



Immersion®

MicroScribe® MX Portable Measurement System

Accurate. Affordable. Portable.

Each MicroScribe MX system provides a cost-effective alternative to traditional coordinate measurement machines (CMMs) for manufactured parts inspection and high-accuracy reverse engineering. The system supplies metrology-level accuracy in an easy-to-use articulated arm and seamless integration with the most popular metrology, reverse engineering, and 3D design software applications.

The Right Tool at the Right Price

The new MicroScribe MX Portable Measurement System supplies CMM functionality at a whole new price point. With metrology-level accuracy, this system enables cost-effective inspection of many manufactured parts and reverse engineering projects. Now you can have the 3D data collection efficiency of coordinate measurement systems at an affordable price.

Fast and Efficient To Lower Your Costs

The MicroScribe MX system can complete measurement jobs faster and with less expense. With the system's smooth-action, counter-balanced, articulated arm, users can quickly position the stylus into even tight spaces. Optional tips further support fast and accurate measurement of many parts and materials.

Highlights

- The right accuracy at the right price
- Choice of configuration for five or six degrees of freedom
- Fast and easy, click-and-go operation – minimal training needed
- Portable – weighs as little as 11.4 pounds (5.17 kg)
- Optional case for easy travel

It's not necessary to spend time converting data, because the system seamlessly integrates with so many measurement and inspection software packages (see Software Solutions, back page). Unlike other CMMs that provide limited third-party software integration, MicroScribe technology frees you to choose the software that's right for your business. In addition, an available software developer's kit (SDK) provides all the files and information needed to create unique programs and utilities. With the fast operation and ease of use provided by the MicroScribe MX system, you can do more projects in house and help avoid the increased costs and protracted turnaround associated with outsourcing.



**Accuracy up to
0.004-inches**



Highly Accurate and Easy To Use

MicroScribe MX systems are calibrated according to Immersion's Tri-Test Calibration™ method based on the American Society of Mechanical Engineers' B89.4.22 draft specifications for the performance evaluation of articulated-arm CMMs. All systems ship with two (one master and one working) 20mm, M4 threaded, 3mm ruby ball tips. Convenient probe calibration software is provided allowing for user-provided tips and rapid tip swapping. MicroScribe systems are CE and FCC certified, and a one-year limited warranty is standard.

Setting up the MicroScribe MX system, even the first time, takes as little as five minutes. Bolt the base to a work surface or set the clamp system wherever you need it.

Specifications

MicroScribe System	MX	MLX
Reach	25 in (.63 m)	33 in (.84 m)
Workspere diameter	50 in (1.27 m)	66 in (1.67 m)
Degrees of freedom (Part No.)	5 (CMS-MX-SYS) 6 (CMS-6MX-SYS)	5 (CMS-MLX-SYS) 6 (CMS-6MLX-SYS)
As specified in the ASME B89.4.22 draft specifications	<0.004 in (0.1016 mm)	<0.005 in (0.1270 mm)
Weight	11.4 lb (5.17 kg)	13.2 lb (5.99 kg)
Power	Universal power supply (100V – 240V)	
Connectivity	USB 2.0	
OS compatibility	Windows 2000, XP	
Ambient temperature, operating and accuracy	15°C to 35°C	
Ambient temperature, storage	-20°C to 70°C	
Relative humidity	10-90% non-condensing	

Included Accessories

- USB cable
- Universal power supply (with country specific IEC cable)
- One-year limited warranty
- Certificate of Calibration
- Two tool tips: 3mm ruby ball tip, M4 threaded, 20mm length (Figure 1)
- User tip calibration fixture (Figure 2)
- Dual foot pedal (Figure 3)
- User's guide

Optional Accessories

- Rugged carrying case (Figure 4)
- Hand switch (Figure 5)
- Metrology probe set: varying lengths and tips, available soon
- Battery, available soon



Figure 1: Tip



Figure 2: Tip Calibration Fixture



Figure 3: Dual Foot Pedal



Figure 4: Carrying Case



Figure 5: Hand Switch

Software Solutions

Seamless integration with premier reverse engineering and metrology software is available through several levels of support. Visit our Web site for the most up-to-date compatibility list.

In addition, MicroScribe Utility Software allows data acquisition for some applications that do not provide native support. Select features include:

- Calibration routine lets you calibrate and use most M4 threaded probes
- Data streaming that lets you collect points automatically at a time or distance you specify
- Custom reference frame for defining the physical workspace

About Immersion Corporation

Founded in 1993, Immersion develops software and hardware technologies that improve the way people interact with digital devices. Immersion MicroScribe products are the fast, flexible way to capture 3D measurements from a physical model. The MicroScribe MX portable measurement system offers superb flexibility and metrology-level accuracy at the right price for many reverse engineering and inspection projects. The MicroScribe G2 desktop digitizing system is the ideal choice for rapid prototyping, character creation, and many reverse engineering projects.

For More Information

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