SVT SERIES

OIL-LUBRICATED SCREW VACUUM PUMPS WITH VSD

Elmo Rietschle®

Precise, efficient, quiet operation
for multi-pump plants

VAKUUM EXPERTEN

VACUUM

Elmo Rietschle

THE SVT
THINK SMARTER

The SVT family combines oil-sealed screw technology with integrated variable-speed control to deliver high, stable pumping efficiency in the sub-atmospheric band where packaging, vacuum filling, and can-line processes actually run.

Designed for centralized vacuum systems, SVTs hold precise setpoints while keeping heat and noise out of the packing hall. Pair with VSD boosters where deeper vacuum is needed; keep the SVT as the efficient backbone.

Cleaner halls
Remote plant room = less heat/noise, lower HVAC cost.

Energy savings
Holds exact setpoint (no over-pumping) up to 50% savings.

Plug-and-play
Integrated controller, service access, low oil carry-over (≤3ppm).

Scalable control
Coordinate up to 8 pumps with trim & baseload strategy for plant-level efficiency.

Service confidence
Long intervals, genuine parts, training and support programs.

APPLICATIONS OVERVIEW

BATTERY & ELECTRONICS

House vacuum for production lines

SVT provides reliable vacuum for pick-and-place operations, component handling, and fixture clamping in electronics and lithium battery plants.

FOOD & BEVERAGE

Vacuum packaging

Meat, fish, dairy, ready meals using 2-/3-pipe staged systems for stable seals and energy savings.

Vacuum filling

Milk powder, baby formula, canned fruit / vegetables — ideal at 100–200 mbar (abs).

CAN MANUFACTURING

Aluminium beverage cans

Holding / clamping during forming, necking, and high-speed decorating; centralized SVTs with robust filtration.

GLASS BOTTLE

Glass container production

Vacuum forming supports clean, continuous operation in harsh environments.

MEDICAL SYSTEMS

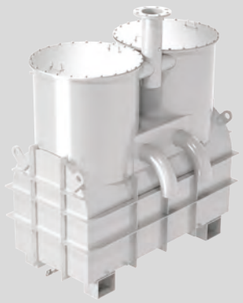
Centralized suction for healthcare

Dependable vacuum for hospital suction networks, sterilization processes, and other critical medical applications where continuous, clean vacuum is essential.

THE
CENTRE OF SMARTER EFFICIENCY

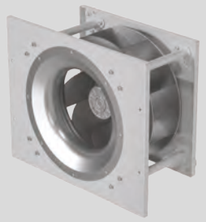
3-Stage oil separation

Engineered separator system designed with computational fluid dynamics results in very low back-pressure and ≤3 ppm oil carry-over supporting efficiency and a cleaner plant.



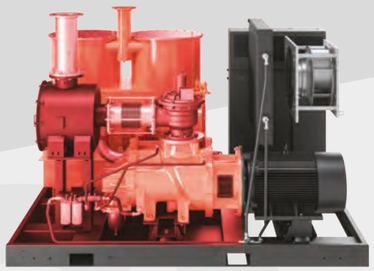
High quality airend

The SVT airend delivers high flow and exceptional energy efficiency for demanding applications. Its precision engineering ensures smooth, low-vibration operation for long-term reliability.



Inlet control & throttling

An integrated valve regulates inlet conditions during start and at rough vacuum; once below ~500 mbar (abs) the valve is fully open and the VSD takes over to maintain setpoint precisely, ensuring the absolute minimum of energy is used.



Hot/cold section architecture

Thermally managed canopy separates hot and cool zones to protect electronics, stabilize performance, and control noise; maintaining the correct oil temp is important and is carried out by intelligent thermostatic controller.

Drive & motor package

Premium-efficiency drive/motor pairing enables deep turndown and smooth ramping, avoiding inrush peaks and supporting base-load/trim strategies (series models span 7.5–90 kW). This combination offers maximum efficiency.

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VARIABLE SPEED & SETPOINT CONTROL

Proven Energy Logic

Design to the duty

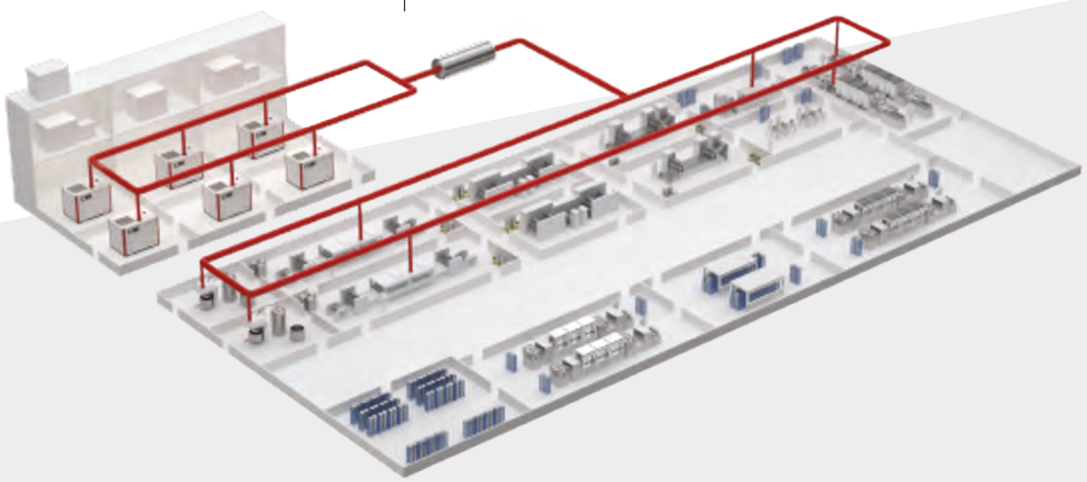
Running a system at deeper vacuum then the process needs can inflate throughput (and power) by 30–50%. SVT setpoint control prevents this creep and protects against unplanned energy loss.

Plant-wide savings

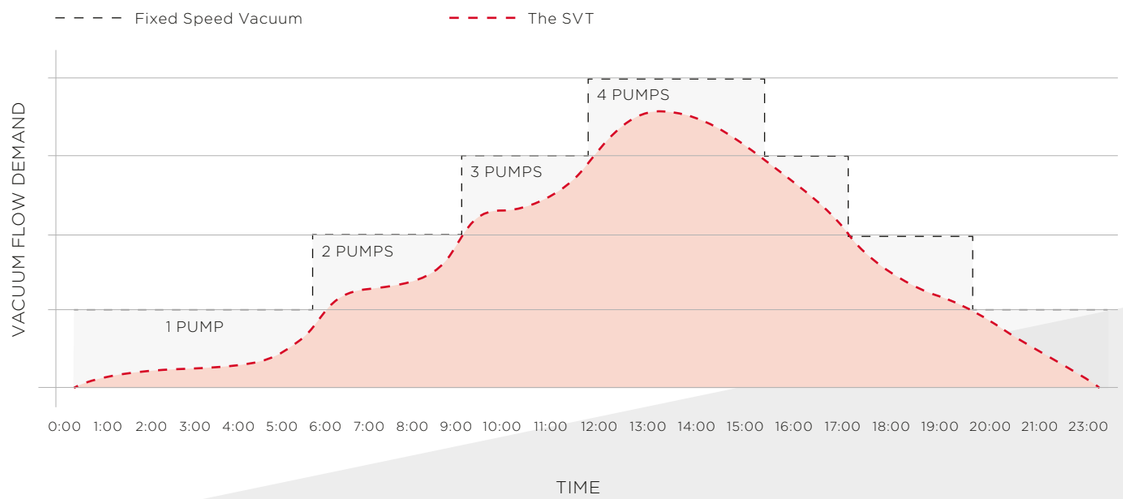
In multi-pump installations, run one “trim” SVT to follow demand; keep the others at their most efficient fixed speed. This control logic is much more efficient than fixed speed machines with cascade control.

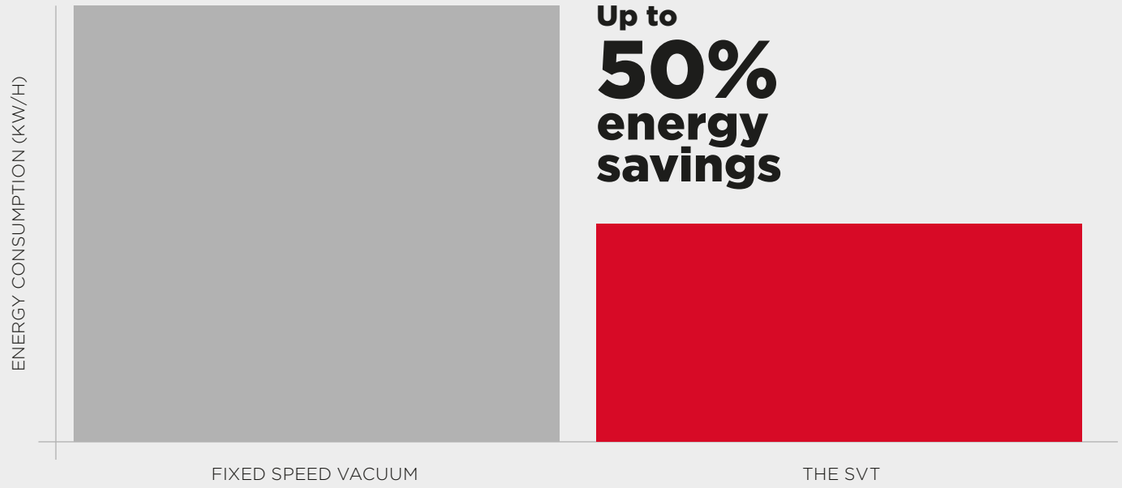
Combine for maximum efficiency

SVTs are engineered to deliver stable system vacuum and excel under variable flow conditions. Pair them with VSD boosters to achieve deeper vacuum levels for demanding applications such as food and beverage processing.



Fixed vs variable speed vacuum pumps





TECHNICAL HIGHLIGHTS

	MAX. CAPACITY (M^3/hr)[1]	MOTOR RATING (KW)	NOISE (DB(A))[2]	OIL CAPACITY (L)	TOTAL WEIGHT (KG)	COOLING METHOD	SUPPLY POWER FREQUENCY (Hz)
SVT600	605	7.5	68	18	741	AC/WC	50/60
SVT800	735	11	75	22	890	AC/WC	50/60
SVT1000	905	15	78	22	933	AC/WC	50/60
SVT1500	1,386	22	75	41	1,560	AC/WC	50/60
SVT1800	1,672	30	78	41	1,620	AC/WC	50/60
SVT2000	1,936	37	78	41	1,660	AC/WC	50/60
SVT3000	3,135	45	80	90	3,552	AC/WC	50/60[3]
SVT4000	3,830	55	80	90	3,608	AC/WC	50/60[3]
SVT4500	4,310	75	83	90	3,773	AC/WC	50/60[3]
SVT5400	5,335	75	84	120	5,057	AC/WC	50/60[3]
SVT6000	5,740	90	85	120	5,631	AC/WC	50/60[3]

1 = Measured as per ISO21360-2:2012(E)
2 = Noise as per ISO2151:2004 under ideal conditions
3 = 60hz option (Non-Standard)

AC = Air Cooled
WC = Water Cooled

	L (mm)	W (mm)	H (mm)
SVT600	1390	960	1520
SVT800	1530	1060	1520
SVT1000	1530	1060	1520
SVT1500	2040	1360	1650
SVT1800	2040	1360	1650
SVT2000	2040	1360	1650
SVT3000	3150	1950	2230
SVT4000	3150	1950	2230
SVT4500	3150	1950	2230
SVT5400	3350	2250	2160
SVT6000	3350	2250	2160

Why SVT Wins in Real Plants

Optimized for real World operating pressures

SVT is built for continuous performance where most industrial processes actually run at 100 to 250 mbar (abs). This means better efficiency, less stress on components, and longer life in real applications.

Energy efficiency through intelligent control

SVT uses variable speed drives and staged system design with precise setpoint control to eliminate overpumping. The result is up to 30 to 50 percent energy savings compared to conventional fixed speed systems.

Proven performance across industries

From food packaging halls to battery plants and can manufacturing lines, SVT systems deliver cleaner rooms, lower energy consumption, and stable product quality validated in real world installations worldwide.

LIFECYCLE, SERVICE & SUPPORT

Preventive programs tailored to duty cycles, with genuine parts and trained Elmo Rietschle technicians. Operator training enforces setpoint discipline and staging best practices, key to sustaining energy and seal quality.

PROTECT
COMPLETE PEACE OF MIND

GENUINE PARTS

Service Highlights:

- **Preventative and scheduled maintenance programs**
- **Genuine parts for reliable operation**
- **Expert on-site inspections and maintenance**
- **Effective professional training for your teams**
- **Ongoing customer support to maximize ROI and performance**

BENEFITS
OF CHOOSING PARTS PROTECT

Practical Knowledge
Useful maintenance tips to avoid unnecessary downtime and maintain steady productivity.

Dedicated Support
Our team is committed to providing prompt and effective assistance whenever you need it.

Genuine Parts Assurance
We guarantee the use of genuine parts to ensure your equipment runs smoothly and reliably.

Transparent Pricing
With predictable costs, you can effectively plan and manage your maintenance budget with confidence.

WHY CHOOSE ELMO RIETSCHLE?

When looking for solutions to support your vacuum or low pressure system we are an expert partner you can trust.

Our extensive product range, technical knowledge and experience enable us to continue to engineer tailored solutions for a wide array of applications.

Optimum Performance
Constant vacuum and low pressure

Sustainability
Embracing eco-friendly technologies and production methods

Flexibility
Wide product range to adapt to different application demands

Lower Total Cost of Ownership
Reduce maintenance & energy consumption

PART OF A WIDER FAMILY

Elmo Rietschle is part of Ingersoll Rand which gives our customers access to an even wider range of products and solutions. Ingersoll Rand has a very broad range of innovative and mission-critical air, fluid, energy and medical technologies, providing services and solutions to increase industrial productivity and efficiency.

We have locations throughout the world to better supply and support you. Our expert local service personnel speak your language.

Elmo Rietschle®

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LOW PRESSURE & VACUUM SOLUTIONS
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Radial	Side Channel	Liquid Ring	Rotary Vane	Rotary Lobe	Claw	Screw	Systems

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