

# PORTABLE HARDNESS TESTERS

SERIE RSD MAG



# PURPOSE

- Measure the hardness value directly on site without having to move the sample
- Real Rockwell results conform to ASTM E18 and real Brinell results conform to ASTM E10 standards
- No need to move huge samples to the laboratory to make test, because RSD MAG is portable hardness tester



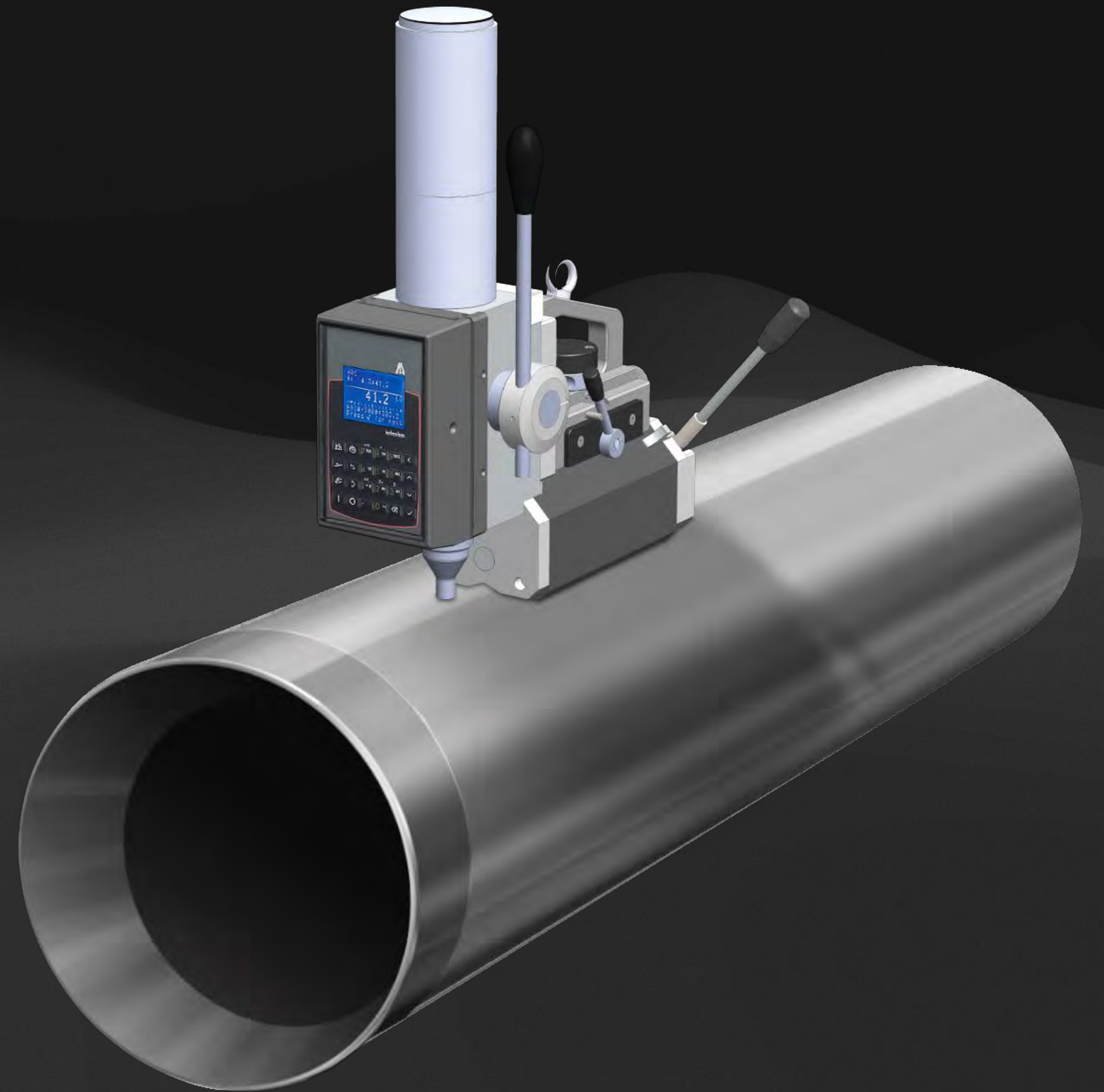
# RSD MAG

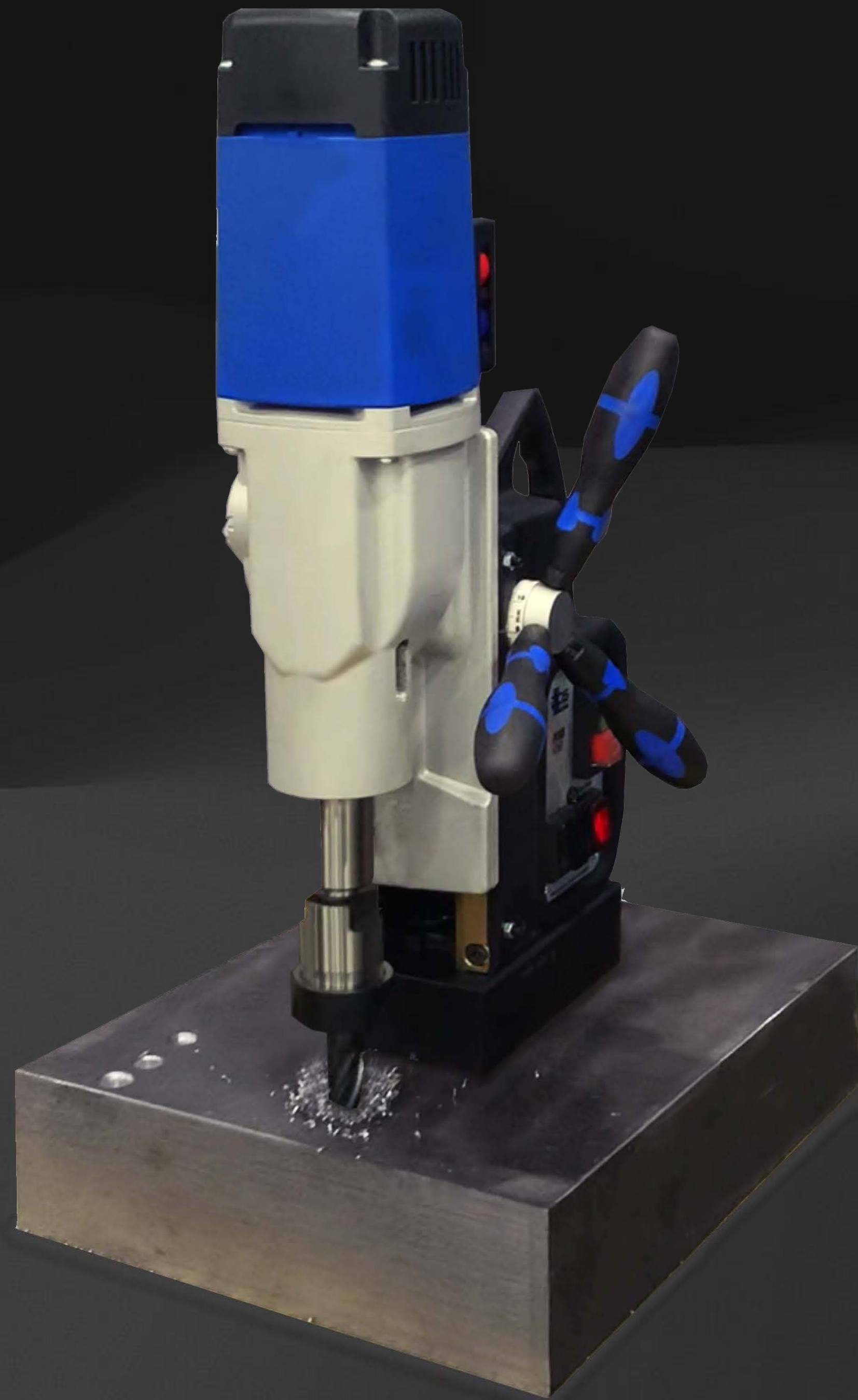
- RSD MAG is a real hardness tester conform to STM E10 / E18 standards
- Thanks to its **magnetic clamping base** it's possible to perform hardness tests on any kind of surface and in 360° degrees of positions
- Perfect results even on the most difficult surfaces, even upside-down



# RSD MAG FEATURES

- RSD MAG performs HRC tests on hardness materials or HRB on soft materials in order to cover the entire range of possible hardnesses
- It's also able to perform Brinell measure with a **2.5 mm ball**





- You can use a **milling station** to prepare the sample before the measurement
- Our milling station has a magnetic clamping base to assure perfect stability during milling





FFRI

0.0

Handheld

1 2 3 4 5 6 7 8 9 0

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# RSD MAG CATALOG

## AUTOMATIC SYSTEM

The RSD hardness testers are extremely accurate systems for automatic preloading, loading and measurements.

RSD AFFRI® System hardness testers achieve the highest level of depth accuracy and measurement resolution available for Rockwell tests.

Thanks to the AFFRI® System, the real indentation measurement is guaranteed without any external interference in any condition.

## ONE DRIVE MEASUREMENT

Just push the START level and the head moves down performing the hardness test cycle in automatic succession without breaking phases:

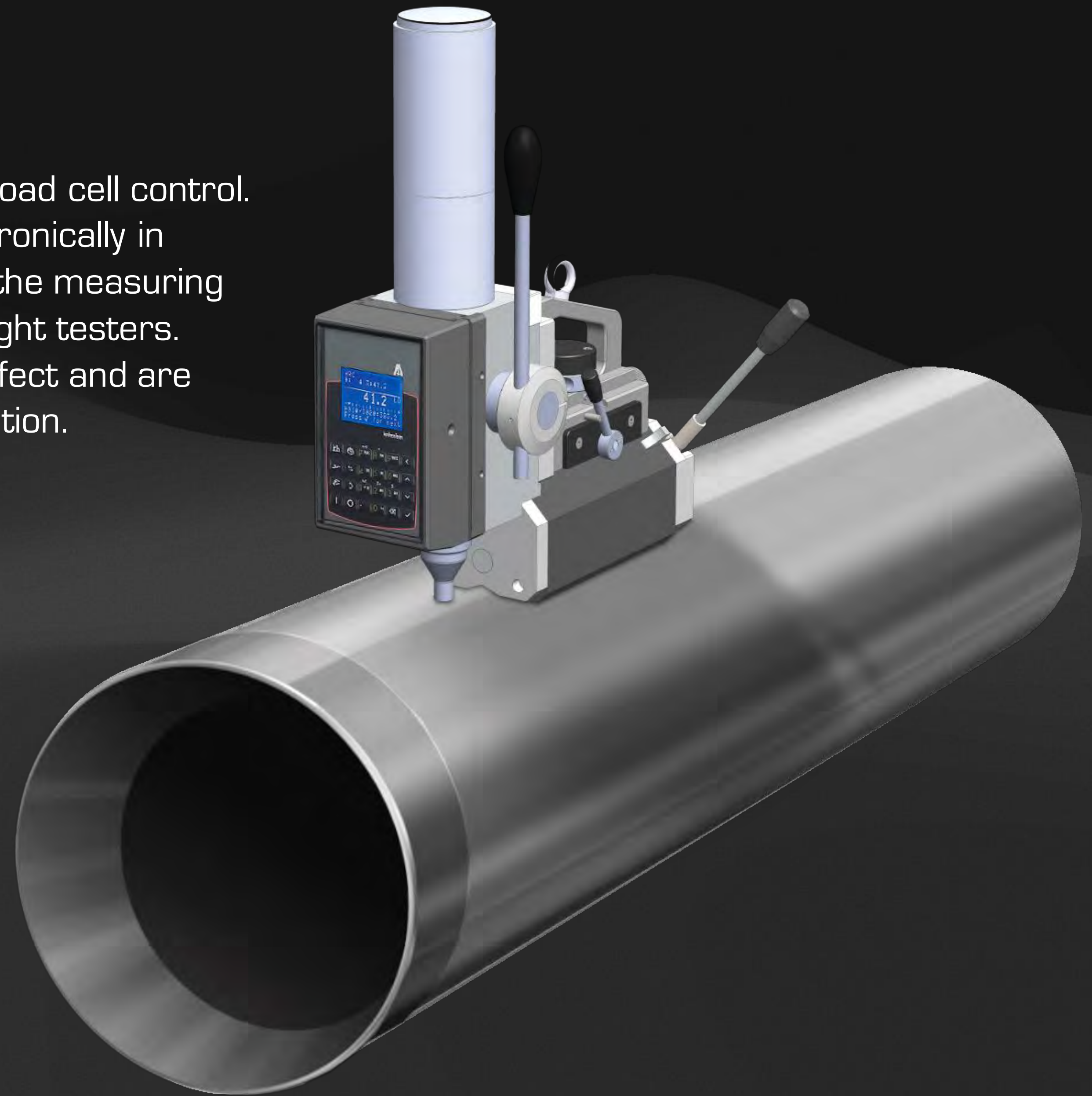
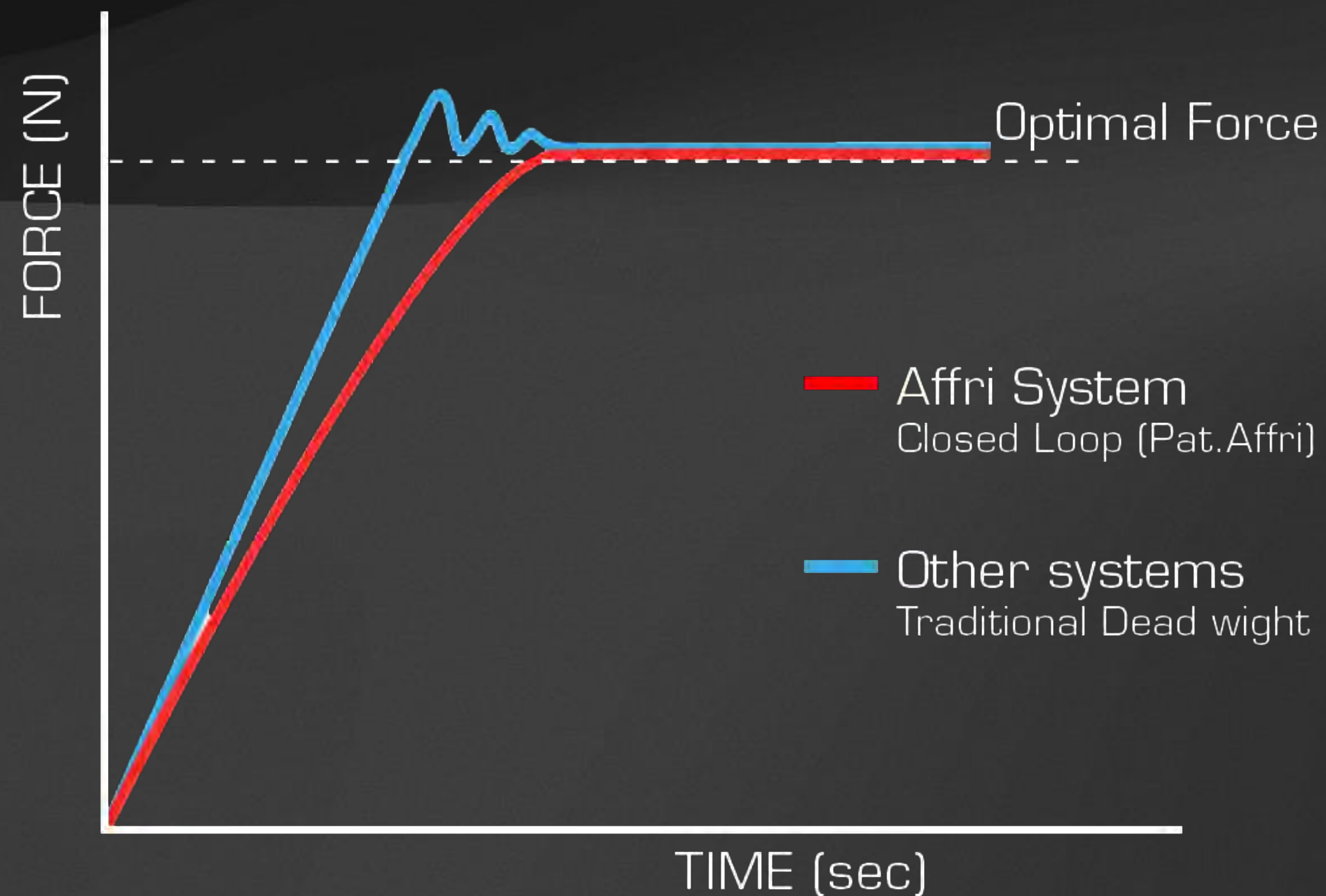
- 1- Automatic contact with the specimen
- 2- Automatic clamping and activation of reference surface point
- 3- Automatic preloading and loading
- 4- Automatic measure
- 5- Automatic return stroke when be used by operators of every level





## LOAD CELL TECHNOLOGY

This is the exclusive AFFRI latest generation of dynamometric load cell control. Load forces are applied through load cells and controlled electronically in "Closed-Loop" (pat. AFFRI). Load forces are applied directly on the measuring axis, eliminating problems associated with traditional dead weight testers. With Load Cell Technology by AFFRI the results are always perfect and are not affected by any structural deflection, misalignment or vibration.



## MAGNETIC CLAMPING BASE

Thanks to its magnetic clamping base it is possible to perform hardness tests on every bulky samples directly in the production department and line. RSD MAG is completely uninfluenced by direction or kind of surface, in this way it is operative up to 360° degrees of positions, even upside down. The magnetic system assures perfect stability during the whole measurement.



## AUTOCOMPENSATION SYSTEM

The system automatically recognizes the surface of specimen. During the hardness test, it may happen that the samples deflect or are not stable, but the measuring head of RSD MAG will follow the sample without losing contact. The measuring of real indentation depth is not affected by external conditions. RSD MAG assures perfect results even in the most difficult conditions.



## HANDY AND SIMPLE

The AFFRI magnetic portable hardness tester solves all type of problems. It can be used as conventional hardness tester or as a portable system for on-site testing when the test pieces are too large or too heavy to move or for a bench hardness tester.



## ONE DRIVE MEASUREMENT

It can be used by any kind level operators because RSD MAG has fully automatic test cycle:

- 1- Identify the test area and place hardens tester on the test sample
- 2- Lock the magnetic lever, now RSD MAG is completely fixed to the surface
- 3- With the sliding of 50mm, make contact between indenter and sample surface
- 4- Pull down the START lever and the test cycle will begin automatically

**OUR HARDNESS TESTERS  
ARE RECHARGEABLE WITH  
POWER BANK BY SOLAR ENERGY**

