Material Quality Inspection

Emdoor Rugged Product for ERNST Hardness Tester (E-Computest) Solution

Background

Hardness indicates the ability of a material to resist hard objects pressed into its surface, and it is one of the important indicators of metal materials. The hardness tester is a kind of hardness measuring instrument. By pressing its indenter into the surface of the material to be tested, the hardness value of the material can be obtained from the indentation area or depth. ERNST is a Swiss professional manufacturer of high-quality hardness testers integrating R&D, design and production. As the competition becomes more and more fierce, how to realize the miniaturization of the hardness tester and improve the degree of intelligence and information under the premise of ensuring the accuracy has become an inevitable trend in the development of the hardness tester industry at home and abroad. This is also an opportunity for Ernst.

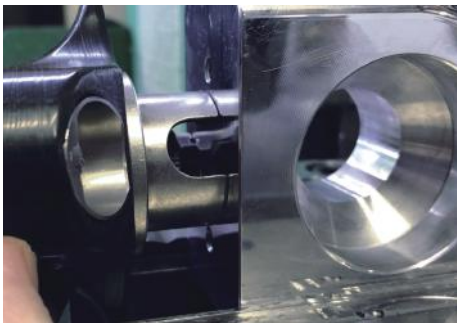
Challenge

1. The traditional hardness tester is only an independent device, and all operations or settings are manually implemented on the hardness tester. The data is stored in the machine, and then printed or transmitted to the host computer through the data cable. The operation is cumbersome and cannot meet the modern requirements such as remote control, integration of big data systems, and remote diagnosis of equipment status.
2. Traditional hardness testers are mostly desktop hardness testers, which are bulky and immovable and can only meet general market needs. For measuring large workpieces that are not easy to move, such as molds, pipes, etc., or when measuring target materials outdoors, it is difficult to measure.
3. With the development of digital information, although the hardness tester gradually incorporates technologies such as digital display and touch screen, it is still difficult to find a balance between portability and intelligence. As a result, it is difficult to realize intelligentization of small hardness testers, and vice versa.

Introduction

Aiming at the difficulties faced by the hardness tester and the opportunities faced by ERNST, Emdoor Info recommended a rugged handheld EM-T62 for it. It can be perfectly integrated with an ultra-small and high-precision Rockwell hardness tester newly developed by ERNST to form a new wireless portable digital hardness tester which is E-Computest. The system can measure surfaces of different types, materials, shapes and sizes from flat to cylindrical surfaces in any direction. It is simple and convenient, and can be used to measure large parts or outdoors.

EM-T62
Rugged Handheld



Advantage

1. E-Computst is small size, has the same accuracy and repeatability as a desktop hardness tester, and is equipped with a rugged handheld to connect to it wirelessly. It only needs to select the required hardness scale through the terminal and apply a test force on the tested device, and the hardness will be synchronized to the screen. EM-T62 can also perform fast data management, sharing, archiving and printing of the hardness results.
2. There is no need to move large equipment or connecting wires, and it can be easily carried on any site for hardness measurement. Realize fast wireless data transmission through the App, and the maximum transmission distance is 80m.
3. The terminal is equipped with an online hardness measurement system, which can realize the creation and storage of massive files, the real-time calculation and visualization of statistics and histograms, the creation and customization of test reports, the addition of measurement information (text/image/barcode/GPS coordinates, etc.)

Optional Accessories

Docking Charger

Hand-strap

Scanning Trigger

Vehicle Mount

Android

IP65

GPS

Bluetooth

1D Scanning

2D Scanning