

Rotor Mapping System – Model 2020



The XMI Rotor Mapping System model 2020 is designed to measure rotor lateral run-out (TIR) and rotor thickness variation (RTV). The system utilizes non-contact capacitive probes which measure the “air gap” between the probe and the rotor. The capacitive probes have the ability to measure to 1/2 micron resolution.

The model 2020 with the rotor run-out option, has been designed to accurately measure the characteristics of the rotor without any run-out error from the measuring equipment. Additional sensors on the model 2020 are constantly monitoring for any run-out error which might come from the motorized turntable or the motor bearings. These monitoring sensors insure there is no latent error attributable to the measuring equipment.

The model 2020 is user friendly and easy to operate. Utilizing the quick rotor mount and turning the rotor at the recommended 30 RPM, accurate RTV measurements can be accomplished quickly and easily.

Specifications

Software	RTU XPro Software
Number of Probes	2
Maximum Range	2.5mm
Probe Resolution	+/- 0.0005mm
Sample Rate	3600 Per Second
Recommended Sample Rate	20 Samples/Second sample rate is software selectable
Operating Temperature	-73 to 400° C
Probe	Capacitive w/90° quick disconnect cable
Cable length	10 feet
X-axis probe location measurement resolution	+/- 0.001mm
Computer	3GHz Intel w/XP

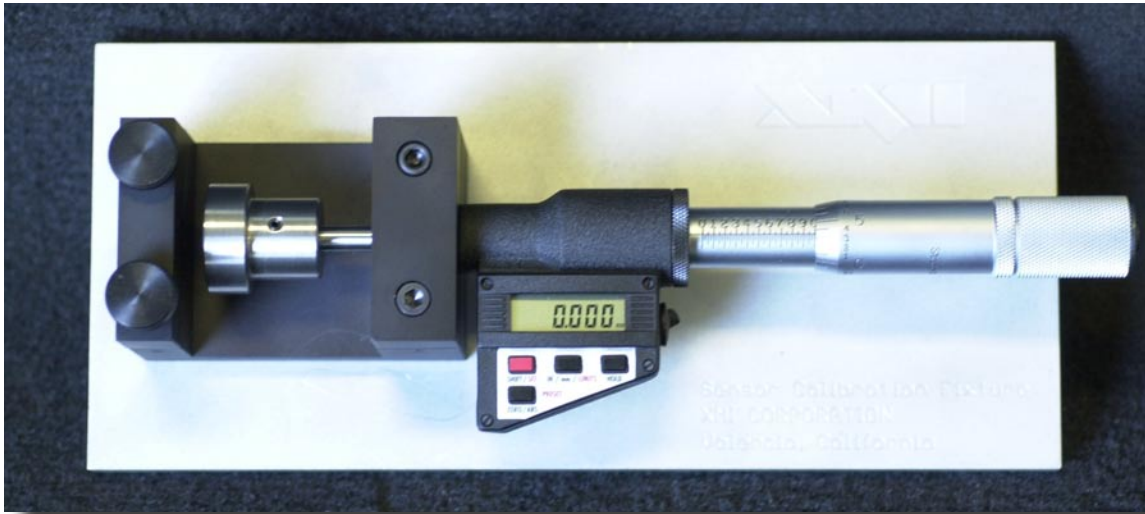
Options

- Additional Probes
- Graphical Analysis Software
- Sensor Verification Fixture Model XTF001-01
- Special kit to measure actual rotor thickness (replaces micrometer measurements)
- Additional monitoring sensors for computing non-bias lateral run-out

Customized Software Available



XMI Corporation
 24713 Avenue Rockefeller
 Valencia, Ca. 91355
 tel. 661-257-0111 fax. 661-257-0555
www.xmicorp.com info@xmicorp.com



XMI Sensor Verification Test Fixture - XTF001-01 (0-1")

Used to verify Capacitec sensors are working within tolerances prior to RTV measurements.

Available for sale as a separate item.



XMI on-vehicle RTV Measuring System Model 2010 can be used to measure vehicle RTV (Rotor Thickness Variation) without disturbing the brake system. The on-vehicle system can also be used with the Rotor Mapping System Model 2020 to compare run-out measurements on and off the vehicle to help understand any changes in run-out once the rotor is mounted on the vehicle.

The Rotor Mapping System Model 2020 and the on-vehicle system can use common resources by sharing the capacitive probes, amplifiers and the computer. This “Combo” configuration Model 2020-10 can significantly reduce hardware costs.

