CASE STUDY – OFFSHORE INDUSTRY – VALVE SEATS

Background

Valve manufacturers who were specifying either filled PTFE or Nylon as their soft seat material were not only restricting the design of their valves, but in some instances wrongly interpreting "Nylon" – one of the main reasons being that there are so many different grades of Nylon.

Disadvantages

There was a certain amount of confusion and ambiguity throughout the valve industry whereby the customer did not know what their valve seat was either made of or capable of.

Solution

Working closely with a major valve manufacturer, Devol introduced Devlon V grade as an alternative valve seat material in the early 1980s. Devol has been supplying V grade valve seats ever since to a worldwide customer base.

Devlon V grade is typically used in the following class of valves:-

CLASS	TEST PRESSURE (psi)	WORKING PRESSURE (psi)
150	425	275
300	1,100	720
600	2,175	1,440
900	3,250	2,160
1500	5,400	3,600
2500	9,000	6,000

Advantages

- Ability to perform in temperature range of -193°C to +200°C
- Can withstand a pressure of 414 bar (6,000 psi) at 176°C
- Will outperform all other Nylons, virgin and filled PTFE
- Available in dimensions of 1" (25.4mm) to 6'6" (2,000mm)
- Has Shell approval (MESC 77/130) for use in high pressure valves conforming to API6D
- Is specified by several OEMs
- Cost effective