

# NATURAL GAS CHROMATOGRAPH

imagine the possibilities

8200 SERIES



**ABB**

# INNOVATION

ABB Totalflow proudly introduces the most economical high-precision, on-line gas chromatograph in the industry—the NGC 8200. The NGC 8200 is a major advancement in the field of natural gas chromatography. Using industry-accepted gas chromatography techniques, the NGC 8200 can provide all of the gas-quality and heating-value information your measurement applications require. The data is accessible locally via the front panel digital display, or with a variety of laptop interfaces. It can also be viewed from remote locations using industry standard remote protocols. The lightweight and extraordinarily durable NGC 8200 features four-stream monitoring capability and modular parts that can easily be replaced in the field. Yet the device is economical enough to consider as a replacement for your composite sampler systems.

## THE NGC 8200 SERIES

- + Transmitter-like simplicity and usability
- + Multiple flow computers and analyzers in one instrument
- + All of your natural gas analyses in the same product
- + Interactive graphical display in an explosion-proof package
- + Miniaturized conventional analytical components (not silicone wafers)
- + Windows® CE real-time operating system
- + Integral flow computer with addition of multivariable pressure transmitter

### STANDARD COMPUTATIONS

PROVIDE HEATING VALUE,  
RELATIVE DENSITY,  
WOBBE INDEX,  
GALLONS/MCF

### OPTIONAL COMPUTATIONS

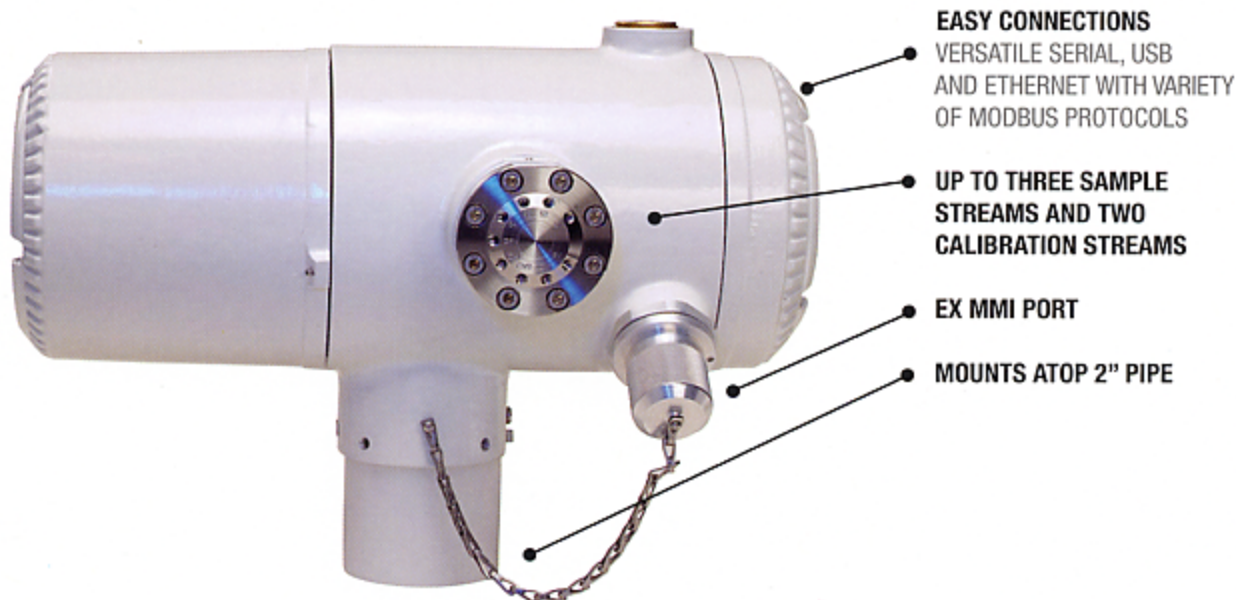
PROVIDE SPEED OF SOUND,  
VAPOR PRESSURE AND  
HYDROCARBON DEWPOINT  
(OTHERS ON REQUEST)

**EXPLOSION PROOF  
GRAPHICAL USER INTERFACE**



# PRECISION

- + Rugged field unit with laboratory-type precision
  - + +/- 0.125 Btu at ref
  - + +/- 0.25 Btu over temperature
- + Best stated precision for on-line chromatograph
- + Stable oven utilizes high-speed digital control
- + Dual calibration stream option
- + Double-precision equations of state, e.g., dew point, speed of sound, vapor pressure

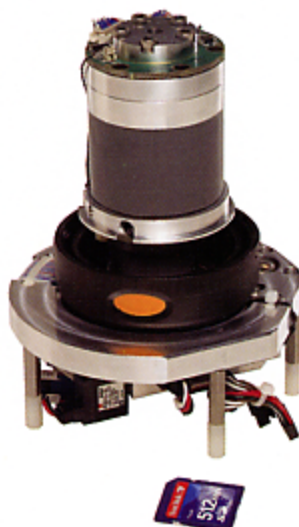


**SERVICEABILITY**  
COMPLETE UNIT CONSISTS OF ONLY  
THREE REPLACEABLE MODULES

SELF DIAGNOSTICS THAT  
GENERATE LOG FILES

REMOTE OPERATION:  
OFFSITE MAINTENANCE  
BY FACTORY EXPERTS

**THE CORE ANALYTICAL  
COMPONENTS ARE ON A SINGLE,  
EASY-TO-INSTALL MODULE**

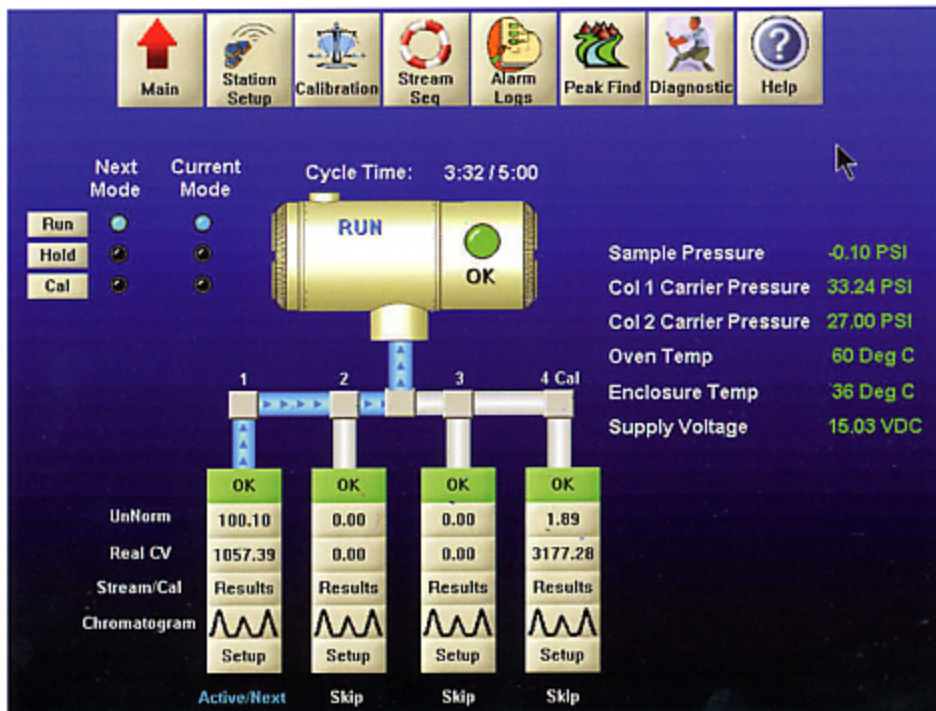


# SIMPLICITY

- + Easy to install — compact size permits lighter-weight, small-footprint installation at the sample point
- + Easy to start up — factory-calibrated, ready to install using startup diagnostics, startup wizards
- + Easy to operate — whether using the graphical local display with magnetic navigation keys or using the graphical MMI, as show below, simple operation is assured from the ground up
- + Graphical LCD magnetic touch display:
  - + View status, results, and chromatograms
  - + Invoke mode changes (cal, hold, run)
  - + User-configurable LCD screen

## MAIN ANALYZER INTERFACE SCREEN

- + Provides a simple yet powerful combination of GUI, navigation elements and data



# FLEXIBILITY

## SOFTWARE FLEXIBILITY

- + NGC software is based on Totalflow's flexible XSeries framework—providing unmatched flexibility
- + Conversion to a total energy device simply requires adding the necessary number of multivariable transmitters and instantiating Totalflow's proven flow computer applications
- + Examples of other software flexibility:
  - + Alarm by exception with cry-out
  - + General purpose data logger
  - + Programmable math / logic functions
  - + Programmable local LCD
  - + Configurable modbus register map
  - + Complex equations of state

## APPLICATION FLEXIBILITY

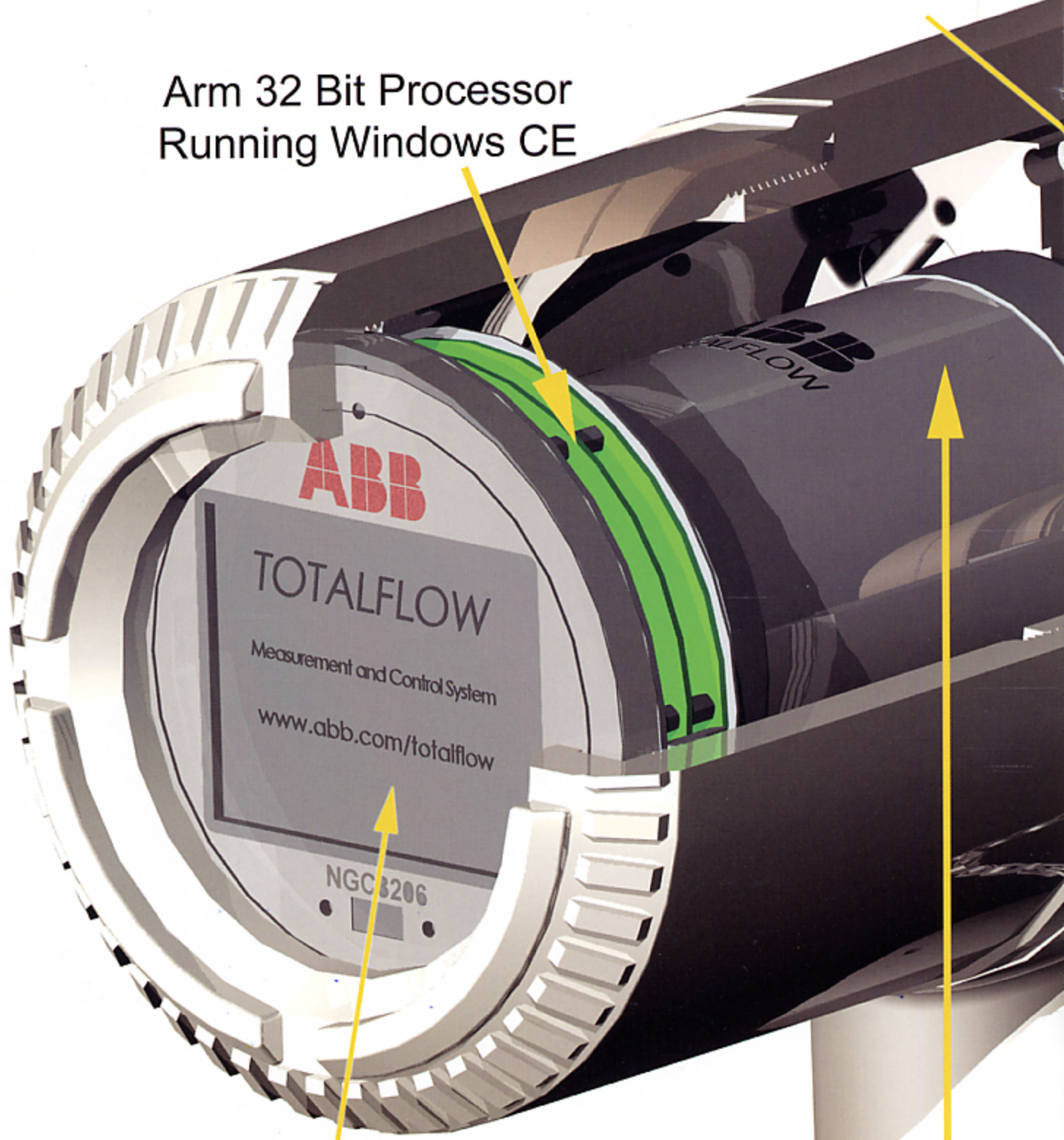
INDUSTRIAL / COMMERCIAL  
PIPELINE TIE-INS  
ENERGY PLANTS  
LANDFILL  
CITY GATES  
HIGH-END SAMPLERS  
GAS DISTRIBUTION  
INTEGRAL FLOW-ENERGY  
C6+  
C7+  
C9+  
O<sub>2</sub>/N<sub>2</sub>  
H<sub>2</sub>S%



# NGC 8200

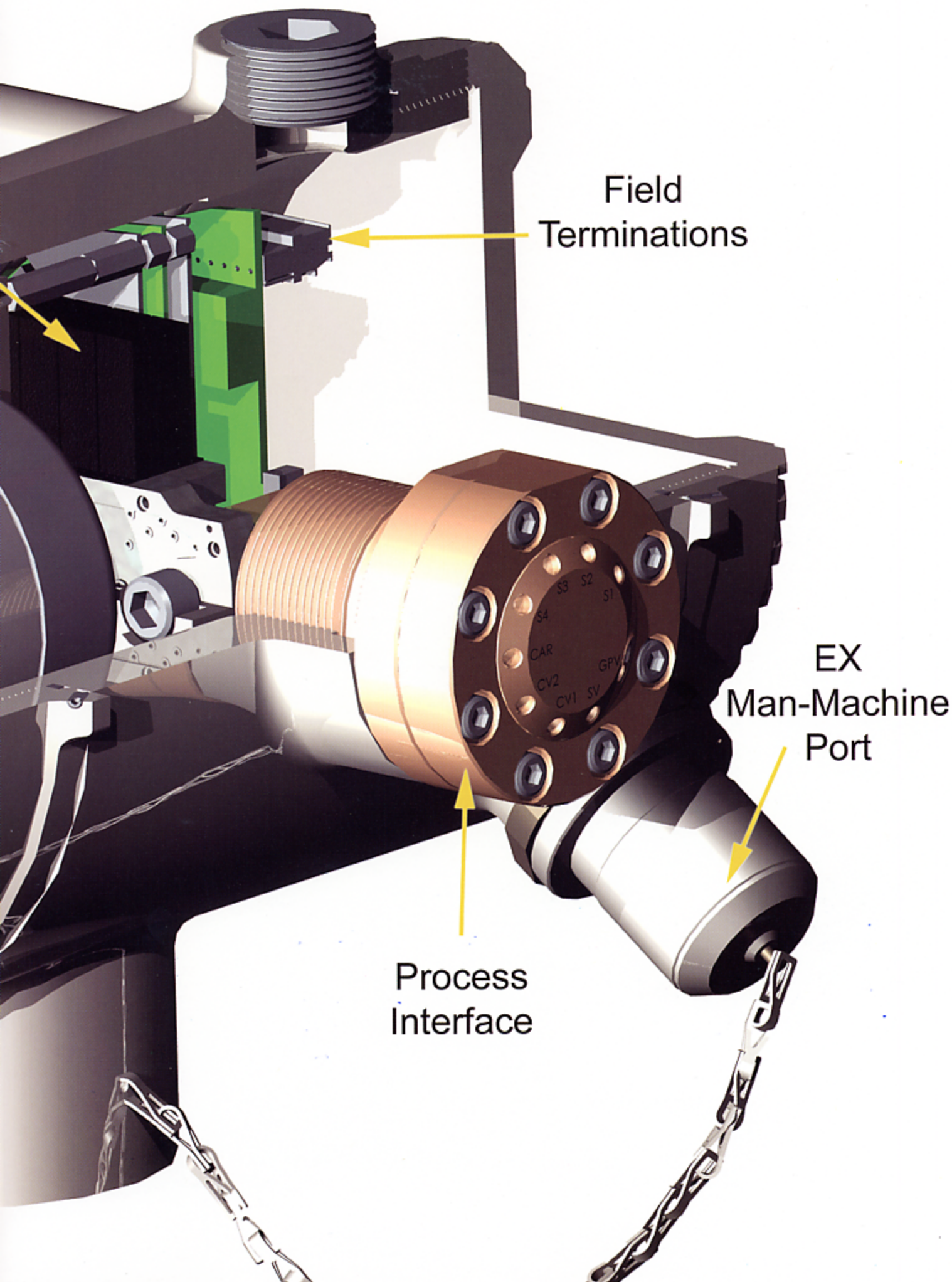
Built-In Stream  
Selector Switching

Arm 32 Bit Processor  
Running Windows CE



Graphical Display  
with Magnetic  
Navigation Keys

Analytical  
Assembly



Field  
Terminations

EX  
Man-Machine  
Port

Process  
Interface



*ABB Totalflow proudly introduces the new,  
innovative NGC 8200 series*

**ABB**

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Some information is forward looking and describes features that will be available after initial release.  
Performance specifications are based on initial test data, but are subject to change as final testing is completed.