

Injection Quill for Oil & Gas, Refinery And Petrochemical Industry





OVERVIEW



OVERVIEW :

Injection Quills are Special Purpose Products, used widely in the Petroleum Industry for Treatment, Mixing, and Neutralizing of Process Products in

- Petrochemical
- Chemical
- Petroleum
- Power and allied industry

Primary purpose of employing injection quills in the process system is to ensure the complete mixing between the two process fluid- between the fluid in the main header pipe and the other being introduced through the quill.

APPLICATION :

Injection quills provide an easy solution for uniform and complete mixing of process fluids. The quill injects / introduces process fluid at the center of the main header- in the form of solid jet or spray- thus ensuring the mixing of process fluids and preventing any channeling effect at the main header pipe side walls.

This method of injection of liquid finds wide applications with a wide range of process fluid- corrosive, flammable, acids etc- easily introduced in the system with out the need of consideration of special equipments for handling and mixing.



PRODUCT RANGE



Crystal offers superior and reliable injection quills such as:

- Retrievable Injection Quills
- Non Retrievable Injection Quills
- Forged Injection Quills
- Injection Quill with Double Block and Bleed Valve
- Corrosion Coupons and Access Fittings

Today's process industry demands more and more equipment in exotic materials like Duplex Stainless Steels, Monel, Inconel, Hastelloy, Titanium, Clad Materials etc.

Crystal harnesses its expertise in manufacture of high quality Injection Quills in these materials. Quills supplied by Crystal are designed, engineered and tested in compliance with international Codes and standards.

PRODUCT RANGE	RETRIEVABLE	NON RETRIEVABLE	FORGED	QUILL WITH DBB VALVES
HEADER SIZE	12" TO 36"	Upto 60"	6" to 36"	Upto 30"
QUILL SIZE	¾" TO 2"	¾" to 6"	6" to 36"	½" to 3"
MOC	CS, SS304, SS316L, UNS NO 4400, UNS NO 6625, UNS NO 8825, HASTELLOY C276 ,DUPLEX STEEL	CS, SS304, SS316L, UNS NO 4400, UNS NO 6625, UNS NO 8825, HASTELLOY C276 ,DUPLEX STEEL	CS, SS304, SS316L, UNS NO 6625, UNS NO 8825	CS, SS304, SS316L, UNS NO 4400, UNS NO 6625, UNS NO 8825, HASTELLOY C276 ,DUPLEX STEEL
DESIGN PRESSURE (kg / cm ² g)	10 to 100	10 to 200	50 TO 300	Upto 200
DESIGN TEMPERATURE (°C)	150 to 500	150 to 500	100 TO 500	Upto 350



INJECTION QUILL - TYPES



Retractable Injection Quill consist of following components :

- Branch Fitting used for insertion of injection tube from flange facing of nozzle on header to C/L of header
- Injection Nozzle
- Integral Bleed valve or Isolation Valve
- Integral Check Valve
- Coupling
- Retrievable tool and Service Valve (optional)

Features

- Injection Nozzle allows proper injection of chemicals into the liquid gas or mixed phase system
- Uninterrupted Normal Operations During Insertion and Retraction of Injection Quill
- Positioning of quill in fluid flow is precise due to its adjustable feature



Non-Retractable Injection Quills consist of following components :

- Body
- Cover
- Disc / Piston / Ball
- Disc Seat
- Body Seat Ring
- Trim

Features

- Tip designed for different injection spray patterns and flow rate.
- Even distribution of injection chemical in header.
- Ideal for high pressure applications.
- Available in Flanged & Threaded Connection



INJECTION QUILL - TYPES



Forged Injection Quill consist of following components :

- Forged Body
- Spray Nozzle
- Flange

Features

- Single piece forged construction
- Corrosion Properties can be retained after forging as well.
- Forging parameters are maintained within the established limits.
- Forging in High Alloys materials can be carried out maintaining physical, chemical and corrosion resistance properties.



Injection Quills Double Block & Bleed Valve consist of following components :

- Probe
- Integral Check Valve
- Double Block and Bleed Valve
- Outlet Flange

Features

- Can be used to take sample of the process fluid .
- At full operating pressure and temperature chemical can be directly injected into the process fluid
- Double Block and Bleed Valve allows chemical injection directly into the process stream
- Check Valve prevents back flow of process stream



QUALITY CONTROL SYSTEM

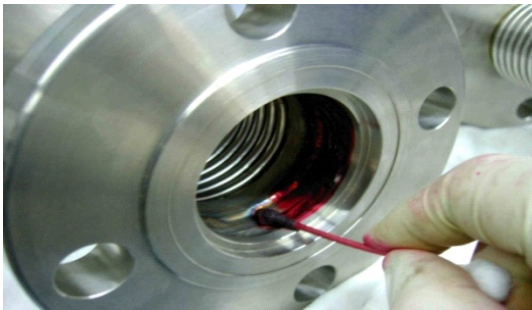
Crystal follows stringent quality control system so that all the parameters are complied and customer get high quality product:



ULTRASONIC TESTING



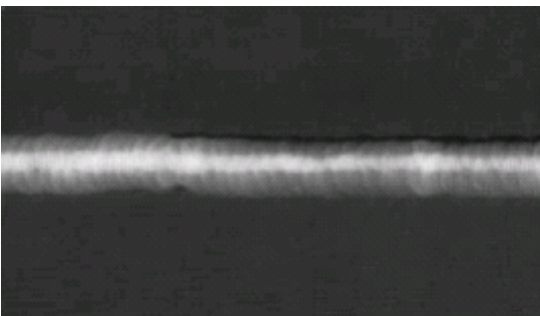
HARDNESS TESTING



DYE PENETRANT TESTING



MAGNETIC PARTICLE INSPECTION



RADIOGRAPHY



HYDROTESTING



POSITIVE MATERIAL IDENTIFICATION



DIMENSIONAL INSPECTION



Crystal
industrial

CERTIFICATIONS



- ✓ ISO 9001 : 2008 Certificate
- ✓ ISO 14001:2004 Certificate
- ✓ OHSAS 18001 : 2007 Certificate
- ✓ ASME Stamp Certificate
- ✓ National Board Registration
- ✓ IBR Approved

CLIENTS



**Regd. Office : 403,404,412 Raheja Arcade, Sector No. 11,
CBD Belapur, Navi Mumbai – 400614.
Maharashtra, India.**

Tel. : +91 22 6511 3814 / 15

Fax : +91 22 6793 9439

Email : info@crystalindustrial.in

Web site : www.crystalindustrial.in

