Atlas Copco

Oil-free rotary screw compressors

ZR/ZT 55-90 FF & ZR/ZT 90 VSD-FF

55-90 kW/75-120 hp

Atlas Copco

Setting the standard in energy efficiency, safety and reliability

Energy, safety & reliability

The shortest route to superior productivity is to minimize operational cost while maintaining an uninterrupted supply of the right quality of air. The Atlas Copco Z compressor series is focused on effectively saving energy, ensuring product safety – only oil-free machines exclude contamination risks for 100 % – and guaranteeing the utmost reliability around the clock. And not just today, but day after day, year after year, with minimal maintenance cost, few service interventions and long overhaul intervals.

Core technology
Atlas Copco masters each compression principle and offers the most energy efficient technology for the application.

The right drive
Fixed speed machines are efficient at full load but when air demand fluctuates, a Variable Speed Drive ensures substantial savings.

The innovative accessories
The integrated IMD adsorption dryer offers high quality dry air with the lowest pressure drop and uses the heat of the compressor for regeneration. Two features that lead to significant energy savings.

Optimal use
Central control of a multi-compressor installation reduces the pressure band and achieves the lowest overall energy cost. Optimization also covers operation of machines at their most optimal point.

Oil-free compression
Atlas Copco oil-free screw compressors have compressor chambers completely free of oil. This is possible because there is no metal contact between the precision cut rotors and hence no need for lubrication.

Complete safety
Process, products and environment are safeguarded from contamination. The first air compressors TÜV-certified as "oil-free" (ISO 8573-1 CLASS 0).

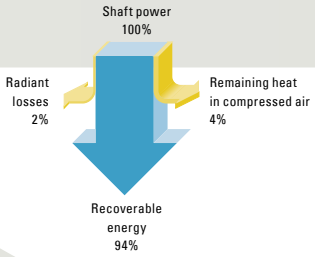
Expertise
Since 1903, Atlas Copco's philosophy has been to continually improve our products through intensive R&D, with the aim to maximize the value for our customers.

The integrated design
Internal piping, high end design features, Variable Speed Drive, 100 % matched components... the only way to ensure total reliability.

Trouble-free installation & commissioning
Each machine is tested to ensure it meets specifications, complete security and no surprises. The ZR oil-free compressor is truly plug-and-play. Put it on a flat floor, connect the power line and the air outlet... and push the start button.

Energy

Energy recovery
Heat of compression can be recovered and put to good use in industrial processes like pre-heating of boiler feed water, heating of buildings etc.



Safety

Reliability

The professional follow-up
Service Contracts will ensure maximal machine uptime, preventive maintenance, immediate response and genuine spare parts… all over the globe.

ISO 8573-1 CLASS 0
Atlas Copco sets a new industry standard

Class zero

When it comes to clean, oil-free compressed air for your critical processes, you can't afford to compromise. Atlas Copco, a pioneer in oil-free air screw technology, is known for its range of compressors designed especially for applications that require oil-free air.

Now Atlas Copco has achieved a new milestone: Setting the standard for air purity as the first manufacturer to be certified ISO 8573-1 CLASS 0.

Why a new class?

Industries such as pharmaceuticals, food and beverages, electronics and textiles must exclude any risk of contamination. Otherwise severe consequences could follow: spoiled or unsafe products, production downtime and damage to both brand and reputation. To address the needs of critical applications where air purity is essential, the ISO 8573-1 compressed air standard was revised in 2001. Along with a more comprehensive measuring methodology, a new and more stringent class was added to the five existing purity classes: ISO 8573-1 CLASS 0.

CLASS	Concentration total oil (aerosol, liquid, vapour) mg/m³
0	As specified by the equipment user or supplier and more stringent than class 1
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5

First to achieve ISO 8573-1 CLASS 0

As the industry leader committed to meeting the needs of the most demanding customers, Atlas Copco requested the renowned TÜV institute to type-test its Z range of oil-free screw compressors. Using the most rigorous testing methodologies available, all possible oil forms were measured across a range of temperatures and pressures. The TÜV found no traces of oil at all in the output air stream. Thus Atlas Copco not only became the first compressor manufacturer to receive CLASS 0 certification, but also exceeded ISO 8573-1 CLASS 0 specifications.

Atlas Copco eliminates any risk

Only oil-free compressors deliver oil-free air. Whether your activities are in pharmaceutical production, food processing, critical electronics or a similarly exacting industry, it is essential to eliminate risk. That's why you need an Atlas Copco risk-free solution: oil-free screw compressors especially for applications demanding the highest levels of purity. Zero oil means zero risk. Zero risk of contamination. Zero risk of damaged or unsafe products. Zero risk of losses from operational downtime. Above all, zero oil means zero risk of ruining your hard-won reputation.

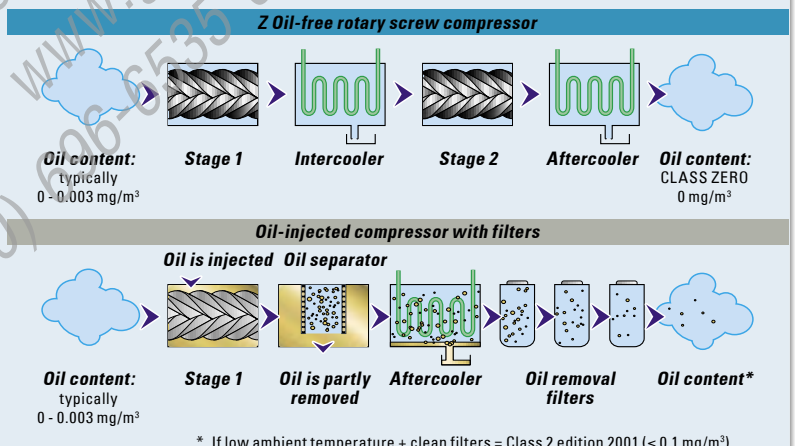
The most stringent air purity testing available

Most manufacturers prefer "partial flow" testing, which targets only the center of the air flow. The Atlas Copco Z range of oil-free screw compressors was tested using the more stringent "full flow" method. This examines the entire air flow to measure aerosols, vapors and wall flow. Even with such rigorous testing, no traces of oil were found in the output air stream.

TÜV (Technische Überwachungsverein/Technical Monitoring Association) reporting on the Atlas Copco Z range of oil-free screw compressors

Can oil-injected compressors with oil removal filters deliver oil-free air?

Often referred to as "technically oil-free air", this system relies on air cooling devices (e.g. refrigeration dryers) and several stages of oil removal with multiple components. A failure of any of these components or inadequate maintenance can result in oil contamination of a process. Therefore, with oil-injected compressors there will always be a risk of contamination and the possibility of severe consequences for your business.



* If low ambient temperature + clean filters = Class 2 edition 2001 (≤ 0.1 mg/m³)
If high ambient temperature + saturated filters = Class 3 edition 2001 (≤ 1 mg/m³)

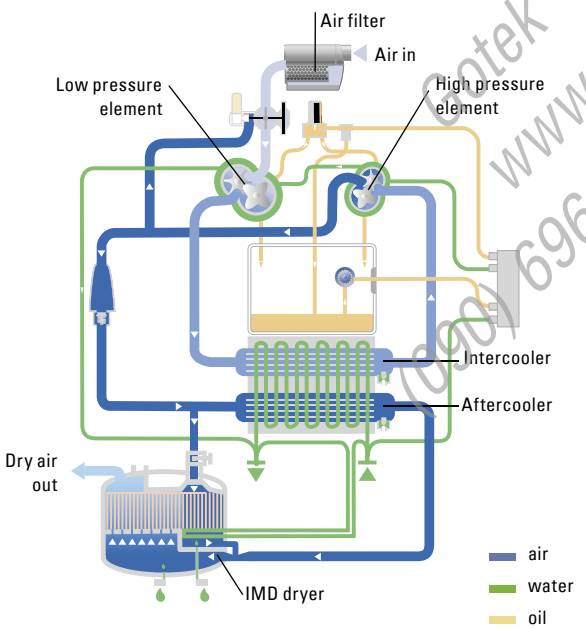
Move up to a risk-free standard.
Visit www.classzero.com

Proven Z-technology in one complete package

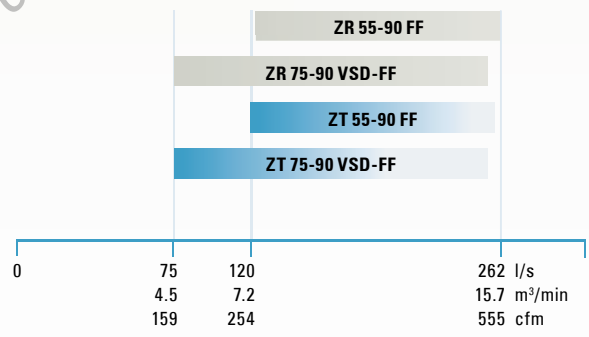
Watercooled ZR 55-90 VSD-FF Integrated VSD, Full Feature version with IMD dryer and Energy Recovery

1. High efficiency cooling
2. Element bearings
3. Water separator
4. Electronic water drains
5. Gearbox breather
6. High precision gears
7. Advanced Elektronikon® control and monitoring system
8. Energy Recovery system

Watercooled ZR-FF: air/oil/coolant flow



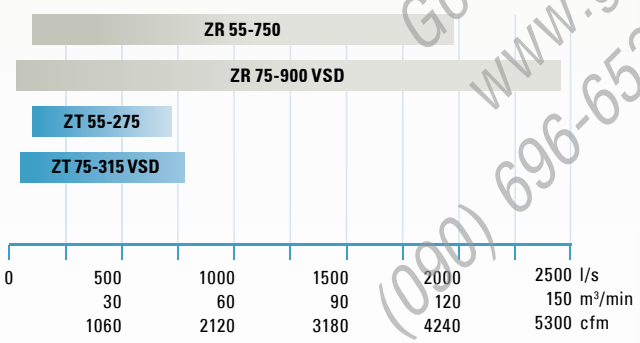
ZR/ZT 55-90 FF and ZR/ZT 90 VSD-FF Capacity range (50 & 60 Hz)



Aircooled ZT 55-90 VSD-FF
Integrated VSD, Full Feature version with IMD dryer

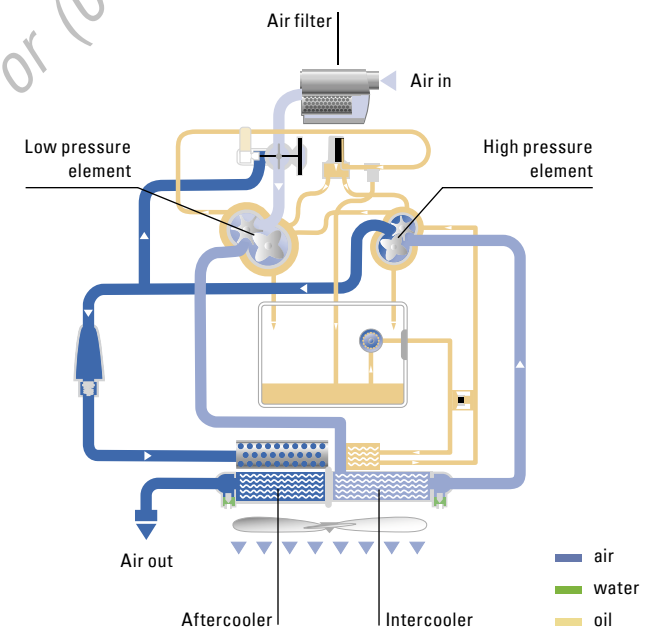
1. Oil-free screw compression element
2. Advanced Elektronikon® control and monitoring system
3. Gearbox breather
4. High precision gears
5. Electronic water drains

Complete ZR/ZT range



ZT: Aircooled / ZR: Watercooled / VSD: Variable Speed Drive / FF: Full Feature.
See data pages for range details.

Aircooled ZT: air/oil/coolant flow

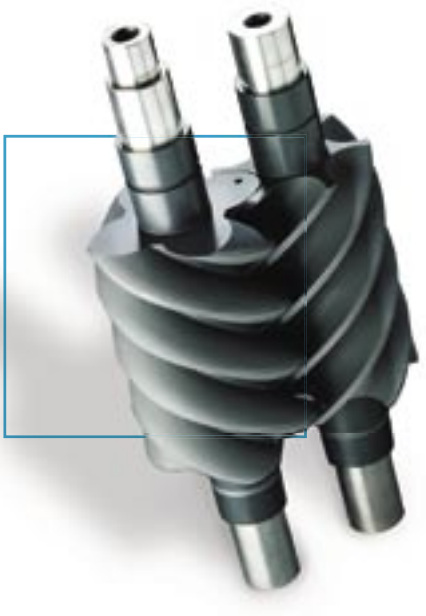


Superior design in every detail

Proven Z-technology

World class oil-free compression element

- 100 % oil-free rotary screw compression
- high quality air
- low speed to capacity ratio
- high overall efficiency, thanks to:
  - superior rotor coating
  - element cooling jackets
- no oil disposal problems downstream as air is completely oil-free



Superior element bearings

- high stability under varying load conditions
- easily adapt to changing loads
- no need for pre-lubrication/stabilisation time

Effective electronic water drains

- sensitive and precise operation
- reliable solid state actuation
- no loss of air
- alarm for malfunction on the Elektronikon® display

High precision drive system

AGMA Q13/DIN Class 5 gears in the main drive

- long lifetime
- low transmission losses
- low noise and vibration

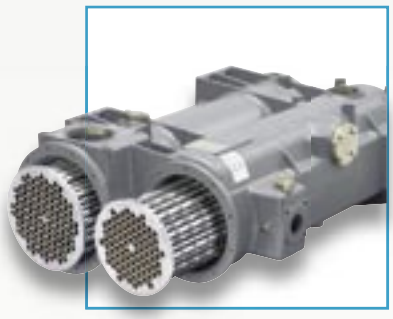
Totally enclosed motor

- IP55 TEFC protection against dust and humidity
- highly efficient conforming to EFF1

Cooling system designed for life

High efficiency + high reliability water cooling (ZR)

- corrosion resistant stainless steel tubing
- highly reliable robot welding; no risk of leaks
- aluminium star insert increases heat transfer
- highly efficient cooling reduces energy consumption and dryer loads



High efficiency + high reliability air cooling (ZT)

- stainless steel pre-cooler with fins
- excellent heat transfer
- easy access for cleaning
- low noise + low energy radial cooling fans

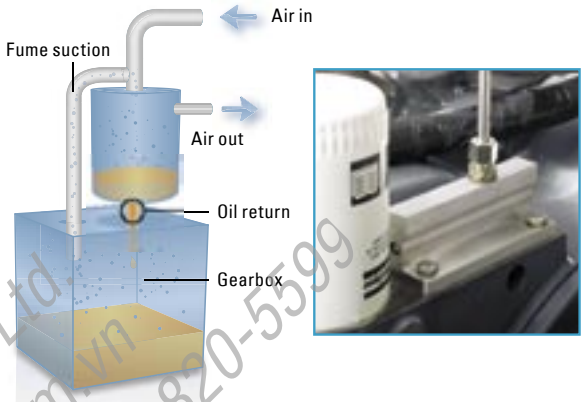
Reliability in every detail

Water separator

- the labyrinth design efficiently separates the condensate from the compressed air
- low moisture carry-over protects downstream equipment:
  - long High Pressure element lifetime
  - better dryer performance

Integrated gearbox breathing system

- simple filter combined with venturi system
- keeps the oil inside the gearbox
- no oil fumes vented to the atmosphere



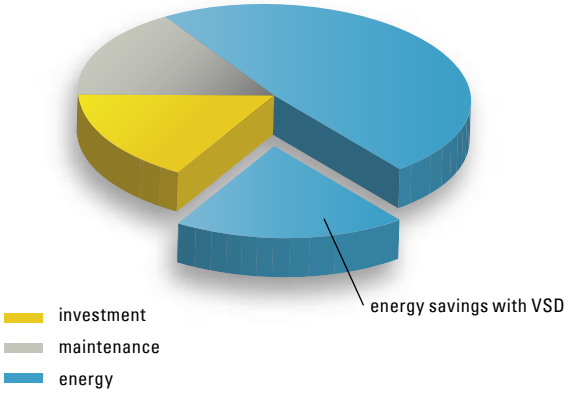
Advanced Elektronikon® control and monitoring system

- overall system performance status with pro-active service indications, alarms for malfunctions and safety shutdowns
- multi-language selectable display
- all monitoring and control functions via one interface
- wide communication possibilities
- integration possible in many process control systems (field bus system)

Why Variable Speed Drive (VSD) compressors?

Direct energy savings of up to 35 %

- Unload losses are reduced to a minimum
- No blow-off of compressed air to the atmosphere
- Load/no load transition losses are eliminated
- The precise pressure control of the VSD compressor allows for a tighter pressure band and a lower average working pressure, resulting in reduced energy consumption

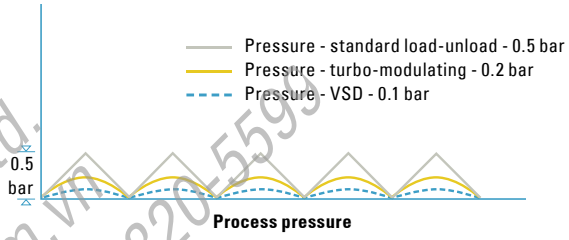


Indirect energy savings

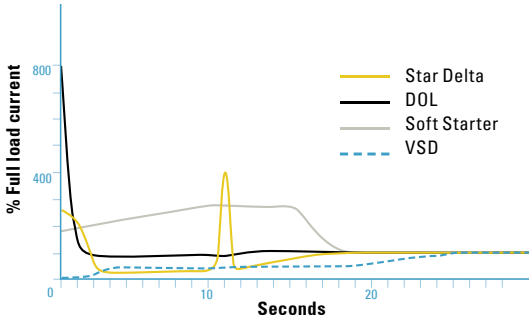
- The lower system pressure obtained by VSD results in up to 10 % additional yearly savings:
  - lower energy consumption of (other) base load machines
  - leak losses are significantly reduced: e.g. leakage at 6 bar is 13 % lower than at 7 bar
  - most compressed air applications consume less air at a reduced pressure

Additional VSD benefits

- **The stable system** pressure provides stability for all processes using compressed air.



- **No current peaks** during start-up
  - unlimited starting and stopping
  - no risk of current peak penalties upon starting



- Savings in electrical installation - smaller breakers, fuses, transformers and cables.

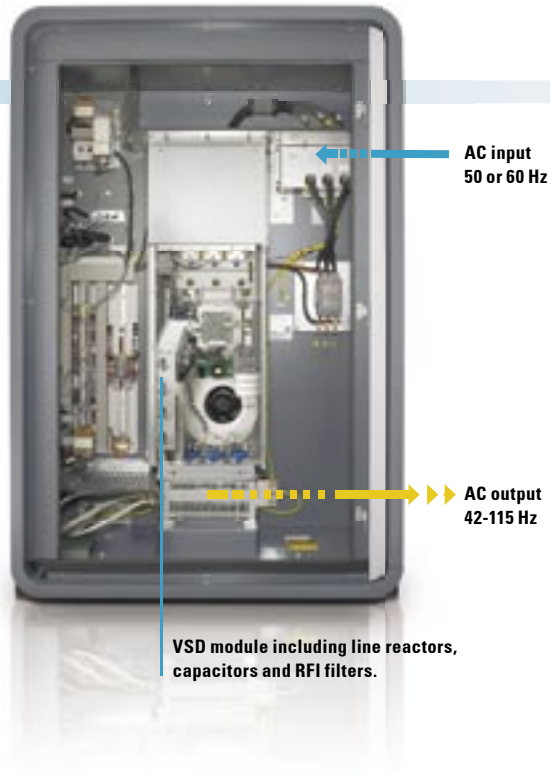
Predicting your savings

Call upon the expertise of Atlas Copco specialists and have an assessment carried out in your factory. A detailed report will show your current operation and the achievable savings when adding a VSD solution to your compressed air system.

The magic of VSD

The supply frequency from the frequency convertor to the electric motor, is steered by the air demand. When demand is low, frequency is reduced, thereby slowing down the motor and reducing compressor output. When demand is high, the process is reversed.

This method ensures a perfect match between air demand and air supply, dramatically cutting down energy requirements. Pressure overshoots are also eliminated.



Integrated VSD - The only way

Elektronikon® controls compressor and inverter
- maximum machine safety
- easy networking of the compressor

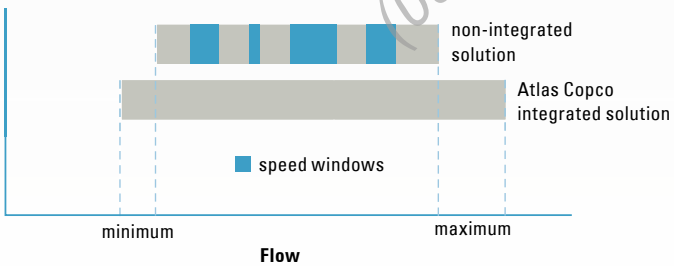
EMC tested and certified
- no influence of external sources
- no emissions to other equipment

Mechanical enhancements
- proper lubrication to gears and bearings for all speeds
- all components operate below critical vibrations

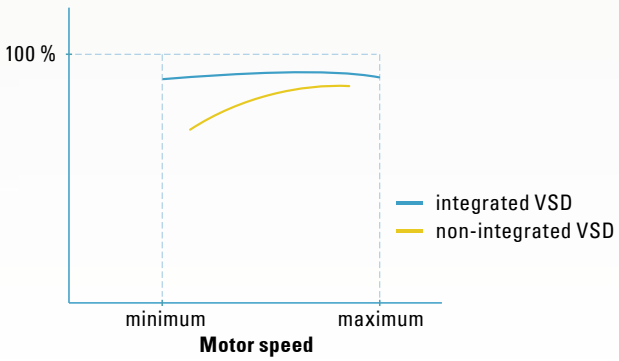
Inverter duty motor specifically designed for VSD
- bearings protected against induced bearing currents
- motor & converter perfectly tuned to obtain best efficiency over entire speed range
- optimized cooling air flow, preventing overheating
- maximum operating range without torque starvation

Tested over complete speed range
- elimination of "speed windows", ensuring stable pressure and consistent energy savings

Operating range



Combined motor/converter efficiency



The Full Feature compressor – a compact, all-in-one quality air solution

Dry compressed air out of the box

- The Full Feature concept is a total installation, providing dry compressed air. Integrating the IMD dryer and its Variable Speed Drive on VSD models, this compact package offers high quality air at the lowest cost.
- The IMD adsorption dryer eliminates the moisture before it enters the air net, ensuring a reliable process and an impeccable end product.
  No external energy is needed to dry the air, resulting in large savings in comparison to conventional dryers.
- The pressure drop through the dryer is minimal, which again cuts down the operating cost.
- The IMD dryer needs **no purge air:** no compressed air is wasted.
- The Full Feature compressor is a pre-wired and pre-piped solution, ready to use.

The IMD drying principle

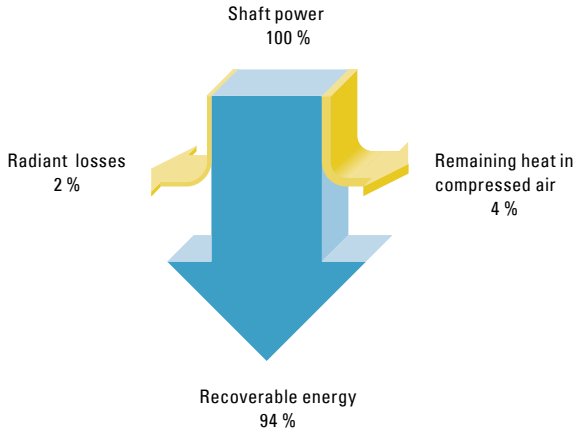
1. Hot air in for regeneration
2. Cold wet air in
3. Cold dry air out
4. Regeneration area
5. Drum rotation

Watercooled
ZR 90 VSD-FF

Maximize your savings: recover energy

What energy?

Air compression creates heat that is normally wasted in the coolers. Atlas Copco has designed energy recovery systems which enable most of this heat to be recovered. Energy recovery could be as high as 94 % of the shaft input of the compressor.

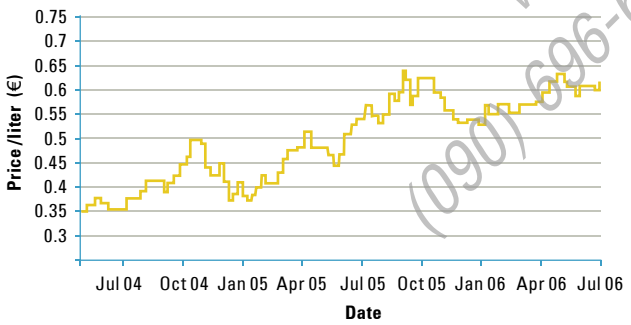


Why recover energy?

Energy costs can amount to up to 80 % of the total cost for the production of compressed air. With rising energy prices, saving energy also means a **substantial cost saving**.

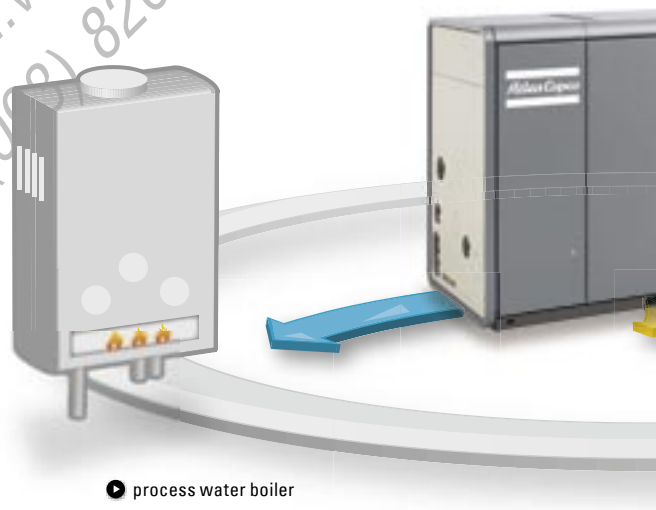
With global warming, Kyoto norms, the gradual depletion of classical sources of energy: everybody is becoming increasingly aware that we all need to contribute to **overall energy conservation** as much as possible.

Evolution of the fuel oil prices (example from a European country)



How is the energy recovered?

Energy recovery systems are **comprehensive modules** that recover heat which is otherwise wasted. The heat in the form of hot water (85-90 °C) is directly usable as a source of energy. The main module of the recovery system is built in into the compressor.



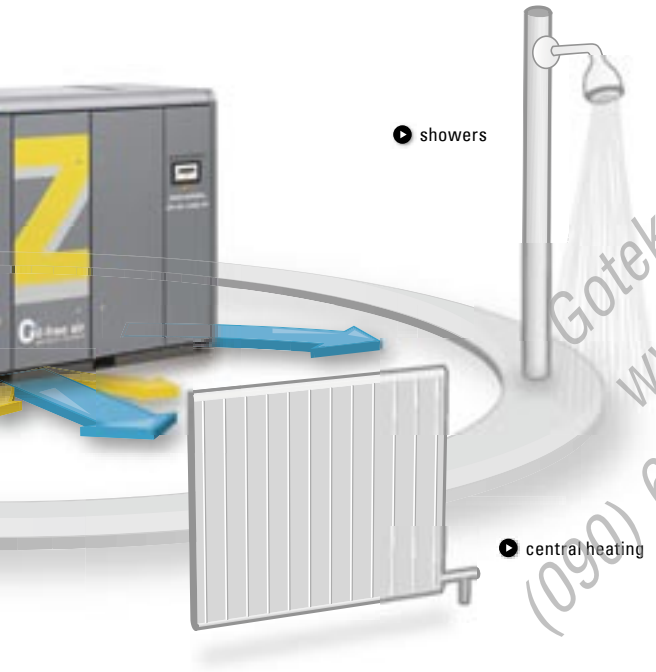
process water boiler

How can the recovered energy be used?

The hot water generated can be put to several uses in the industry:

- as **preheated boiler feed water** for industrial processes
- for **space heating** by circulation in radiators or for **showers**
- for other **industrial applications** like dyeing textiles, operation of absorption chillers, and others

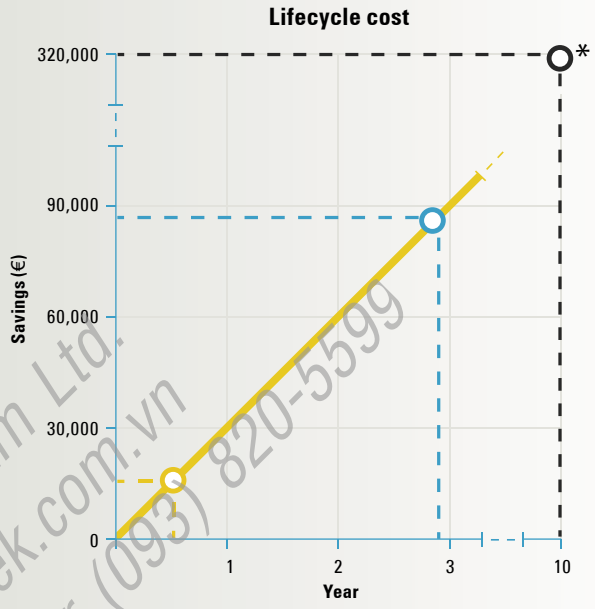
Hot water from the ZR compressors should always be used as an auxiliary source of energy, as the load of the compressor, and hence the hot water produced, may vary.



How do I benefit?

You **save energy** wherever you add the recovered energy as an auxiliary source to reduce your operating costs.

The investments needed for linking the hot water from the compressor to existing circuits are relatively modest and the payback period can be very short.

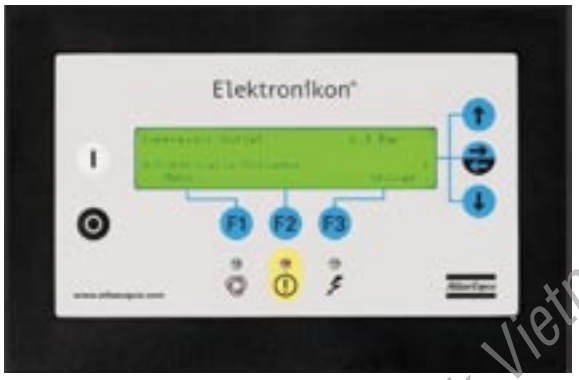


- The energy recovery system is paid back in less than 6 months
- Compressor is paid back in less than 3 years
- Net gain of € 230,000 in 10 years *

* Only includes calculation on energy as maintenance will remain almost the same as a standard compressor

Assumptions

- example chosen is a 90 kW ZR compressor
- 8,000 running hours/year at full load and full energy recovery
- cost of fuel oil: 0.55 €/l
- The figures shown are an example. Price calculations can be made case by case.



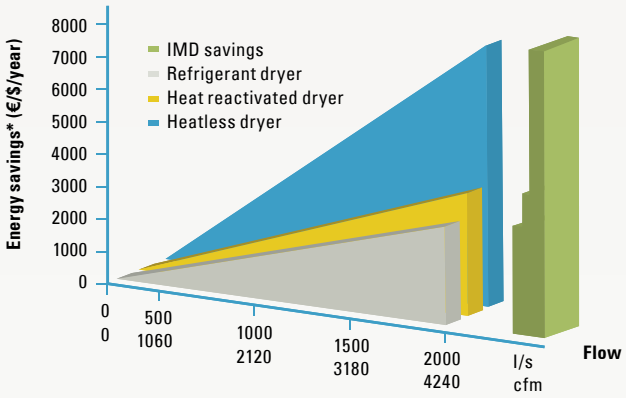
Overall system control and monitoring

- One integrated control system for compressor and dryer
- Monitoring of the IMD dryer includes:
  - Temperature readings of
    - IMD dryer inlet and outlet
    - regeneration air inlet and outlet
    - mix air inlet

Energy savings with Full Feature/MD

Direct savings

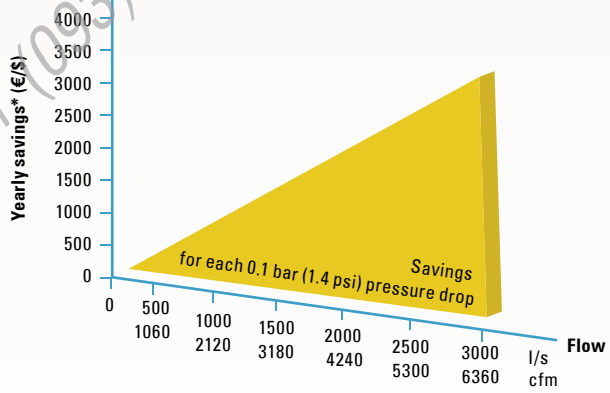
The IMD drying process requires no external energy; over time this results in large savings.



* Assumptions: 1 kWh = 0.05 €/$ – 8000 h/year

Indirect savings

Other than direct energy input, the pressure drop in dryers causes indirect energy consumption as well. IMD dryers have a very low pressure drop, which leads to a further reduction in energy cost.



Custom*Design*

The answer to every non-standard question

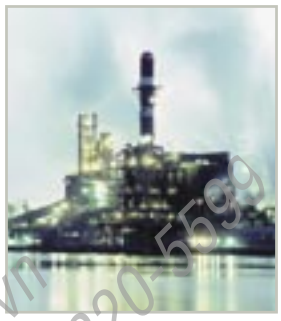
The new generation of Z-compressors is designed as standard to perform in a wide range of operating and site conditions.

However, some environments call for additional measures. For all those special requests Atlas Copco's Custom*Design* department offers an adequate solution.

- **Customizing** the standard products to fit your local plant standards. Meeting these standards on electrical voltage, colour coatings, explosion proof zones, documentation, test and inspection requirements…
- **Designing** products to secure operation in harsh environments. Allow outdoor installation in sub-zero temperatures, increase corrosion resistance for windy coastal and offshore applications or ensure performance in hot, moist or dusty environments…
- **Extending** the range to nitrogen compressors and booster units to suit your specific application…

All this while retaining the high standards on energy, safety and reliability, inherent to all Atlas Copco products.

With dedicated teams in both Product Companies and Regional Engineering Centers Custom*Design* offers close-to-home solutions fitting your applications world-wide.



Global presence – local service

Our Aftermarket product portfolio is designed to add maximum value for our customers by ensuring the optimum availability and reliability of their compressed air equipment with the lowest possible operating costs. We deliver this complete service guarantee through our extensive Aftermarket organization, maintaining our position as the leader in compressed air.

Full range of available Aftermarket products

Activity	Product*
Genuine parts	Atlas Copco Service kits & oils
Extended warranties	AIR*Xtend*
Service contracts	ServicePlan
System audits	AIR*Scan* ™
Remote monitoring	AIR*Connect* ™
Energy saving	AIR*Optimizer* ™
Product improvements	Upgrade programs

* More information is available from your local Atlas Copco customer centre

Complete scope suiting all needs

Features and benefits

Numerous features are included as standard. Some applications may also need or benefit from one of the factory installed options.

Standard

☑	Air intake filter and silencer	☑	AGMA class 13, DIN class 5 gears
☑	Air intake flexible	☑	Electric motor pre-mounted
☑	Stainless steel inter and aftercooler cores*	☑	IP 55 motors
☑	Inter and aftercooler water traps and electronic drains	☑	Starters
☑	Outlet air silencer	☑	Pre-mounted electrical and VSD cubicles
☑	Terminal expansion joints – air and water side	☑	Silencing canopy
☑	Outlet air flange	☑	Skid with no need for foundations
☑	Complete water circuit*	☑	Electronic drains
☑	Single point inlet and outlet connection	☑	Suppression of emissions/harmonic distortions (in VSD)
☑	Back-flush arrangement for cooler cleaning*		
☑	Complete oil circuit pre-piped		
☑	Built-in oil breather system		

	Option/Model	ZR 55-90	ZR 75-90 VSD	ZR 55-90 FF	ZR 75-90 VSD-FF	ZT 55-90	ZT 75-90 VSD	ZT 55-90 FF	ZT 75-90 VSD-FF
☐	SPM monitoring equipment (loose kit)	•	•	•	•	•	•	•	•
☐	Kit for purge of dry air during standstill (for tropical environment)	•	•	•	•	•	•	•	•
☐	High ambient temperature version (required when ambient temperature is above 40 °C)					•			
☐	Energy recovery	•	•	•	•				
☐	Teflon-free elements	•	•	•	•	•	•	•	•
☐	Water shut-off valve	•	•	•	•				
☐	Material certificates (check if you require pressure vessel approval certificates)	•	•	•	•			•	•
☐	Test certificate	•	•	•	•	•	•	•	•
☐	Witnessed performance test	•	•	•	•	•	•	•	•
☐	High resolution display for Elektronikon MkIV (required for Chinese, Korean and Japanese characters)	•	•	•	•	•	•	•	•
☐	Wooden case protection packaging	•	•	•	•	•	•	•	•
☐	Thermistors in motor windings	•		•		•		•	
☐	Anti-condensation heaters in main motor	•	•	•	•	•	•	•	•
☐	Anchor pads	•	•	•	•	•	•	•	•
☐	Earthing system IT, TT or TN network		•		•		•		•
☐	PDP sensor			•	•			•	•
☐	Low load kit			•	•			•	•

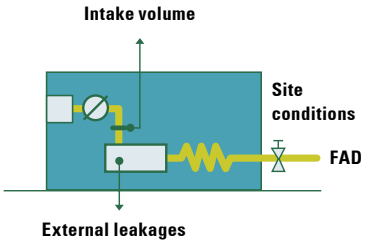
* For watercooled versions
** Only for watercooled versions with free-standing MD dryers

Technical data

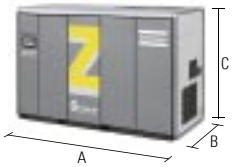
True performance

Atlas Copco Z-compressors are measured according to ISO 1217, Edition 3, Annex C stipulating the FAD (Free Air Delivery) measurement at the outlet of the package, net of all losses.

Atlas Copco specifications correspond to the capacity and pressure that are effectively available to the user, not to the air volume that is sucked in. Differences can be substantial.



Dimensions & weight



	A	B	C	Weight
ZR 55	2180	1450	2184	1640
ZR 75	2180	1450	2184	1715
ZR 90	2180	1450	2184	1780
ZR 75 VSD	2630	1450	2184	2030
ZR 90 VSD	2630	1450	2184	2030
ZT 55	2180	1450	2184	1760
ZT 75	2180	1450	2184	1835
ZT 90	2180	1450	2184	1900
ZT 75 VSD	2630	1450	2184	2100
ZT 90 VSD	2630	1450	2184	2100

	A	B	C	Weight
ZR 55 FF	2180	1450	2184	1890
ZR 75 FF	2180	1450	2184	1965
ZR 90 FF	2180	1450	2184	2030
ZR 75 VSD-FF	2630	1450	2184	2280
ZR 90 VSD-FF	2630	1450	2184	2280
ZT 55 FF	2880	1450	2184	2360
ZT 75 FF	2880	1450	2184	2475
ZT 90 FF	2880	1450	2184	2500
ZT 75 VSD-FF	3330	1450	2184	2700
ZT 90 VSD-FF	3330	1450	2184	2700

	A	B	C	Weight
ZR 55 *	2180	1450	2184	1640
ZR 75 *	2180	1450	2184	1715
ZR 90 *	2180	1450	2184	1780
ZR 75 VSD *	2630	1450	2184	2030
ZR 90 VSD *	2630	1450	2184	2030
ZR 55 FF *	2880	1450	2184	1990
ZR 75 FF *	2880	1450	2184	2065
ZR 90 FF *	2880	1450	2184	2130
ZR 75 VSD-FF *	3330	1450	2184	2370
ZR 90 VSD-FF *	3330	1450	2184	2370

* Equipped with Energy Recovery system

(1) Reference conditions:
- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

(2) Cooling water temperature rise of 15 °C

(3) Max. capacity is at reference pressure and not at max. pressure

(4) Pressure dewpoint is specified for
- 20 °C cooling air/water temperature
- relative humidity of 60 %
- nominal working pressure
- load level of minimum 50 %
  For VSD: at reference speed

(5) ± 3 dB(A) measured at a distance of 1 m and according to ISO 2151:2004 and using ISO 9614-2

(6) Maximum intake / cooling air temperature is 50 °C for HAT versions

Conversions
- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32

ZR 55-90 FF compressor range

ZR/ZR FF Watercooled oil-free compressors	Free air delivery (1)			Installed motor		Cooling water consumption (2)		Pressure dewpoint (4)	Sound pressure level (5)
						ZR	ZR-FF	ZR-FF	
Type	l/s	m³/min	cfm	kW	hp	l/s	l/s	°C	dB(A)
50 Hz units									
ZR 55 - 7.5	143	8.6	303	55	75	0.9	1.3	-24	65
ZR 55 - 8.6	131	7.9	278	55	75	0.9	1.3	-24	65
ZR 55 - 10	121	7.3	257	55	75	0.9	1.3	-25	65
60 Hz units									
ZR 55 - 7.25	155	9.3	329	55	75	1	1.4	-24	65
ZR 55 - 9	138	8.3	293	55	75	1	1.4	-25	65
ZR 55 - 10.4	128	7.7	271	55	75	1	1.4	-25	65
50 Hz units									
ZR 75 - 7.5	194	11.6	411	75	100	1.2	1.8	-26	65
ZR 75 - 8.6	184	11.0	390	75	100	1.2	1.8	-26	65
ZR 75 - 10	174	10.4	369	75	100	1.2	1.8	-27	65
60 Hz units									
ZR 75 - 7.25	213	12.8	452	75	100	1.3	1.9	-26	65
ZR 75 - 9	194	11.6	411	75	100	1.3	1.9	-27	65
ZR 75 - 10.4	185	11.1	392	75	100	1.3	1.9	-27	65
50 Hz units									
ZR 90 - 7.5	234	14.0	496	90	120	1.4	2.1	-27	65
ZR 90 - 8.6	220	13.2	466	90	120	1.4	2.1	-28	65
ZR 90 - 10	209	12.5	443	90	120	1.4	2.1	-28	65
60 Hz units									
ZR 90 - 7.25	262	15.7	555	90	120	1.6	2.3	-26	65
ZR 90 - 9	235	14.1	498	90	120	1.6	2.3	-28	65
ZR 90 - 10.4	224	13.4	475	90	120	1.6	2.3	-29	65

(1) Reference conditions:
- dry air
- absolute inlet pressure 1 bar(a)
- cooling and air intake temperature 20 °C
- nominal working pressure
- performance of the compressor package measured according to ISO 1217, Third Edition, Annex C

(2) Cooling water temperature rise of 15 °C

(3) Max. capacity is at reference pressure and not at max. pressure

(4) Pressure dewpoint is specified for
- 20 °C cooling air/water temperature
- relative humidity of 60 %
- nominal working pressure
- load level of minimum 50 %
  For VSD: at reference speed

(5) ± 3 dB(A) measured at a distance of 1 m and according to ISO 2151:2004 and using ISO 9614-2

(6) Maximum intake / cooling air temperature is 50 °C for HAT versions

Conversions
- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32

ZR 75-90 VSD-FF compressors

ZR VSD / ZR VSD-FF Watercooled oil-free compressors	Free air delivery (1)			Cooling water consumption (2)		Pressure dewpoint (4)	Sound pressure level (5)
				ZR	ZR-FF	ZR-FF	
Types – 50/60 Hz	l/s	m³/min	cfm	l/s	l/s	°C	dB(A)
ZR 75 VSD-9 bar (e)				1.25	1.92	-30	65
Max (3)	220	13.2	466				
Min	75	4.5	159				
ZR 75 VSD-10.4 bar (e)				1.25	1.92	-30	65
Max (3)	198	11.9	420				
Min	98	5.9	208				
ZR 90 VSD-9 bar (e)				1.25	1.92	-30	65
Max (3)	258	15.5	547				
Min	75	4.5	159				
ZR 90 VSD-10.4 bar (e)				1.25	1.92	-30	65
Max (3)	232	13.9	492				
Min	98	5.9	208				

ZT 55-90 FF compressor range

ZT/ZT FF Aircooled oil-free compressors	Free air delivery [1]			Installed motor		Installed fan motor		Pressure dewpoint [4]	Sound pressure level [5]
						ZT	ZT-FF	ZT-FF	
Type	l/s	m³/min	cfm	kW	hp	kW	kW	°C	dB(A)
50 Hz									
ZT 55 - 7.5	142	8.5	301	55	75	2	3.1	-28	72
ZT 55 - 8.6	130	7.8	276	55	75	2	3.1	-28	72
ZT 55 - 8.6 HAT [6]	120	7.2	254	55	75	2	-	-	72
ZT 55 - 10	120	7.2	254	55	75	2	3.1	-28	72
60 Hz									
ZT 55 - 7.25	154	9.2	326	55	75	2	3.6	-28	72
ZT 55 - 8.6 HAT [6]	127	7.6	269	55	75	2	-	-	72
ZT 55 - 9	137	8.2	290	55	75	2	3.6	-28	72
ZT 55 - 10.4	127	7.6	269	55	75	2	3.6	-29	72
50 Hz									
ZT 75 - 7.5	193	11.6	409	75	100	3.6	4.7	-30	72
ZT 75 - 8.6	184	11.0	390	75	100	3.6	4.7	-30	72
ZT 75 - 8.6 HAT [6]	174	10.4	369	75	100	3.6	-	-	72
ZT 75 - 10	174	10.4	369	75	100	3.6	4.7	-31	72
60 Hz units									
ZT 75 - 7.25	212	12.7	449	75	100	3.8	5.6	-30	72
ZT 75 - 8.6 HAT [6]	184	11.1	390	75	100	3.8	-	-	72
ZT 75 - 9	194	11.6	411	75	100	3.8	5.6	-31	72
ZT 75 - 10.4	184	11.0	390	75	100	3.8	5.6	-31	72
50 Hz units									
ZT 90 - 7.5	233	14.0	494	90	120	3.6	4.7	-31	72
ZT 90 - 8.6	220	13.2	466	90	120	3.6	4.7	-32	72
ZT 90 - 8.6 HAT [6]	208	12.5	441	90	120	3.6	-	-	72
ZT 90 - 10	208	12.5	441	90	120	3.6	4.7	-32	72
60 Hz units									
ZT 90 - 7.25	261	15.7	553	90	120	3.8	5.6	-32	72
ZT 90 - 8.6 HAT [6]	222	13.3	470	90	120	3.8	-	-	72
ZT 90 - 9	236	14.2	500	90	120	3.8	5.6	-32	72
ZT 90 - 10.4	222	13.3	471	90	120	3.8	5.6	-33	72

ZT 75-90 VSD-FF compressors

ZT VSD / ZT VSD-FF Aircooled oil-free compressors	Free air delivery [1]			Pressure dewpoint [4]	Sound pressure level [5]
				ZT-FF	
Types – 50/60 Hz	l/s	m³/min	cfm	°C	dB(A)
ZT 75 VSD-9 bar (e)				-30	72
Max [3]	220	13.2	466		
Min	75	4.5	159		
ZT 75 VSD-10.4 bar (e)				-30	72
Max [3]	198	11.9	420		
Min	98	5.9	208		
ZT 90 VSD-9 bar (e)				-30	72
Max [3]	258	15.5	547		
Min	75	4.5	159		
ZT 90 VSD-10.4 bar (e)				-30	72
Max [3]	232	13.9	492		
Min	98	5.9	208		

What sets Atlas Copco apart as a company is our conviction that we can only excel in what we do, if we provide the best possible know-how and technology to really help our customers produce, grow and succeed.

There is a unique way of achieving that - we simply call it the Atlas Copco way. It builds on **interaction**, on long-term relationships and involvement in the customers' process, needs and objectives. It means having the flexibility to adapt to the diverse demands of the people we cater for.

It's the **commitment** to our customers' business that drives our effort towards increasing their productivity through better solutions. It starts with fully supporting existing products and continuously doing things better, but it goes much further, creating advances in technology through **innovation**. Not for the sake of technology, but for the sake of our customer's bottom line and peace-of-mind.

That is how Atlas Copco will strive to remain the first choice, to succeed in attracting new business and to maintain our position as the industry leader.

ISO 9001
A consistent quality earned us the industry's leadership and the customer's trust.

ISO 14001
Atlas Copco's Environmental Management System forms an integral part of each business process.

Never use compressed air as breathing air without prior purification in accordance with local legislation and standards.

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