## **Crane Aerospace & Electronics** contact information:

David Perret

**General Manager** +33-472-814-205 M: +33-674-909-794 F: +33 472-377-203 dPerret@craneae.fr

#### **Patrice Herbay**

Regional Business Manager +33 637-607-418 M: +33 637-607-418 Patrice.Herbay@craneae.com

www.craneae.com

Fuel Gauging Systems 6/14



# **Crane Fuel Gauging Systems**

Providing accurate fuel quantity measurement through proven technologies





# Crane Fuel Gauging Advantage

From standalone probes to complete gauging systems, Crane provides proven Fuel Gauging solutions which ensure accurate and reliable fuel quantity measurement.

**Optimum accuracy** – From helicopters to business jets to UAVs, Crane's Fuel Gauging technology provides accurate, real-time measurement of fuel in one or multiple tanks. Readings and system performance can be depended upon under all flight operating conditions.

**Install it. Depend upon it.** – Crane 3D tank modeling and system simulation capabilities help ensure optimal probe geometry and placement within

the tank in order to achieve the highest accuracy and lowest system weight. This modeling capability assures equipment material and construction are lightweight and meet safety requirements.

The Fuel Control Unit electronics architecture is modular and can be programmed to adapt to a variety of tank geometries. This reduces development time and program risk. Field-loadable software, along with diagnostic troubleshooting tools, help simplify certification and assure schedule milestones are met.

After installation on the aircraft, Crane Fuel Gauging Systems require no scheduled maintenance or calibration. The robust design and construction helps ensure the system can withstand all environmental conditions encountered in aerospace applications.

## The CCANE Advantage

Stable Partner Strong Heritage Technological Innovation Operational Excellence Unparalleled Experience

### **Benefits**

- Proven high-accuracy probes provide precise continuous measurement
- Compatible with any tank geometry and type including both fixed and flexible auxiliary tanks
- No calibration is required after installation
- Robust modular design ensures safety and reliability
- Fluid temperature indication enhances system accuracy
- Fuel balancing capability improves safety and operational performance
- Comprehensive built-in test for easy maintenance in the field
- Intrinsically safe meets AC25.981-1C requirements
- Field-loadable software capability provides flexibility during flight test for quick in-field modification

## Applications

For over 20 years, Crane has focused on providing robust fuel gauging systems for business jet, helicopter and UAV applications. Leading manufacturers including AgustaWestland, Airbus Helicopters and Pilatus rely on Crane's technical expertise and responsive development team. Over 10,000 probes and 3,000 fuel control units delivered and in service.



## **Typical Fuel Gauging Equipment**

### Multi-channel System

- Up to 12 probes per channel
- Up to four low- or high-level sensors per channel
- Multi-channel Fuel Control Unit (FCU) including fuel quantity measurement and low-level warning system

#### **Passive and Active Fuel Probes**

- Proven technology
- Analog output (voltage or current)
- Independent low level function (optional)

#### Optional

- In-tank harnesses
- Fuel Quantity Display

Providing accurate fuel quantity measurement through proven technologies.

When you partner with Crane, you join our rich heritage of experience and technology leadership. Our dedication to integrity and operational excellence ensures that you can count on us for high quality and delivery performance providing the best solution for your application.

Crane's Fuel Gauging Systems are designed and manufactured at our Lyon, France facility. Our Lyon site is a center of excellence with consistently outstanding on-time delivery and quality performance. And, Crane Fuel Gauging Systems are backed by Crane's global field service and product support.

#### **Fuel Control Unit**

- Sensor excitation
- Transmission of level and quantity information
- Discrete or data bus communication
- Comprehensive built-in test

