Royce Technologies Instrumentation Line

MEASUREMENT TECHNOLOGIES BY ROYCE
Dissolved Oxygen Monitoring and Control
• Single and Multi-channel Analyzers
• Bioreactor and Lagoon Systems

Total Suspended Solids Monitoring and Control
• Portable Analyzers
• Single and Multi-channel Analyzers
• Solids density

Interface Level analyzers
• Primary, Secondary and Thickener Analyzers

COMMON FEATURES OF ROYCE PRODUCTS
• Microprocessor based, self-diagnosing electronics
• Rugged, mil-spec electronic components
• One step, automatic calibration
• Analog and digital output communications, including multiple BUSS options
• Programmable setpoints and solid state relays
• Space age composite sensor materials
• Polymer, unbreakable sensor optics
• Color compensating optics (TSS)
• Self cleaning sensors throughout the line of products
• Intelligent, menu driven setup and operation
• Enclosure sun screens (Optional)
• Sensor fault feedback on all controllers
• Backlit displays
Galvanic Parts Per Million
Dissolved Oxygen Systems

Features

• Single & Dual Channels
• One step, push button calibration
• Displays DO & temperature for each channel
• Two 4 – 20 mA per channel for DO and temperature
• Two relays per channel
• RS – 485 & Modbus (Standard)
• Profibus DP (Optional)

Model 9110/9120/9210/9220 Analyzer

Features

• Range 0 - 99.9 PPM and percent saturation 0 - 99.9%
• One step, push button calibration
• Two methods of calibration are standard
• Automatic Temp, altitude and salinity compensation
• Isolated 4 - 20 mA
• Digital serial output available

Model 9200 Analyzer
# Total Suspended Solids Systems

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| • Two complete analyzers in one package (TSS & Interface Level)  
• One sensor for both applications  
• Microprocessor based  
• Automatic Ranging  
• Simple, in situ calibration  
• Electronic self diagnostics  
• Nine volt battery with automatic shut off  
• Waterproof, completely submersible, rugged housing | • Single & Dual Channels  
• Automatic, push button, in situ calibration to a known value  
• Range 10 - 80,000 mg/l  
• Measured range depends on sensor  
• 72 Series: 10 - 1500 mg/l  
• 73 Series: 300 - 30,000 mg/l  
• 74 Series: 800 - 80,000 mg/l  
• 76 Series: 300 - 30,000 mg/l  
• Two 4 - 20 mA per channel  
• Two relays per channel  
• RS-485 & Modbus (Standard)  
• Profibus DP (Optional) | • Automatic ranging  
• 10 to 80,000 mg/l  
• Phased array source for automatic color compensation (Model 73B)  
• Automatic, push button, in situ calibration to a known value  
• Automatic ambient light compensation on all models  
• User selectable calibration curves  
• Two Programmable setpoint relays  
• Outputs 4 - 20 mA, 0 - 1 VDC (isolated)  
• RS-485 (Standard) |

**Model 711**  
Portable MLSS/ILA System

**Model 7110/7120 Series**  
Analyzer

**Model 7011A**  
Continuous Analyzer
Interface Level Analyzer

- Measures both interface and clarity
- No moving parts, no maintenance, no recalibration required
- Surface skimmer friendly
- Microprocessor based electronics
- Backlit LCD displays
- Full featured set point relays available
- Simple user friendly menu driven programming
- Numerical and graphical displays

JC Series Compressor Cleaning Systems

- One channel, two channel and four channel systems available
- Utilizes the highest grade compressor available

- Can be used on any Royce sensor
- Can be controlled by a Royce analyzer or controller
- Thousands in use worldwide
DO – Dissolved Oxygen

SS\(^1\) – Suspended Solids
  Low Range < 50mg/L

SS\(^2\) – Suspended Solids
  Medium Range
  1,000 to 20,000 mg/L

SS\(^3\) – Suspended Solids
  High Range to 8%
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Royce, a Xylem brand, provides high quality monitoring and control instrumentation and sensors specifically designed for municipal and industrial wastewater treatment applications. Recognized throughout the wastewater treatment industry as experts in the biological wastewater treatment process.