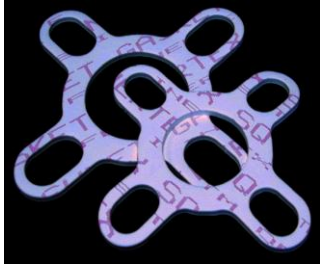




**VSP Technologies OPRA®
(one piece reduced area) gaskets**

*For all lightly loaded flanges: FRP, PVC, PVDF,
cast iron, & API 650 Manways, etc.*



**VSP Technologies' OPRA® gaskets
engineered for low torque flange applications
U.S Patent #6,682,081**

Engineered reduced area design

*20-50% Lower torque than conventional
full face gaskets*

Lower torque

*Now you can reliably develop a tight
seal on delicate flanges **without breakage***



High compressibility expanded PTFE(TEFLON®)

*Seals against uneven & rough flange surfaces
Purity and non-contaminating*

100% Expanded PTFE(TEFLON®)

Low stress to seal & reduced creep relaxation

**NPS ½ - 24 Gaskets for standard
ASME/ANSI B16.5 class 150 flanges
OPRA type 1**

In stock

**Non-standard vessel & manway gaskets
also available (OPRA® Type 2)**

1-3 Day design & fabrication turnaround



Contact Information for product info or to place an order:

8140 Quality Drive, Prince George, VA 23875

Ph: (800) 334-6013 Ph: (804) 541-0812 Fax: (804) 452-1251 Available 24/7 - after hours, weekends & holidays

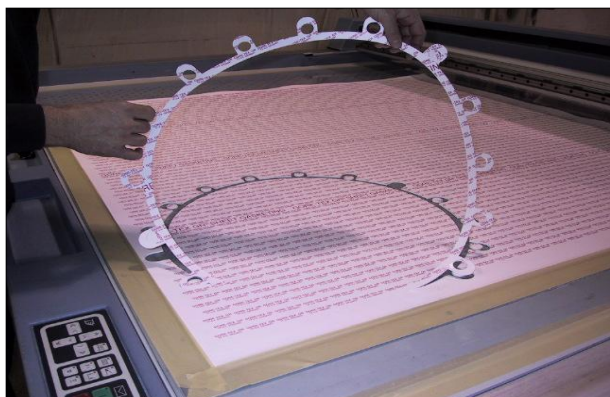
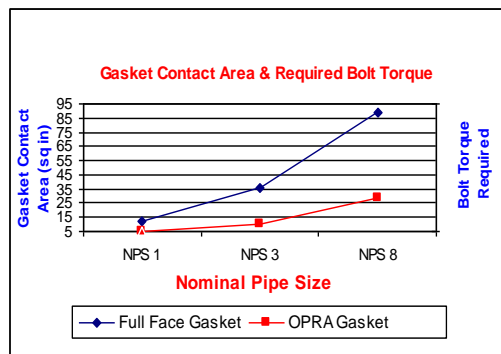
E-Mail: vsptechnologies.com

- The OPRA® is a unique patent design
- Full face geometry with minimal contact area

As gasket contact area decreases, minimum required bolt load



OPRA® Type 1
Standard ASME
pipe flanges
NPS ½ - 24



OPRA® Type 2 Vessel/equipment gaskets engineered/ designed to seal with available bolt load of equipment



CADD design & fabrication insures accuracy, quality & rapid order turnaround

OPRA® Type 1: Standard ASME Pipe Flange Gaskets Torque Table (Lubricated Bolts)

Gasket Size	Optimum Assembly Torque (Ft-lbs)	Gasket Size	Optimum Assembly Torque (Ft-lbs)
NPS 1/2 x 150	20	NPS 6 x 150	70
NPS 3/4 x 150	20	NPS 8 x 150	85
NPS 1 x 150	20	NPS 10 x 150	100
NPS 1 1/4 x 150	25	NPS 12 x 150	125
NPS 1 1/2 x 150	25	NPS 14 x 150	160
NPS 2 x 150	40	NPS 16 x 150	145
NPS 2 1/2 x 150	45	NPS 18 x 150	170
NPS 3 x 150	50	NPS 20 x 150	170
NPS 4 x 150	45	NPS 24 x 150	210

Technical and Performance Data

Maximum continuous process temperature: 450° F

Pressure resistance: Vacuum to maximum flange rating (constructed for pressure rating of flange)

Chemical resistance: pH = 0 - 14, (except molten alkali metals, elemental fluorine, and tri-fluoride compounds)

ASME gasket factors: m = 2.5, Y = 2900 psi

Typical PVRC gasket factors: Gb = 1,461 psi, a = 0.189, Gs = 0.15 psi

Tightness & sealability: Max. Gasket Tightness Tp = >36,630

Tightness Class T3 => Leak Rate, LR < 2.5 x 10⁻⁵ mg/sec (NPS 4 Gasket @ 150 psig)