



***Blower
Engineering***

LIBERTY, NC

Enhanced Finish Product Zone Protection



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Bare Shaft Blowers





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Raw Materials





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Rotor Machining





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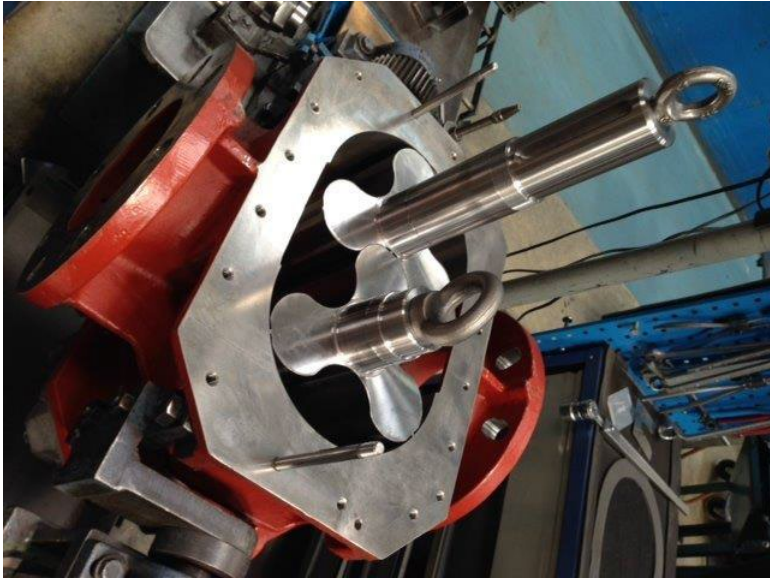
Endplate/Cylinder Machining





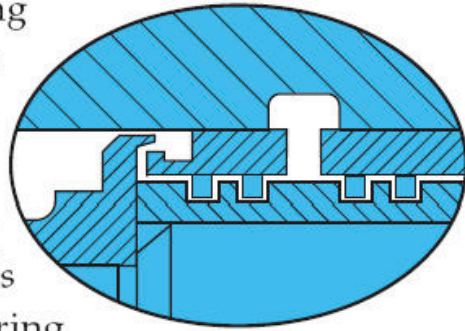
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Blower Assembly and Testing



Design Features

- Bearings: Spherical/cylindrical roller and ball bearing combinations; minimum 100,000 hour design life.
- Tri-Lobe Rotors: Involute contoured impeller profiles for maximum efficiency.
- Impeller/Shaft Rigidity: Reduces mechanical deflection and vibration.
- Oil Seals: Simple non-wearing slinger type oil seals, provide positive sealing in both oil sumps. Unaffected by high temperatures. No shaft wear.
- Air Seals: Piston ring air seals provide dependable non-wearing operation to minimize air leakage past the shafts.
- Heavy-Duty and ribbed cast iron housing and end covers: Reduce noise levels and increase heat dissipation.
- Versatile Mounting: Horizontal or vertical airflow is easily achieved by relocating the removable mounting feet incorporated in all models.
- Splash Oil Lubrication: Assures improved bearing life and operational simplicity.
- Gas or air is delivered in an uncontaminated, oil free state.
- The unit may be coupled directly or driven by V-belts.
- Rotation of the impellers is synchronized by a pair of timing gears having helical, hardened and ground teeth.



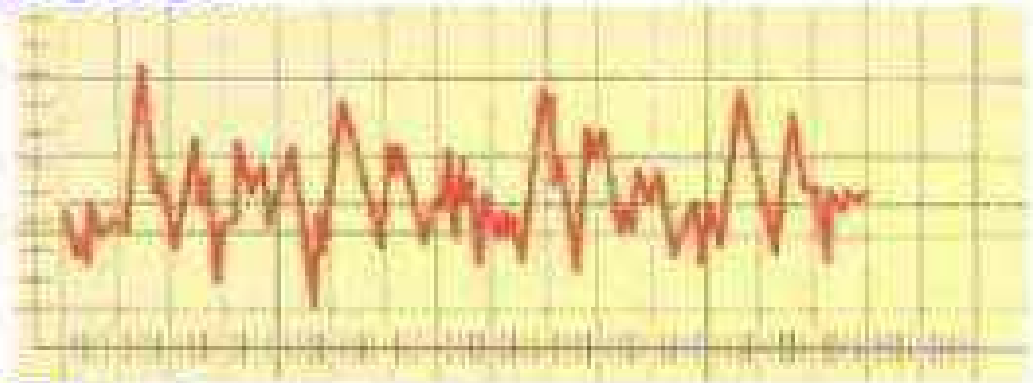
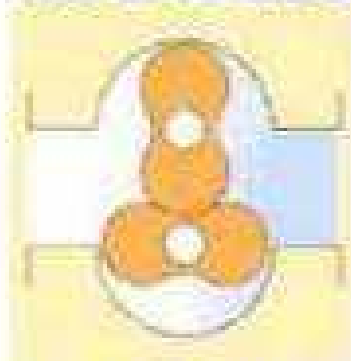
Two Lobe vs Tri-Lobe

All TL Blowers have Tri-Lobe rotors.

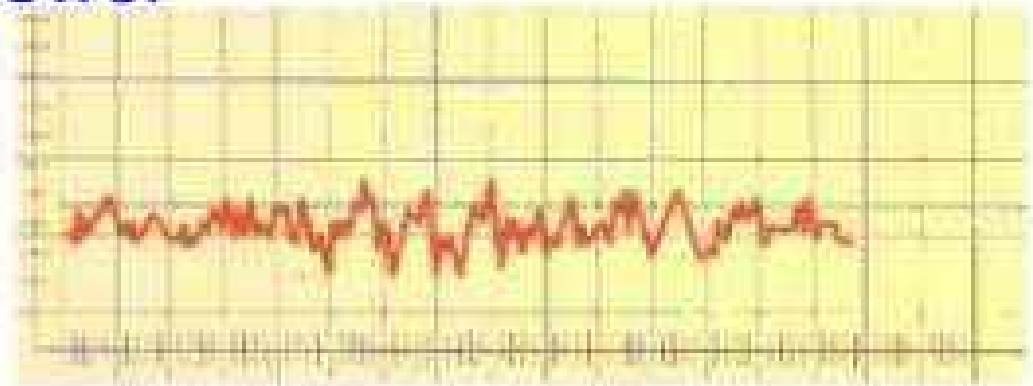
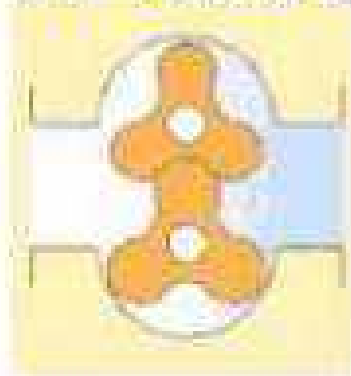
Lower frequency noise and less vibration.

Increased efficiency and reliability vs Dual-Lobe Blowers.

Two-Lobe Blower



Tri-Lobe Blower



18 Blower Models

TRI-LOBE BLOWER PERFORMANCE

| Tri-Lobe Model | ΔP Max PSIG | Vacuum Max "Hg | Inlet Volume CFM | | | | | | | | | |
|----------------|---------------------|----------------|------------------|-----|-----|-----|------|------|------|------|---|---|
| | | | 30 | 145 | 300 | 600 | 1200 | 2400 | 4800 | 5200 | | |
| TL 10 | 13 | 13 | ■ | | | | | | | | | |
| TL 20 | 13 | 13 | ■ | ■ | | | | | | | | |
| TL 30 | 15 | 15 | ■ | ■ | ■ | | | | | | | |
| TL 40 | 15 | 15 | ■ | ■ | ■ | ■ | | | | | | |
| TL 41 | 11 | 12 | | ■ | ■ | ■ | ■ | | | | | |
| TL 50 | 15 | 15 | | ■ | ■ | ■ | ■ | | | | | |
| TL 60 | 15 | 15 | | | ■ | ■ | ■ | | | | | |
| TL 61 | 11 | 12 | | | ■ | ■ | ■ | ■ | | | | |
| TL 70 | 15 | 15 | | ■ | ■ | ■ | ■ | ■ | | | | |
| TL 80 | 15 | 15 | | | ■ | ■ | ■ | ■ | ■ | | | |
| TL 81 | 11 | 12 | | | ■ | ■ | ■ | ■ | ■ | ■ | | |
| TL 90 | 15 | 15 | | | ■ | ■ | ■ | ■ | ■ | ■ | | |
| TL 100 | 15 | 15 | | | | ■ | ■ | ■ | ■ | ■ | | |
| TL 101 | 10 | 12 | | | | | ■ | ■ | ■ | ■ | ■ | |
| TL 110 | 15 | 15 | | | | ■ | ■ | ■ | ■ | ■ | ■ | |
| TL 120 | 12 | 13 | | | | | ■ | ■ | ■ | ■ | ■ | |
| TL 600 | 15 | 15 | | | | | | ■ | ■ | ■ | ■ | |
| TL 900 | 12 | 13 | | | | | | | ■ | ■ | ■ | ■ |

Pressure Performance data based on the following; Gas handled: Air, Inlet pressure: 14.7 PSIA, Inlet Temp.: 68°F

Vacuum Performance data based on the following; Gas handled: Air, Discharge pressure: 29.92 HG A, Inlet Temp.: 68°F

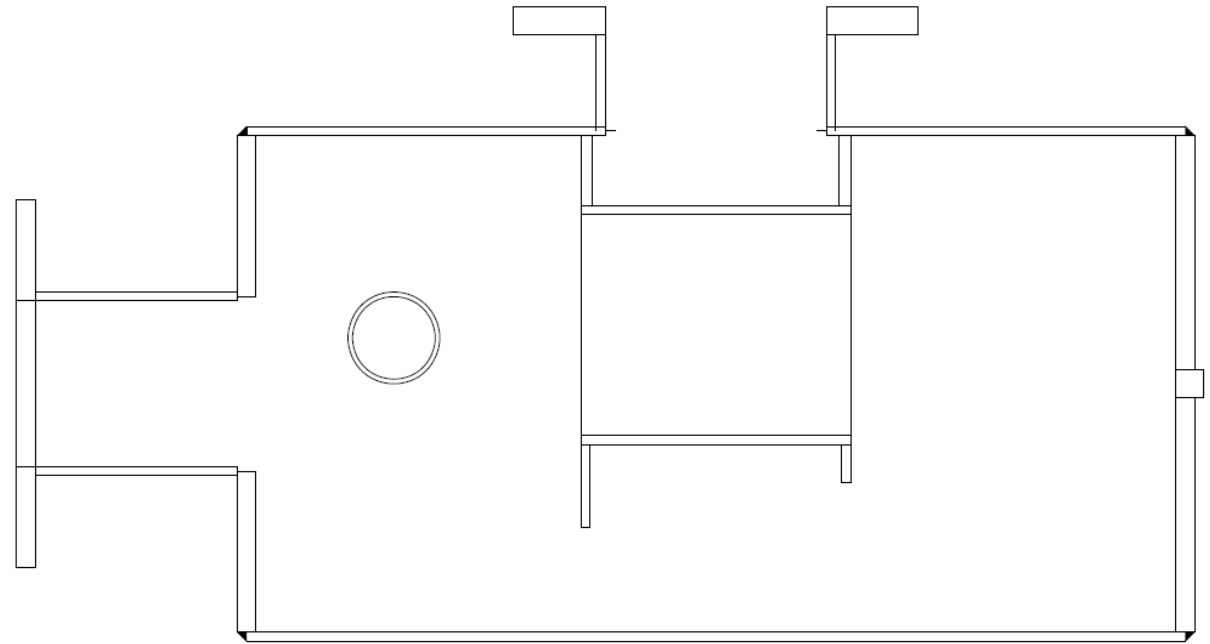


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Compact Base Blower Package

- Smaller footprint than competitors.
- Quiet operation
(90-100 dba max @ 15 PSIG)
- Sanitary Design





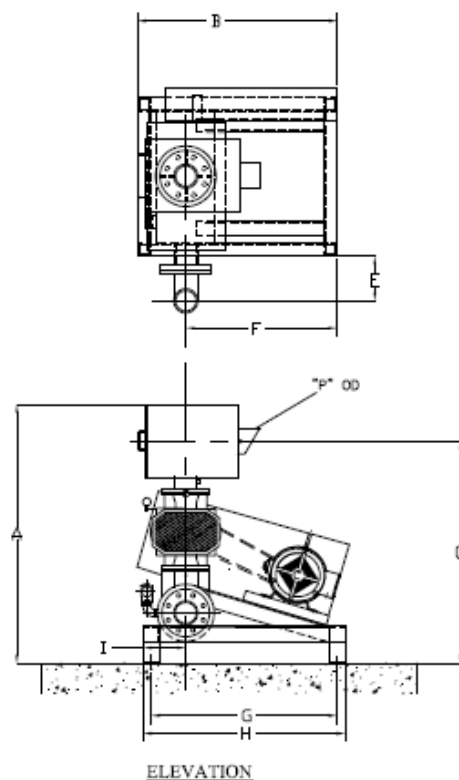
Discharge Silencer

- Chamber type silencer, no fiberglass or other material.



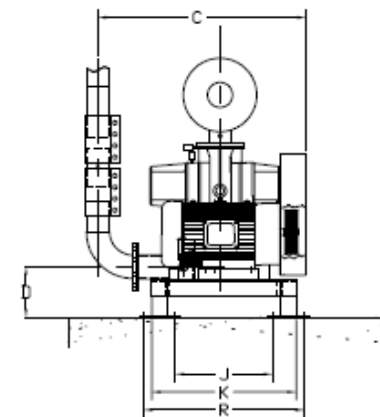
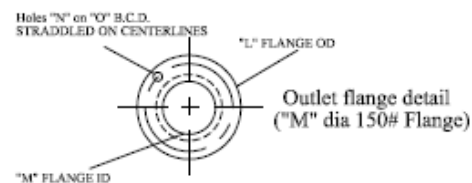


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ELEVATION

| Blower Engineering Sales and Service | | |
|---|------------------|--------------------|
| Overall Dimension Sheet (Vertical Outlet) | | |
| Drawn: Sam Bymes | Scale: NTS | Date: Apr. 29 2014 |
| Checked: | Drawing: ODS-RFS | Revised: |



END VIEW

NOTE: DIMENSIONS IN INCHES

| MODEL | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|-------|------|----|--------|-------|-------|----|----|----|----|-------|-------|------|---|------|-------|----|--------|-------|
| TL10 | 48.5 | 32 | 29.5 | 9 | 6.5 | 22 | 27 | 29 | 7 | 17 | 23 | 7.5 | 3 | .75 | 6 | 3 | 38 | 25 |
| TL20 | 48 | 32 | 29.5 | 9 | 6.5 | 22 | 27 | 29 | 7 | 17 | 23 | 7.5 | 3 | .75 | 6 | 4 | 37.5 | 25 |
| TL30 | 50 | 32 | 29.5 | 9 | 6.5 | 22 | 27 | 29 | 7 | 17 | 23 | 7.5 | 3 | .75 | 6 | 4 | 39.25 | 25 |
| TL40 | 50 | 32 | 29.5 | 9 | 6.5 | 22 | 27 | 29 | 7 | 17 | 23 | 7.5 | 3 | .75 | 6 | 4 | 39.25 | 25 |
| TL41 | 60 | 40 | 36 | 9.5 | 8 | 30 | 35 | 38 | 8 | 17.75 | 27.25 | 9 | 4 | .75 | 7.5 | 6 | 47.125 | 30.75 |
| TL50 | 53 | 40 | 35.25 | 9.5 | 8 | 30 | 35 | 38 | 8 | 17.75 | 27.25 | 9 | 4 | .75 | 7.5 | 5 | 43 | 30.75 |
| TL60 | 61.5 | 40 | 35.25 | 9.5 | 8 | 30 | 35 | 38 | 8 | 17.75 | 27.25 | 9 | 4 | .75 | 7.5 | 6 | 48.625 | 30.75 |
| TL61 | 64 | 49 | 45 | 11 | 9.5 | 35 | 42 | 46 | 11 | 22.5 | 34 | 10 | 5 | .875 | 8.5 | 8 | 50.75 | 37.5 |
| TL70 | 68 | 49 | 43 | 11 | 9.5 | 35 | 42 | 46 | 11 | 22.5 | 34 | 10 | 5 | .875 | 8.5 | 8 | 54.75 | 37.5 |
| TL80 | 68 | 49 | 46 | 11 | 9.5 | 35 | 42 | 46 | 11 | 22.5 | 34 | 10 | 5 | .875 | 8.5 | 8 | 54.75 | 37.5 |
| TL81 | 68 | 49 | 47.25 | 11 | 9.5 | 35 | 42 | 46 | 11 | 22.5 | 34 | 10 | 5 | .875 | 8.5 | 8 | 54.75 | 37.5 |
| TL90 | 70 | 49 | 46 | 11 | 9.5 | 35 | 42 | 46 | 11 | 22.5 | 34 | 10 | 5 | .875 | 8.5 | 8 | 56.75 | 37.5 |
| TL100 | 79 | 60 | 53 | 12.25 | 10.5 | 43 | 51 | 56 | 13 | 27 | 40 | 11 | 6 | .875 | 9.5 | 10 | 62.75 | 43.5 |
| TL101 | 79 | 60 | 56.625 | 12.25 | 10.5 | 43 | 51 | 56 | 13 | 27 | 40 | 11 | 6 | .875 | 9.5 | 10 | 62.75 | 43.5 |
| TL110 | 84 | 60 | 52.5 | 12.25 | 10.5 | 43 | 51 | 56 | 13 | 27 | 40 | 11 | 6 | .875 | 9.5 | 10 | 67.75 | 43.5 |
| TL120 | 88.5 | 68 | 66.25 | 15 | 13.5 | 46 | 55 | 60 | 14 | 31 | 45 | 13.5 | 8 | .875 | 11.75 | 12 | 72 | 48 |
| TL900 | 117 | 86 | 72 | 17 | 14.25 | 54 | 66 | 72 | 18 | 32.75 | 48.75 | 13.5 | 8 | .88 | 11.75 | 14 | 91.75 | 56.75 |



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Aluminum Acoustic Enclosure





Key Benefits



- < 75 dba. @ 15 psig (3ft. field conditions)
- Weatherproof
- Residential areas
- Outdoor applications
- Install over a standard Tri-Lobe blower package



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TL10 to TL120 Enclosure Packages





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Single Blowers or Double Blower Enclosures





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Mechanical Pre-Cleaners





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High Debris Environments

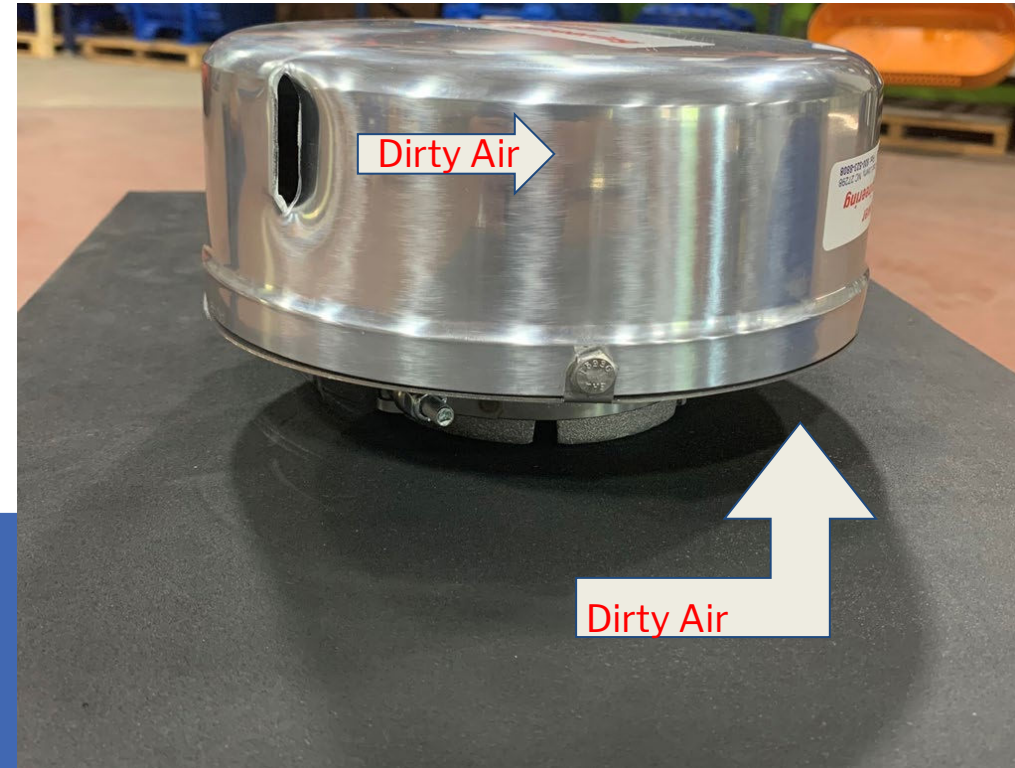




HOW IT WORKS:

- Dirty air enters the Mechanical Pre-Cleaner.
- Spinning rotors separate dirt from the air.
- Dirt is carried along the inside of the cover to the discharge port.
- Dirt is ejected back into the atmosphere.
- Clean air is drawn in through the chamber; only dry, clean air enters the Filter/Silencer.

**Extends filter element
life up to 75%.**

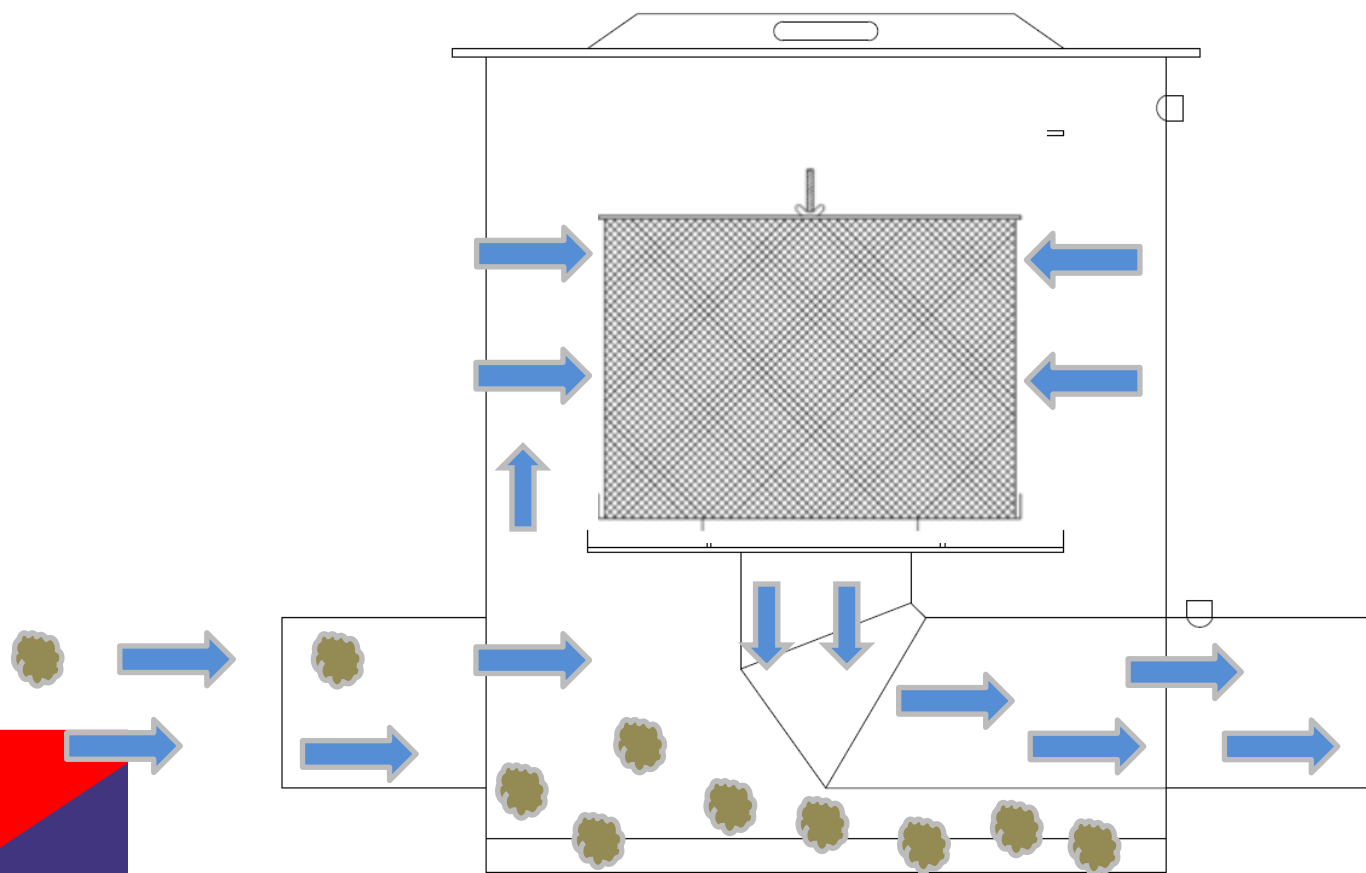




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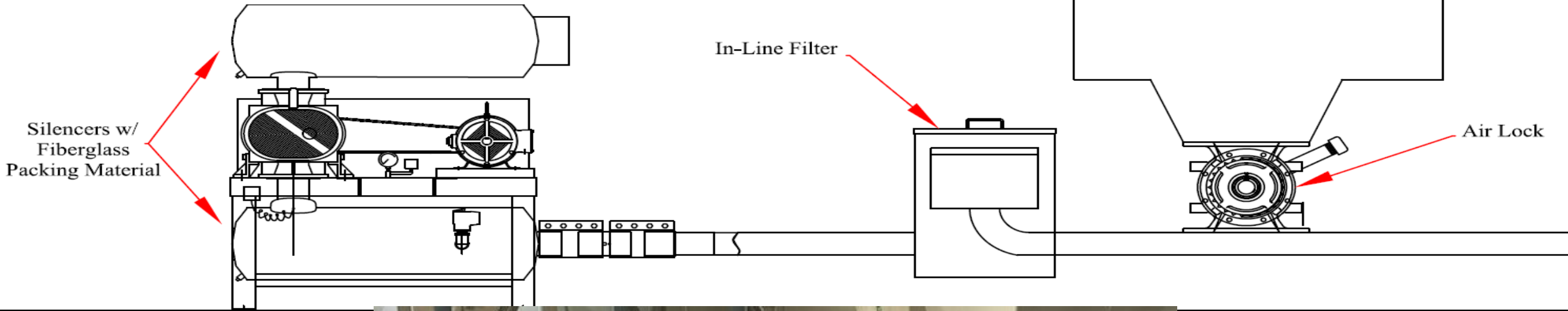
In-line Filter







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Filter Construction

Filter media is reinforced wire mesh on the “dirty side” of the filter element

Perforated 11-gauge metal backing up the clean side of the filter element





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Polyester Filter Elements

- For Extreme use, washable/reusable 10 -15 cycles
- Molded ends, no gasket to tear off





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Filter Elements Available

- 10 Micron
- 5 Micron
- 1 Micron
- HEPA Grade





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THANK YOU !

TOM BYRNES JR

TOMJR@BLOWERENGINEERING.COM

716-830-0161

WWW.BLOWERENGINEERING.COM