

TECHBUD



Atlas Copco

QAS range

Efficient and reliable power

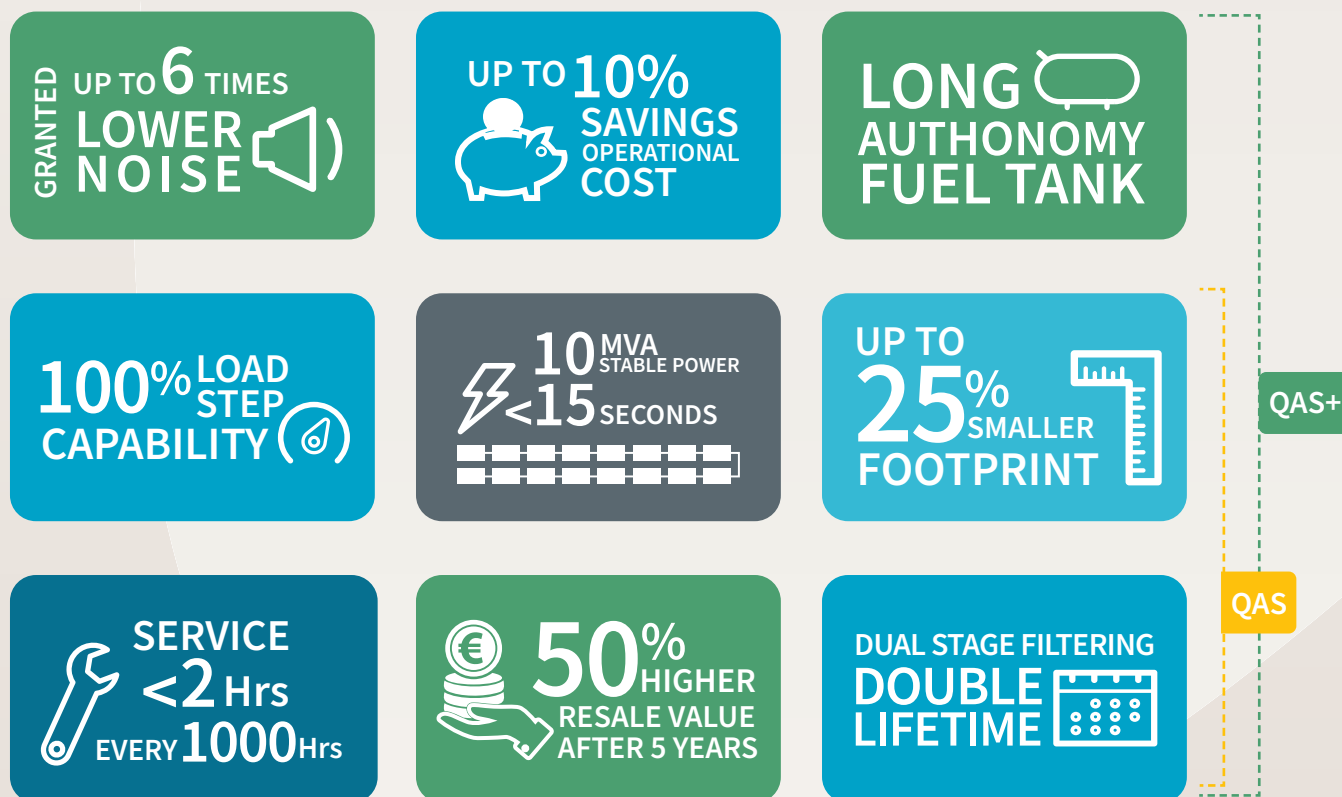
European market

Powering your productivity growth

The QAS range is feature-packed and comes with the ruggedness and reliability that the market demands from a generator. However, some features set the QAS apart – they help you meet your productivity targets while bringing significant business advantages.

These generators feature an innovative design that meets the strictest environmental regulations and helps end-users optimize their operational performance. Thanks to their high resilience and fast and easy connection, these models are unrivaled when it comes to flexibility. The QAS range is “Plug-and-Play” (with multiple sockets, power locks and terminal board) and features easy fast connections for fuel and urea (fuel valve, automatic refueling system, automatic urea transfer system), Fleetlink Telemetry and a simple paralleling capability. Your ever-changing need for power can be satisfied.

The QAS range’s modular design focuses on connecting multiple generators as simply as possible, for an installation that optimizes efficiency. Meanwhile, the built-in Power Management System (PMS) optimizes fuel consumption and extends the generators’ lifetime.



Data may change depending on models, for further information contact Atlas Copco support.



Maximize your performance with the QAS range

QAS+

QAS+ generators help you improve your fleet performance and achieve a faster Return on Investment (ROI). These models are the most efficient within the QAS range, offering cuts in CO₂ emissions and fuel consumption. QAS+ generators deliver a significant reduction in operating noise levels and are quieter than comparable generators.

- + Long autonomy fuel tank, and lowest Total Cost of Ownership (TCO).
- + Super-silent performance is delivered through its smart variable-speed drive (VSD) air cooling system and remote radiator. **Up to 6 times lower noise level.**
- + Isolated compartment for the power pack brings not only superior noise reduction but also optimized cooling and heating performance.
- + Smart VSD electrical fan also results in higher efficiency by consuming less energy and reducing fuel consumption and CO₂ emission.

QAS

The QAS range provides complete power solutions, making this series the preferred choice for a wide range of applications throughout the world.

QAS generators are built for multi-drop use and are designed to be on the move regularly. Whether they are moved a few meters or hundreds of kilometers, you can be assured of their easy, safe movement capabilities and guaranteed performance, even in the harshest conditions. This makes QAS perfect for rental applications and heavy-duty construction use.

Uptime is a major factor for all operations. Reliable and predictable machinery, such as QAS mobile generators help companies to minimize unplanned shutdown and boost their profitability. These models enable easy and accessible serviceability through large access doors and panels. Service downtime is also reduced thanks to the units' fuel filtration system. Dependable equipment also delivers quicker return on investment.

QAS+	Models								
	kVA	QAS+ 60	QAS+ 120	QAS+ 160	QAS+ 200	QAS+ 250	QAS+ 325	QAS+ 450	QAS+ 660
		58	116	160	196	247	321	450	660

QAS	Models	QAS 14	QAS 20	QAS 30	QAS 45	QAS 60	QAS 110	QAS 150	QAS 200		
	kVA	14,1	17,5	28	43,5	60	116	150	200		



QAS+

The ultimate power generator



1. Because you need Power, not noise:

- The smart **Variable Speed Drive (VSD)** motor-driven cooling fan adjusts the cooling flow to the specific requirements of the engine.
- QAS+ delivers a significant reduction in noise levels, being on average 5-8 dBA* quieter than comparable generators. This lowers noise by up to 6 times, depending on application and load profile.
- The acoustic performance make it the perfect choice for noise-sensitive environments, such as **events and metropolitan construction sites**.

**Depending on model*

2. Because it is a generator designed to be moved around:

- The compact QAS+ models offer footprints up to 25 per cent **smaller** than any comparable generator. This makes them easier to transport and position on site, thereby creating **safer working conditions**.
- QAS+ offers a **high-capacity fuel tank** within the reduced footprint.
- Integrated lifting structure with a single elevation point withstands 4 times the weight without deformation.
- Sturdy multidrop base frame with integrated forklift pockets.
- 110% self -fluid containment with spillage sensor.

**1 shift= 6 hours*





3. Because electrical power is often required at short notice:

- “Plug and play” connectivity is designed to provide a safe, fast and flexible energy supply with the minimum of hassle for the operator.
- Equipped with multiple sockets (**up to 8**), a terminal board and optional power locks, the generators can be powered up in less than 10 seconds.
- Pass through cable path, bend and strain relief.

4. We know you are making a long-term investment:

- Optimized fuel efficiency thanks to **Variable Speed Drive (VSD)**, which minimizes power losses while cooling the engine.
- **Long autonomy** with integrated fuel tank to run up to 5 working shifts* including heavy-duty fuel filtration system with water separator.
- Extended engine lifetime due to Dual Stage Air Filtration with safety cartridge.
- With **FleetLink intelligent telematics** system, end-users can realise maximum visibility of asset location and performance, wherever generators are in the world.
- Oil drain pump, lockable external fuel filling point and Adblue filling point.

5. Because you need optimum power usage:

- The innovative **Power Management System (PMS)** enables efficient and fast paralleling.
- This helps to efficiently manage the generators when they are running in parallel, by starting and stopping units in line with increases or decreases in load.
- The load on each generator remains at a level that **optimizes fuel consumption**. It eliminates the need for generators to run with low load levels, which can damage the engine and shorten the life expectancy of the equipment.
- User friendly Touch screen controllers: Qc4004 + Qd0701.



QAS range

Secure your Stage V compliance

1. To decrease your operational costs and downtime

- The QAS range offers low operational costs and quick servicing.
- Decreased service downtime due to its heavy-duty fuel filtration system with water separation.
- Full access to engine, alternator (AVR and diode bridge) and radiator through large access doors and panels, all on one side.
- QAS generators incorporate an oil drain pump, and a lockable external fuel and Ad-Blue filling point.
- Dual Stage Air Filtration with safety cartridge extends the engine's lifespan.

2. For safe and efficient transport

- Integrated lifting structure with single elevation point.
- Sturdy multidrop base frame with integrated forklift pockets.
- 110% self-containment with spillage sensor.
- Transport bumpers.

3. Because it is designed for quick and safe installation

- Plug and play cable connection.
- Pass-through cable path, bend and strain relief.
- Plexi cover for terminal board protection.



**Options available may change depending on model selected. Please consult with your local Atlas Copco customer center.*



4. For integrated control and power cubicle

- Digital controller, Stage V ready.
- 4 Pole breaker.
- Earth leakage protection.
- Dedicated socket compartment.
- Emergency stops.



5. To increase your performance

- QAS generators have an immediate impact on the overall operational performance.
- High cooling performance radiator with ParCOOL for 100% prime power operation.
- Sound attenuated and rugged galvanized steel enclosure.



6. Putting you in control

- Dual frequency > 60 kVA.
- Qc3501 - Advance paralleling application controller.
- Qc4004 + Qd0701 - Advance paralleling application controller compatible with Transformer Maintenance functionality.
- Auxiliary winding alternator.



QAS range

Technical data



		QAS+ 60	QAS+ 120	QAS+ 160	QAS+ 200	QAS+ 250	QAS+ 325	QAS+ 450	QAS+ 660
Electrical data									
Rated frequency	Hz	50 60	50 60	50 60	50 60	50 60	50 60	50 60	50 60
Rated voltage (1)	V	400 480	400 480	400 480	400 480	400 480	400 480	400 480	400 480
Prime power (PRP)	kVA / kW	58/47 59/47	116/92.5 130/104	160/128 181/145	196/157 239/191	247/198 258/206	321/257 353/283	449/359 468/374	648/518 726/581
Rated standby power (ESP)	kVA / kW	58/47 59/47	126/100.5 142.5/114	170/136 200/16	215/172 261/208	272/218 283/226	354/283 389/311	494/395 513/410	723/578 793/634
Power factor cos φ		0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Rated current (PRP)	A	84 71	167 156	231 218	283 288	356 310	463 425	649 564	935 873
Single step load capability (G2) acc. ISO-8528/5	%	90 100	55 60	60 65	55 60	60 75	55 60	60 75	50 65
Operating temperature (min/max)	°C	-25 / 40	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50
Fuel consumption									
Fuel tank capacity*	l	230	550	545	545	1065	1065	1300	1175
Fuel consumption at 75% $\pm$ 100%PRP load 50Hz	l / h	9.1 / 12.3	17,1 / 23	24,7 / 30,7	28,9 / 37,8	36,9 / 48,1	46,5 / 62	62,4 / 86,2	90,3 / 122,1
Fuel autonomy at 75% $\pm$ 100%PRP load 50Hz	h	25 / 18.7	32 / 24	22 / 18	19 / 14	29 / 22	23 / 17	21 / 15	13 / 9,6
Engine									
Model (EU Stage compliant)		F34TEVP02	FPT N45	FPT N67TEVP02	FPT N67TEVP01	Scania DC9320A	Scania DC9320A	Scania DC13320A	Volvo D16 TWD1683GE
Speed	rpm	1500 1800	1500 1800	1500 1800	1500 1800	1500 1800	1500 1800	1500 1800	1500 1800
Rated power (without fan)	kWm	53.5	102 113.6	141 159	181 209	223 243	289 303	397 404	570 596
Aspiration		Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled
Speed control		Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
No. of cylinders		4L	4L	6L	6L	5L	5L	6L	6L
Coolant		Parcool	Parcool	Parcool	Parcool	Parcool	Parcool	Parcool	Parcool
Swept volume	l	3,4	4,5	6,7	6,7	9,3	9,3	12,7	16,12
Exhaust gas after treatment system		EGR + DOC + DPF	DOC+SCRoF +CUC	DOC+SCRoF +CUC	DOC+SCRoF +CUC	(DOC + DPF) + SCR	(DOC + DPF) + SCR	(DOC + DPF) + SCR	SCR
Ad-Blue tank capacity	l	N/A	43	43	43	63	63	63	70
Alternator									
Brand Model		LEROY SOMER LSA 42.3 L9	LEROY SOMER LSA 44.3 M6	LEROY SOMER LSA 44.3 L12	LEROY SOMER LSA 44.3 VL14	LEROY SOMER LSA 46.3 S5	LEROY SOMER LSA 46.3 L10	LEROY SOMER LSA 47.3 S5	LEROY SOMER LSA 47.3 L10
Rated output (ESP 27°C 40°C)	kVA	66 79,5	138 164	182 218	220 265	275 331	358 431	500 605	745 875
Degree of protection / insulation class		IP 23/H	IP 23/H	IP 23/H	IP 23/H	IP 23/H	IP 23/H	IP 23/H	IP 23/H
Excitation type / AVR model		AREP / D350	AREP / D350	AREP / D350	AREP / D350	AREP / D350	AREP / D350	AREP / D350	AREP / D350
Noise level									
Sound power level (LwA) Sticker	dB(A)	87	87	89	91	94	97	97	98
Sound pressure level (LpA) at 7m	dB(A)	56	56	58	59	62	64	64	65
Dimensions and weight									
Length	mm	2830	2900	3380	3380	3710	3710	4250	4800
Width	mm	1100	1100	1180	1180	1500	1500	1500	1750
Height	mm	1665	1930	2150	2150	2120	2120	2120	2315
Weight (dry / wet)	kg	1727 / 1898	1910 / 2410	2950 / 3450	3100 / 3600	3650 / 4690	3856 / 4896	4362 / 5615	6300 / 7639

(1) Other voltages available, please consult. * Standard tank is already long autonomy. Not all the standards or options are available in all the range, for further information contact Atlas Copco support. N/A means not apply. DOC = Diesel Oxidation Catalyst | DPF = Diesel Particulate Filter | EGR = Exhaust Gas Recirculation | SCRoF = Selective Catalytic Reduction on Filter | CUC = Clean Up Catalyst | SCR = Selective Catalytic Reduction | Fuel density used 0,86 kg/l



		QAS 14	QAS 20	QAS 30	QAS 45	QAS 60	QAS 110	QAS 150	QAS 200
Electrical data									
Rated frequency	Hz	50	50	50	50	50 60	50 60	50 60	50 60
Rated voltage (1)	V	400	400	400	400	400 480	400 480	400 480	400 480
Prime power (PRP)	kVA / kW	14,1 / 11,3	17,5 / 14	28 / 22,5	43,5 / 35	60/48 59/47	116/92 126/103	150/120 175/140	200/160 234/187
Rated standby power (ESP)	kVA / kW	15,5 / 12,4	18,7 / 15	31 / 25	47,6 / 38	60/48 59/47	126/101 141/113	165/132 193/154	220/176 258/206
Power factor cos φ		0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Rated current (PRP)	A	20,4	25	41	63	86 71	167 154	217 211	289 282
Single step load capability (G2) acc. ISO-8528/5	%	100	100	100	100	100 100	55 55	60 75	50 50
Operating temperature (min/max)	°C	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50	-25 / 50
Fuel consumption									
Fuel tank capacity*	l	115	115	92 / 257	92 / 257	220 / 485	247 / 485	286 / 720	286 / 720
Fuel consumption at 75% $\pm$ 100%PRP load 50Hz	l / h	3,7	4,6	6,3	10,1	13	23 26,5	31,9 35,8	39,2 45
Fuel autonomy at 75% $\pm$ 100%PRP load 50Hz	h	30,5*	25*	14 / 41	9 / 25,6	17 / 37	11 / 21 9 / 18	9/23 8/20	7,3/18,4 6,4/16
Engine									
Model (EU Stage compliant)		KUBOTA D1703M-E4BG	KUBOTA V2203M-E4BG	KUBOTA V2403 CRT E5	KUBOTA V3800-CRT E5	FPT F34TEVP01	FPT N45	FPT N67TEVP02	FPT N67TEVP01
Speed	rpm	1500	1500	1500	1500	1500 1800	1500 1800	1500 1800	1500 1800
Rated power (without fan)	kWm	13,2	15,8	25,5	38,9	54 53,6	101 111	136 150,5	176 200,5
Aspiration		Natural aspired	Natural aspired	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled	Turbocharged and air-to-air aftercooled
Speed control		Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
No. of cylinders		3L	4L	4L	4L	4L	4L	6L	6L
Coolant		Parcool	Parcool	Parcool	Parcool	Parcool	Parcool	Parcool	Parcool
Swept volume	l	1,7	2,2	2,4	3,8	3,4	4,5	6,7	6,7
Exhaust gas after treatment system		N/A	N/A	DOC+DPF	DOC+DPF	EGR+DOC+DPF	DOC+SCRoF +CUC	DOC+SCRoF +CUC	DOC+SCRoF +CUC
Ad-Blue tank capacity	l	N/A	N/A	N/A	N/A	N/A	43	43	43
Alternator									
Brand Model		LEROY SOMER TAL 040D	LEROY SOMER TAL 040F	LEROY SOMER TAL 042C	LEROY SOMER TAL 042F	LEROY SOMER TAL 042H	LEROY SOMER TAL 044E	LEROY SOMER TAL 044J	LEROY SOMER TAL 044M
Rated output (ESP 27°C 40°C)	kVA	16,5	22	35	50	66 80	133 165	165 199	220 265
Degree of protection / insulation class		IP 23 / H	IP 23 / H	IP 23 / H	IP 23 / H	IP 23 / H	IP 23 / H	IP 23 / H	IP 23 / H
Excitation type / AVR model		AREP+ / R180	AREP+ / R180	AREP+ / R180	AREP+ / R180	AREP+ / D350	AREP+ / D350	AREP+ / D350	AREP+ / D350
Noise level									
Sound power level (LwA) Sticker	dB(A)	87	88	89	90	89	90	93	94
Sound pressure level (LpA) at 7m	dB(A)	59	60	61	62	61	62	65	66
Dimensions and weight									
Length	mm	1780	1780	2100	2100	2730	2730	3500	3500
Width	mm	870	870	950	950	1100	1100	1160	1160
Height	mm	1200	1200	1300	1300	1795	1850	1850	1850
Weight (dry / wet)	kg	651 / 750	696 / 795	810 / 905	985 / 1065	1670 / 1870	2034 / 2241	2450 / 2750	2575 / 2880

(1) Other voltages available, please consult. * Standard tank is already long autonomy. Not all the standards or options are available in all the range, for further information contact Atlas Copco support. N/A means not apply. DOC = Diesel Oxidation Catalyst | DPF = Diesel Particulate Filter | EGR = Exhaust Gas Recirculation | SCRoF = Selective Catalytic Reduction on Filter | CUC = Clean Up Catalyst | SCR = Selective Catalytic Reduction | Fuel density used 0,86 kg/l



Optimize your power solutions

When you need temporary power, a single generator is not always the most efficient solution. Does the application load vary? Do any of the gensets in your fleet need higher power? A Modular Power Plant (or paralleling multiple generators) is the efficient solution if you answered yes to any of the these questions.

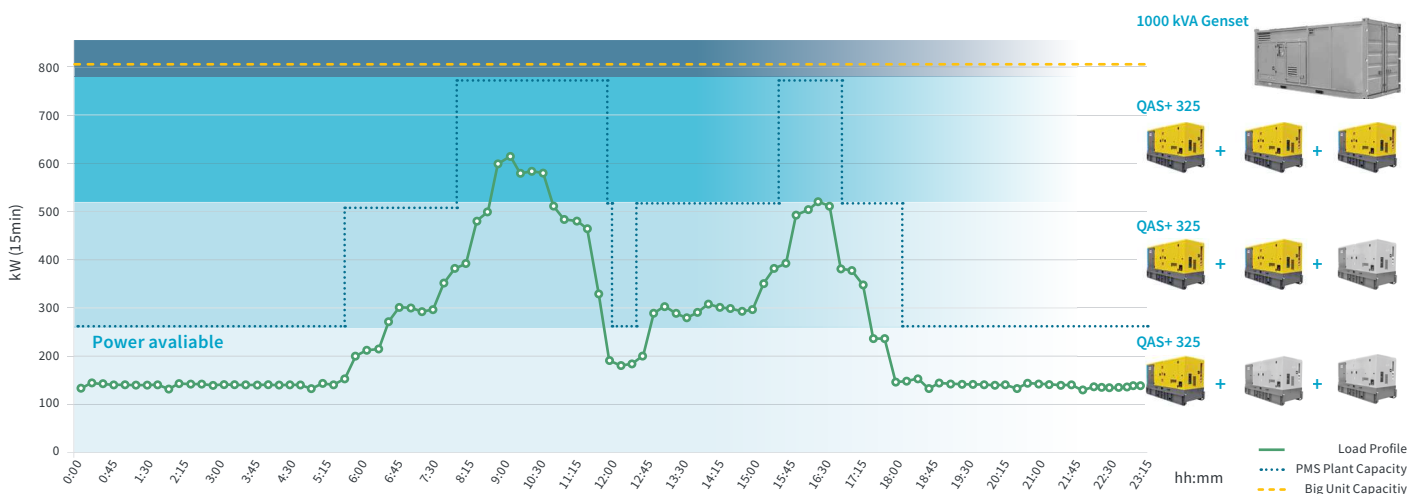
We have developed a unique Power Management System (PMS). The PMS manages the number of generators running in parallel with load demand, starting and stopping units in line with increases or decreases in load. In this way, the load on each generator remains at a level that optimizes fuel consumption.

It also eliminates the need for generators to run with low load levels, which can cause engine damage and shorten the life expectancy of the equipment.

Just one example:

The deployment of a **1MVA** generator as a prime power source, taking the load demand patterns of a typical industrial application as a guide, could mean **up to 1680 liters** of fuel consumed each day. That compares with approximately 1380 liters of fuel if three QAS+ 325 in the PMS were doing the same job. In this case, even considering the Ad-Blue cost, an estimated **annual saving of more than €100.000** makes for a compelling case, not to mention **150 tons of CO₂ saved** over the course of a year.

Powerful match



Note: this data is simulated. It's based on a typical industrial daily load diagram.



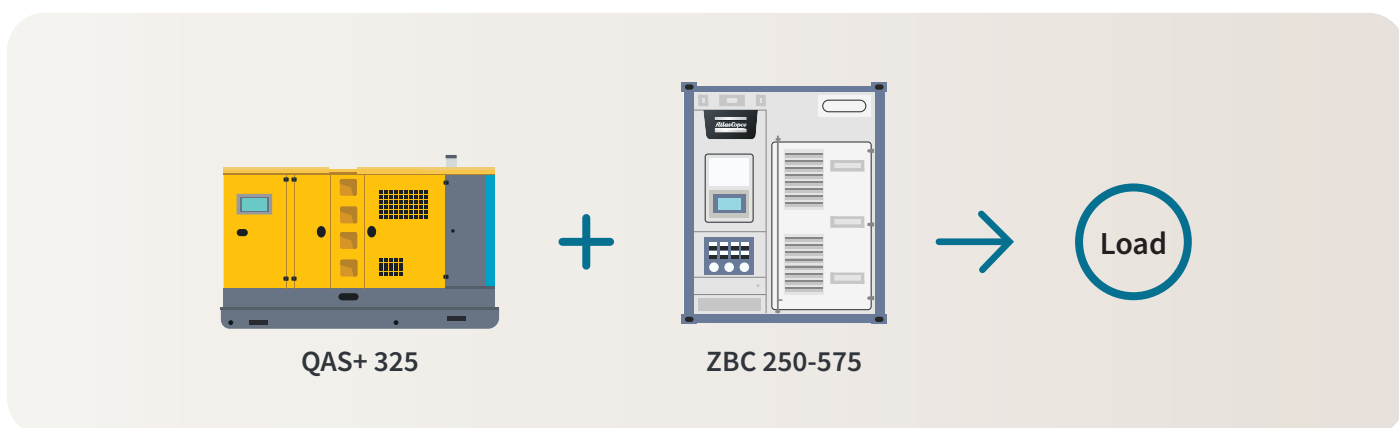
A hybrid energy solution that boosts performance

The environment is becoming a major focus-area in many machine-driven industries, as regulations regarding noise and emissions grow stricter. There is a need for a technological solution that provides reliable power in silent operation, while reducing fuel consumption and CO2 emissions. Energy Storage Systems (ESS) are transforming power supply as we know it, and Atlas Copco is leading the transition towards more environment-friendly operations.

Energy Storage Systems are ideally suited to noise-sensitive environments, such as events or metropolitan construction sites, telecoms or rental applications, and large units can work in parallel to become the 'brain' of a microgrid. Energy storage solutions featuring long-life, low-maintenance and high-density Lithium-ion batteries working in hybrid mode with power generators increase the solution's efficiency, especially when dealing with low loads and peaks in energy demand.

Using an Energy Storage System with a generator in hybrid mode enables you to use a smaller-sized generator, downsizing the solution, saving money on hardware, extending the generator's working life, optimizing performance levels and increasing the level of environmental awareness on site.

Perfect combination



Scan this code and
increase your productivity

Product portfolio

ENERGY STORAGE SYSTEMS

PORTABLE
2-10 kVA



MOBILE
15-150 kVA



CONTAINER
250-1000 kVA



FAST CHARGER
160-480 kW



HYBRID GENERATORS

HYBRID



LIGHT TOWERS

SOLAR



ELECTRIC



DIESEL



GENERATORS

PORTABLE
1,6-12 kVA



SPECIALIZED
9-660* kVA



VERSATILE
9-1500* kVA



LARGE POWER
800-1450 kVA



*Multiple configurations available to produce power for any size application

DEWATERING PUMPS

ELECTRIC SUBMERSIBLE
up to 18 000 l/min



ELECTRIC SELF-PRIMING CENTRIFUGAL
833-35.000 l/min



SELF-PRIMING CENTRIFUGAL
833-35.000 l/min



ONLINE SOLUTIONS

FLEETLINK

Intelligent telematics is a system that helps optimize fleet usage and reduce maintenance, ultimately saving time and cutting operating costs.



PUMP SIZING CALCULATOR

With a few inputs, this pump sizing calculator will help you to compare dewatering submersible models and find the right one for you.



ECO CALCULATOR: YOUR SIZING TOOL

A useful calculator to help you choose the best solution for your power and light needs.



Atlas Copco

AUTORYZOWANY PARTNER:

TECHBUD

SILNIKI • MASZYNY BUDOWLANE • DROGOWE • AGREGATY

Techbud Sp. z o.o.
ul. Gorzowska 12
65-127 Zielona Góra

tel. +48 68 470 72 50
fax +48 68 470 72 51
www.techbud.eu
techbud@techbud.eu