Bursting Disk or Safety Valve?

- Economic Efficiency
- Possible Applications
- Advantages
**Considerations to economic efficiency**

**Comparison of costs - example 1: the safe application**

**Operating condition**
- working pressure much lower than burst pressure, low working ratio
- Bursting Disk replacement required after 5 years

**Purchasing:**
- 2 Safety Valves (since one required as spare/replacement valve during inspection), 3 flat Bursting Disks (1 installed, 2 spares stocked), 3 reverse acting Bursting Disks (1 installed, 2 spares stocked), + 2 pre-torqued Holders

**Maintenance costs:**
- Bursting Disks: 100.00 EUR per replacement/inspection
- Safety Valves: 500.00 Euro per replacement/inspection

**References:**
- Bursting Disks: STRIKO pricelist (+/- 10% burst tolerance, 3 pieces), Safety Valve pricing: CT Chemie Technik AG
Comparison of costs - example 2: the critical application

Operating condition
- working pressure very close to max. operating pressure, high working ratio
- Bursting Disk replacement required 3 times a year

Purchasing:
- 2 Safety Valves (since one required as spare/replacement valve during inspection),
- 3 fl at Bursting Disks (1 installed, 2 spares stocked),
- 3 reverse acting Bursting Disks (1 installed, 2 spares stocked),
- 2 pre-torqued Holders

Maintenance costs:
- Bursting Disks: 100.00 EUR per replacement/inspection,
- Safety Valves: 500.00 Euro per replacement/inspection

References:
- Bursting Disks: STRIKO pricelist (+/- 10% burst tolerance, 3 pieces),
- Safety Valve pricing: CT Chemie Technik AG in Basel, Switzerland (Type 32.2 & 31.2, spring-loaded, PN16, closed cover, soft sealing EPDM)

(5 types of DN values are shown in the graphs for DN 25, DN 50, and DN 80.)

(pre-torqued Holders, 2 spares stocked), 3 reverse acting Bursting Disks (1 installed, 2 spares stocked), + 2 pre-torqued Holders

in Basel, Switzerland (Type 32.2 & 31.2, spring-loaded, PN16, closed cover, soft sealing EPDM)
Advantages of the combined protection:

- Bursting Disk and Holder made of high-quality material (chemical resistance) allows for use of the less expensive stainless steel Safety Valve
- use reverse acting Bursting Disks for mediums which tend to foul (bursting pressure is not impacted by product fouling)
- Safety Valve can be inspected installed in place, during operation
- significantly higher tightness with Bursting Disk compared to safety valve without upstream Bursting Disk

Conclusion:
Using a Bursting Disk or a combination of Bursting Disk and Safety Valve has the advantages of

- reducing costs
- minimal installation time
- shorter/less idle time
- complete pressure relief unit consisting of pre-torqued holder with implemented Bursting Disk available from stock, allowing for quick and easy replacement at any time

Ask STRIKO for a detailed consultation and a customised quote.

We’re certain to also have a solution for your application, as our strengths are:

INNOVATION – QUALITY – RELIABILITY
Put us to the test!