

**Reduces flush water costs and keep slurry out of the gland packing increasing overall wear life.**



Lantern restrictor (1), Bush (2) and Lip Seal (3)

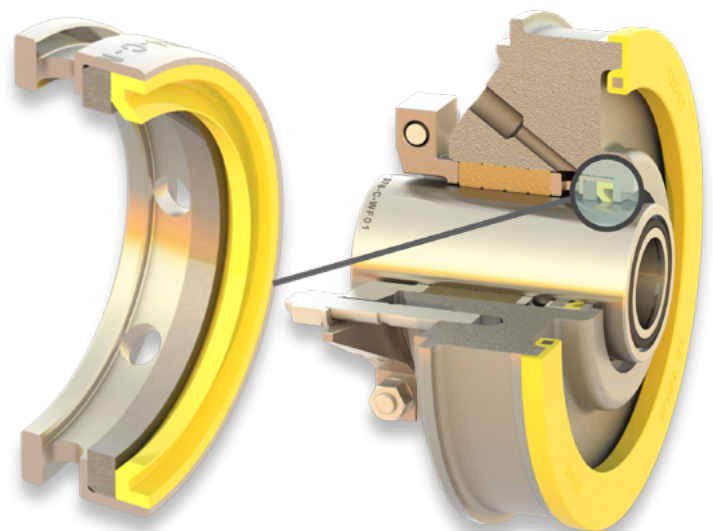
Gland Guard reduces flush flows by an average of 70% whilst attaining longer sleeve, packing and lantern restrictor life.

Unlike standard lantern restrictors, our patent pending Gland Guard cartridges features:

1. A Stainless Steel lantern restrictor.
2. An extremely hard (1300 Vickers) Wolfram™ replaceable bush, engineered to minimise flush flow.
3. A specialist lip seal designed for slurry applications which during operation, allows clean flow underneath (so no wear) and closes when the flush water is turned off. This keeps slurry out of your gland packing even during shuts and enables gland flush to be turned off on standby pumps.

This combination significantly reduces gland water flush flow and significantly reduces operating costs. Custom designs are available enabling our Gland Guard to provide solutions in all brands of pumps.

Plastic lantern restrictors and soft ductile iron shaft sleeves are without doubt the cheapest spare parts, however, they result in higher operating costs compared to the extended life Gland Guard provides, particularly when used in conjunction with our Wolfram shaft sleeves.



Position of Gland Guard inside a sealing arrangement

Through the use of high quality parts, Gland Guard addresses two key efficiency issues: high flush flows and solids entering the gland packing.

### Leaking Shaft Sleeves

Sealing where the pump shaft enters the wet end is a critical function. Intuitively most people know that badly leaking shaft seals:

- Are a safety issue.
- Cause reduced bearing assembly life.
- Result in product dilution/loss.

The cost associated with leaking shaft seals can be extremely high. Studies on large sites in remote areas have shown the cost to feed pumps with clean gland water is over US\$1,500,000 per annum.

Gland Guard in conjunction with our Wolfram sleeves can be expected to save over US\$1,000,000 in such applications.

They are guaranteed to last at least three times as long as OEM equivalents in acceptable operating conditions.

### Solids entering gland packing

On high pressure applications, the radial compression force is very significant and high wear rates will occur unless solids are kept out of the packing.

Our Gland Guard seals are ideal for these otherwise difficult duties.



Result of a leaking shaft sleeve



Hardened 420SS sleeve wear after 3 weeks



Wolfram sleeve wear after 22 weeks

Find out more at [saferpumps.com](http://saferpumps.com) or email [info@saferpumps.com](mailto:info@saferpumps.com) for a quote.

