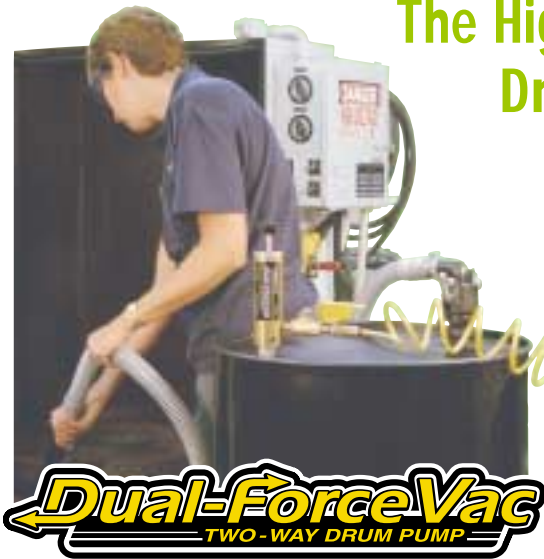


## The Highest Quality Dual Mode Drum Pump Available

There's a number of drum pumps on the market that will simply empty fluids from a 55 gallon drum. But if you're looking for the convenience and versatility of a dual-mode drum pump, the Dual-Force Vac is the powerful and affordable equipment for liquid material handling and spill clean-up.



Automatic safety shutoff valve prevents overflows

Relief valve limits internal drum pressure to 8 PSIG

Installs on 55 gallon drum in less than a minute

Virtually no maintenance — quiet operation

Resistant to most non-volatile, non-flammable liquids

Optional wand and squeegee kit handles large floor spills

Closed head drum not included

ITW Vortec has introduced the new Dual-Force Vac – a powerful yet economical two-way drum pump. Its all new, patented design offers many unique features. The quiet and safe operation of this air-powered drum pump means no motor burn out and no shock hazard. The Dual-Force Vac is truly a versatile, plant maintenance cleaning tool for fast, pump-in/pump-out handling of:

### APPLICATION

### notes

After literally four motor burnouts in less than a year, a Pennsylvania machine shop purchased a Dual-Force Vac to replace the electric vacuum used for clean out of parts washers. In the pump mode, they now directly transfer the liquid waste into 55 gallon drums for disposal.

A company supplying industrial cleaning fluids uses Dual-Force Vacs for product delivery, and remarked that, if they dispense too much product in the customer's tank, they simply vacuum it back.

Faced with frequent floor spills, a facility processing lubricants told us that their Dual-Force Vac paid for itself in less than a month from their savings in absorbents and disposal costs.

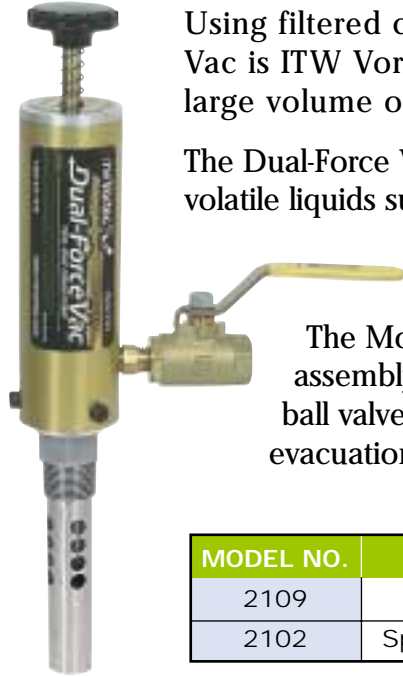
Dual-Force Vacs are widely used to thoroughly clean machine sumps because of its fast vacuuming of both chips and coolant.

An East Coast firm providing industrial wastewater and water pollution control consulting services recommends ITW Vortec Dual-Force Vacs to their clients as an affordable means of liquid transfer.

- ◆ Coolant sumps, even with chips and swarf
- ◆ Sludge and waste water from parts washers
- ◆ Solvents
- ◆ Hydraulic Oil
- ◆ Liquid Transfers
- ◆ Tramp Oil
- ◆ Liquid spills
- ◆ And much more



# Dual-Force Vac



Using filtered compressed air, the heart of the Dual-Force Vac is ITW Vortec's Transvector air amplifier, which moves a large volume of air using a lesser amount of compressed air.

The Dual-Force Vac is not intended for use with flammable or volatile liquids such as gasoline, alcohol, kerosene, aviation fuel, mineral spirits or any materials that have a low flash point.

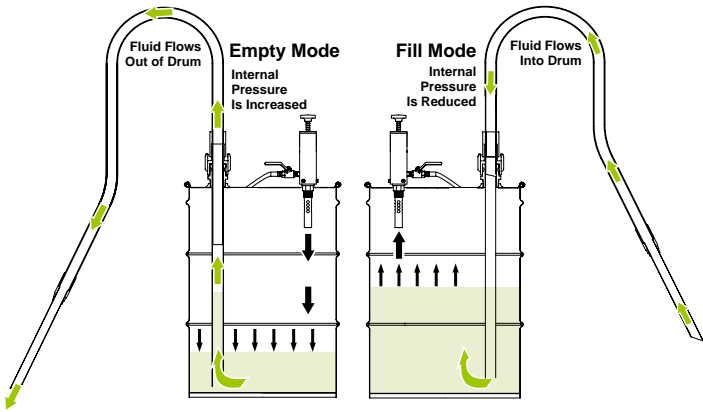
The Model #2109 Dual-Force Vac includes: pump body assembly w/overflow preventer & pressure relief valve, ball valve with 1/4" NPT (F), hose drum connection, drum evacuation tube, hose (1 1/4" x 10' long), extension wand.

MODEL NO.	DESCRIPTION
2109	Dual-Force Vac, Two-Way Drum Pump
2102	Spill Pick Up Kit, Includes aluminum wand and squeegee

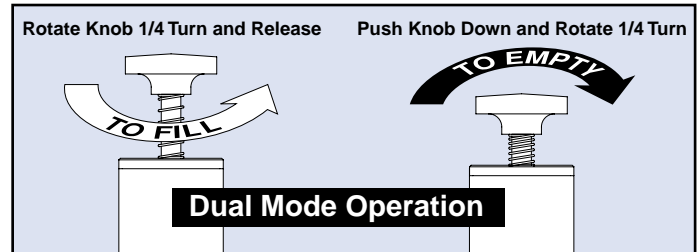
AIR SUPPLY PRESSURE PSIG (BAR)	AIR CONSUMPTION SCFM (SLPM)	VACUUM IN. OF MERCURY (kPA)	FILL RATE GPM (LPM)	EMPTY RATE GPM (LPM)
50 (3.5)	15 (425)	6.7 (22.7)	29.5 (112)	36.7 (139)
100 (6.9)	23 (651)	9.5 (32.2)	33 (125)	33 (125)

Note: Not recommended to operate at less than 50 PSIG. Flow rates based on a liquid viscosity of 0.8 cps.

## TECH notes



A powerful Transvector air amplifier delivers the two-way pumping strength of a Dual-Force Vac. (See Round Transvectors for more detail) In a vacuum mode, the suction side of the Transvector is used to create a vacuum inside the drum, drawing the liquid in through the hose. Air from the output side of the amplifier exits out the pump assembly in a safe, downward direction. Depressing and locking the knob for the pump-out mode changes the direction of the airflow to create pressure inside the drum. The downward regulated pressure on the surface of the liquid forces the liquid out the hose.



**The Dual-Force Vac delivers fast, reliable operation, backed by a two year warranty**

The Dual-Force Vac quickly installs on a UN/1A1/X1.8/300 rated, closed head 55 gallon drum. The drum should be in good condition free of dents or rust.

The Dual-Force Vac is ideal for large floor spill pick-ups. Order model #2102 accessory kit. Kit includes aluminum wand and squeegee spill pick up tool.

**Perfect for machine sumps, parts washers, floor spills and versatile liquid transfers**