NEW OPTIMAX™ INJECTOR

SUPERIOR MIXING, SUPERIOR ATOMIZATION

Now there is a better option for torch oil, slurry backflush, quench, and other similar injection operations – the OptiMax injector from Spraying Systems Co. The OptiMax injector is specially designed to produce a uniform spray pattern for quick vaporization. The OptiMax injector mixes steam with the oil, hydrocarbons or chemicals using a unique, patented atomization process. This process ensures thorough mixing of the steam and fluid prior to injection. The mixed fluid that exits the injector consists of small drops in a uniform spray pattern.

BENEFITS

• Thoroughly mixed fluid and uniform spray coverage optimize the effectiveness of the chemical reaction
• Fast vaporization of the hydrocarbon for quicker reaction in the process stream
• Better control of drop size over a wide flow rate range provides more operating flexibility
• Durable, dependable design for long wear life
• Uses available plant steam instead of costly compressed air – better for the environment and the bottom line

SPECIFICATIONS

| Flow rate range: Wide range to accommodate any amount of barrels per day |
| Steam utilization rate: 2% to 5% by weight depending on hydrocarbon density |
| Spray angle: 90° standard; others available upon request |
| Materials: 316 stainless steel standard; others available upon request. Special alloying process available for components subject to erosive wear |
| Customized dimensions for all installations |
| Can be manufactured to ASME® B31.3 |

IDEAL FOR

• Additive injection
• Torch oil injection
• Hydrocarbon atomization
• Slurry backflush
• Quench
CUSTOMER SPECIFICATIONS:

Process Line Size/Sch: ________________________________
A: ______________________ (in. or mm)
B: ______________________ (in. or mm)
C: ______________________ (in. or mm)

Mounting Flange size: ________________________________
Liquid Inlet Flange size: ______________________________
Steam Inlet Flange size: _______________________________
Max. Liquid Flow Rate: ______________________ (PSIG or BARG)
Min. Liquid Flow Rate: ______________________ (PSIG or BARG)
Liquid Density (@ operating temp.): ______________________
Spray Angle: _______________________________________
Injected Liquid Flow Rate: ______________________ (gph or lph)

PROCESS FLUID INFO:

Temperature: ______________________ (°F or °C)
Pressure: ______________________ (PSIG or BARG)
Dynamic Viscosity: ______________________ (cP)
Velocity: ______________________ (ft/s or m/s)
Process Fluid Density (@ operating temp.): _______ (lb/ft³ or kg/m³)
Process Fluid Flow Rate: ______________________ (ft³/min or m³/min)

MATERIAL OF CONSTRUCTION:

Spray Nozzle: ______________________________________
Inlet Flanges: ______________________________________
Injector Mounting Flange: ______________________________
Pipe: _____________________________________________

ASME® B31.3-2016 CODE REQUIRED?
☐ Yes ☐ No (Includes VT, PT, 10% RT, LT, MTR)

PROVIDE DESIGN CONDITIONS:

Injector Design Temp: ______________________ (°F or °C)
Injector Design Pressure: ______________________ (PSIG or BARG)
Vessel Design Temp: ______________________ (°F or °C)
Vessel Design Pressure: ______________________ (PSIG or BARG)
Corrosion Allowance: ______________________ (in. or mm)

OPTIONAL NON-DESTRUCTIVE EXAMINATIONS:
☐ 100% Radiographic Examination (RT) ☐ PMI
☐ Certified Material Test Reports (CMTRs) ☐ NACE MR0175
☐ MR0103