

Industry: Petroleum Processing

Application: Sour Water Injection

Product Descriptions: TF 24XPN Retractable Spray Lance

Situation: An engineering firm contacted BETE looking for a sour water injection system to scrub the overhead line of a coker fractionator that contains chlorides and cyanides. The nozzles needed to be retractable while the system was in service. The conditions inside the 30" pipe were 250°F (121°C) and 20 psig (1.4 barg).

BETE's solution: Four 1" TF24XPN nozzles were specified, each flowing 27 gpm (102 L/min) at 50 psi (3.4 bar). The TFXP series was chosen because coke fines were expected to be in the sour water and gas stream. The TFXP series, with its greater free passage, is specifically designed for applications like this.

BETE designed a retractable spray lance that would enable field personnel to safely remove the nozzle while the coker fractionator is on-line. The lance design includes a hand wheel to facilitate nozzle retraction and extension. To minimize the clearance required for the nozzle, BETE designed a special right-angle adapter. The spray lance design also includes a bellows-sealed gate valve, which is required due to environmental regulations.

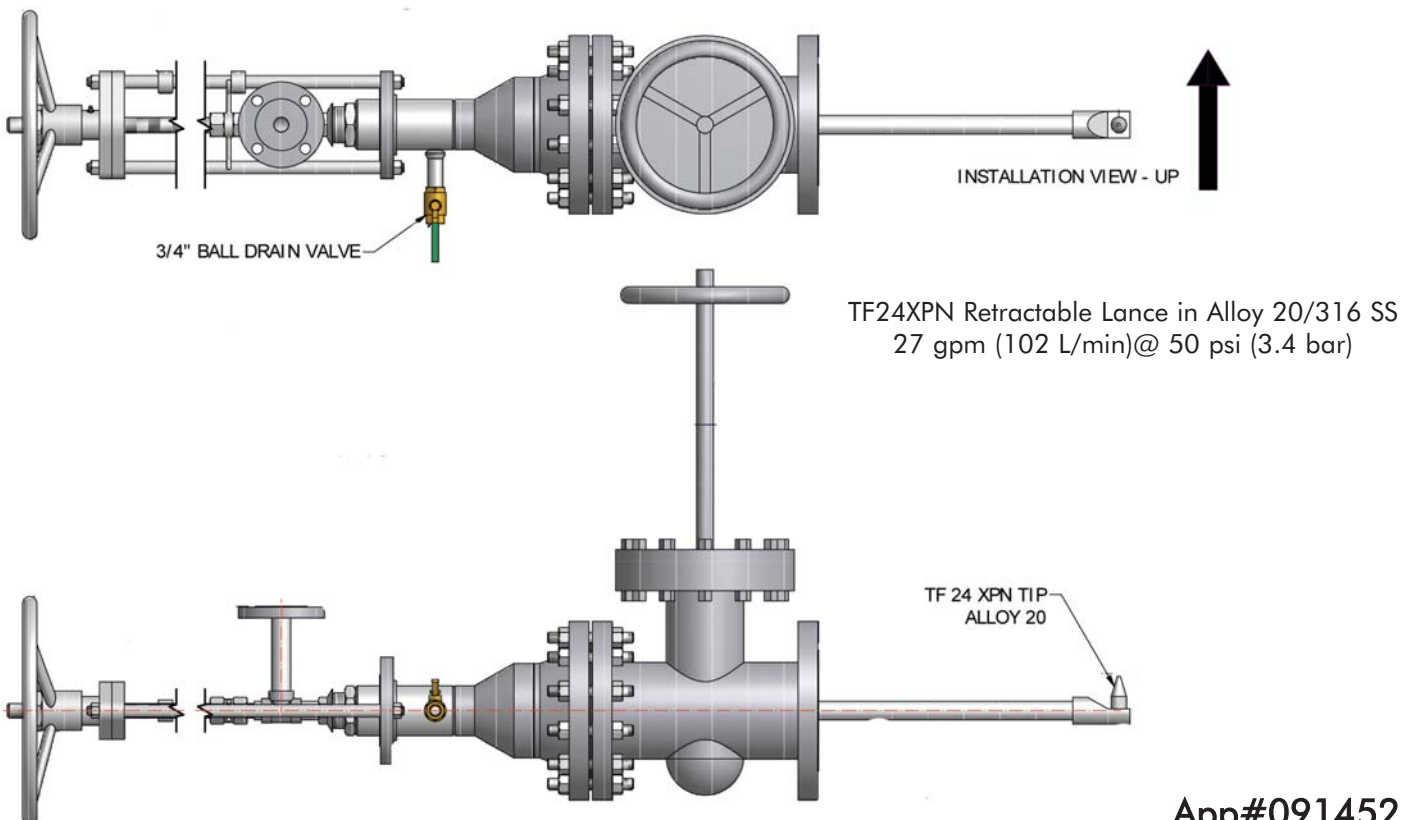
Technical Questions?

Please contact:

Applications Engineering
(appeng@bete.com)

413-772-0846

App#091452



App#091452