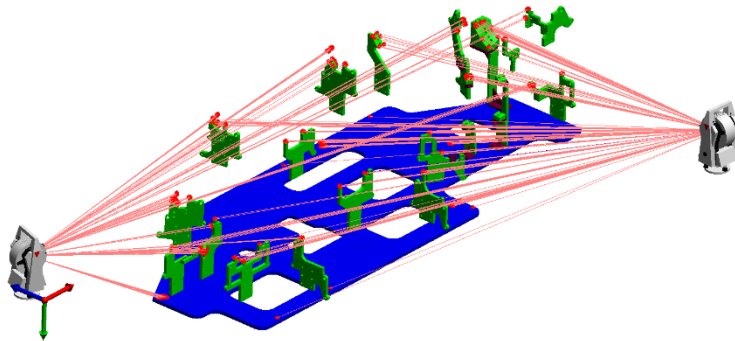
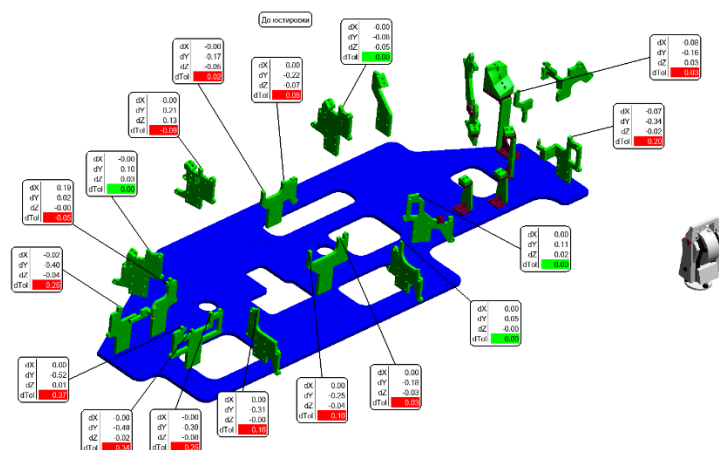


Modern automotive technologies require high accuracy of geometry of the vehicle body and individual components and, accordingly, impose more stringent requirements for:

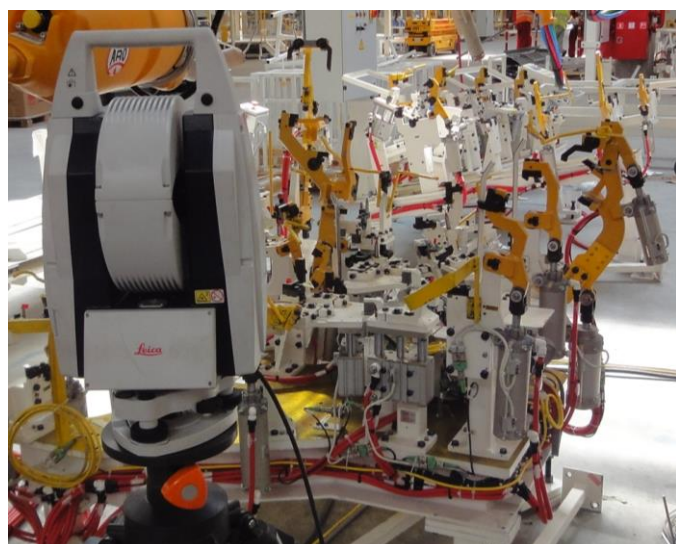
- welding benches;
- jigs;
- die sets, male dies, female dies;
- inspection fixtures;
- vehicle components.



Inspection and adjustment of welding benches.



Actual geometry of a bench.



Modern CMMs assure high accuracy of measurements. Leica laser trackers offer accuracy of $0.015 \text{ mm} \pm 0.006 \text{ mm/m}$. The Hexagon CMM arm offers accuracy of 0.008 mm across the entire measurement range.

Geometry inspection of basic pins (clamps)

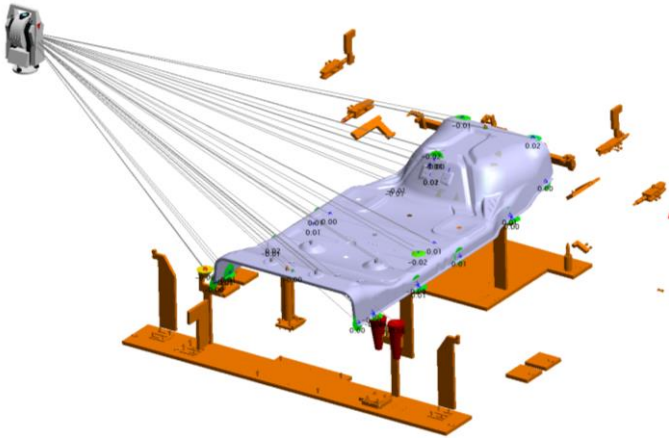
Basic clamps of an assembly line are an important stage in the commissioning of a conveyor since, as a vehicle body moves from station to station, the basic clamps must ensure the uniqueness of the installation of the body in a station's coordinate system to ensure the correct geometry of the body during welding.



Welding conveyor.

Geometry inspection of a vehicle body

Modern tools and methods of geometry inspection reduce inspection operation time and completely replace templates, inspection fixtures and references, thus moving away from the manufacture of inspection fixtures during subsequent upgrade.



Geometry inspection of the bench floor.

Geometry inspection of jigs

Incoming inspection of the manufacture of inspection fixtures and annual inspection.



Edge inspection.

Referencing robots to a station's coordinate system

Leica laser trackers are used to reference robots to a station's coordinate system.



Our company was created by professionals with more than 10 years of experience in high-precision measurements in various sectors of industry.

Our company's main activity is metrology that is not subject to licensing.

We guarantee professional competence, equipment and other material capabilities required for high-precision measurements.

All measuring equipment that we use in our work is listed in the State Register of Measuring Instruments and has a government-issued certificate of verification.

All our professionals completed specialized training in working with hardware and software, which is evidenced by certificates.

If you have a measuring task or questions regarding high-precision spatial measurements, feel free to contact our professionals:

Industrial Measurements Team:

Evgeny Kraev
e.kraev@promzamer.com
+7-981-838-12-55

Sergey Pavlov
s.pavlov@promzamer.com
+7-981-838-59-58

Sergey Polygin
s.polygin@promzamer.com
+7-911-230-73-22