

## **Engineering – Information**



# **Electronic Development**

### **Overview**

**MESCO Engineering** is your partner for electronic and software developments for factory and process automation. Our core expertise is the development of remote I/Os and field devices. We specialize in R&D services for automation and industrial communication with a focus on fieldbus/Ethernet implementations, on designs for explosive areas and for Functional Safety.

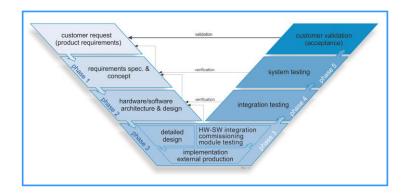
We provide our customers with:

## **Analog developments**

- 0,05 ... 0,25% typical accuracy
- 12bit ... 24bit A/D
- 10 SPS ... 1 MSPS
- <50 ppm/K typical temperature drift</p>
- Galvanic isolation of supply unit and communication signals
- Power supplies with optimized space/efficiency rate

## **Digital developments**

- 8 bit ... 32 bit microcontroller
- Power management (µW)
- Real-time capability
- Fieldbus interfaces





## **Services**

#### Consulting

- Implementation concepts / feasibility studies / case integration
- Consulting for functional design
- Concepts for explosion-proof
- Concepts for Functional Safety

## Design

- Common and complex system architectures
- Mixed-signal design
- Low-power design
- Miniaturization
- IECEx design
- Functional Safety design
- EMC compliant design
- PSpice simulation
- Complete documentation incl. worst case calculations

## Layout

- Schematics and layouts on various systems
- Consideration of modern manufacturing technologies (multilayer, HDI, flex circuits and others)

## **Testing**

- Tests for temperature, environment, EMC
- In-house laboratories for EMC, electronics, fieldbus systems

## **Prototyping**

- Rapid prototyping
- Collaboration with series manufacturers