ATQ METRO

TECHNOLOGY IS MEANINGFUL
WHEN DELIVERED WITH SUPPORT AND SERVICES





ABOUT US

ATQ METRO is a leading manufacturer and service provider of state-of-the-art engineering products for industrial 2D/3D metrology, dimensional measurement, reverse engineering, and traceability. Our success is driven by visionary leadership and a commitment to high-quality, precision products, excellent technical support, and long-term relationships with our customers, suppliers, and employees. We offer a wide range of contact and non-contact measurement products, ideal for production, quality control, manufacturing, and research. At ATQ METRO, we are dedicated to delivering the highest **ACCURACY**, **TRUST**, and **QUALITY** across our entire product range.

PRODUCTS AND SERVICES WE OFFER



CORE VALUES

PASSION **KNOWLEDGE** **CO-OPERATION** **RESPECT** **INTEGRITY**

- Vision Measuring Machine(VMM)
- Horizontal Vision Measuring Machine(H-VMM)
- One Touch Vision Measuring Machine
- Gantry Vision Measuring Machine
- Amalgam Vision Measuring Machine
- Cutting Tool Inspection Machine
- Profile Projector (Horizontal / Vertical)
- Automatic Focusing Digital Microscope
- Laser Marking Machine
- Metrology Fixtures
- Maintenance, Calibration & Repair Services
- Inspection Services

MANUAL VISION MEASURING MACHINE

BA SERIES

The BA Series vision measuring machine is an easy-to-use and economical solution for dimensional checking. It provides precise and fast measurement of precision components, making it ideal for small and lightweight parts.



FEATURES

- Ergonomic Design
- Economical
- Highly Stable Granite Structure
- High Precision Linear Guide
- Reliability

Model		BA 200	BA 300
Dimension(mm)(L x W x H)		550 X 540 X 930	600 X 740 X 980
Measuring Range (mm)(X x y x Z)		200 X 100 X 150	300 X 200 X 200
Measuring Accuracy (µm)		2.5+ L/100	2.5+ L/100
Image & Measuring	Camera	Industrial grade color camera	
	Lens	Manual dented zoom lens (0.7 - 4.5 X)	

AUTO FOCUS VISION MEASURING MACHINE

EX SERIES

The EX-series is the perfect solution to upgrade the dimensional measurement and inspection capabilities of your quality control lab. Offering a non-contact, high precision autofocus vision measuring system, the EX-series provides a quick and reliable solution for 2D and 3D measurement applications.



FEATURES

- Ergonomic Design
- High-Quality Imaging with Full HD Camera
- High Precision Linear Guide
- Highly Stable Granite Structure
- Auto Edge Detection
- Advanced LED Light Sources
- Semi-Automatic Program Playback
- Segmented Surface-Ring Light
- On-Screen Z-Axis Control
- Direct Image Measurement
- Easy-to-Use Software

Model		EX 200	EX 300	EX 400
Dimension(mm)(L x W x H)		550 X 540 X 930	600 X 740 X 980	700 X 840 X 980
Measuring Range (mm)(X x y x Z)		200 X 100 X 150	300 X 200 X 200	400 X 300 X 200
Measuring Accuracy (µm)		2.5+ L/100	2.5+ L/100	2.5+ L/100
Image & Measuring	Camera	Industrial grade color camera		
	Lens	Manual dented zoom lens (0.7 - 4.5 X)		

CNC VISON MEASURING MACHINE

STD SERIES

Precision 3-Axis Measurement System

The STD series delivers precise and efficient 3-axis measurements for complex precision parts with advanced image processing, high-speed stage control, and ATQ METRO's software, it supports 2D/3D measurements using touch probes or non-contact sensors, ensuring versatility and productivity.



FEATURES

- Ergonomic Design
- High Accuracy
- Classic Model
- Superior Image Quality
- High-Performance Auto Focus
- Auto Zoom Lens
- Stable Granite Base
- Touch Trigger Probe Compatibility
- Advanced Illumination System
- Programmable Ring Light
- Wide Range of Options

Model		STD 3020	STD 4030	STD 5040
Dimension(mm)(L x W x H)		1600×780×1700	1750×920×1700	1900×1080×1700
Measuring Range (mm)(X x y x Z)		300×200×200	400×300×200	500×400×200
Measuring Accuracy (µm)		2.5+L/200	2.5+L/200	2.5+L/200
Image & Measuring	Camera	Industrial grade color camera		
	Lens	Manual dented zoom lens (0.7 - 4.5 X) / Auto zoom lens (01 - 10 X)		

GANTRY VISION MEASURING MACHINE

GT SERIES

The GT series offers high-precision, gantry vision measuring machines designed for exceptional accuracy and efficiency with advanced capabilities. It provides high-speed measurements for the geometric elements of various parts widely used across industries. It is ideal for inspecting products such as PCBs, copper-clad laminates, pad glass, external bodies covers and insulation materials.



FEATURES

- Ergonomic Design
- High Accuracy
- Classic Model
- Superior Image Quality
- High-Performance Auto Focus
- Auto Zoom Lens
- Stable Granite Base
- Touch Trigger Probe Compatibility
- Advanced Illumination System
- Programmable Ring Light
- Wide Range of Options
- Changing Rack

Model		GT862	GT1008	GT1210	GT1512	GT1812
Dimension(mm)(L x W x H)		1700×1280×1750	1900×1480×1750	2100×1680×1750	2500×1880×175	2700×1880×1750
Measuring Range (mm)(X x y x Z)		600×800×200	800×1000×200	1000×1200×200	1200×1500×200	1200×1800×200
Measuring Accuracy (µm)		3 + L / 200	3 + L / 200	3 + L / 200	3 + L / 200	3 + L / 200
Repeatability (µm)		3	3	4	4	4
Weight (kg)		1800	2900	3200	4400	4900
Image & Measuring	Camera	Industrial grade color camera				
	Lens	Manual dented zoom lens (0.7–4.5 X) / Auto zoom lens (1–10 X)				

HORIZONTAL VISION MEASURING MACHINE

H-VMM SERIES

The H-VMM Horizontal Vision measuring machine combines best features of horizontal Profile Projector and traditional vision measuring machine. The H-VMM is configured like a traditional horizontal profile Projector. The casting work stage suitable for heavy duty application like Shaft, Precision machined / turned parts, Hobs and cutting tools.



FEATURES

- Heavy duty work stage
- Automatic edge detection
- High precision glass scales
- Multisensor capable
- LED illumination for surface and profile lighting.
- Digital video colour camera.

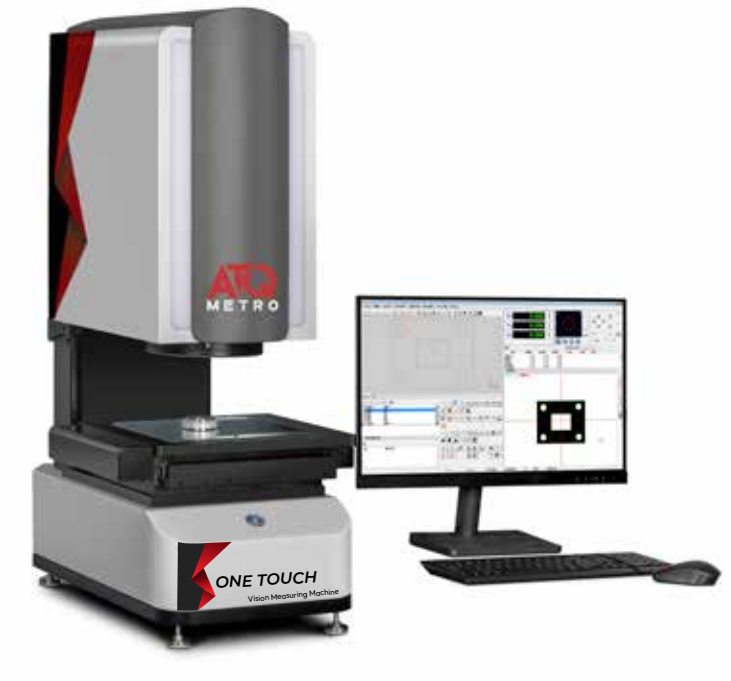
Model		H-VMM 300
Measuring range		300X100X150
Scale Resolution		0.0005mm
Measuring accuracy (µm)		± (3 + L / 100)
Image & Measuring	Camera	Industrial grade color camera
	Lens	Manual dented zoom lens

ONE TOUCH VISION MEASURING MACHINE

VISION ONE TOUCH SERIES

Vision One Touch Series – Smart, Fast, Precise

The vision one touch series simplifies precision measurement with a single touch. After placing a part on the work stage the system locates, measures and records results automatically regardless of orientation. It generates detailed inspection reports, making it perfect and automated for quality control.





FEATURES

- Large field of view
- Automatic edge detection and measurement
- User-friendly interface
- Fast
- Single touch program run mechanism
- Automatic recognition of part's location

Model	VOT 850V	CNC VOT 850V	VOT 860H
Field of view	80×50	80×50	80×80
Dimensions (mm)	300×450×750	300×450×750	300×450×750
Accuracy (µm)	±(3+L/50)	±(3+L/50)	±(3+L/50)
Measuring Range (mm)	80 X 50	200 X 200	80 X 80

AMALGAM VISION MEASURING MACHINE

COMBIGENI SERIES

The combigeni series is a high-speed, large field-of-view vision measuring machine offering advanced multisensor capabilities. It combines fast image stitching with traditional vision measurement for exceptional productivity and precision.

Featuring telecentric large field-of-view optics and a fully automatic zoom lens, it supports simultaneous measurements on multiple parts, saving time and effort. The machine integrates one-touch measuring technology with traditional methods for enhanced efficiency.

Optional laser sensors and touch trigger probes enable complex contact and non-contact measurements. The system also automatically records results and generates detailed inspection reports.

FEATURES

- **Large field of view**
- **Automatic edge detection and measurement**
- **User-friendly interface**
- **Fast**
- **Single touch program run mechanism**
- **Automatic recognition of part's location**
- **Ergonomic Design**
- **High Accuracy**
- **Classic Model**
- **Superior Image Quality**
- **High-Performance Auto Focus**
- **Auto Zoom Lens**
- **Stable Granite Base**
- **Touch Trigger Probe Compatibility**
- **Advanced Illumination System**
- **Programmable Ring Light**
- **Wide Range of Options**



Model	Combigeni 400	Combigeni 500	Combigeni 600
Measuring Range （mm）X x Y x Z	400x300x200	500x400x200	600x500x200
Machine Movement	Automatic		
Vision lens configuration	Double Telecentric FOV Optical Lens with additional auto zoom lens (01 - 10X)		
large field-of-view	80 x 60mm		
Measuring accuracy (µm)	Vision amalgam measurement : ±(3+L/100) Traditional Vision Measurement : ±(3+L/200)		
System measuring accuracy	±(3+L/100)		

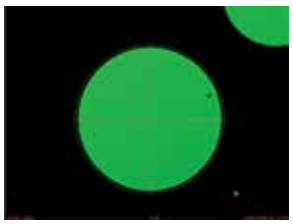
ATQ METRO 2D MEASURING SOFTWARE

ADVANCED EDGE DETECTION WITH CUTTING-EDGE IMAGE PROCESSING

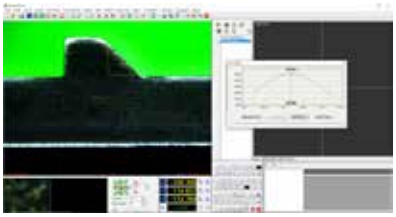
The ATQ Metro 2D/3D measuring software is a versatile multi-sensor application for precise measurements. It integrates contact (touch probe) and non-contact (vision) systems, enabling effortless measurement of geometric and complex shapes with advanced edge detection and high-speed optical scanning. It ensures precise, fast, and repeatable results in both manual and CNC modes, minimizing dependency of operator skills.

FEATURES

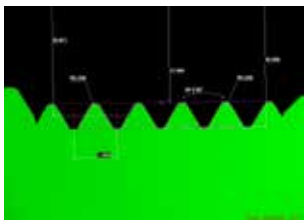
- Powerful Autofocus Function
- Automatic Feature Recognition
- One-Click Measurement
- Contour and Cut Section Inspection
- Image Merge & Graphical View
- CAD Export
- Freeform Curve Inspection
- GD&T Dimensions and Tolerances
- Digital Read Out (DRO)
- Automatic 2D Profile Scanning
- Image & Probe Measuring Functions
- Customizable Report Formats



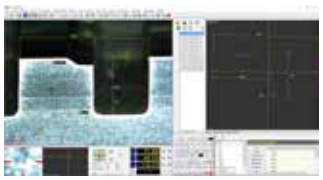
One Click Measurement



Auto Focus Surface



Contour Inspection



Cut Section Inspection



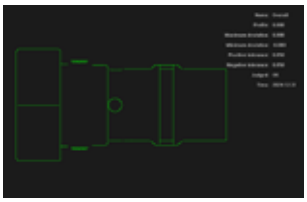
Image Merge



Cut Section Image Merge



Graphical View



CAD Export

ATQ METRO

VMM INSPECTION REPORT

www.atqmetro.com

Format No.: AMPL/INSP/F/04

Rev.00/Date:01.09.2021

Customer:-	ATQ METRO PVT LTD	Date:-	31.12.2024
Drawing Name:-	CUT SECTION		
Drawing No.:-	12345	Ref No.:-	KP/01

Sr. No.	Feature	Standard	Upper tol.	Lower tol.	Measured	Deviation	Status
1	Diameter 1	49.900	0.200	-0.200	49.979	0.079	OK
2	Diameter 2	5.900	0.200	-0.200	5.899	-0.001	OK
3	Diameter 3	32.000	0.200	-0.200	32.003	0.003	OK
4	Diameter 3	36.000	0.200	-0.200	35.958	-0.042	OK
5	Diameter 4	32.000	0.200	-0.200	31.962	-0.038	OK
6	Distance 1	20.000	0.200	-0.200	20.041	0.041	OK
7	Distance 2	94.000	0.200	-0.200	93.986	-0.014	OK
8	Distance 3	20.900	0.200	-0.200	20.887	-0.013	OK
9	Distance 4	23.100	0.200	-0.200	23.116	0.016	OK
10	Distance 5	6.200	0.200	-0.200	6.284	0.084	OK
11	Distance 6	23.600	0.200	-0.200	23.657	0.057	OK
12	Pitch	1.500	0.010	-0.010	1.496	-0.004	OK
13	Thead Height	1.000	0.010	-0.010	0.925	-0.075	NG
14	Thread Angle	60°0'0"	0°30'0"	-0°30'0"	60°0'11"	0°0'11"	OK

XBar-S Chart



Histogram



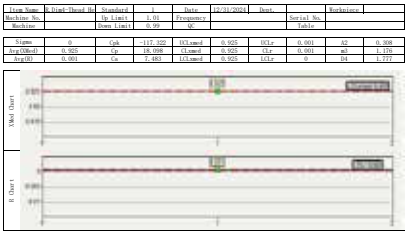
XBar-R Chart



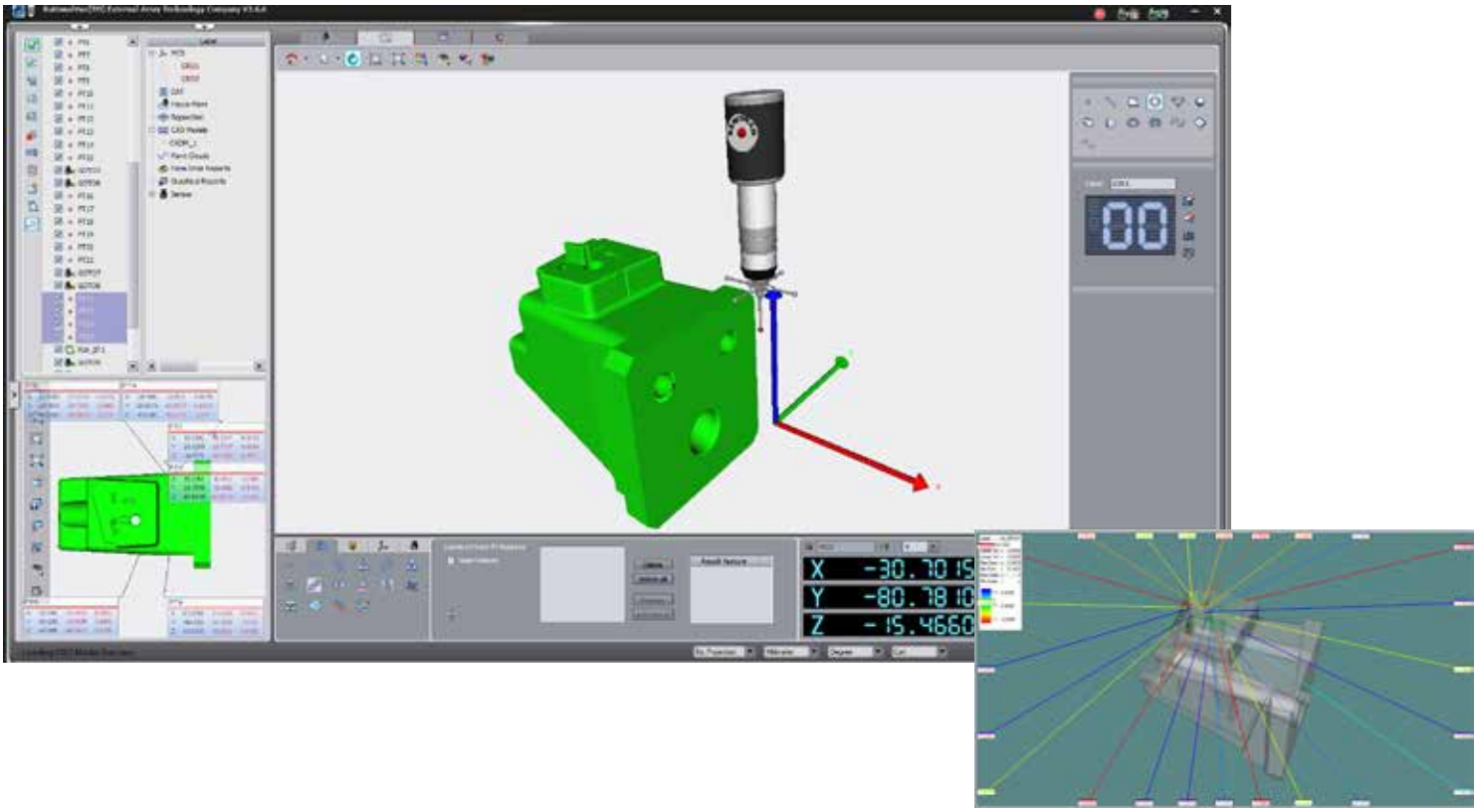
X-Rm Chart

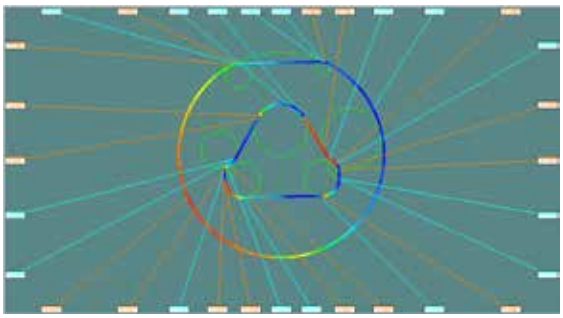


XMed-R Chart



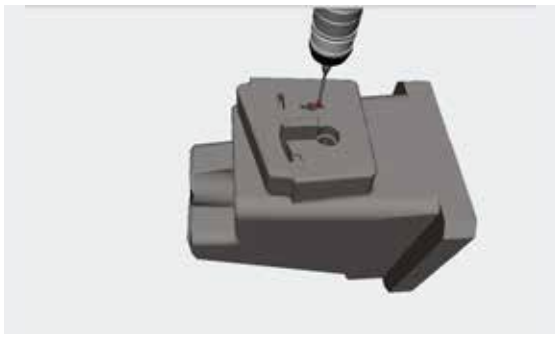
3D SOFTWARE (Optional)





Output form error analysis report

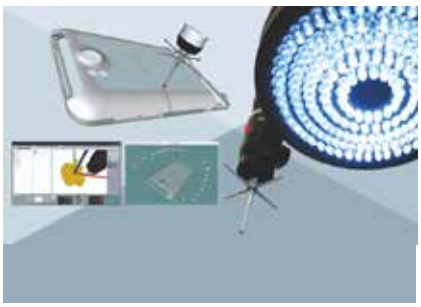
- DMIS based 3D Measuring Software
- Full CAD comparison module for 3D measurement
- Import STEP, IGES & DXF to perform CAD comparison
- Export CAD with IGES & DXF to realize reverse engineering
- CMM type report exporting



Comparison based on multiple 3D format

The software allows users to input 3D files of STEP, IGES format or CAD files of DXF format. The CAD file can be used for measuring, guiding the software to do comparison between the theoretical values and the measuring results, which increases the measuring efficiency by 2-3 times. The CAD input allows the software to achieve all types of geometric and dimensional tolerances measuring function such as position tolerance, profile tolerance for curve or curved surface.



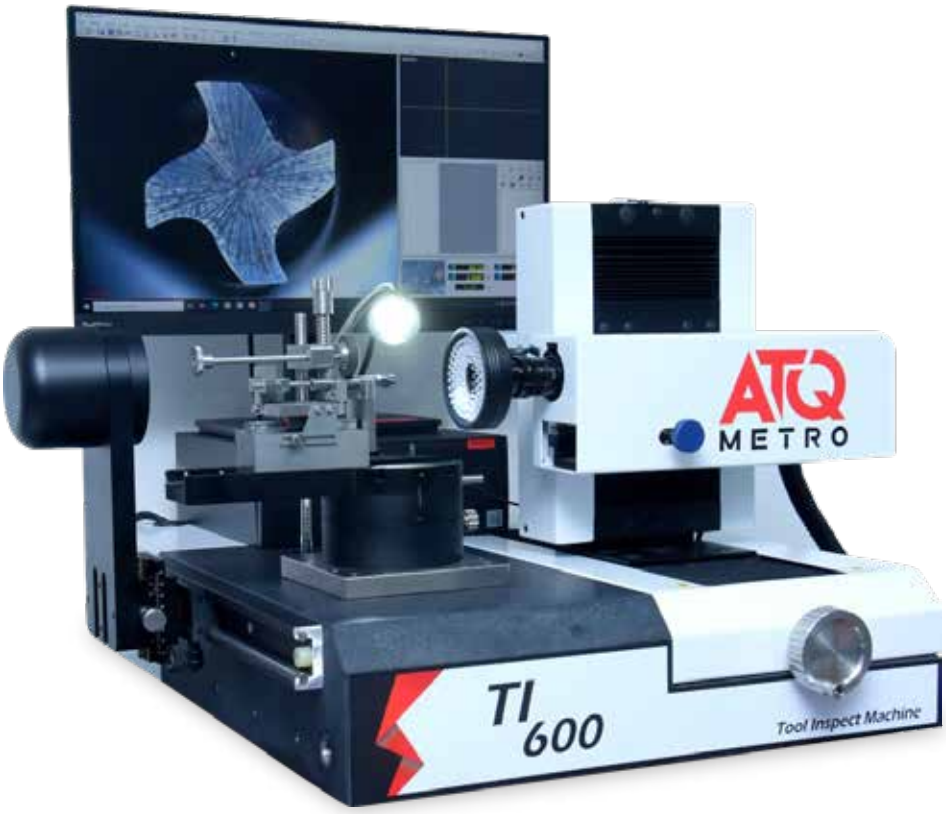




CUTTING TOOL INSPECTION MACHINE

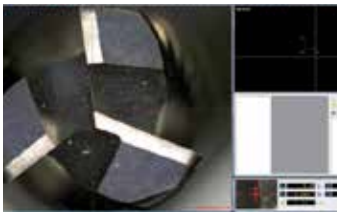
TOOL INSPECT 600

The tool inspect 600 is a versatile measuring device designed for the precise inspection of metal cutting tools. This advanced system provides users with additional measurement functions and enhanced application experiences, making it a reliable solution for quality assurance in tool manufacturing and usage.





Tool Fixture



Easy Operation



Reports

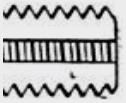
THE BEST INSPECTION MACHINE FOR:



End Mills



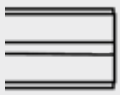
Drills



Taps



Ball Nose



Reamers



Form Tools

Model	X-axis travel	Z-axis measurement range	Max measurable and clamped shank diameter	Working distance
TOOL INSPECT 600	180MM	50MM	32 MM	90 MM

PROFILE PROJECTOR

ATQ Metro's profile projector provide precise optical measurement and inspection solutions tailored to different applications.

VERTICAL SERIES

Designed with a vertical light path for inspecting plastic, rubber, and small machined/turned parts.
Available with 300mm, 400mm, and 600mm screens.
Features a light-duty glass work-stage for delicate components.

HORIZONTAL SERIES

Features a horizontal light path for inspecting machined/turned parts such as die castings, gears, shafts, hobs, and cutting tools.
Available with 300mm, 400mm, and 600mm screens.
Equipped with a heavy-duty steel work-stage for rugged applications.





Lens axis	Vertical	Vertical	Horizontal	Vertical	Horizontal	Horizontal
Specifications	EPP 300VT	PP300 VT	PP 300HT	PP 400VT	PP 400HT	PP 600HT
Work stage table top area	290 x 175mm	380 x 280mm	400 x 120mm	380 x 280mm	450x160mm	600 x 250mm
Measuring range x/y axis	150 x 100mm	200 x 100mm	200 x 100mm	250 x 150mm	300x150 mm	400 x 250mm
Screen: fine grain ground glass	300 mm dia.			400 mm dia.		600 mm dia.
Standard Magnifications	10x					
Optional Magnifications	20x,25x, 50x		20x,25x, 50x,100x			
Magnifications Accuracy	0.05% on profile and surface					

LASER MARKING MACHINE

ATQ Metro's laser marking machines are among the most advanced marking solutions, offering precision, efficiency, and ease of use for industrial applications.



KEY FEATURES

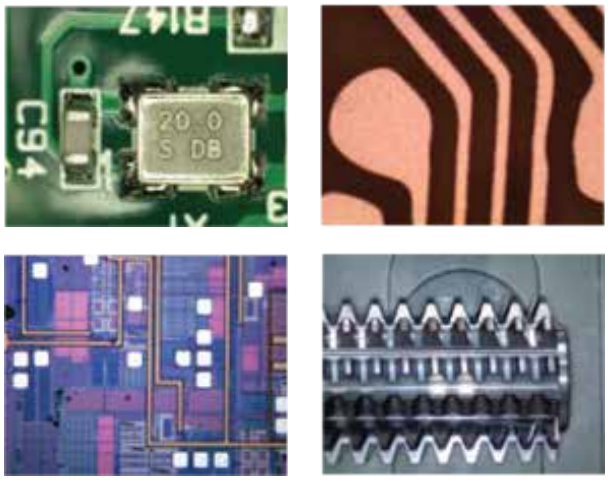
- All-In-One Design: Combines electric cabinet & working table for compact functionality.
- Industrial Layout: Popular design with excellent dust-proof capabilities.
- Versatile Work Area: High clearance between the lifting table and working table, ideal for marking small workpieces.
- Superior Laser Performance: Stable output power with excellent optical quality.
- Fast marking speed for maximum efficiency.
- Exceptional beam quality for precise and clean markings.
- User-Friendly Operation: Simple and intuitive controls.
- Low Power Consumption: Energy-efficient design.
- Automation capabilities and portable feasibilities

MARKING SAMPLES



AUTOMATIC FOCUSING DIGITAL MICROSCOPE

Designed for visual inspection, this digital microscope offers precise and efficient automatic focusing for enhanced inspection quality.

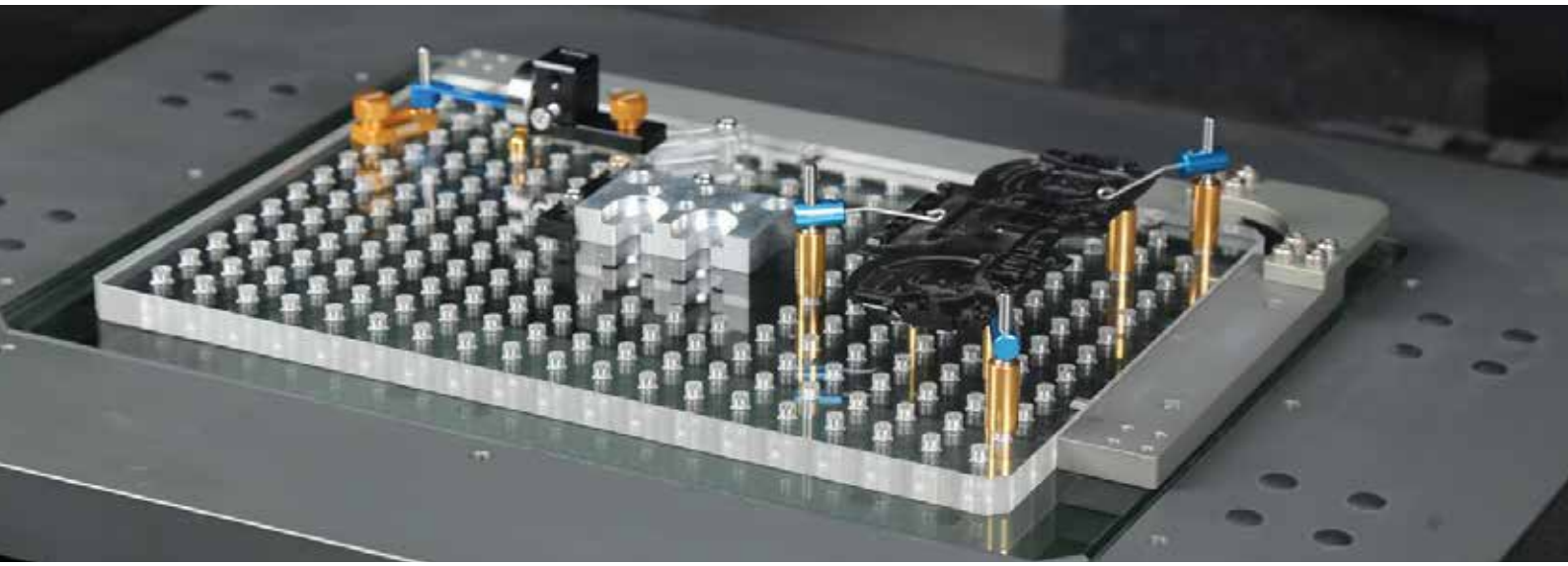




METROLOGY FIXTURES

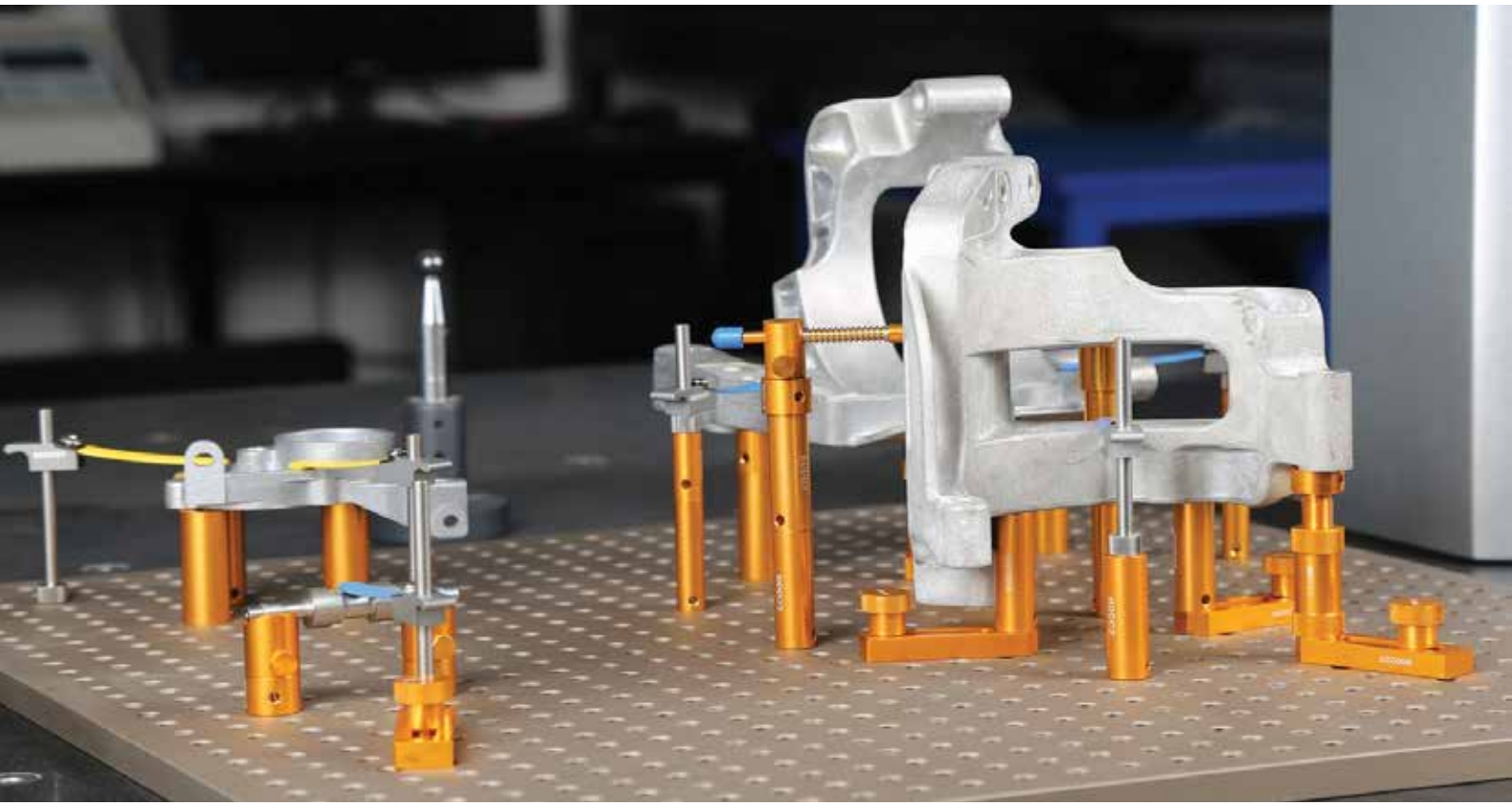
HOLDING FIXTURE KIT FOR VMM (VISION MEASURING MACHINE)

ATQ Metro offers a range of modular fixtures which is specifically designed to use with vision measuring machine. Our VMM fixture kit provides an ingenious clamping solution for securing components during measurement. This system ensures continuous and fast clamping, significantly enhancing repeatability and consistency in measurements, by using our fixture kit, users can save on the cost and time typically associated with developing specialized fixtures for each component, while also ensuring greater accuracy and efficiency during the measurement process.



HOLDING FIXTURE KIT FOR CMM (COORDINATE MEASURING MACHINE)

The ATQ METRO CMM fixture kit is designed to improve the reproducibility and accuracy of your inspection process. Offering quick and repeatable fixturing setups, these modular fixtures can be easily expanded to meet the specific needs of your components. Regardless of size, shape, or material, our CMM fixtures provide a comprehensive and reliable solution, helping to ensure precise and consistent measurements for all parts.



WIDE RANGE OF APPLICATIONS

Vision Measuring Machines offer a broad range of applications and are widely utilized in Metrology Labs, QC/Standard Rooms, and R&D Centers. Renowned for their exceptional measuring accuracy, these machines are highly adaptable to stringent measurement requirements. They serve as powerful tools in precision manufacturing across industries such as automotive, aerospace, defence, medical, pharma, eletrical, electronics, OEM and more.

INDUSTRIES WE SERVE

Aerospace | Automotive | Medical | Defence | Electronics | OEM

APPLICATIONS WE CATER TO


PRECISION MACHINED PARTS


3C


PLASTIC


SPRING


RUBBER


DIE & MOULD (TOOLING)


CUTTING TOOLS


WATCH INDUSTRIES


BRASS COMPONENTS


JEWELLERY


MEDICAL PARTS


SHEET METAL/ STAMPING

Process Control | Quality Control | First Article Inspection | Inprocess Inspection

Layout Inspection | Final Inspection | Multisensor Measurement | Geometric Features (GD & T) | Reverse Engineering

OUR ESTEEMED CLIENTS

PLASTIC

TATA AUTOCOMP · TE connectivity · ANCHOR by Panasonic · ESSEM CONNECT • HARNESS • INNOVATE · YAZAKI Power. Data. Display. · HAVELLS

PRECISION MACHINED PARTS

Amphenol COMMUNICATIONS SOLUTIONS · SFS · Ashish ASHISH BRASS COMPONENTS PVT. LTD. · BHAVANI · Paloma Turning Co. Pvt. Ltd. · UPS LAKSHMI

CUTTING TOOL

cutting tools · VP TOOLS · DORMER PRAMET · MSTM ISO 9001:2015 Certified · WOLF · INDUSTRIAL TOOLS AND GAUGES

CUTTING TOOL

ACCUSHARP · MANAR TOOLS PVT. LTD. · Gujtech Tools A Reliable Tooling Partner · CTC · NMC TOOLS · Cummins

DIE & MOULD (TOOLING)

Vineil Hitek Tooling · DIAS Dias-C Tools & Components · Galva Decoparts Pvt. Ltd. · Technocom Combines Private Limited · PMC PRECISION MOULDS & COMPONENTS PVT LTD. · SPENCER INDIA

STAMPING

mahindra ACCELO · YSM INDIA · SCHURTER ELECTRONIC COMPONENTS · SRUJANA ENTERPRISES · Diotec Semiconductor · MODVAK CONNECTIONS, YOU CAN RELY ON

RUBBER

MK MEGA KLC POLYMER TECHNOLOGIES PVT.LTD. · SCHMALZ · PRECISEAL · Fleetguard · RUBBER CRAFT INDUSTRIES · MAX SPARE LIMITED QUALITY. PRECISION. SPEED.

SPRING

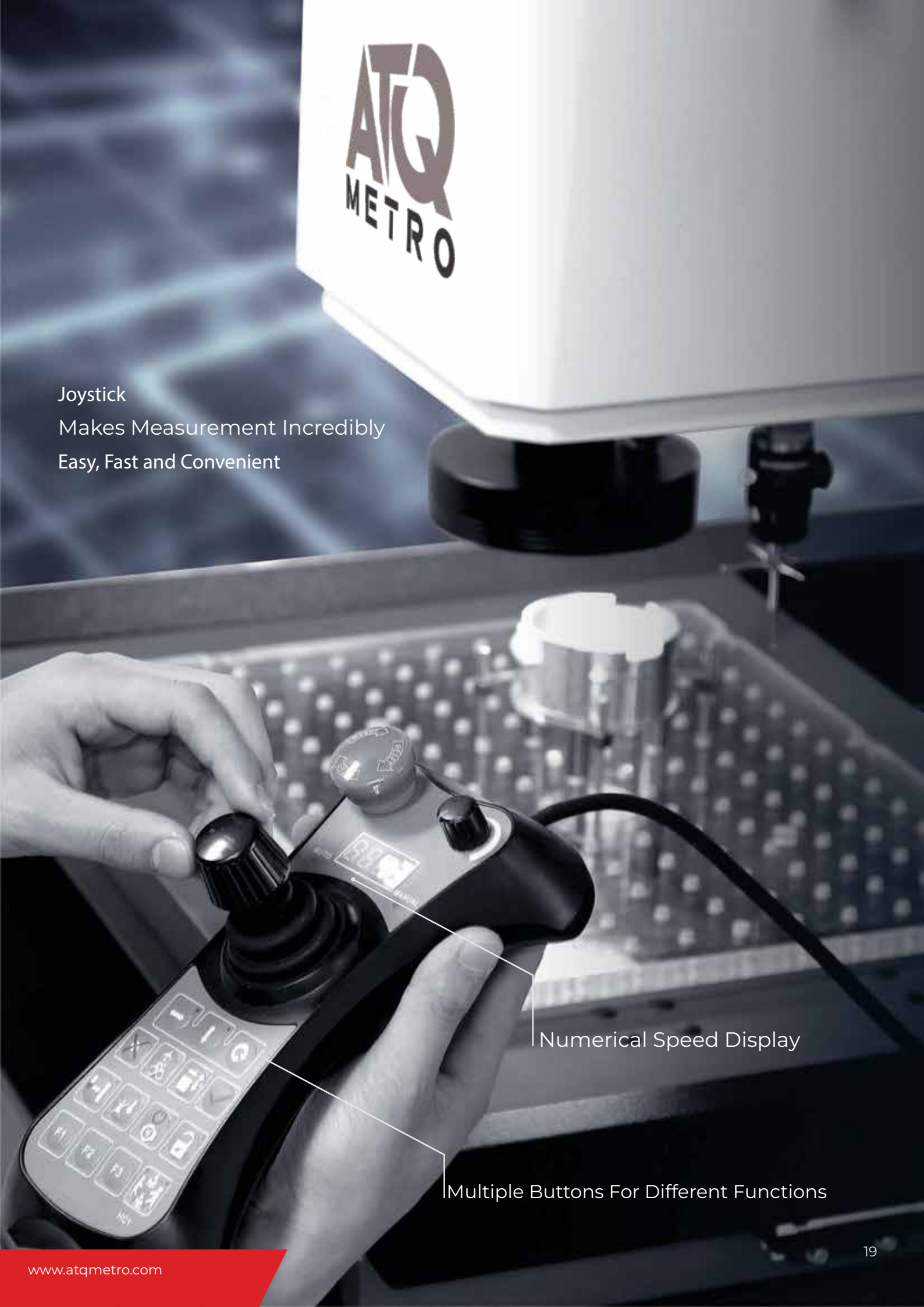
AGSA AGSA SPRING PVT. LTD. · DESHMUKH SPRING INDUSTRIES Quality Endured ! · Standard Spring · connectwell · ROHIT SPRINGFORMS · Techno Springs India Pvt. Ltd.

MEDICAL

Manman · Meril · allwin Medical Devices · Rivarp MEDICAL · THOMSON SURGICALS · INTEGRATED MEDTECH SOLUTIONS

CAL - LAB

UNIVERSAL · BMT Instrumentation & Laboratories · KCL · TICCL · Sigma Calibration Lab · MES



Joystick
Makes Measurement Incredibly
Easy, Fast and Convenient

Numerical Speed Display

Multiple Buttons For Different Functions



Let's connect...

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+91-7875 444 909

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www.atqmetro.com

REGIONAL OFFICES

BENGALURU

108E 3rd phase,
peenya industrial
area, opposite ESI
local office,
Bengaluru - 560058

JAMNAGAR

Plot No 3689, Shop
No 14, GIDC Phase 3,
Golden Point, Dared.
Jamnagar - 361006

GURUGRAM

H.No. 411/16, Ground
Floor, Civil Lines,
Peer Baba Wali Gali,
Gurugram - 122001

LUDHIANA

H.J. 711, H.B. Colony,
B.R.S. Nagar,
Ludhiana - 141012

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