QUESTIONS

• SYSTEM/COMPONENT COST? HOW MUCH IS TOO MUCH?
• WILL INTRINSICALLY SAFE DEVICES BE ACCEPTABLE
• HOW INTELLIGENT DOES THE SENSOR NEED TO BE?
Questions

- What materials/seals are needed?
- Design for what maximum pressure, temperature and flow?
- How do we heat the system?
- Where is the intelligence located?
NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001
WHERE IS THE SMARTS?

DUMB SENSORS
- PRESSURE
- TEMP.
- FLOW
- VALVE

SAMPLE SYSTEM

INTELLIGENT CONTROLLER
i.e. PLC

ANALYZER

QUICKEST WAY
NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001
WHERE'S THE SMARTS?

NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001
WHERE'S THE SMARTS?

SMART SENSORS

- SMART PRESSURE
- SMART TEMP.
- SMART FLOW
- SMART VALVE

SAMPLE SYSTEM

ANALYZER

ANALYZER CONTROLLER

HARDEST WAY
NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001
WHERE'S THE SMARTS?

EASIER WAY TO GET STARTED
NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001
WHERE IS THE SMARTS?

SMART SENSORS
- SMART PRESSURE
- SMART TEMP.
- SMART FLOW
- SMART VALVE

SAMPLE SYSTEM

SMART ANALYZER CONTROLLER

ANALYZER

ULTIMATE WAY
WHERE IS THE INTELLIGENCE LOCATED?

• IN THE SENSOR?
• IN THE ANALYZER?
• IN ANOTHER SYSTEM, i.e. PLC?
• IN BOTH THE ANALYZER AND THE SENSORS?
NEW SAMPLING/SENSOR INITIATIVE
New Orleans - March 7, 2001

BOTTOM LINE

• HOW MANY WILL YOU BUY?
• HOW MUCH WILL YOU PAY?