSTEMS
- ▼ MULTI-SENSING CMMS
- ▼ NON-CONTACT, AUTOMATED 3D MEASUREMENT
- ▼ ARTICULATED MEASUREMENT ARMS
- ▼ 2D FIELD OF VIEW MEASUREMENT
- ▼ 3D WHITE LIGHT SCANNING & REVERSE ENGINEERING
- ▼ ROUGHNESS AND CONTOUR
- ▼ PORTABLE ROUGHNESS AND CONTOUR
- ▼ ROUNDNESS AND FORM
- ▼ 3D OPTICAL PROFILING
- ▼ TUBE AND BORE INSPECTION
- ▼ AIR GAUGING & IN-PROCESS GAUGING
- ▼ PROCESS AUTOMATION
- ▼ QUALITY MANAGEMENT SOFTWARE
- ▼ HIGHQA SOFTWARE APPLICATION OPTIONS
- ▼ INDUSTRIAL DATA ACQUISITION SOFTWARE
- ▼ MACHINE TOOL OFFSET INSTRUCTION SOFTWARE

# OPTICAL SHAFT MEASUREMENT

## JENOPTIK OPTICLINE

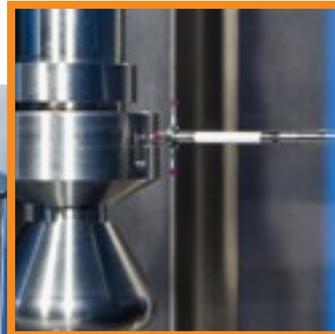
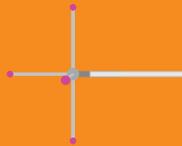
### FAST, OPTICAL SHAFT MEASUREMENT WITH 1-MICRON ACCURACY

- › Fast measurement of cylindrical components with tight tolerances
- › Reduced First-Off cycle times
- › Validate components while in production with this well established, reliable and robust solution specifically designed for shop floor use

#### Tolaris Software

- › Take advantage of automatic data acquisition with the Tolaris software, no more manual data entry needed
- › Intuitive software and simple operation of the machine enables even those with no metrology expertise to get repeatable and accurate results
- › Simple to program, with drag and drop, wizard and live mode for measuring as you go

Now available with a scanning touch probe for inspecting internal and hard-to-see features.

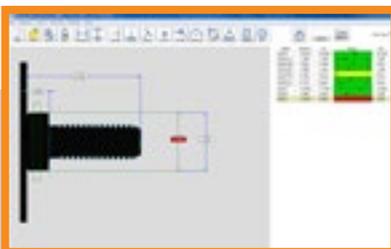


# INSTANT 2D PROFILE MEASUREMENT

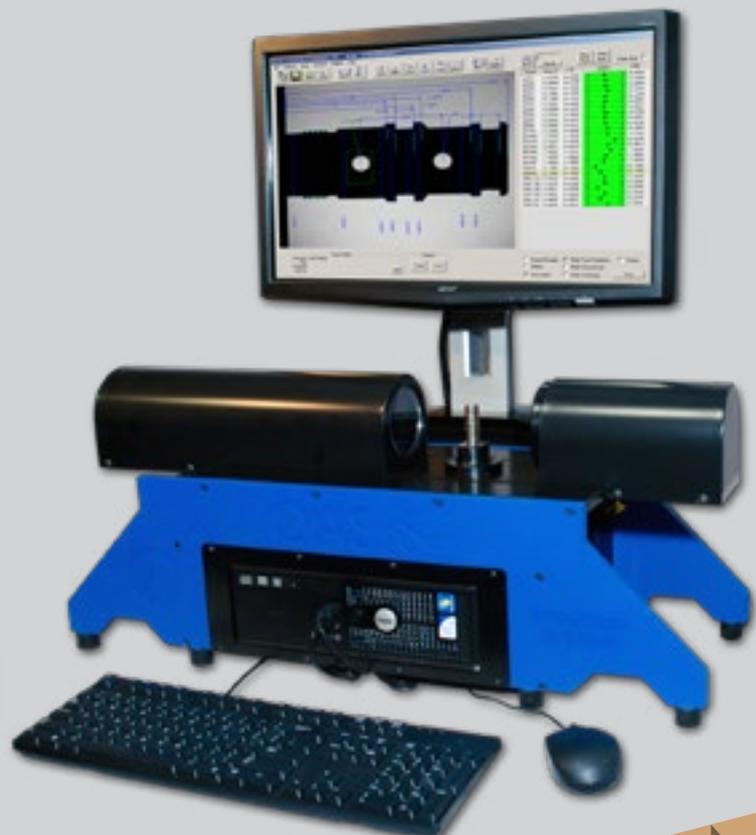
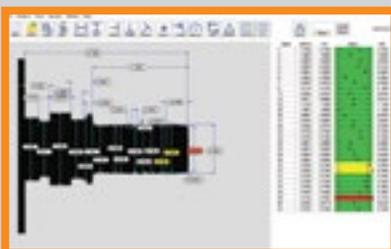
## OASIS HIGH FREQUENCY, INSTANT MEASUREMENT

COMBINING ACCURACY AND PRECISION WITH A FAST, EASY TO USE OPERATOR INTERFACE

- › Continuous image acquisition
- › Instant measurements
- › Simultaneous measurement of multiple dimensions
- › Accurate to +/- 2.5µm
- › Precision optics
- › User friendly full feature software
- › Dimensions saved as a CSV or transferred to SPC software
- › Automatic inspection reporting
- › Lightweight
- › Complete Turn-Key Package



Name	MeasID	LS	Value	U/L
PROF1	20.824	20.800		20.848
PROF2	7.245	7.240		7.250
PROF3	7.073	7.060		7.082
PROF4	7.088	7.074		7.102
PROF5	6.396	6.372		6.420
PROF6	6.448	6.420		6.484
PROF7	6.144	6.087		6.201
PROF8	13.841	13.740		13.942
PROF9	4.444	4.444		4.444
PROF10	12.663	12.663		12.663

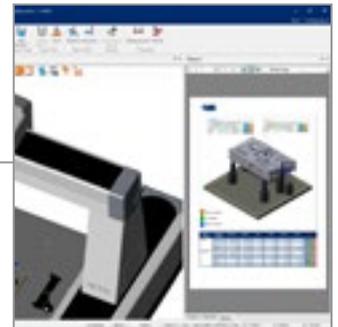


# CMM SYSTEMS

## LK METROLOGY CMM

**PREMIUM BRIDGE TYPE AND GANTRY CMMS WITH OPTIONS FOR TACTILE PROBING AND LASER SCANNING. MANUFACTURED IN UK**

- › Manufactured by LK Metrology, the inventor and only manufacturer of premium CMMs in the UK – manufactured in Derby, trading since 1963
- › Reduce measurement cycle times with high velocities/accelerations
- › Meet your industry standards with excellent accuracy and repeatability
- › Provide a comprehensive measurement solution for probing, scanning and digital inspection
- › Camio CMM software selects the best sensor for the task to get better insights while reducing overall cycle time. and provides CAD comparisons



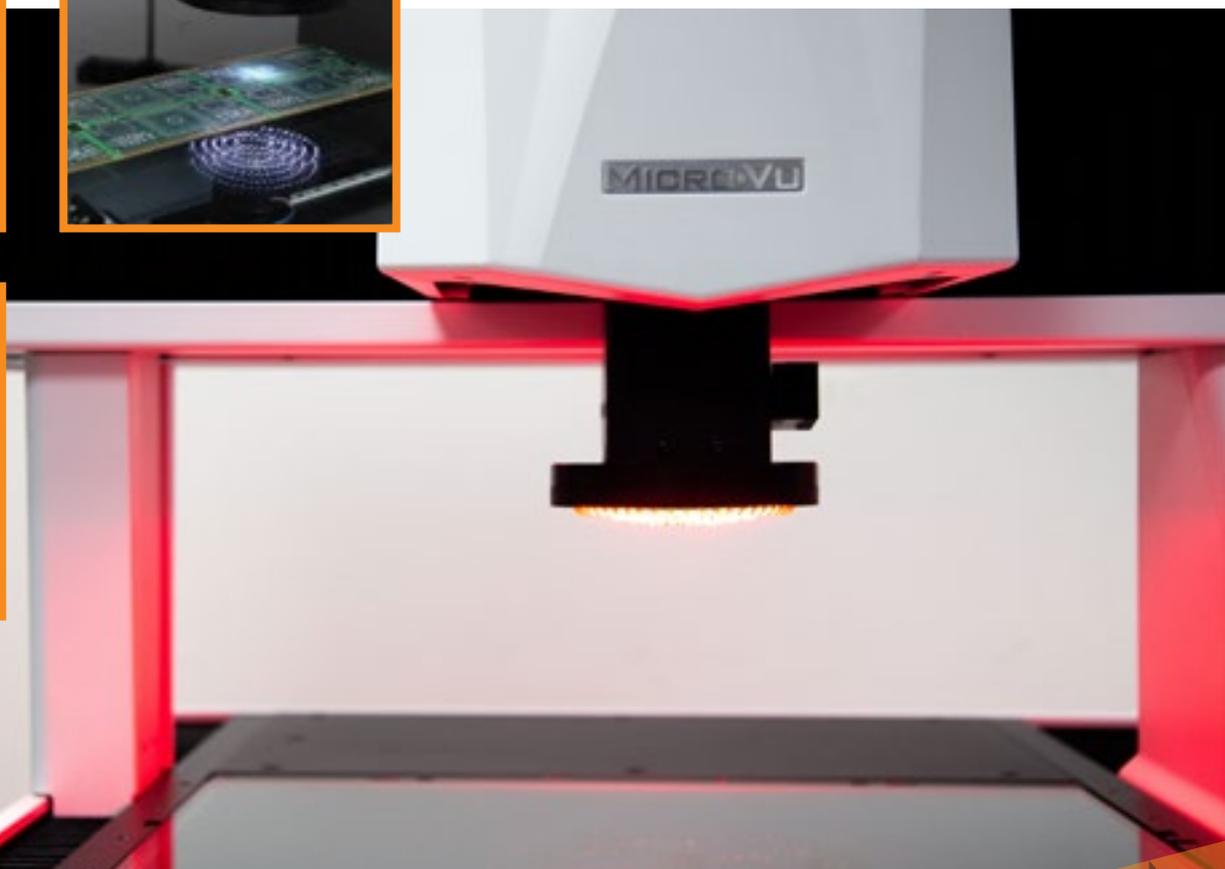
# MULTI-SENSING CMMs

## MICRO-VU VERTEX AND EXCEL

**SMALL AND LARGE COMPONENTS EASILY MEASURED WITH HIGH ACCURACY**

- › Advanced surface and profile illuminations allows ease of measurement, even with shiny surfaces such as ground parts
- › Vertex - Bench Type Systems - available in two sizes
- › Excel - Large capacity systems - available to measure parts up to 2000mm
- › Quickly measures multiple parts and characteristics
- › Easy to use software reduces reporting time
- › Integrates touch probe, laser and optical measurement devices
- › Need fixturing? See page 39

› Now available with UKAS Calibration ISO 10360 accreditation see page 42 for more details.

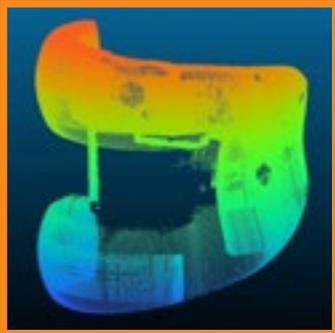


# NON-CONTACT, AUTOMATED 3D MEASUREMENT

## DWFRITZ ZEROTOUCH

### MICRON-PRECISION MEASUREMENT OF COMPLEX 3D GEOMETRIES IN MINUTES

- › Full 3D measurement of complex components including:
  - » Orthopaedic implants
  - » Gears and sprockets
  - » Aerospace vanes
  - » Brake rotors
  - » Ev stators with hairpins
  - » Laminate stack with stamped profiles
  - » Splines
- › Surface defects and micron-level flaws can easily be identified in any material including non-opaque materials, at speed.
- › Save hours of time from a traditional CMM setup, with ZeroTouch's fast drag and drop programming and more repeatable inspection with point cloud data.
- › Full 3D surface mapping
- › Ensure your data integrity with point clouds made up of 1000s more data points than a contact system would provide.



# ARTICULATED MEASUREMENT ARMS

## RPS EVO TOUCH AND LASER

**PORTABLE, LIGHT AND EASY TO USE. UP TO 7 AXES, AVAILABLE WITH UP TO 7M RANGE!**

Coming soon: UKAS accredited verification to ISO10360-12

- › Measuring range options from 1.5m up to 7m!
- › Option for touch probe and laser scanning head
- › Lightweight and strong made with carbon fibre, titanium and aluminium
- › Easy to manouver
- › Laser fork option can scan, inspect, reproduce any kind of bent pipe, analysing the center axis and the bends vertex, bend radius, bend angles and straight segments between the bends
- › Interfaced with the most popular software for 3D Inspection and Reverse Engineering, like Verisurf®, InnovMetric PolyWorks®, 3D Systems Geomagic®
- › Option for optical measurement of complex pipe geometry using Axel 7 software



# 2D FIELD OF VIEW MEASUREMENT

## INSPECVISION PLANAR

### MEASURING 2D PARTS INSTANTLY

- › Instantly see if your components are out of spec with a correction contoured light overlay
- › Measure 2D parts in seconds
- › No external moving parts makes this system perfect for shop floor use
- › Reverse engineer 2D parts
- › Convert paper drawings to CAD files
- › Reliable results, removing discrepancies from hand tools and acquiring data, without the need for manual input

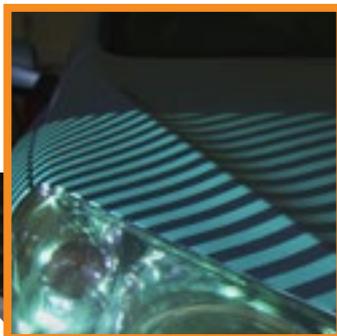


# 3D WHITE LIGHT SCANNING & REVERSE ENGINEERING

## INSPECVISION OPTISCAN AND ACCUITY

### MEASURING 2D & 3D PARTS IN SECONDS

- › Scanning of 2D and 3D parts in as little as 4 seconds!
- › Reverse engineer parts
- › Instantly observe dimensions which are out of spec with contoured light overlay

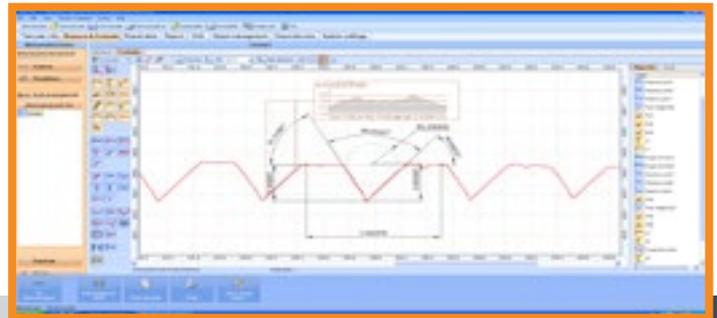


# ROUGHNESS AND CONTOUR

## JENOPTIK W800 AND W900

### HIGH ACCURACY SURFACE ROUGHNESS AND CONTOUR MEASUREMENT

- › Surface roughness and contour measurement integrated in one machine
- › Automate the measuring process with the intuitive Evovis software system
- › Extremely high accuracy measurement for surface roughness and contour
- › Ability to measure top and bottom of holes to create a single integrated measurement



# PORTABLE ROUGHNESS AND CONTOUR

## JENOPTIK W5, W10 & W20 HAND HELD SYSTEMS

### PORTABLE AND RELIABLE ROUGHNESS MEASUREMENT

- › Compact and light design
- › Intuitive handling with click wheel
- › Bluetooth® technology for wireless data transfer and printing
- › Precise workpiece support, even on small shafts
- › Mobile measurement
- › Exchangeable probes
- › Tolerance evaluation
- › Optional stands

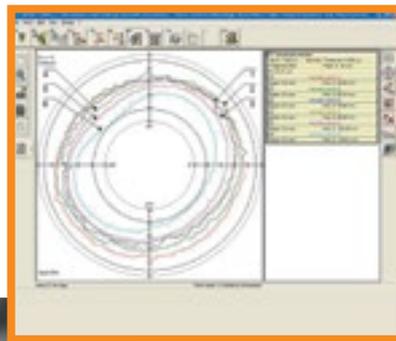
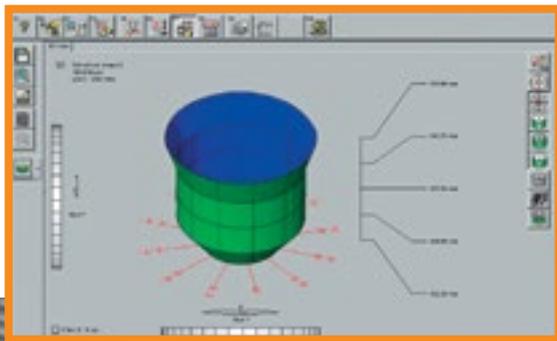


# ROUNDNESS AND FORM

## JENOPTIK ROUNDSCAN AND FORMLINE

MARKET LEADER 0.6 NANOMETER RESOLUTION HIGH ACCURACY MEASUREMENT

- › Fast, automated roundness measurement to high accuracy
- › Turboform software package allows results to be recorded automatically
- › Made for shopfloor use, with its own active damping capability and ability to hold parts up to 100kg



# 3D OPTICAL PROFILING

## SENSOFAR 5 AXIS

HIGH QUALITY NON-CONTACT 3D OPTICAL SURFACE PROFILERS 4 IN 1 TECHNOLOGY

- › **Ai focus variation:** Saving each layer as the lens moves upward, allowing you to see shape and curvature
- › **Confocal:** Only allowing focused light through, permitting you to see surface structure
- › **Interferometry:** Using a laser allows very accurate measurement down to nanometers – great for shiny surfaces such as wafers
- › **Spectroscopic Reflectometry:** Perform thickness measurements on transparent layers in a quick, accurate and non-destructive way

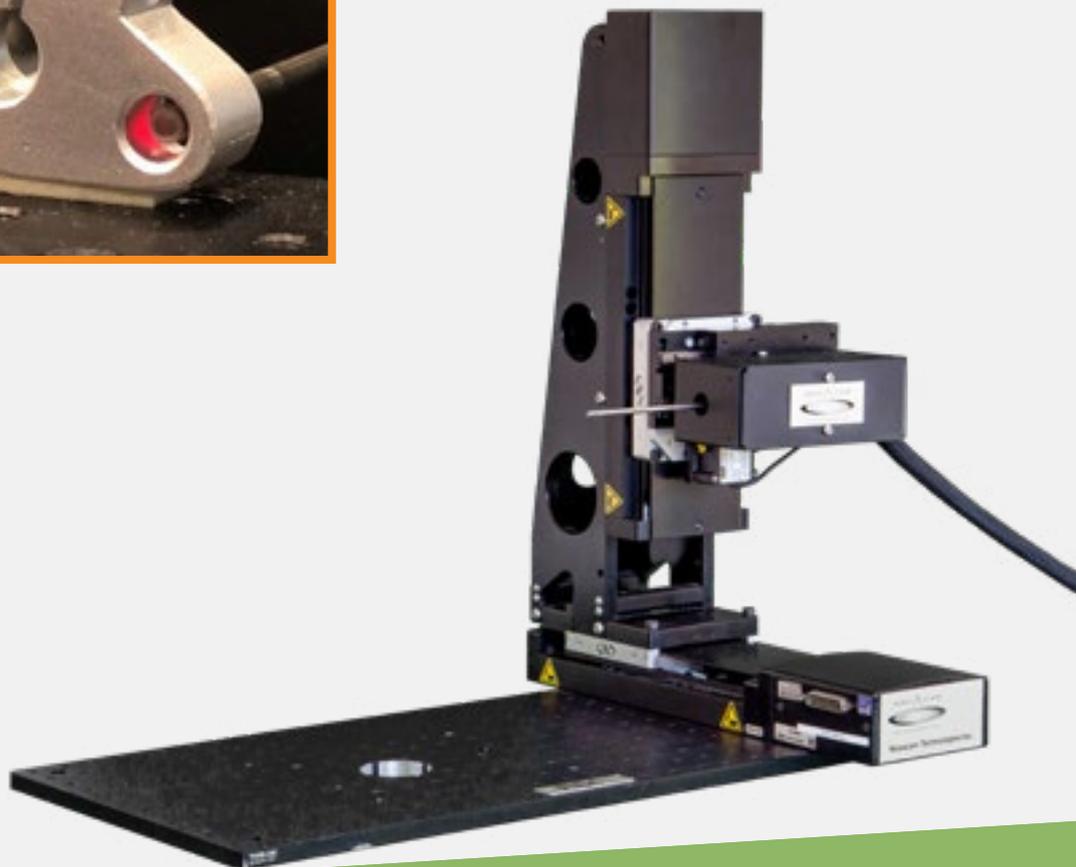
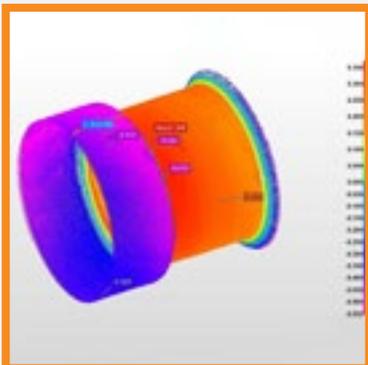


# TUBE AND BORE INSPECTION

## NOVACAM BOREINSPECT

### 3D METROLOGY OF BORES FROM 1MM DIAMETER!

- › 3D inspection for bore diameters as small as 1mm as well as systems reaching up to 260mm
- › Can measure every dimensional detail of inside diameter (ID), including undercuts, chamfers, threads, rifling, O-ring grooves, splines, lands, and edge breaks
- › Enables fully configurable automated digital inspection
- › Produces 3D point cloud data for calculating GD&T parameters
- › Measure dimensional or surface defects such as porosities, cracks, and scratches
- › Measure roughness as well as thickness of semi-transparent coatings

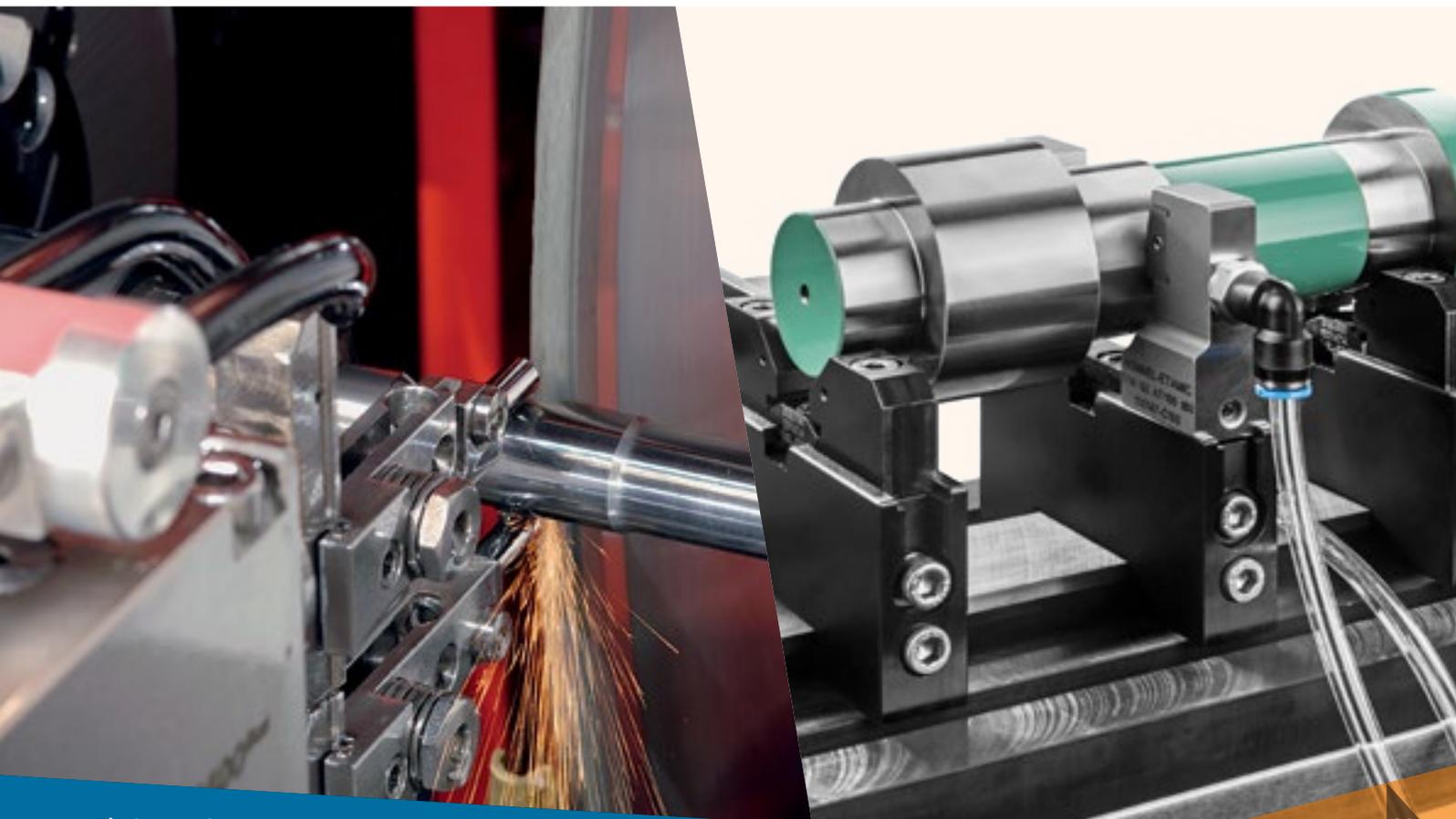


# AIR GAUGING & IN-PROCESS GAUGING

## JENOPTIK AIR GAUGING AND IN PROCESS GAUGING

### BESPOKE SYSTEMS FOR IN PROCESS MEASUREMENT AND EXTREME SIZES

- › In process or post process gauging, made specifically to meet your component measurement requirements
- › Extremely high accuracy with great repeatability
- › Bespoke systems made for a variety of component shapes and sizes
- › Our metrology experts are able to analyse your needs and create a measurement solution tailored to your requirements



# PROCESS AUTOMATION

## INTEGRATING TURNKEY AUTOMATED METROLOGY SOLUTIONS INTO THE MANUFACTURING PROCESS

**ALLOWING YOU TO WORK ON YOUR PROCESS RATHER THAN *IN* YOUR PROCESS**

### Automation solutions:

- › Smart Quality Cells for high mix, low volume applications - intelligent part recognition and inspection with minimal operator input
- › In-Line quality cells - low mix high volume - integrated inspection in manufacturing process
- › Automating Manual operations - better utilise human resource while increasing productivity on low skill repetitive tasks
- › Collaborative automation for complex process requiring highly skilled operators - seamless integration of operator with automated process

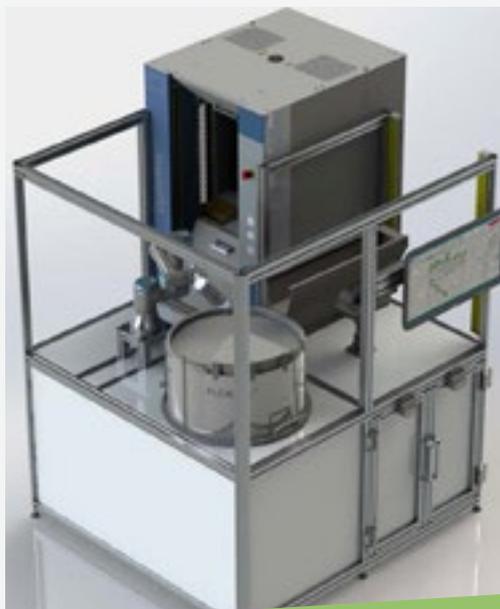
### Automation capabilities:

- › Robotics (industrial & collaborative)
- › Fixturing (gripping, part handling)
- › End effector tooling
- › Defect detection/part verification
- › Component identification (vision recognition)
- › PLC programming
- › Human machine interfacing (HMI)
- › Collaborative machine interfacing (using Arkite HIM)
- › Realtime notifications and remote visibility of quality

In-line inspection cell for multiple component variants.

Features:

- › Opticline C203 shaft measurement system
- › 6 Axis robot
- › 2D Vision recognition system
- › Flexible Bowl Feeder
- › Component hopper
- › Light gate safety system
- › Smart HMI and full data inspection logging



**5 stages to automating your process with The Sempre Group**

**USER REQUIREMENTS  
SPECIFICATION (URS)**

**3D SIMULATION OF PROPOSED  
AUTOMATED SOLUTION**

**SCOPE OF SUPPLY  
AGREEMENT**

**DESIGN, MANUFACTURE  
& TESTING**

**DELIVERY & COMMISSIONING**

# PROCESS AUTOMATION

## Why integrate quality into manufacturing?

- › Increase Productivity - reduction of: scrap rate, cycle time and resource costs
- › Reallocation of human resource to higher value tasks
- › Proven return on investment
- › Proactive maintenance - Track manufacturing trends to make informed decisions
- › Closed loop feedback to machine tools
- › Centralise the data of your quality control

## NOT LOOKING FOR INSPECTION? WE CAN ALSO AUTOMATE OTHER PROCESSES!

- MACHINE TOOL TENDING
- PART ASSEMBLY
- MACHINE VISION

## Increasing Hardwicke Enterprise's productivity:

- › increased capacity (freed up a machine tool operator)
- › saved 52 hours (50% job time) for 1000 parts
- › increased machine up time and lights out manufacture
- › faster order turnaround

Sempre connected and programmed a cost effective machine tool tending robot with dual gripper and component pallet.



# QUALITY MANAGEMENT SOFTWARE

## HIGH QA INSPECTION MANAGER

**INTEGRATED QUALITY MANAGEMENT SYSTEM WITH THE ABILITY TO RECOGNISE AND INTERPRET GD&T DRAWINGS**

Auto ballooning and Inspection planning:

- › Scan an entire drawing, or multiple pages, in one click
- › High QA software will automatically extract the geometric dimensioning and tolerancing (GD&T) data and critical dimensions, with all the tolerances automatically allocated
- › Import all inspected results from multiple machines using any CMM/VMM
- › The process is very simple and fully automated, allowing total traceability

Reporting:

Automatically populate standard and custom reports using measurement and statistical process control (SPC) shop floor data, such as:

- › **First article inspection (FAI) reports** – the software can reduce the time required for FAI reporting by up to 90 per cent
- › **Production Part Approval Process (PPAP)** – the software can reduce the time taken for data collection by up to 90 per cent
- › **Initial Sample Inspection Report (ISIR)**



# HIGHQA SOFTWARE APPLICATION OPTIONS

**HIGHQA HAVE DEVELOPED APPLICATIONS TO ENHANCE HIGHQA INSPECTION MANAGER SOFTWARE FROM SHOP FLOOR OPERATOR USAGE, TO ADVANCED PLANNING OPTIONS.**

## MODEL BASED DEFINITION (MBD)

- › Convert embedded Product & Manufacturing Information (PMI) CAD data automatically into 2D GD&T drawings. Extract, modify, and manage GD&T and PMI from native 3D MBD models



**COMING SOON:  
SUPPLY CHAIN PORTAL**

## IM EXPLORER

- › Shop floor measurement data collection application
- › Access ballooned drawings and inspection plans from your HighQA Inspection Manager software via a secure browser, anywhere on the shop floor through an intuitive interface



## ADVANCED PRODUCT QUALITY PLANNING (APQP)

High QA APQP software gives you the framework to control processes and procedures throughout product development. It covers the following phases:

- › Process Design and Development
- › Validation of Product and Process
- › Production Launch, Assessment, and Improvement



# INDUSTRIAL DATA ACQUISITION SOFTWARE

## PROLINK SPC SOFTWARE

**DATA COLLECTION AND ANALYSIS. COMPATIBLE WITH ANY METROLOGY SYSTEM THAT HAS DATA OUTPUT**

Gain full visibility of:

- › all your characteristics
  - › on all of your components
  - › measured on any of your systems
  - › at any of your factory sites
  - › in real-time.
- › Universal software that can record and analyse data from ANY Metrology system with an output
  - › Data can automatically be entered in to your own report format

**Meeting medical industry standards:**

Prolink SPC software is 21 CFR part 11 compliant.



# PROLINK SOFTWARE APPLICATION OPTIONS

## PROLINK APPLICATION MODULES RANGE FROM SHOP FLOOR TO WHOLE ENTERPRISE SOLUTIONS

### DATA COLLECTION:

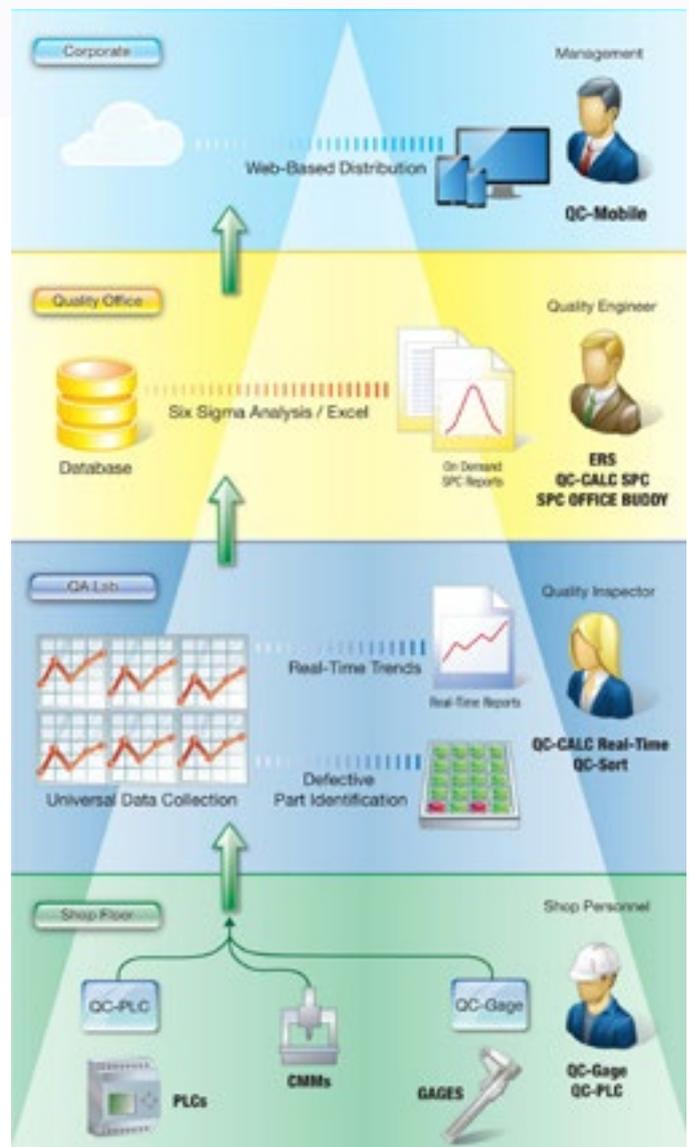
- › **QC Calc RealTime:** Collates, analyses and reports results seamlessly regardless of the equipment type
- › **QC Calc GageStation:** Collates data directly from electronic gages that are not as programmable as a CMM or VMM including measuring instruments such as Vernier calipers

### DATA VISUALISATION:

- › **QC Mobile:** Web-based application that works in conjunction with ERS to allow reports or dashboard views via a web browser

### DATA ANALYSIS:

- › **Enterprise Resource Scheduler (ERS):** Facilitates the creation of interactive charts and dashboards demonstrating visibility and control within the factory
- › **Integration with MiniTab and Excel**
- › **Office Buddy:** A fast and easy way to create charts and reports into Minitab®, JMP® and Excel®



# MACHINE TOOL OFFSET INSTRUCTION SOFTWARE

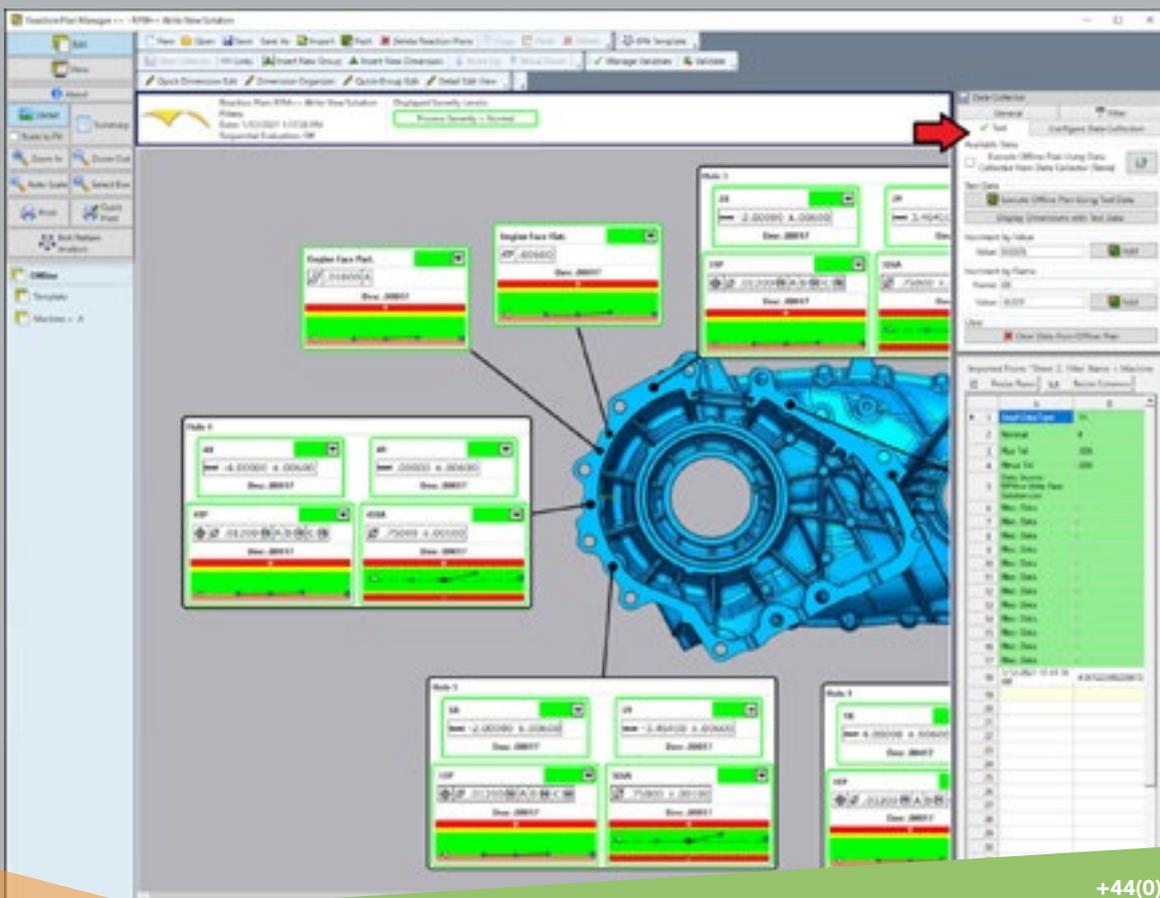
## REACTION PLAN MANAGER SOFTWARE

### REAL-TIME OPERATOR FEEDBACK AND INSTRUCTIONS FOR TOOL CORRECTION

Utilise your measurement data in real-time on the shop floor for tool correction.

1. Collate data directly from your CMM/VMM
2. Measurement data is analysed
3. A digital report is automatically displayed with process control (machine adjustment) information
4. The operator uses the instructions to adjust the tool offset without any manual interpretation or calculation

- › Compatible with SPC software such as Prolink
- › Deriving value from your measurement data
- › Dramatically reducing scrap and reworks through proactive tool correction.
- › Automated paperless system



# MEASURING INSTRUMENTS

---

- ▼ HAND TOOLS
- ▼ HEIGHT GAUGES
- ▼ TACHOMETERS, STROBOSCOPES & DATA LOGGERS
- ▼ FORCE AND TORQUE
- ▼ THREAD DEPTH AND PLUG GAUGES
- ▼ LINEAR DIGITAL MEASURING SYSTEMS
- ▼ WIRELESS DATA TRANSFER FOR GAUGES

# HAND TOOLS

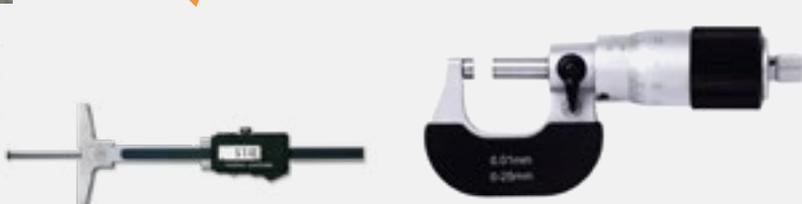
## HAND TOOLS & WIRELESS DATA COLLECTION

### HAND HELD AND HAND OPERATED SYSTEMS

- › Gauge Blocks & Accessories
- › Plug Gauges & Rings
- › Thread Gauges & Rings
- › Dial Indicators
- › Measuring Stands
- › Dial, Bore Gauges & Thickness Gauges
- › Headstocks & Surface Plates
- › Vices, Angle Plates & V-Blocks
- › Straightedges & Rules
- › Squares, Protractors & Levels
- › Calipers
- › Height Gauges
- › Micrometers
- › Speed, Electrical, Hardness, Testers
- › Force Gauges & Magnifiers
- › Reduce time taken to measure and record results, eliminate errors in data entry with a universal wireless data transmitter for all your measurement hand tools



**NEW  
WIRELESS HANDTOOL  
DATA COLLECTION  
(SEE PAGE 37)**



# HEIGHT GAUGES

## ELECTRONICA HEIGHT GAUGES

### MANUAL AND MOTORISED GAUGES FOR 2D MEASUREMENT

- › Easy to use software
- › Automatic data output
- › Air cushion for assisting height gauge manoeuvrability
- › 2D and 3D capability
- › Specific internal measurement capability
- › High repeatability

Coming soon: UKAS  
accredited verification  
to ISO13225-2012



# TACHOMETERS, STROBOSCOPES & DATA LOGGERS

## MONARCH

### STROBES, TACHOMETERS AND DATA LOGGERS

- › The Monarch Nova-Strobe LED family of rugged industrial stroboscopes provide an extremely bright, uniform light output for performing stop-motion diagnostic inspection and RPM measurements
- › Portable and panel tachometers available with laser or LED options

#### Options include:

- › Event logging
- › Barometric
- › Voltage
- › Current
- › Pressure
- › Temperature/Humidity
- › Temperature



# FORCE AND TORQUE

## ANDILOG GAUGES

### FORCE AND TORQUE MEASURING TOOLS AND ACCESSORIES

- › Digital force and torque gauges available for a range of uses with options for advanced measurements, thresholds and large capacity collection
- › A range of applied force solutions are available including: bottle opening torque, door open/close, force measurement
- › Wide range of stands and grips available



# LEITECH GAUGES

## DIGITAL MOTORISED THREAD DEPTH AND PLUG GAUGES

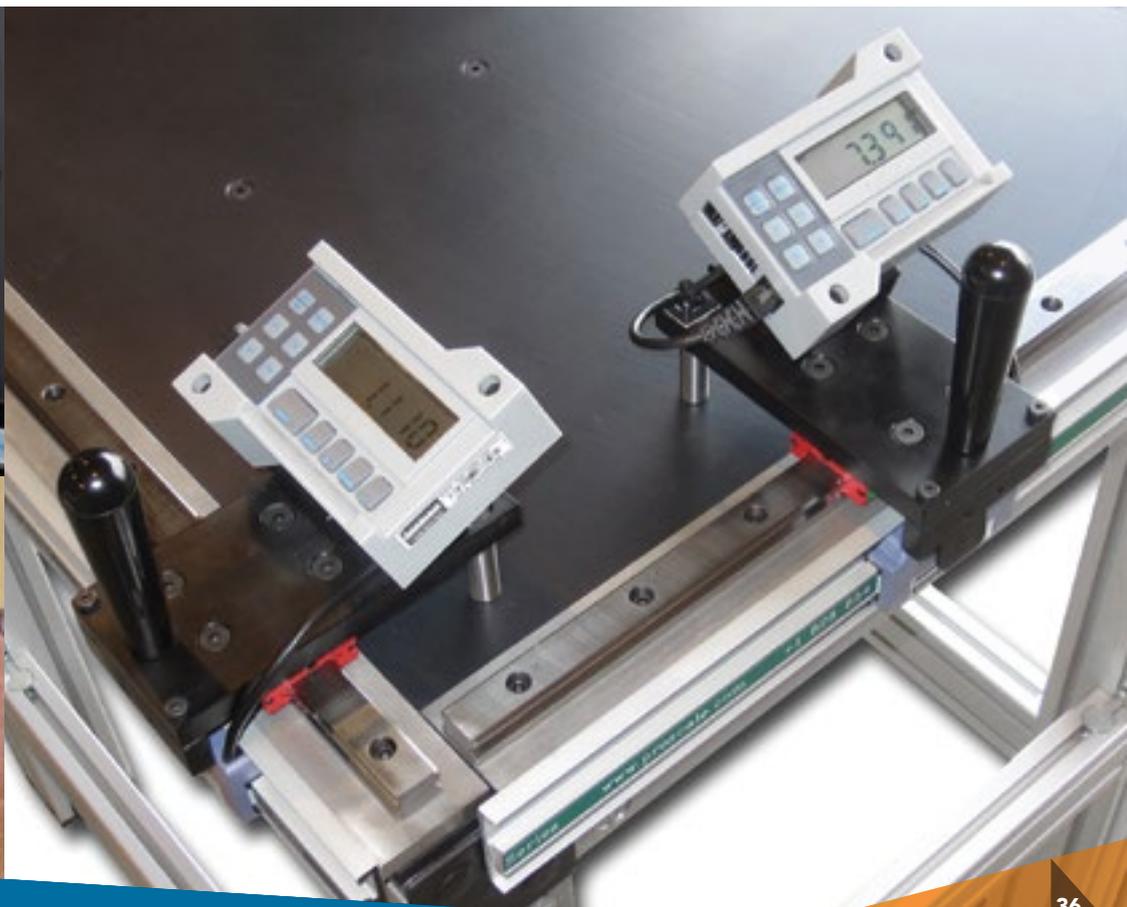
- › Measure thread go/no go coupled with thread depth
- › Digital or analogue displays
- › High-resolution devices available
- › Halve your inspection time!



# PROSCALE DIGITAL LENGTH MEASURING DEVICES

**DIGITAL RULES AVAILABLE WITH LENGTHS UP TO 6M**

- › A range of length measuring systems available
- › Battery powered or mains supply
- › Wireless data export option
- › X and Y systems available
- › Low cost solution to measure long parts
- › Simple to use
- › Provides results very quickly
- › ESD compliant option



# MICRORIDGE MOBILECOLLECT

## UNIVERSAL DATA TRANSMITTER WORKS WITH ANY MEASURING GAUGE

- › Transfer measurement data direct to PC from your gauges with one click
- › Connect a single measurement system to a spreadsheet, or hundreds of gauges to a cloud-based quality control monitoring application
- › Real time data entry with 100% accuracy
- › Works with any gauge with a digital output
- › No need to buy new equipment the transmitter can be attached to your current hand tools with a digital output



# ENGINEERING SERVICES

---

- ▼ METROLOGY FIXTURES
- ▼ SUB-CONTRACT MEASUREMENT & PROGRAMMING SERVICES
- ▼ SERVICE & CALIBRATION
- ▼ UKAS ACCREDITED VERIFICATION
- ▼ IN HOUSE REPAIRS & CALIBRATIONS
- ▼ TRAINING
- ▼ SUPPORT AGREEMENTS



*“I recently had Kevin Hall onsite here at Nat’s Manufacturing to complete some training on our Micro-Vu system. I would just like to let you know that we were very impressed with Kevin and the entire training session. As two manufacturing engineers with very limited knowledge or understanding of the system, we are now, after only 2 days training, able to not only write programs but have a better understanding of all the variables involved in using the Micro-Vu. Kevin was a pleasure to work with and has been of great assistance to me. We look forward to working with you again in the future.”*

Manufacturing Engineer  
Netus Manufacturing Ltd

# METROLOGY FIXTURES

## CREATING A REPEATABLE, REPRODUCEABLE, TRACEABLE, INSPECTION PROCESS FOR ANY METROLOGY SYSTEM

Worldwide design, supply and support.

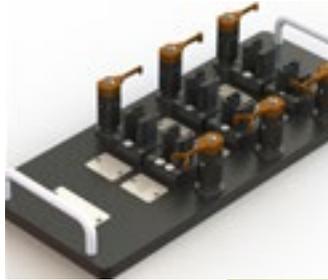


Fixturing solutions can benefit any manufacturing quality process from high volume low mix to low volume high mix.

Ideal for industries including medical, automotive and aerospace to demonstrate compliance such as ISO13485 and AS9100 certification.

### STATIC FIXTURES

- › Repeatedly secures components for inspection
- › Keeps exact orientation of part
- › Compact poke yoke component nests
- › Ergonomic securing mechanisms
- › Flexible quantity of components from single nest to high volume component
- › Multiple component variations
- › Allows multiple components to be measured in one routine



### AUTOMATED ROTARY FIXTURES

All the benefits of static and rotary fixtures plus:

- › Automated rotation - fire and forget
- › Minimal operator involvement
- › High volume measurement
- › Reduce cycle time

#### What's included:

- › Design, manufacture, validation, programming, gauge R&R
- › Low cost, fast turnaround solutions available
- › Inspection focused technical design team



#### Our Proven Fixture Process:



### ROTARY FIXTURES

All the benefits of static and rotary fixtures plus:

- › 360 degree access to components
- › Programme to be optimised to the part orientation
- › Precision manual turning

# SUB-CONTRACT MEASUREMENT & PROGRAMMING SERVICES

## WE WILL DO MEASUREMENT AND INSPECTION REPORTS FOR YOU IN HOUSE OR ON SITE

### CONTRACT MEASUREMENT

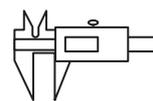
#### Meeting Your Measurement Requirements:

- › On time and on budget
- › Accurately
- › Detailed report provided
- › Express turn around options available

#### Options include:

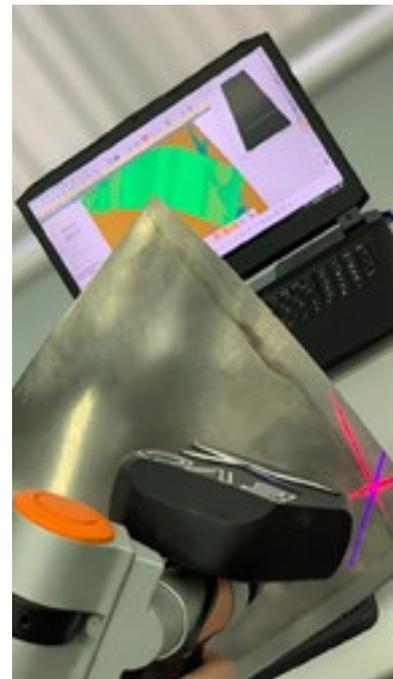
- › Initial sample inspection reports
- › Single and batch inspection
- › Reverse engineering
- › Offline part programming service
- › Statistical reports (gauge R&R/ CP/ CPK)
- › Gauge, fixture design and verification
- › 2D and 3D scanning

### OUR SCOPE



#### Equipment:

- › Optical and Contact CMMs
- › Optical Shaft Measurement
- › Optical surface profiler
- › Contour and Surface Finish
- › Form and Roundness
- › Auto Ballooned Inspection Reports
- › Fully Detailed Reporting and Analysis Including: FAIR/ PPAP/ISIR reporting



# SERVICE & CALIBRATION

Our team of skilled engineers are available for on-site service and calibration, to ensure the integrity and quality of your systems

Upgrades to Windows 10 available for Opticline, Micro-Vu and Form Testers



- › Calibration and servicing schedules to suit your business
- › Rapid response to your service needs
- › In house repairs laboratory
- › Assurance our team is always available and have the knowledge to help
- › Supporting customers across the UK and Ireland

We have recently introduced a dedicated support team based in Ireland for local support.

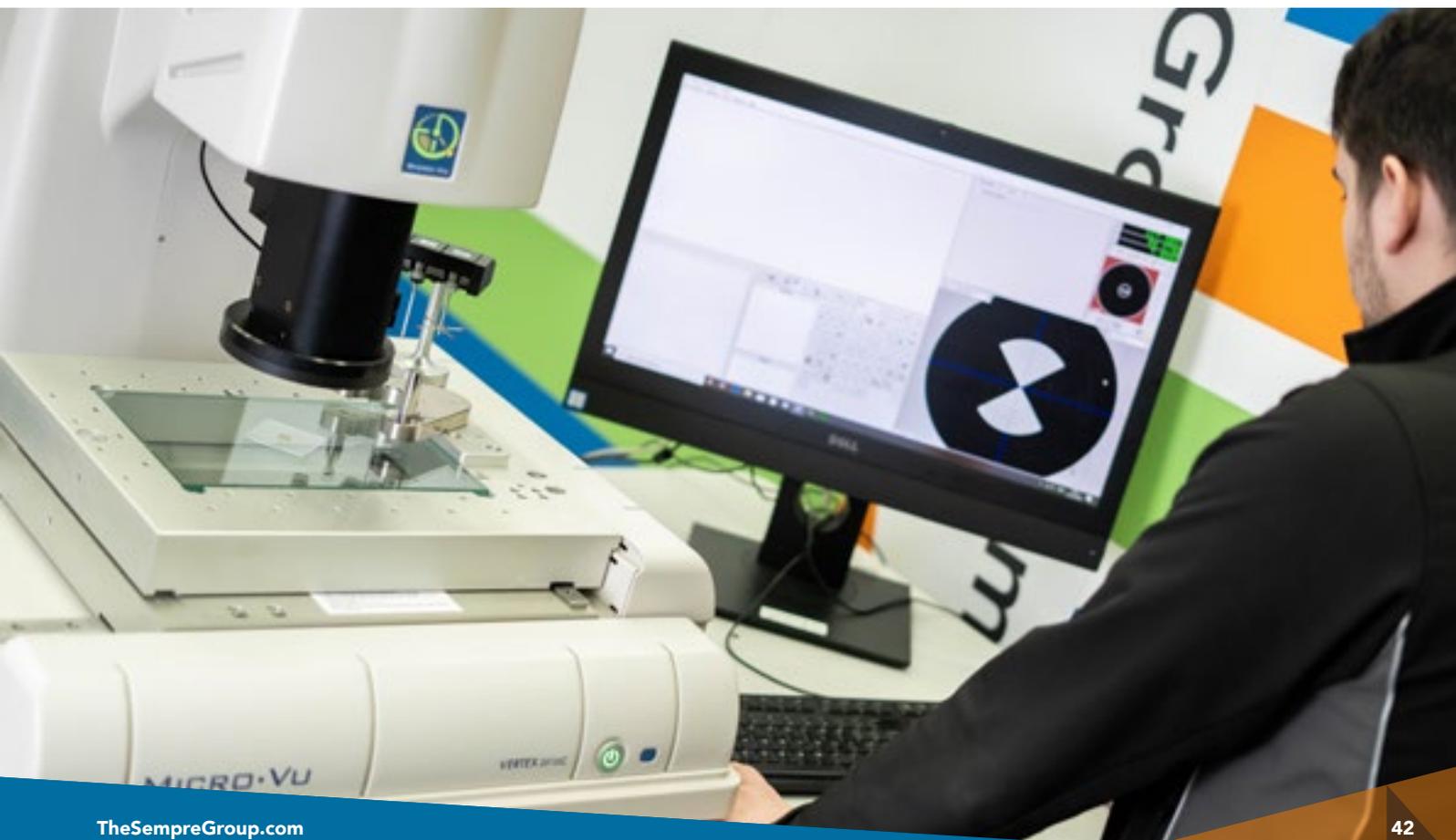


# UKAS ACCREDITED VERIFICATION

## VISION CMM VERIFICATION TO ISO10360-7

WE ARE ONE OF THREE UKAS ACCREDITED ORGANISATIONS TO OFFER THIS SERVICE IN THE UK AND IRELAND

WE ARE ACCREDITED FOR VERIFICATION OF SYSTEMS UP TO 1.5M X 1.5M IN X AND Y



# IN HOUSE REPAIRS & CALIBRATIONS

## We offer a range of repairs of:

- › Air gauges
- › In process gauging
- › Metrology systems
- › Surface finish equipment
- › Height gauges
- › Computers



## In house calibration:

- › UKAS electrical meter calibration
- › Surface finish traceable calibration



# TRAINING

## GET THE MOST FROM YOUR MEASURING SYSTEM. YOU'VE MADE THE INVESTMENT, NOW MAKE IT WORK FOR YOU.

### Invest in your team:

- › Hands-on, practical training
- › Tailored to your industry and your products

**We can offer training at your facilities or on-site at The Sempre Group or via video conferencing (remote).**

- › Utilise your new and old machines
- › Create measuring routines
- › Keep operators up-to-date with new techniques and capabilities
- › Ability to troubleshoot measurement issues
- › Improve production efficiency
- › Encourage focus on the integrity and quality of your products
- › Health and safety compliance

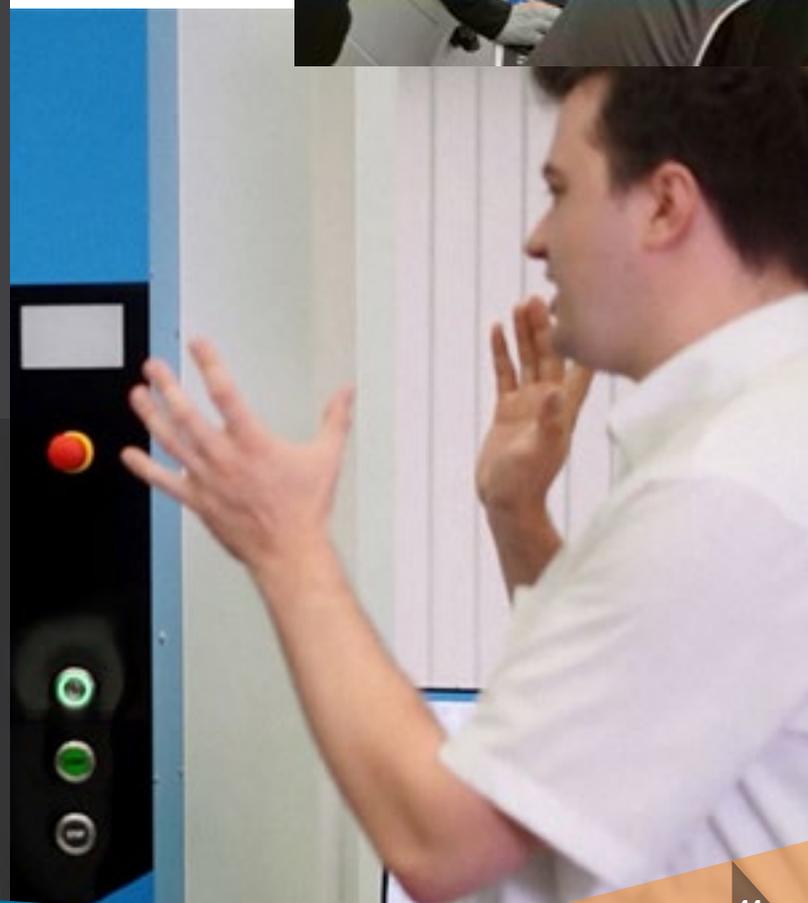
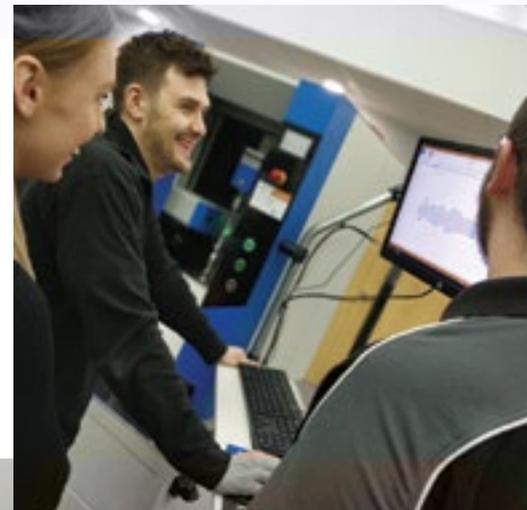
**We offer training on all metrology systems and software supplied by The Sempre Group.**

Basic or advanced training, held over two or three days.

Need something bespoke? Let us know!



- › Regular training webinars offered on our Micro-Vu and Opticline systems



# SUPPORT AGREEMENTS

A service and maintenance agreement between you and The Sempre Group. We can provide different levels of support, according to your needs, to help provide peace of mind.

- › Unlimited telephone support
- › Remote support (internet access required)
- › Priority response (within 24 hours)
- › Breakdown cover
- › Annual / 6 monthly / 3 monthly calibrations (including traceable calibration certificates)
- › Regular backups of calibration data

## BENEFITS:

- › Fixed costs
- › Priority response assurance and 24hr response time
- › Security and protection
- › Improve: Efficiency, performance, protection
- › Reduce: Breakdowns, expenses, downtime

## SUPPORT LEVEL OPTIONS

### PLATINUM

- › Annual service and calibration (including traceable calibration certificates)
- › Unlimited telephone support
- › Remote support (internet access required)
- › Backup of calibration data
- › On-site breakdown visits
- › 24hr response time
- › Priority booking
- › Breakdown and parts cover

### GOLD

- › Annual service and calibration (including traceable calibration certificates)
- › Unlimited telephone support
- › Remote support (internet access required)
- › Backup of calibration data
- › On-site breakdown visits
- › 24hr response time
- › Priority booking

### SILVER

- › Annual service and calibration (including traceable calibration certificates)
- › Unlimited telephone support
- › Remote support (internet access required)
- › Backup of calibration data



# SEMPRE

LEAN  
ENTERPRISE

# LEAN ENTERPRISE

- ▼ OPERATOR GUIDANCE & LEAN ASSEMBLY
- ▼ VISUAL FACTORY AND FACTORY FURNITURE

5.0  
RATING



“I would like to share my gratitude to your company. Thank you so much for the speedy service and delivery, ensuring our order arrived in time to be installed before our customer visit; I am extremely grateful. As we develop the site we will be ordering more. Thanks very much.”

Rebecca Hammond

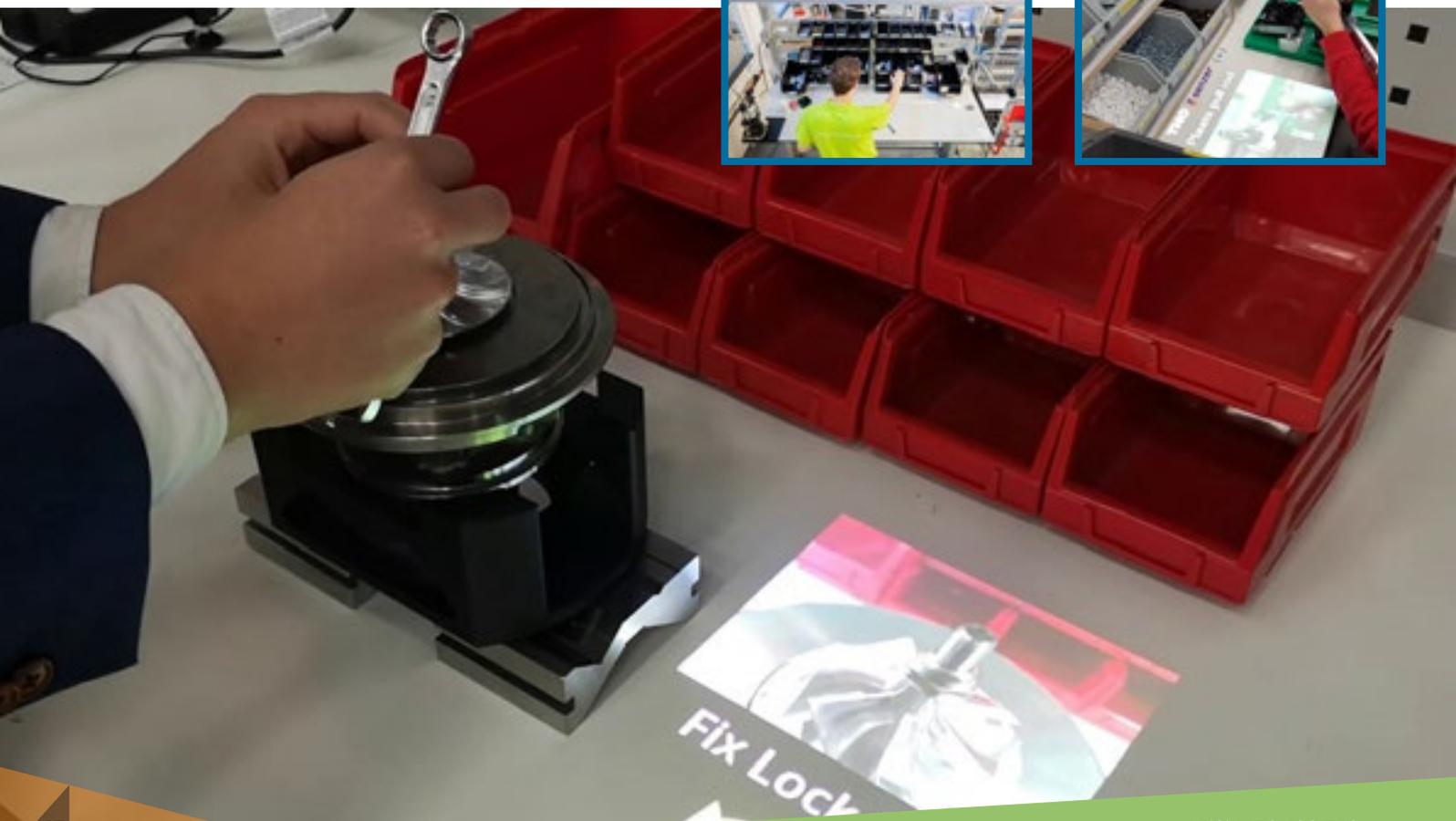
Training and Development Leader, NALCO | An Ecolab Company

# OPERATOR GUIDANCE & LEAN ASSEMBLY

## ARKITE HUMAN INTERFACE MATE (HIM)

**DID YOU KNOW: YOU CAN INTEGRATE THE ARKITE IN TO AN AUTOMATED PROCESS**

- › Integrate with smart tools, barcode scanners, ERP and MES
- › Collect traceable data, logging operator timestamps and KPI's:
  - 90% Error Reduction
  - 75% Rework Reduction
  - 50% Reduced Training Time
- › Create an efficient traceable assembly process with projected instructions, images and gif instructions
- › Notify the operator when an error is made with coloured/text indicators
- › Real-time guide through the assembly steps
- › Can be projected on a workbench or directly on to component such as a car chassis



# VISUAL FACTORY AND FACTORY FURNITURE

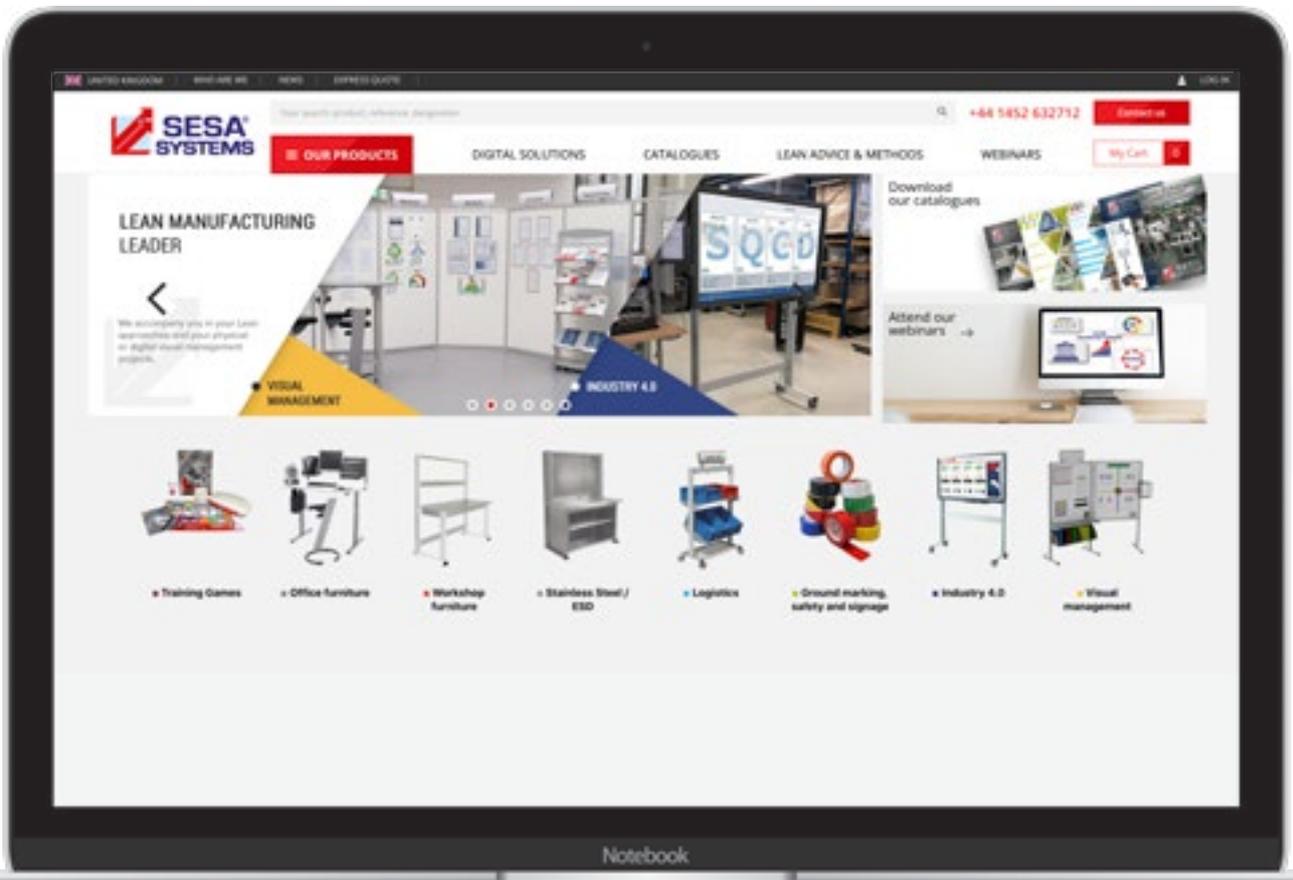
## SESA SYSTEMS LEAN ENTERPRISE

EVERYTHING YOU NEED TO CREATE A LEAN FACTORY ENVIRONMENT FROM VISUAL BOARDS AND FLOOR MARKINGS TO 5S WORKBENCHES AND CLEANING STATIONS

- › Request or download the catalogue for the whole SESA systems range from the website



NOW AVAILABLE TO PURCHASE ONLINE AT  
[www.sesa-systems.co.uk](http://www.sesa-systems.co.uk)



# OUR COLLEAGUES

Our colleagues make our company who we are: We are a collaborative and responsive team, experts in our fields. We create strong tailored partnerships with our customers and partners.

Our values allow us to support our customers, partners and colleagues to reach the best solutions for their challenges.

## Values

---

**COLLABORATIVE.** We Listen first.

**RESPONSIVE.** We start solving now.

**TAILORED.** We find your answer not an answer.

**INDEPENDENT.** Your solution is unique to you.



# OUR PARTNERS

The Sempre Group has developed very strong supplier partnerships over many years, which enables the company to offer world class products from many sources. These include:



## CONTACT US

THE LODGE,  
37 BARNETT WAY  
BARNWOOD  
GLOUCESTER  
GL4 3RT  
Tel: 01452 632712



UNIT 1 & 2 BALBRIGGAN  
BUSINESS CAMPUS,  
HARRY REYNOLDS RD,  
BALBRIGGAN,  
CO. DUBLIN  
Tel: 086 0355649  
+441452 632712



[sales@thesempregroup.com](mailto:sales@thesempregroup.com)  
[service@thesempregroup.com](mailto:service@thesempregroup.com)  
[accounts@thesempregroup.com](mailto:accounts@thesempregroup.com)  
+44(0)1452 632712

Follow us on: [in](#) [t](#) [v](#)

Sign up for our Newsletter for updates on our latest offers and events.

[TheSempregroup.com](http://TheSempregroup.com)



GTMA, Made In The  
Midlands and Midlands  
Aerospace Alliance (MAA)

Version3\_01\_2022

