# **Overpressure Protection**

# FOR ALL YOUR PRESSURE RELIEF CHALLENGES

## THE BEST FROM THE BEST - G2 MANUFACTURING TECHNOLOGY

Rupture discs are a symbol of trust. It's our job to ensure that when you insert a Fike rupture disc in your operation, it performs exactly as intended. This level of precision may be the difference between protecting your business, and most importantly, protecting your people from pressure-related disasters.

Fike's premium G2 rupture discs are the result of 75 years of rupture disc manufacturing—featuring our highest operating ratios, tightest burst tolerances and greatest life cycles.



## FIKE IS THE ONLY RUPTURE DISC MANUFACTURER UTILIZING G2 TECHNOLOGY, WHICH INCLUDES:

#### **Pre-Bulging Process**

While bulging the metal, an engineered reversal point is implemented, which allows for precise control in the disc's pressure. This patented technique allow us to "control the reversal" to a degree previously unimaginable, creating an ultra-reliable disc that's proven to withstand in excess of 100,000 cycles.

#### **Patented Opening Feature**

Conventional scoring and coining methods used to create the disc's opening feature may cause microscopic mechanical damage, resulting in loss of burst tolerance control. G2's laser ablating and patented milling technologies remove material rather than compress it, greatly supporting the engineered reversal point.

#### **Pre-Engineered Manufacturing**

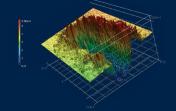
All configurations of rupture disc sizes, burst pressures and materials have been pre-engineered and pre-calculated. Therefore, a rupture disc with any combination of variables may be manufactured with maximum reliability and the shortest lead times in the industry.

### OPENING FEATURES -UNDER THE MICROSCOPE

Two rupture discs may appear quite similar, but viewing them under a microscope may reveal a different story.

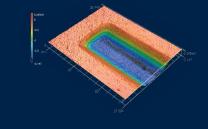
#### **Scored/Coined Disc**

Score blade produces inconsistent trench geometry and heat transfer, which may result in performance degradation and lower cycle life.



#### Laser-Ablated Disc

Femtosecond laser vaporizes the material, leaving the rest untouched. This results in a much more predictable, and reliable, rupture disc.



## SANITARY RUPTURE DISCS











Disc	AXIUS® SC* Advanced Design/G2 Technology Superior Cycling Performance Smooth, Reverse Acting	SR-H* Excellent Liquid Performance Scored, Reverse Acting	SHX* Higher Pressure Applications Cross Scored, Forward Acting	LO-V Superior Opening Bi- Directional
Size Range	1-4 in. DN33.7, DN40, DN42.4, DN50, DN38, DN51, DN76	1.5-4 in. DN40, DN50, DN38, DN51, DN76	1.5-2 in. DN40-50	3-8 in. DN80-200
Burst Pressure	10-275 PSIG 0.69-18.96 BARG	12-140 PSIG 0.83-9.65 BARG	300-1500 PSIG 20.68-103.42 BARG	1"WC-170 PSIG 0.21-11.72 BARG
Operating Ratio	95% of marked burst pressure > 40 psig and 95% of min burst pressure for burst pressure ≤ 40 psig	90% of marked burst pressure	90% of marked burst pressure	80% of marked burst pressure
EU Operating Ratio	95% of min burst pressure for burst pressure ≤ 2.76 barg and 100% of min burst tolerance for burst pressure < 2.76 barg	95% of min burst pressure	95% of min burst pressure	85% of min burst pressure
Non-Fragmenting	Yes	Yes	Yes	Yes
Vacuum Resistant	Yes	Yes	Yes	No
Pulsating/Cyclic	Best	Good	Good	NR*
Process Media	Liquid/Vapor/Gas	Liquid/Vapor/Gas	Liquid/Vapor/Gas	Vapor/Gas