V^2B Gasket

- Sizes Available: 1" - 6"
- Available as a **complete system** or as **individual components**
  - V^2B Screen
  - V^2B Gasket
  - V^2B Vent Cap
  - Sanitary Clamp
  - Optional Torque-Rite™

- Use the V^2B Gasket for:
  - **air flow and venting**
  - **vacuum relief**
  - **particulate removal**
  - **in-line fluid conditioning**

- Used in:
  - **pharmaceutical tanks**
  - **food and beverage processing**
  - **environmental incubation**
  - **clean room applications**

- Components available in electro polished finish.

- **Other mesh and micron sizes are available**. Consult Rubber Fab with special needs and requirements.

NOTE: The V^2B Gasket is not intended for use in every existing vacuum breaker and venting situation. Rubber Fab recommends testing to determine the individual system's needs and requirements and its compatibility with the V^2B Gasket. Rubber Fab suggests a regular cleaning cycle in order to maintain consistent water and air flow through the V^2B Gasket. Due to the inherent risks in vertical silo and tank venting, Rubber Fab does not recommend the V^2B Gasket without the use of traditional vacuum breakers.
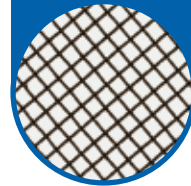
Rubber Fab
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The V^2B Gasket: An Excellent Addition to the Rubber Fab's Fluid Conditioning Program

When the need to **eliminate particulates** are critical to the **CGMP** in sterile fill products, upstream or downstream particulate removal, or filtration, you can find additional benefits with the V^2B Gasket.
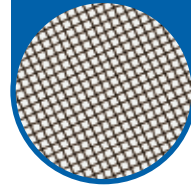
As an **in-line pipe gasket**, the the V^2B Gasket offers the benefits of both a sock gasket and a fine mesh screen gasket. V^2B Gasket's **sintered screen system** provides the **additional strength** a fine mesh or micron screen can sometimes lack with the **additional capacity** for high quantity particulate removal.

Additional information is available on fluid conditioning technology in Rubber Fab's Screen Gaskets brochure. Contact Rubber Fab at 973-579-2959 to receive copies of our literature.
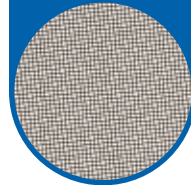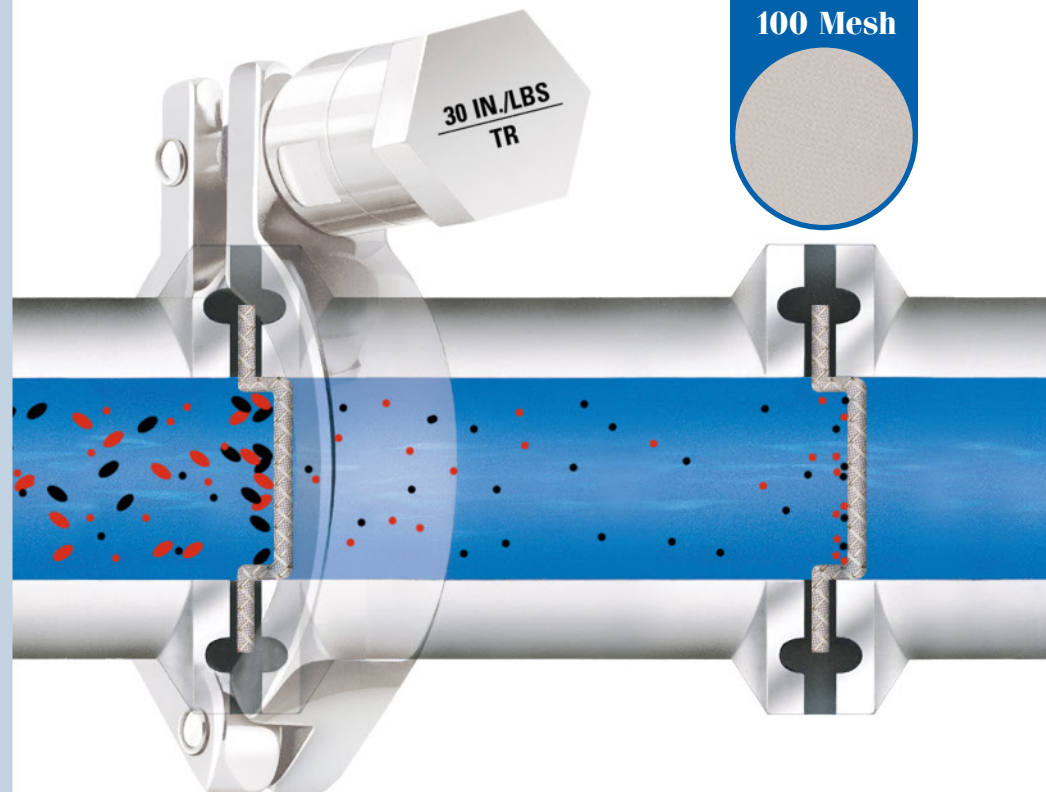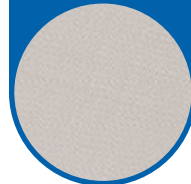
10 Mesh

20 Mesh

40 Mesh

60 Mesh

100 Mesh

30 IN./LBS TR

Rubber Fab's Tank Vent and Breaker System
V^2B GASKETS
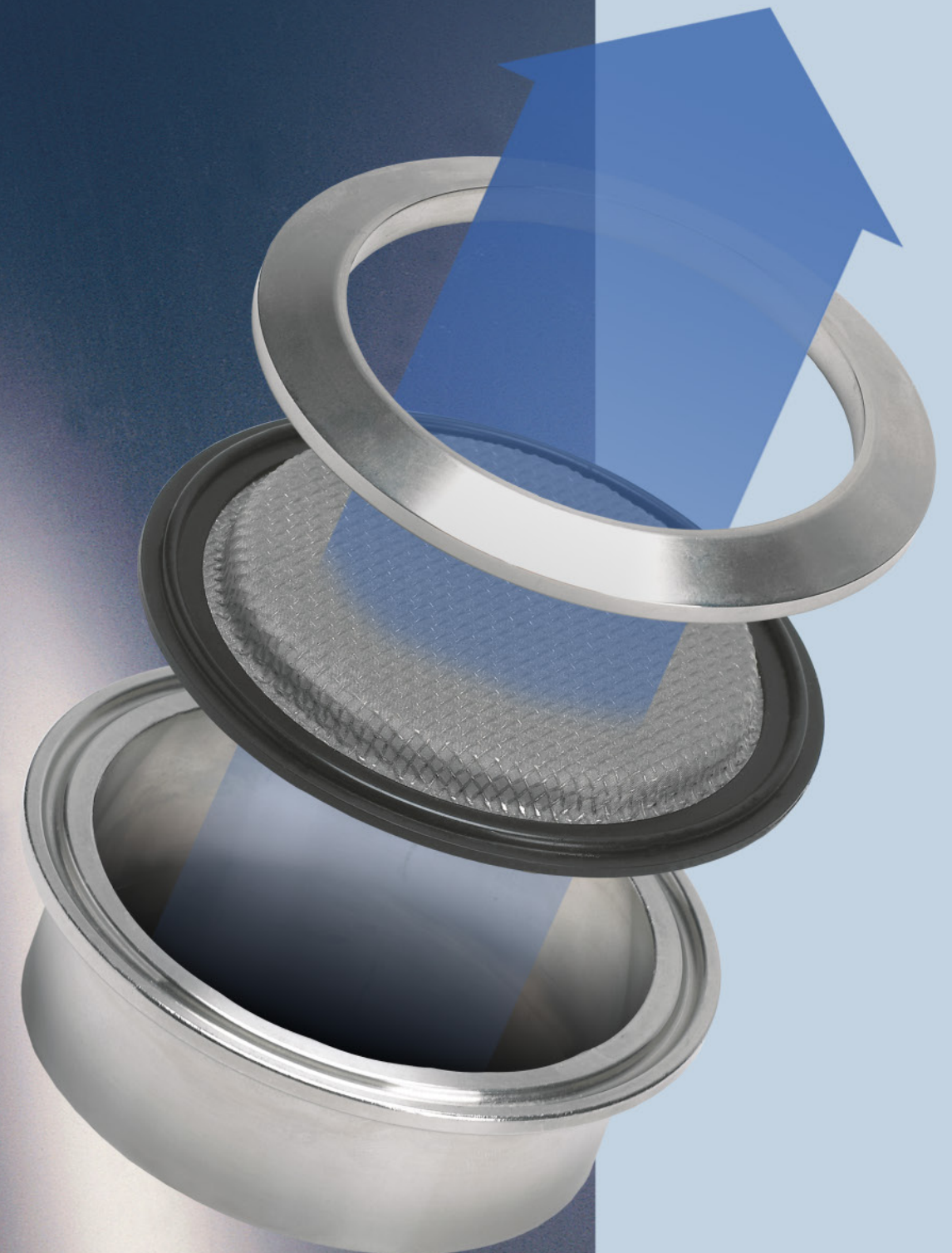
Rubber Fab
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V²B Gasket

- Sizes Available: 1" – 6"
- **Removes atmospheric and environmental particulates**
- Easy to maintain
- Easy to install
- Meets 3A design
- 316L stainless steel construction
- V²B works as both a **vacuum breaker and venting system**
- Materials of construction are both **lot and batch certifiable**
- Elastomers available: Platinum silicone, FKM fluoroelastomers, and EPDM
- All V²B gaskets are **removable and replaceable**
- Minimizes need for pre-air filters

Meets High Pharmaceutical Standards

- U.S. Pharmacopoeia Class VI Certification
- Cytotoxicity Criteria
- Title 21 CFR 177.2600
- USDA Sanitary Standards
- Good Manufacturing Practices (GMP)

The V²B Gasket is available in a size range from 1.5" to 6"

Presenting Rubber Fab's V²B Gasket: The Vent and Vacuum Breaker Gasket.

The Rubber Fab V²B Gasket offers an additional answer for vacuum and pressure relief for **pharmaceutical** and **food/beverage processing** tank venting when **airborne particulate removal is required**. Using a 200 mesh screen combined with a 14 mesh screen of **scintered construction**, Rubber Fab has created a cost effective alternative to expensive vacuum breakers and venting systems.

The V²B System is attached/connected using a standard sanitary clamp to a sanitary tank port, the same way a standard vacuum breaker in installed. **Installation can be horizontal, vertical or in single or multiple port configurations**

(i.e. manifolds) without special fabrication or expensive tooling. The V²B screen will **fit perfectly into the ID of a sanitary pipe** and can be used for **inflow fluid conditioning filtration.**
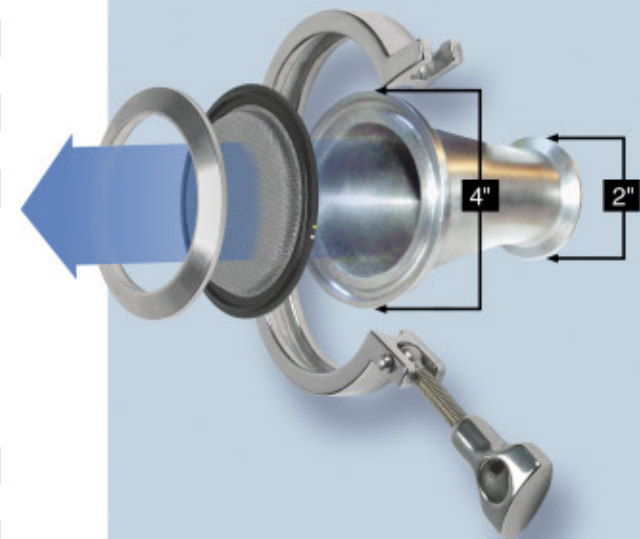
Providing Air Flow Without Contamination.

A key benefit of the V²B Gasket is it's **prevention from most atmospheric and environmental contamination** customarily found with other venting systems. Because the V²B Gasket can provide **unrestricted air flow with ultra fine filtration**, you can feel secure in knowing the **hygenic condition** of the tank contents remain protected. With regular cleaning and maintenance, the V²B Gasket is a **cost effective** and **incredibly simple** way to provide **contaminate free air flow** to any tank system.

V²B Gasket Flow Rate: **Air**

Line Size			CFM per unit		
1.5"	1.26 x 6.45* =	8.13	x .51** =	4.15
2"	2.46 x 6.45 =	15.87	x .51 =	8.09
2.5"	4.04 x 6.45 =	26.06	x .51 =	13.29
3"	6.02 x 6.45 =	38.83	x .51 =	19.80
4"	10.92 x 6.45 =	70.83	x .51 =	36.12
6"	25.34 x 6.45 =	163.44	x .51 =	83.35

* Flow rate through 200 mesh .0021 wire diameter is 930 CFM. When divided by 144, equals 6.45 CFM per square inch.
** % open area of 14 mesh .020 wire diameter.
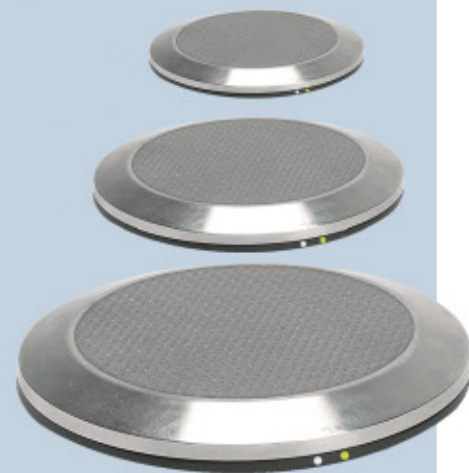
V²B Gasket Flow Rate: **Water**

Line Size			GPM per unit		
1.5"	1.26 x 16* =	20.16	x .51** =	10.28
2"	2.46 x 16 =	39.36	x .51 =	20.07
2.5"	4.04 x 16 =	64.64	x .51 =	32.97
3"	6.02 x 16 =	96.48	x .51 =	49.20
4"	10.92 x 16 =	174.88	x .51 =	89.19
6"	25.34 x 16 =	405.44	x .51 =	206.77

* Flow rate of water through 200 mesh .0021 wire diameter is 16 GPM per square inch.
** % open area of 14 mesh .020 wire diameter.

V²B Gasket: **Open Area**

Line Size			Open Area sq/in		
1.5"	1.27 x 1.27 =	1.61	x .7854* =	1.26
2"	1.77 x 1.77 =	3.13	x .7854 =	2.46
2.5"	2.27 x 2.27 =	5.15	x .7854 =	4.04
3"	2.77 x 2.77 =	7.67	x .7854 =	6.02
4"	3.73 x 3.73 =	13.91	x .7854 =	10.92
6"	5.68 x 5.68 =	32.26	x .7854 =	25.34

Please consult factory for CFM/GPM calculations on additional sizes.

VACUUM RELIEF

VENT RELIEF

VENT RELIEF

VACUUM RELIEF

Create Greater Air Flow with the V²B Gasket.

The Rubber Fab V²B Gasket creates the opportunity to **increase the flow of air** (or decrease if necessary). By using a concentric reducer as illustrated below, you can provide a 2 inch pipe flange 4 inches of air flow area. And by utilizing one or multiple 2-way and/or 4-way sanitary pipe adapters, you can **exponentially increase the air flow** in and out of your tank system while still **protecting the system from atmospheric debris**.

4"

2"