

V-Series: Full Range In Line Oiler



No Moving Parts to Fail...

No switches, pumps, plugging & no problems!



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The Difference

V-Series is designed to remove the pitfalls of both "pig" and "injection" oilers. "Pig" oilers reduce line flows by requiring a pressure drop to induce oil, and plugging is all too common." Injection oilers require many potential fail points (switches, pumps etc.) and do little to operate in concert with air flows. Neither are capable of sizing oil particles for a given air speed, further aggravating hammer lubrication problems. Particles too large to remain in the air stream end up on plumbing walls. Particles too small can pass right through the hammer.

Few operators recognize that a given system will tend to bum out hammers under certain air flow demands, while operating fine under other requirements. Most will suspect the hammer is the problem (including hammer manufacturers themselves). This is the point where oil-to-air ratios in non-proportional oilers (all other brands) is critical. Wasting oil, or burning hammers shuts down your project and increases costs.

The Point

Built-in complexities never add dependability. One failed switch or one plugged orifice and the hammer accumulates damage. V-Series is very simple. It is designed with no moving parts to wear out, stick or fail. To ensure that plugging never occurs, the oil entry into the adjustment valve has 6 ports. This design has never plugged or failed.

The ability to deliver the right amount of oil, at the right size, is paramount to achieve correct lubrication when conditions change. This is key, because if you can't get it there when it's needed, it's too late. When adjusted properly, over oiling and detonation are avoided completely, which is critical in boosted systems.

Simple Solution

Removing the pitfalls was easy, but R&D testing proved that the relationship of air mass and oil feed has an exact balance. V-Series, though appearing simple inside and out, utilizes a series of physics-based variables that the air mass controls. Hence the name "V-Series".

These 7 Basic Conditions Are Possible:

- 1. Steady pressure, steady CFM
- 2. Dropping pressure, steady CFM
- 3. Rising pressure, steady CFM
- Steady pressure, rising CFM
- 5. Steady pressure, dropping CFM
- 6. Dropping pressure, dropping CFM
- 7. Rising pressure, rising CFM

Compare these factors and you can only come up with one thing that relates to all of them ... the air mass! That means PSI + CFM=MASS The total air moving at any given moment. Quite literally, it's the same physics used to indicate air speed.

V-Series is designed to only utilize air mass as the "control" factor. It uses the lack of air motion to automatically stop feeding, without any valves or check balls.



Sizes

Standard units range through line sizes from three quarters to four inches, and capacities from 2 to 38 U.S. gallons. Remote tanks can increase desired capacities. Minimum recommended CFM is 80 @ 80 PSI. Oilers are available through 12" line sizes, to MWP 5,000 PSIG and remote reservoirs (special order) to 173 gallons. For more information on all sizes through 4" on all standard units or if you need our larger sizes (up to 12"), please contact our sales team with your system requirements.

Availability

Due to the vast number of formats we manufacture, most orders are built upon receiving P.O. confirmation. We suggest you allow 10-14 days to receive a unit from the order date. We stock 3 gallon and 5 gallon oilers to ship the same day as ordered.

Parts are interchangeable across all V-Series, valves, nozzles, fill caps except riser tubes. Off the shelf risers are 42" long and the appropriate length is that which will just fit inside. Loctite 515/518 is used on all fittings (no exceptions). Do not use teflon tape on any V-Series fitting or part.

Special Points

When changing hammers, readjustments should be performed (wet shank, oil not running out). This usually takes about a minute. Never use tools to turn adjustment knob or nut behind knob. Tighten nut by hand once adjustment is set (this makes it vibration proof). Never open fill port or drain port when system is pressurized! If unit is pressurized the ports cannot be opened easily. Fully screw in using both hands, and remove by hand only. Seals on plugs must be below protective steel lip (5 full turns). Never grind or weld on the sides of any unit!

Durability

Generally speaking, V-Series is built to withstand just about anything. The massive armored body is there for a reason: the real world. If a heavy impact occurs, resulting in dents, unit should be hydro-tested to minimum 2X of rated working pressure by a qualified service.

Standard Air Direction

If not specified, the factory setup is right to left when looking at the adjustment valve. Reversing this direction requires swapping riser & feed line inside. Riser tube is always the "IN" side (remove fill plug and look for the riser tube).

Standard Air Ports

Female pipe thread. Others available on request.

What Rock Oil to Use?

V-Series will run any rock oil.

Maintenance

Check drain port for clear oil & drain water monthly.



Design Features

- Fully Proportional delivery (oil/air ratio and oil particle sizing) for infinite feed rates to 10 gallons per hour
- Full 4" fill & sediment ports with air pressure locked plugs, remove easily when line is blown down
- Exclusive "6 port taper inlet" feed valve defies plugging
- Exclusive 30 pound capacity contaminant/water trap
- Perfect delivery on boosted systems to rated working pressures (special order for PSI ranges to 5,000 PSI)
- Internal riser tube automatically relieves unit when system blows down
- Unit shuts down oil feed when air stops moving and automatically begins to feed when air is used
- Rated oil capacity is the full usable capacity (no loss)
- Standard -8 JIC remote drain port for draining
- Tough housing and armored sight glass withstands most impacts and flying rocks
- Reversing air flow direction is quickly accomplished by swapping riser tube and feed line positions
- Unit is easily equipped with additional sight glass for multi-position viewing

Simple Installation/Setup:

- 1. Splice into main air line upstream of mud/water injection points
- Install whip checks & fill with oil
- 3. Open valve two full turns and begin drilling for 10-20 seconds
- 4. Pull back and inspect bit shank for oil film. Adjust as necessary, drilling 10-20 seconds between each adjustment
- 5. Feed is perfect when shank is wet, but oil does not run out

OCI Technical Support

Call **814-849-5999** or go to **www.ocidivision.com** for more information.

