HART® – Communication for Process Automation

Overview

HART® stands for a digital communication protocol of field devices. It is outstandingly suitable for transmission of measuring data, diagnostics and device parameter. The HART protocol is compatible with the existing 4-20mA systems and enables the comprehensive system integration via host controller. The simultaneous analog and digital communication follows the principle of Frequency Shift Keying (FSK).

Advantages of HART

- Compatible with the existing 4-20mA systems
- Simultaneous analog and digital communication
- De facto industry standard
- Great accuracy and safe measuring signal transmission
- Simple diagnosis and parameterization
- Applicable in hazardous areas

Services

- Consulting, support and training
- Implementation of HART communication on different hardware platforms and operating systems
- Development of complete SMART transmitters in 2-wire/4-wire technology
- Low Power electronic design with HART functionality
- Development of Intrinsic Safe products complying with ATEX, FM, CSA standards
- Schematic, PCB layout and Prototyping
- Integration of MESCO HART Slave Stack Rev. 7.6 in measurement technology applications (pre-certified HART Stack module for several microcontroller as documented C-source code or object code)
- Certification testing of physical layer, datalink layer + application layer according to HART specification
- Development of parameterization software, based on EDDL or FDT technology (Electronic Device Descriptions for Rosemount Handhelds 275/375, Siemens PDM, Rosemount AMS, diverse FDT/DTM frame applications)
- Development of customer specific Host Software for Windows
- Development of test equipment, manufacturing engineering