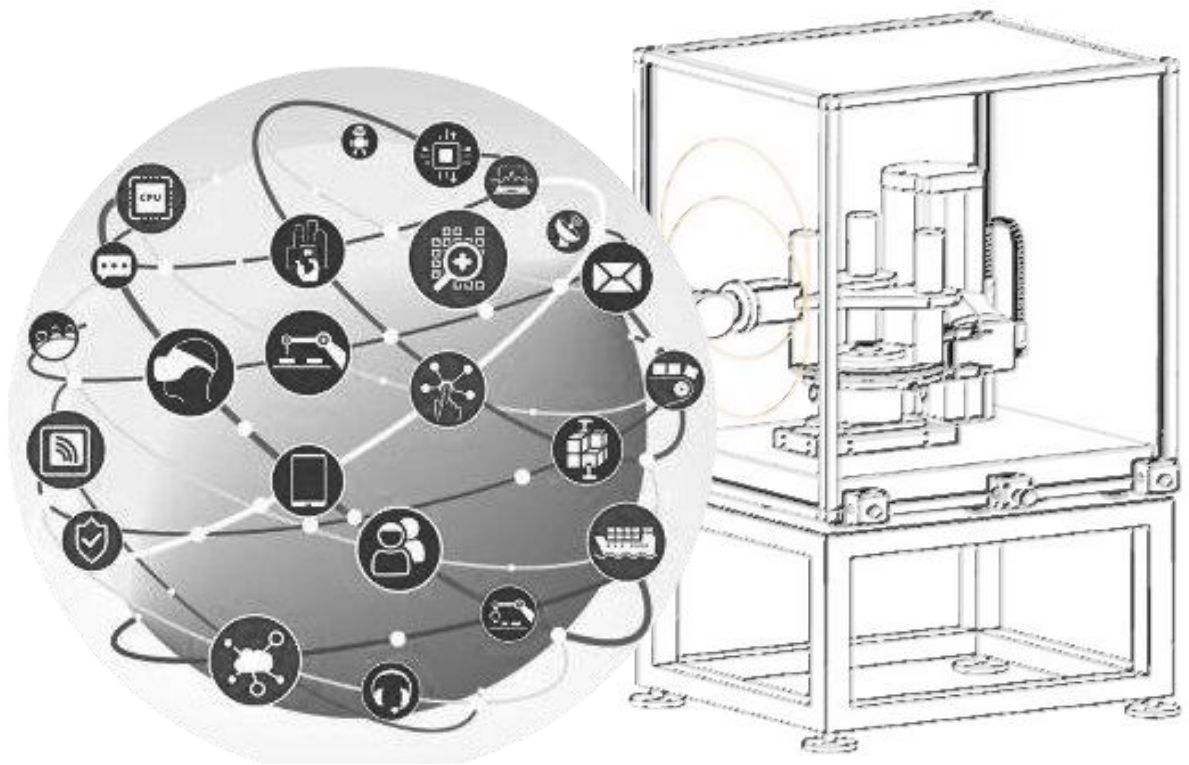


# TR Scan Solutions

A range of non-contact surface measurement products tailor-made for specific customer needs.



**Towards Industry 4.0**

# 1.

## PRESENTATION

Trimos has used its extensive engineering experience to develop tailor-made solutions to meet the needs of international customers.

The Trimos development team can visualize the specific mechanical construction right from the start of the project, which means that customers have the possibility of full integration according to their needs.

The integration of all roughness analysis functions allows fully automatic operation without human intervention.

The wide selection of sensors allows all non-contact measuring solutions to be processed.

The combination of TR Scan and optics with a large numerical aperture allows measurements over a distance of 1mm with a resolution of 35 nanometers and a numerical aperture of +/-45 degrees.

Our product manager and our R&D team in mechanics, electronics and software allow the understanding and follow-up of specific requests.

TR Scan Solutions can be equipped with a robot for automatic loading of the parts to be measured.

### Highlights:

- Turnkey solutions
- Fully automatic, 24/7 use, 7 days a week
- Dedicated to one or more specific measures
- Fast non-contact roughness measurement
- Measurement of geometry elements
- Fast thickness measurement on all types of surfaces
- Innovative vacuum fastening system
- Multi sensors/sensors
- Specific software according to the customer's request.
- Remote assistance
- Ready for Industry 4.0
- Palletizing possible
- Manual or automatic loading
- Loading by a robot
- Online CGK & RR calculation
- Automatic saving of all measurement profiles
- LOG export and automatic results
- Exporting values in QDAS format
- Fieldbus type: Profinet & Profibus

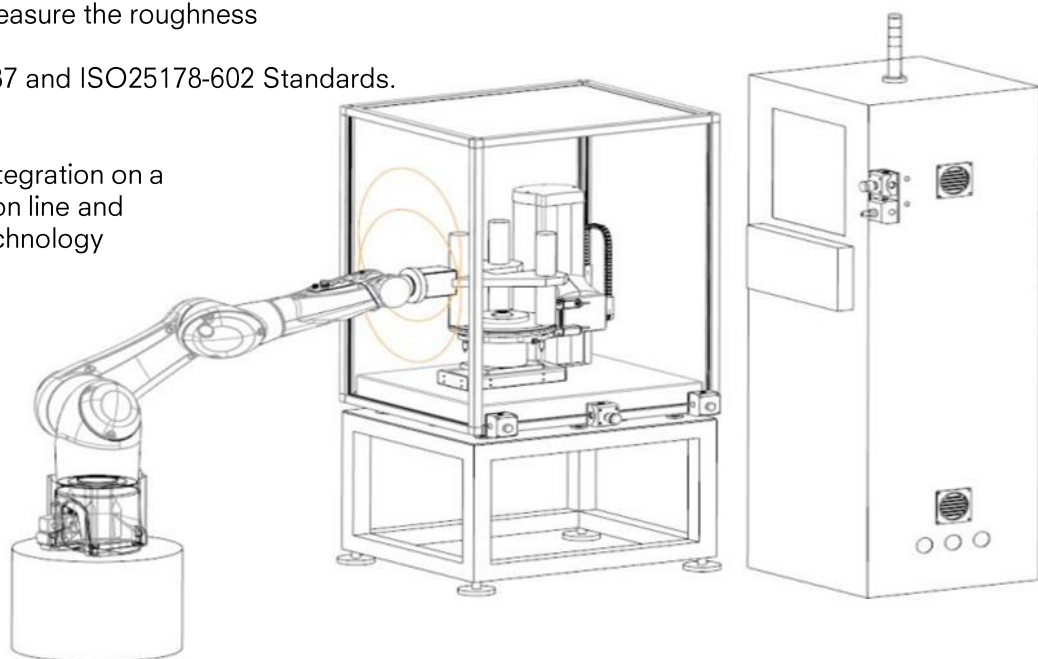


# 2.

## BRAKE DISK

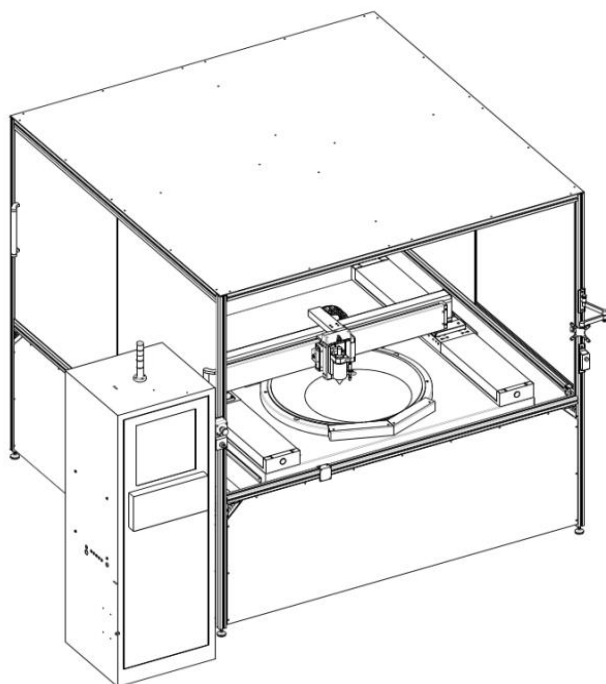
Our system allows us to measure the roughness on both surfaces of a brake according to ISO4287 and ISO25178-602 Standards.

Extremely short cycle time, ~15 seconds, allows the integration on a fully autonomous production line and automatic thanks to the technology Industry 4.0



# 3.

## CMP-PAD

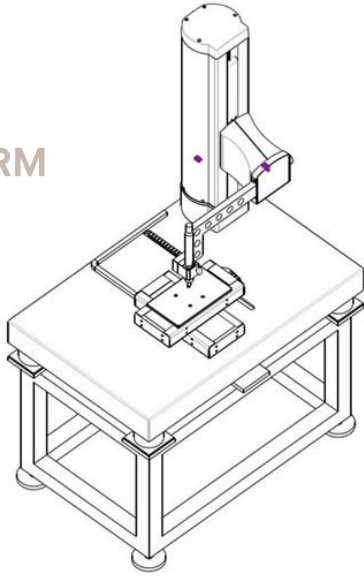


Fast measurement with non-contact multi sensors. Rapid movement of more than >250 mm/s requires a stable mechanical base, the use of a granite base combined with axes in Gantry mode (Multi motor) guarantees fast and precise movement. The unique clamping system with micro-porosity technology enables extremely flexible and thin workpieces to be held by vacuum. The specific and adapted sensors allow a measurement of thickness and roughness according to the standards in force. Macro editing allows fast programming and easy use in a production workshop.



# 4.

## LONG ARM

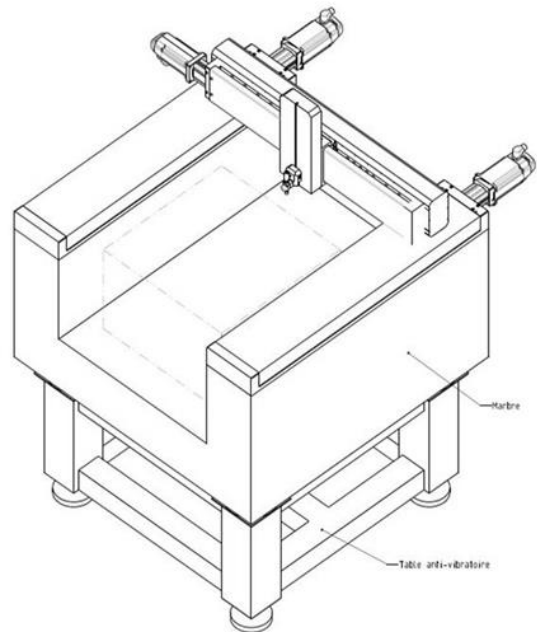


Our long experience in the field of metrology allows us to carry out roughness measurements on complex surfaces that are far apart from each other thanks to a long special arm. Thus, it is possible to carry out 2D roughness measurements according to ISO 4287 on the X or Y axis or in 3D mode.

# 5.

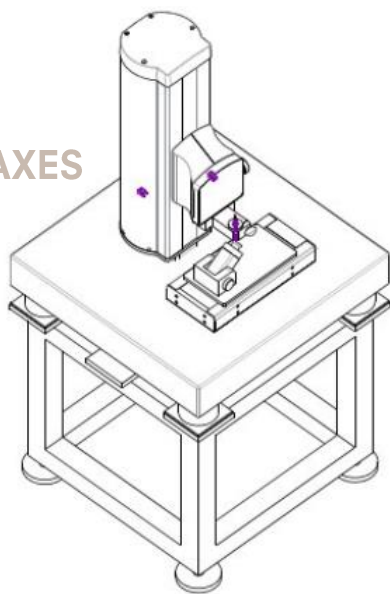
## MODULO

The use of guide modules combined with an extremely rigid structural base allows the creation of large machines and thus the measurement of roughness, shape, flatness, etc. Very large, extremely heavy and bulky workpieces can be measured with high accuracy.



# 6.

## MULTI AXES



Our system is capable of integrating additional axes.

Clamping clamps allow 2D roughness measurements to be held and performed on cylindrical parts with high angles or large bending radii according to ISO4287.

The additional axes may be with manual or motorized movement with CNC controller.

