

RONDO HPC

High-speed, fully automated volumetric inspection and thickness mapping of high-pressure cylinders (HPC)

Equipment Highlights

High-Performance Solution

- Complete inspection cycle time for a 50-liter cylinder <60s (including moving cylinder in and out of the inspection cell)
- Inspection performed by the rotation of the cylinder and the axial movement of single or dual inspection clusters with up to 10 sensors on the rotating cylinder for fast and accurate inspections.
- Integrated automated calibration station that can store up to 3 calibration cylinders performing calibration cycle time <1min.

Designed for Maintenance

- Easy access to UT head assembly.
- Water protection walls, easily removable.

User-friendly Operation (ITOP)

- Built around Innerspec Technologies Operating Platform (ITOP).
- NDT-WEB 360 software provides a web-based user interface easy to access, share, and customize.
- NDT-LINK cloud service for comprehensive asset management (user access, documentation, support, spares).

Built-In Integration

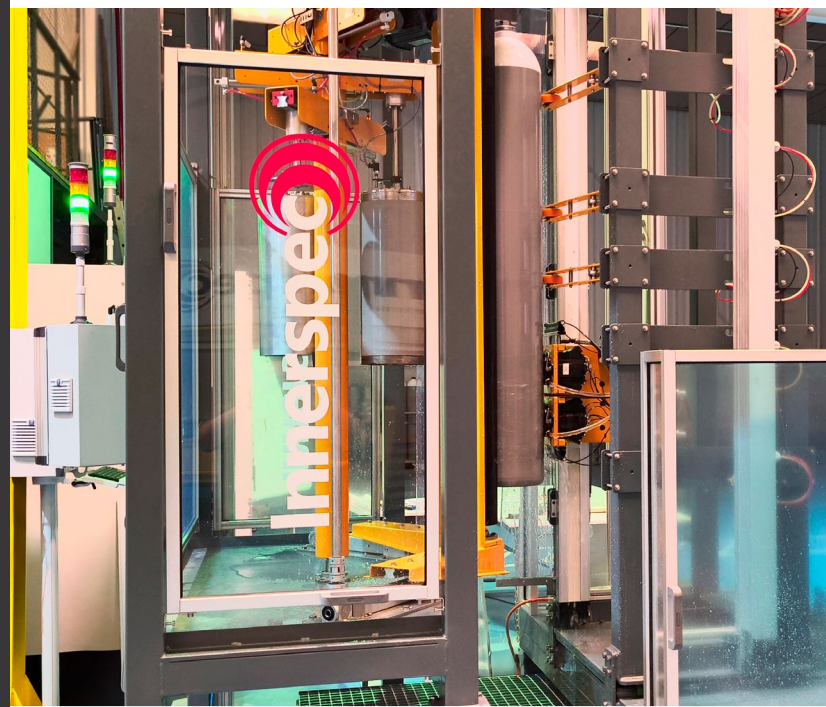
- Integrates in the production line. The cylinders move into the inspection cell with a standard vertical conveyor.
- Turn-key solution to any production line design available.

RONDO HPC provides full volumetric inspection and thickness mapping of standard 10-80 liter High-Pressure Cylinders (HPC) at production speeds with cycle times <60s per 50L cylinder. It is fully compliant with ISO 18119:2018.

The system accommodates HPC diameters between 140-250mm and heights from 450-1600mm. Both aluminum and steel.

The cylinders move into the inspection cell where an automated rotator spins them at up to 2m/s. Single or dual head inspection clusters with up to 10 sensors move axially on the rotating cylinder resulting in fast and accurate inspections.

It is offered as a full turnkey inspection system integrated in the production line. Inspection results include Strip chart, A-scan, C-scan views and a table with automatic defect size measurement.



RONDO HPC Specifications

System Type	Helical inspection - Simultaneous product rotation with axial UT probes movement
Cylinder Diameter	140-267mm
Cylinder Length	450-2000mm
Key Features	• Ultrasonic Testing (UT) technique. • Full volumetric inspection and thickness mapping of standard 10-80 liter High-Pressure Cylinders. • All cylinder materials, both aluminum and steel included. • Total production capacity of 60+ cylinders/hour. • Inspection results include Strip chart, A-scan, C-scan views and a table with automatic defect size measurement.

