

**ALLIGHTSYKES** 

# Unrivalled expertise

in the fields of:



**PUMPS** 





**ENGINES** 



**GENERATORS** 



### Global reach with local expertise.

AllightSykes is a market leader in the design, manufacturing and distribution of lighting, dewatering and power solutions globally, and the driving force behind FG Wilson generators and Perkins engines in Australia and New Zealand. With an active history stretching back 30 years as a well-known brand, we pride ourselves on providing robust, reliable machinery for demanding conditions, with built-in features that make ownership and operation simple and cost-effective for customers.

## Helping you to get the job done.

With every product supported by our dedicated, highly-trained Service teams, we've proven to optimise productivity, slash project downtime and improve workplace safety.

## World leaders in mobile lighting solutions.

From our worldwide headquarters in Perth, Western Australia, design, engineering, procurement and assembly teams produce almost 1,000 lighting towers a year. Each tower features the world's most reliable components, as well as a unique mast design and light assembly that ensures the maximum output reaches your work platform for optimum productivity. The LED lighting technology further enhances the range of solutions on offer with a low power consumption, which reduces operating and maintenance costs for our customers.

### Reliable product support.

We understand that you need to be able to rely on fast, fuss-free genuine parts and service and warranty back-up long after your lighting tower has started doing its job. That's why our genuine Parts and Product Support teams are on hand to make sure you can access qualified, professional and highly skilled technicians when you need them most.

### Looking for a tailored solution?

Our in-house engineering team can custom-design and manufacture bespoke equipment to match any specification supplied. Discover out how AllightSykes can offer you a tailored solution by visiting allightsykes.com.

## MEET THE FAMILY

## **LIGHTING SOLUTIONS**



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### **LUMINAIRES**

Our range of heavy-duty, multi-purpose LED panel lights are designed for floodlighting and spotlighting applications for our lighting towers.



#### KUE2

- Made from high quality aluminium.
- Fully serviceable, high UV resistance with low maintenance costs.
- Incorporated with the latest generation of 105-115 LM/W CITIZEN Chip.



#### KUE4

- Made from high quality aluminium.
- Fully serviceable, high UV resistance with low maintenance costs.



### Hella HypaLUME

- A colour temperature of 5,700K to provide a work environment that is the optimal balance between high alertness and fatigue avoidance.
- Light output of over 28,000 lumens.
- Contains pulsed electronic circuits (PWM), which prevent harmful interferences with other devices and, as such, does not become susceptible to radiation from other devices.



### **ALLUME**

- Designed for mining and industrial applications with a rating of IP67.
- Light output of 63,000 lumens.
- Available in two different lens configurations: wide beam for floodlight applications, and narrow beam for long range and spotlight applications.

	v	т	w	Lumen	Material	Light	IP	Working Temperature	Dimensions	Weight
KUE2	24/48DC	5,000K	350	35,000	Aluminium Alloy	Citizen	IP67	-40°C +45°C	406 x 390 x 258mm (16 x 15.4 x 10.2")	11.5kg (25.35lb)
KUE4	24/48DC	5,000K	500	50,000	Aluminium Alloy	Citizen	IP67	-40°C +45°C	526 x 390 x 258mm (20.7 x 15.4 x 10.2")	15.3kg (33.73lb)
Hella HypaLUME	48	5,700K	300	28,000	Aluminium	Cree	IP67	-20°C +50°C	516 x 404 x 159mm (20.3 x 15.9 x 6.3")	12kg (26.46lb)
ALLUME	48	5,000K	450	60,000	Aluminium	Citizen	IP67	-40°C +50°C	536 x 390 x 231mm (21.1 x 15.4 x 9.1")	15kg (33lb)





## **URBAN RANGE**

## Designed for the rigours of urban and metropolitan projects.

With safety at their core, MLLED light towers are built to enhance your workers' productivity in outdoor working environments, in lighting up metro, civil and constructions projects.

#### **AT A GLANCE**

- Mast will automatically retract if the lighting tower is not levelled, or if the handbrake is not activated.
- Mast will automatically retract when the handbrake is released.
- Speaking alarm reminds the operator to "deploy stabilisers", "check level" and "check handbrake".
- · Compact water-cooled industrial engine.
- Extra low voltage (DC).
- Two LED lamp output options: (1) 4 x 350W (36,000 lumens), or (2) 4 x 500W (50,000 lumens).
- 50,000 hours of life per light.
- Light instant-on (no warm-up/cool down).
- Engine fail-safe shutdown system with latched LED annunciation on (1) high engine temperature, (2) low oil
- · Quiet, compact, two-cylinder diesel engine with a high attenuation canopy and muffler system.



#### **ADDITIONAL OPTIONS**

- DAYLIGHT shutdown system
- External jump start
- · 4.5kg dry chemical fire extinguisher

#### **LAMP WATTAGE RANGE**

• 350W to 500W





	MLLED140K-9DCK	MLLED200K-9ACK	MLLED200K-9ACP	ASPECT
Height	2.56m (8' 5")	2.56m (8' 5")	2.56m (8' 5")	2.56m (8' 5")
Length	2.44m (8')	2.44m (8')	2.44m (8')	2.44m (8')
Width	1.52m (4' 12")	1.52m (4' 12")	1.52m (4' 12")	1.52m (4' 12")
Weight (Wet)	1,200kg (2,645.5lb)	1,200kg (2,645.5lb)	1,200kg (2,645.5lb)	1,200kg (2,645.5lb)
Fuel	Diesel	Diesel	Diesel	Diesel
Fuel Capacity	100L (26.4 USgal)	100L (26.4 USgal)	100L (26.4 USgal)	100L (26.4 USgal)
Fuel Tank	LLPDE	LLPDE	LLPDE	Steel
Fuel Consumption	0.6L/hr (0.16 USgal/hr)	0.71L/hr (0.19 USgal/hr)	0.71L/hr (0.19 USgal/hr)	0.58L/hr (0.15 USgal/hr)
Engine	Kubota Z482	Kubota D905	Perkins 403-11	Kubota Z482
No. Engine Cylinders	3	3	3	2
Engine Cooling	Water cooled	Water cooled	Water cooled	Water cooled
Alternator	Sincro FB4	Mecc Alte LT3	Mecc Alte LT3	Sincro FB4
Power Generation	4kW	5kW	5kW	1.2kW
Sound Pressure Level	65 dB[A] approx. 7 metres	65 dB[A] approx. 7 metres	65 dB[A] approx. 7 metres	65 dB[A] approx. 7 metres
Number of Lights	4	4	4	12
Type of Lights	350W LED	500W LED	500W LED	100W LED
Mast Height	9m (29' 6")	8m (26' 3")	8m (26' 3")	8m (26' 3")
Light Tilt	Electric	Electric	Electric	Fixed
Mast Rotation	360° manual	360° manual	360° manual	Not required
Tire and Rim Size	R14 - 175	R14 - 175	R14 - 175	R14 - 175
Stabiliser Supports	4 wind down legs	4 wind down legs	4 wind down legs	4 wind down legs
Tow Hitch Dimensions	50mm ball (1.9")	50mm ball (1.9")	50mm ball (1.9")	50mm ball (1.9")
Tow Hitch Capacity	2,000kg (4,409lb)	2,000kg (4,409lb)	2,000kg (4,409lb)	2,000kg (4,409lb)
Also Includes	Fully bunded chassis, emergency stop, auto shutdown, on/off timer	Fully bunded chassis, emergency stop, auto shutdown, on/off timer	Fully bunded chassis, emergency stop, auto shutdown, on/off timer	Fully bunded chassis, emergency stop, auto shutdown on/off timer
Additional Safety	off. Level switch: (1)	(1) Mast auto down when Mast auto down when no audible speaking alarm, (2	ot levelled, (2) mast will n	ot raise until levelled.

Photos are for illustration purposes and include non-standard items. Final weight and dimensions will depend on completed specifications and options, subject to manufacturing tolerances. All the information in this document is substantially correct at the time of printing and may be altered at the manufacturer's sole discretion. Errors and omissions excluded. Fuel consumption data is at full load, where diesel fuel has a specific gravity of 0.85 and conforms to BS2869:1998, Class A2.

## MINESPEC LED RANGE

# Our MineSpec LED range is tough and smart.

The MineSpec LED range features a digital control system, which includes an easy start/stop, option location tracking and performance monitoring. Its LED lighting technology offers exceptional light quality with low power consumption, which reduces operation and maintenance costs for you.

#### **AT A GLANCE**

- · Perkins water-cooled engine.
- Minimum refuelling every 2 weeks.
- 10-18 tonne annual carbon footprint reduction per tower (compared with a metal halide equivalent).
- 50,000 hours of life per light.
- 500-hour service intervals with Perkins engines.
- Light Instant-on (no warm-up/cool down).

#### **ADDITIONAL OPTIONS**

- Hydraulic light bar rotation
- Hydraulic post rotation
- Hydraulic stabiliser legs
- CAT/Anderson jumpstart
- Wiggins fast fill
- · Wheel chocks
- · Heavy duty drag skid
- Tandem axles trailer
- Coal mining wiring specs
- Fire extinguisher

#### **LAMP WATTAGE RANGE**

• 300W or 450W





			<u> </u>			<u> </u>	
	MSLED168K-9 (Single Axle)	MSLED201K-9 (Single Axle)	MSLED224K-9 (Single Axle)	MSLED240K-9 (Single Axle)	MSLED280K-9 (Single Axle)	MSLED360K-9 (Single Axle)	MSLED480K-9 (Single Axle)
Height	2.49m (8' 2")						
Length	4.71m (15' 5")						
Width	2.08m (6' 10")						
Weight (Wet)	1,630kg (3,594lb)	1,630kg (3,594lb)	1,630kg (3,594lb)	1,830kg (4,034lb)	1,830kg (4,034lb)	1,830kg (4,034lb)	1,830kg (4,034lb)
Fuel	Diesel						
Fuel Capacity	300L (79 USgal)						
Fuel Tank	LLPDE						
Fuel Consumption	0.85L/hr (0.22 USgal/hr)	1.13L/hr (0.30 USgal/hr)	1.13L/hr (0.30 USgal/hr)	0.85L/hr (0.22 USgal/hr)	1.42L/hr (0.38 USgal/hr)	1.27L/hr (0.34 USgal/hr)	1.7L/hr (0.45 USgal/hr)
Engine	Perkins 402D-05	Perkins 403D-07	Perkins 402D-05	Perkins 402D-05	Perkins 402D-05	Perkins 403D-07	Perkins 403D-07
No. Engine Cylinders	2	3	2	2	2	3	3
Engine Aspiration	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated
Alternator	FB4-48/100	TDWD-10	FB4-48/100	FB4-48/100	FB4-48/100	FB4-48/100	FB4-48/100
Power Generation	Extra low voltage (DC)	Low voltage (AC)	Extra low voltage (DC)				
Electrical System	48	240	48	48	48	48	48
Number of Lights	6	4	8	4	10	6	8
Type of Lights	300W LED	500W LED	300W LED	450W LED	300W LED	450W LED	450W LED
Total Light Output (lm)	168,000	200,000	224,000	240,000	280,000	360,000	480,000
Light Tilt	Hydraulic						
Mast Rotation	144° manual						
Mast Height	9m (29' 6") hydraulic						
Tire and Rim Size	205 R16						
Stabiliser Supports	4 wind down legs						
Tow Hitch Dimensions	50mm ball (1.9")						
Tow Hitch Capacity	2,000kg (4,409lb)						
Also Includes	Battery isolation, emergency stop,						

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## MINESPEC MH RANGE

# Tough, robust and tailored for mining.

When you add the MineSpec to your project asset schedule, you know you're including a high level of resilience, durability and efficiency that most other industrial strength towers will struggle to match.

#### **AT A GLANCE**

- Individually switchable, double-ended metal halide lamps, engineered specifically for operation in mobile equipment.
- Vibration resistant and long lasting.
- · Lamps deliver a clear, true-white light.
- Available also with high-pressure sodium lamps with a powerful yellow light. These are suitable for applications that require environmental sensitivity, and sites with heavy airborne particulates (e.g. coal, dust, or fog).
- · Highwall overhang capabilities.
- Heavy duty conduit providing mechanical protection and electrical continuity.
- Up to seven scopes of lighting directional positioning.

#### **ADDITIONAL OPTIONS**

- Hydraulic light bar rotation
- Hydraulic post rotation
- Hydraulic stabiliser legs
- CAT/Anderson jumpstart
- · Wiggins fast fill
- Wheel chocks
- Heavy duty drag skid
- Tandem axles trailer
- Coal mining wiring specs
- Fire extinguisher

#### **LAMP WATTAGE RANGE**

• 1,500W to 2,000W





	MS4.5K-9 (Single Axle)	MS6K-9 (Single Axle)	MS7.5K-9 (Single Axle)	MS10K-9 (Single Axle)
Height	2.49m (8' 2")	2.49m (8' 2")	2.49m (8' 2")	2.49m (8' 2")
Length	4.71m (15' 5")	4.71m (15' 5")	4.71m (15' 5")	4.71m (15' 5")
Width	2.08m (6' 10")	2.08m (6' 10")	2.08m (6' 10")	2.08m (6' 10")
Weight (Wet)	1,250kg (2,756lb)	1,630kg (3,594lb)	1,630kg (3,594lb)	1,980kg (4,365lb)
Fuel	Diesel	Diesel	Diesel	Diesel
Fuel Capacity	130L (34 USgal)	130L (34 USgal)	130L (34 USgal) 130L (34 US	
Fuel Tank	Polyurethane	Polyurethane	Steel	Polyurethane
Engine	Perkins 403D-11	Perkins 403D-11	Perkins 403D-15	Perkins 404D-22
No. Engine Cylinders	3	3	3	4
Engine Aspiration	Naturally aspirated	Naturally aspirated	Naturally aspirated	Naturally aspirated
Alternator	4 pole, brushless	4 pole, brushless	4 pole, brushless	4 pole, brushless
Number of Lights	3	4	5	5
Type of Lights	1,500W metal halide	1,500W metal halide	1,500W metal halide	2,000W metal halide
Light Tilt	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Mast Rotation	Manual	Manual	Manual	Manual
Mast Height	9m (29' 6")	9m (29' 6")	9m (29' 6")	9m (29' 6")
Tire and Rim Size	205 R16 (16")	205 R16 (16")	205 R16 (16")	205 R16 (16")
Stabiliser Supports	4 wind down legs	4 wind down legs	4 hydraulic legs	4 wind down legs
Tow Hitch Dimensions	50mm ball (1.9")	50mm ball (1.9")	50mm ball (1.9")	50mm ball (1.9")
Tow Hitch Capacity	2,000kg (4,409lb)	2,000kg (4,409lb)	2,000kg (4,409lb)	2,000kg (4,409lb)

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## SUPERSKID RANGE

## The mighty SuperSkid.

We understand that, for some mining and heavy construction projects, big may not be big enough. So, we developed the mighty SuperSkids. Robust, durable, heavy duty towers designed to meet to mine specifications, Allight's SuperSkid mobile lighting towers are designed to withstand the most challenging and rigorous mining conditions.

#### AT A GLANCE

In addition to what a standard MineSpec tower will have, our SuperSkids offer:

- 3 or 4 cylinder Perkins engines coupled with a heavy duty Leroy Somer brushless alternator. (Other power options are available if necessary.)
- Heavy duty skid base for unrivalled stability and peace of mind.
- Optimised cylinder head configuration for optimum fuel and oil consumption and maximum efficiency.

- 12-metre mast offering 10.7 metres of highwall overhang capability.
- A selection of light output options to choose from:
   (1) 15 x 1,000W high-pressure sodium (yellow light), high-intensity discharge lamps,
   (2) 18 x 300W LED lamps,
   (3) 14 x 450W LED lamps
   (4) 12 x 2,000W metal halide (white light), high-intensity discharge lamps.

#### **ADDITIONAL OPTIONS**

- 1,000L base fuel tank
- Extra push bar
- Wiggins Pressure Fast Fill system
- Mobile skid base
- Tow behind prime mover

#### **LAMP WATTAGE RANGE**

• 300W, 450W, 1,000W or 2,000W





	SS15K-12	SS24K-12	SSLED504K-12	SSLED900K-12
Base	Skid	Skid	Skid	Skid
Height	3.31m (10' 10")	3.31m (10' 10")	3.31m (10' 10")	3.31m (10' 10")
Length	6.69m (21' 11")	6.69m (21' 11")	6.69m (21' 11")	6.69m (21' 11")
Width	2.3m (7' 7")	2.3m (7' 7")	2.3m (7' 7")	2.3m (7' 7")
Weight (Wet)	8,000kg (17,637lb)	8,000kg (17,637lb)	8,000kg (17,637lb)	8,000kg (17,637lb)
Mast Height (Fully Extended)	12.0m (39' 4")	12.0m (39' 4")	12.0m (39' 4")	12.0m (39' 4")
Fuel Capacity	161L (42.3 USgal)	161L (42.3 USgal) 219L (57.9 USgal) 300		300L (79.25 USgal)
Generator	P33-2-CAE	P50-2-CAE	Allight	Allight
Output Rating at 50Hz (0.8 Power Factor)	45kVA (36kW)	45kVA (36kW)	10kW	10kW
Engine	Perkins 1103	Perkins 1103	Perkins 403D-15	Perkins 403D-15
Volts	240/415	240/415	48	48
Hz	50 or 60	50 or 60	60	60
Type of Lights	2kW metal halide	2kW metal halide	300W LED	450W LED
Total Light Output	15kW	24kW	5.4kW	6.75kW
Number Of Lights	15	12	18	15
Light Tilt	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Mast Rotation	Hydraulic slew	Hydraulic slew	Hydraulic slew	Hydraulic slew
Mast Raise / Extension	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Mast High Wall Capacity	10.7m (35')	10.7m (35')	10.7m (35')	10.7m (35')

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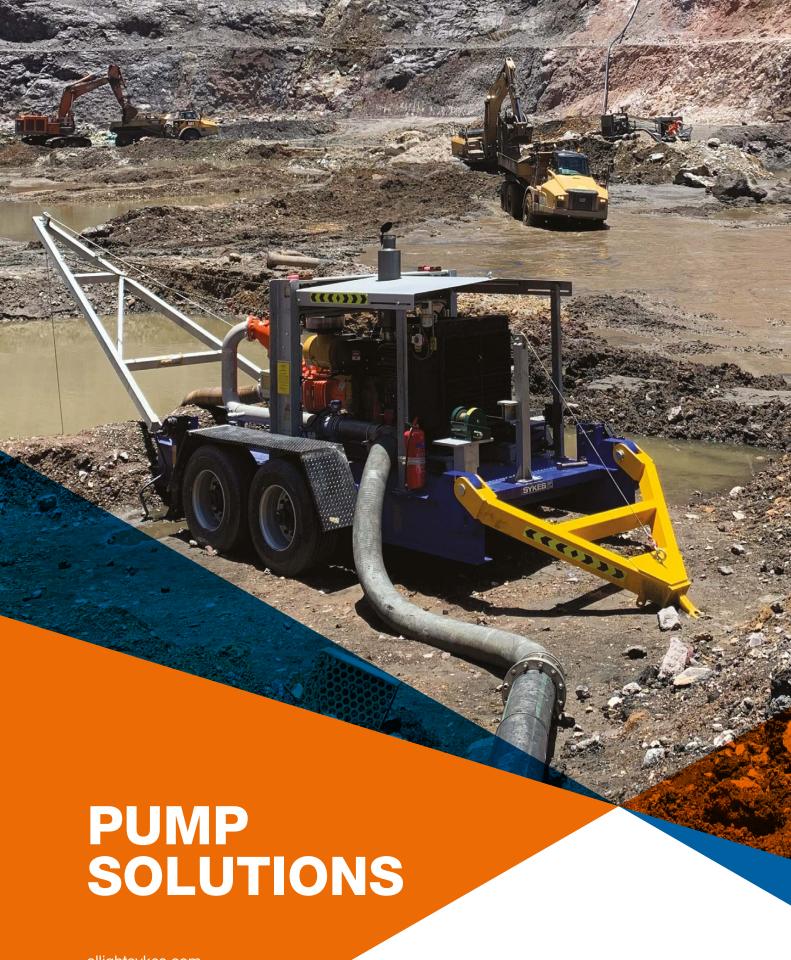
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allightsykes.com



# **Unrivalled expertise**

in the fields of:



**PUMPS** 





**GENERATORS** 







Global reach with local expertise.

AllightSykes is a market leader in the design, manufacturing and distribution of lighting, dewatering and power solutions globally, and the driving force behind FG Wilson generators and Perkins engines in Australia and New Zealand. With an active history stretching back 30 years as a well-known brand, we pride ourselves on providing robust, reliable machinery for demanding conditions, with built-in features that make ownership and operation simple and cost-effective for customers.

### Helping you to get the job done.

With every product supported by our dedicated, highly-trained Service teams, we've proven to optimise productivity, slash project downtime and improve workplace safety.

# The world's leading brands for dewatering solutions.

AllightSykes has been a major force in the world's pump market for over 30 years. We don't just know the dewatering business like no other, but as the OEM of the Sykes brand, we can offer in-house solutions to any hurdles you may face related to product design, manufacturing or service and repair. Additionally, we are an Australian distributor of the most innovative brands, such as Sulzer, Impulse and Exelns, providing cleverly designed solutions to urban worksites, flood water control and mining projects.



We understand that you need to be able to rely on fast, fuss-free genuine parts and service and warranty back-up long after your pump has started doing its job. That's why our genuine Parts and Product Support teams are on hand to make sure you can access qualified, professional and highly skilled technicians when you need them most.

### Looking for a tailored solution?

Our in-house engineering team can custom-design and manufacture bespoke equipment to match any specification supplied. Discover out how AllightSykes can offer you a tailored solution by visiting allightsykes.com.







## MEET THE FAMILY

## **PUMP SOLUTIONS**



CONTRACTOR RANGE
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MEDIUM HEAD RANGE PAGE 7



HIGH HEAD RANGE PAGE 8



EXTRA HIGH HEAD RANGE PAGE 9



QUIET SOLUTIONS RANGE
PAGE 12



YAKKA RANGE PAGE 13



SEWAGE & WASTE RANGE
PAGE 14



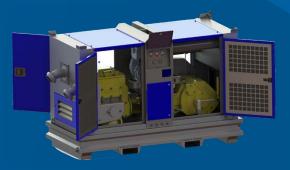
HYDRAULIC RANGE PAGE 15



SULZER RANGE PAGE 18



EXELNS RANGE PAGE 20



IMPULSE RANGE PAGE 21

## SELF-PRIMING SYSTEMS

Page 17



## Compressor Prime

Features a twin cylinder air compressor which passes a jet of compressed air through a venturi-type jet and nozzle to evacuate air from the pump casing and suction line. It makes sure priming is fast, positive and continuous, even under snore conditions. The standard priming system has minimal moving parts, which greatly reduces maintenance requirements.



## Diaphragm Prime

Features a high-capacity diaphragm pump that evacuates air from the pump casing and suction line. A robust, float-driven positive seal arrangement prevents carry-over to the environment.



### Vacuum Prime

A high-capacity vacuum pump in combination with a robust primary tank floatation system. It evacuates air from the pump casing and suction line, resulting in a fast and effective priming and repriming setup. The Vacuum Prime is ideal for wellpoint dewatering and long suction conditions.

## CONTRACTOR RANGE

# Light enough for construction, tough enough for mining.

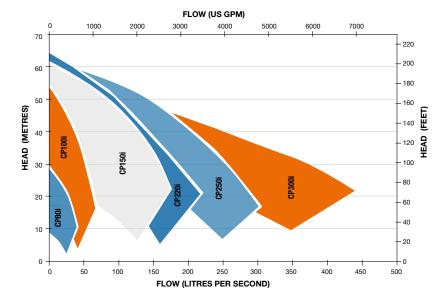
Designed to deliver market-leading, fluid-handling efficiencies with fully automatic priming, Contractor pumps can run dry for extended periods without damage thanks to a clever oil bath mechanical seal assembly.

They allow priming with long suction hoses and suction lifts of up to 9 metres (28 feet). As fluid levels fluctuate, the pump will 'snore' until sufficient liquid is available for the pump to fully reprime itself automatically.



#### AT A GLANCE

- Low fuel usage
- Reduced engine sizes
- Low maintenance costs
- Dry self prime and reprime
- Suction lifts to 9m
- Operates in 'snore' conditions
- Conversion kits for wellpoint dewatering and high heads
- · Diesel, electric or hydraulic drive
- Solids handling up to 90mm
- Replaceable wear parts
- Available in Base (BR), Standard (SR), Premium (PR) and Acoustic (AR) build configurations



Range	Connections mm/inch	Max Head m/ft	Max Flow L/sec (US gal/m)	Solids Handling mm (inch)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
CP80i	75 x 75 (3 x 3)	28.5 (93)	40 (634)	38 (1.5)	2,250 x 1,125 x 2,070 (89 x 44 x 82)	1,000 (2,204)
CP100i	100 x 100 (4 x 4)	54 (177)	67 (1,061)	45 (1.8)	2,250 x 1,125 x 2,070 (89 x 44 x 82)	1,105 (2,435)
CP150i	150 x 150 (6 x 6)	60 (197)	172 (2,756)	77 (3)	2,250 x 1,125 x 2,120 (89 x 44 x 84)	1,840 (4,055)
CP150iC	150 x 150 (6 x 6)	44 (144)	163 (2,582)	77 (3)	2,250 x 1,125 x 2,070 (89 x 44 x 82)	1,160 (2,557)
CP220i	200 x 200 (8 x 8)	64 (210)	220 (3,485)	80 (3.2)	2,250 x 1,125 x 2,120 (89 x 44 x 84)	1,620 (3,571)
CP250i	250 x 200 (10 x 8)	60 (197)	302 (4,783)	60 (2.3)	3,130 x 1,405 x 225 (123 x 55 x 88)	2,359 (5,200)
CP300i	300 x 300 (12 x 12)	60 (197)	445 (7,049)	90 (3)	4,030 x 1,650 x 2,325 (159 x 65 x 92)	3,970 (8,750)

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#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Mining & Quarries



Rental



Industrial



## MEDIUM HEAD RANGE

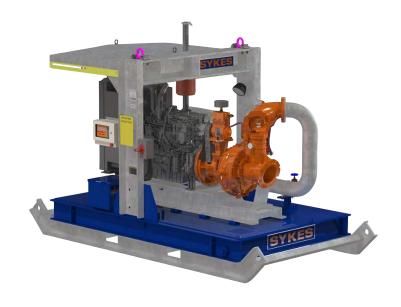
## Developed for harsh environments.

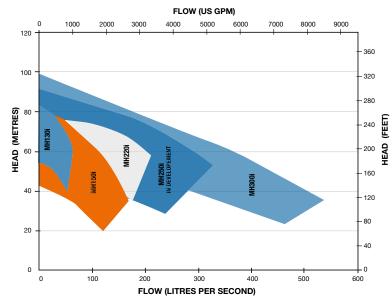
With its tough 316 Stainless Steel impeller and wear plate construction, the Medium Head pump range is tough enough for mining, construction and sewerage by-pass environments, which feature both high water flow and long pipe runs.

Each of the four MH models have an efficiency rating of 77%, can handle solids and offer industry-beating fuel consumption and emission control.



- Light enough for construction, tough enough for mining
- · Low fuel usage
- Reduced engine sizes
- Low maintenance costs
- Dry self prime and reprime
- Suction lifts to 9m
- · Operates in 'snore' conditions
- Diesel, electric or hydraulic drive
- Solids handling up to 90mm
- Replaceable wear parts
- Available in Base (BR), Standard (SR), Premium (PR) and Acoustic (AR) build configurations





Range	Connections mm (inch)	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
MH130i	150 x 150 (6 x 6)	83 (272)	9 (30)	66 (1,046)	29 (2.36)	2,250 x 1,125 x 2,120 (89 x 44 x 84)	1,736 (3,849)
MH150i	200 x 150 (8 x 6)	79 (259)	9 (30)	156 (2,473)	50 (2)	3,130 x 1,405 x 2,225 (123 x 55 x 88)	2,277 (5,020)
MH220i	200 x 200 (8 x 8)	77 (253)	9 (30)	212 (3,360)	55 (2.17)	4,030 x 1,650 x 2,400 (159 x 65 x 95)	2,687 (5,923)
MH300i	300 x 300 (12 x 12)	98 (322)	9 (30)	510 (8,078)	90 (3.5)	3,900 x 1,730 x 2,285 (154 x 68 x 90)	3,602 (7,941)

Final weight and dimensions will depend on completed specifications. All the information in this document is substantially correct at the time of publication and may be altered subsequently.

#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Mining & Quarries



Rental



Industrial



## **HIGH HEAD RANGE**

### Pushing it higher.

High Head pumps are the water management solution of choice in many of the world's harshest mining and construction environments. Fully automatic priming, including high head pumping capability, they can also handle solids up to 75mm.

Boasting one of the best shaft stiffness ratios of any automatic priming pump on the market, the Sykes High Head range provides the reliability and toughness to meet market expectations.

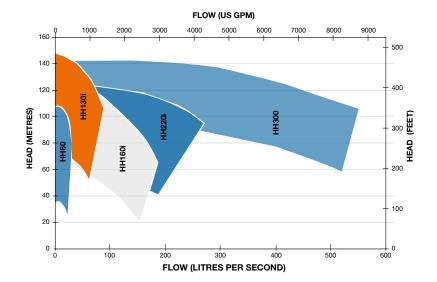


#### AT A GLANCE

- Low fuel usage
- Reduced engine sizes
- Lower maintenance costs
- Dry self-prime and reprime
- Close coupled SAE bearing frames
- Suction lifts to 9 metres
- Operates in 'snore' conditions
- Diesel, electric or hydraulic drive
- Solids handling
- Simple maintenance
- Replaceable wear parts
- Chassis skid, road tow, wheeled, caged
- Powered by Perkins or CAT engines (other engines are available on request)
- Custom build available
- Sykes purpose-built control panel

(12 x 12)

- Able to operate unattended at high discharge heads
- Available in Base (BR), Standard (SR), Premium (PR) and Acoustic (AR) build configurations



#### Max **Max Flow** Solids Approx. Connections **Max Head** Approx. Dimensions Dry Weight kg (lb) Range L/sec, (US Suction Handling LxWxH, mm (inch) mm (inch) m (ft) gal/m) mm (inch) m (ft) 75 x 75 2,250 x 1,125 x 2,070 1,080 **HH80** 105 (344) 9 (30) 28 (444) 25 (1) $(3 \times 3)$ (89 x 44 x 82) (2,380)150 x 150 3,130 x 1,405 x 2,225 2.602 HH130i 144 (472) 9 (30) 87 (1,378) 31 (1.2) $(6 \times 6)$ (123 x 55 x 88) (5,736)3.559 200 x 150 4,030 x 1,650 x 2,400 HH160i 140 (459) 9 (30) 188 (2,978) 65 (1.2) (159 x 65 x 95) (7.849) $(8 \times 6)$ 200 x 200 4,071 4,030 x 1,650 x 2,400 HH220i 125 (410) 270 (4,280) 9 (30) 55 (2.2) (8,975) $(8 \times 8)$ (159 x 65 x 95) 300 x 300 11.300 6,500 x 2,270 x 3,425 HH300 142 (466) 9 (30) 550 (8,718) 52 (2.04)

#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Mining & Quarries



Rental



(24,905)

(256 x 89 x 135)

Industrial



## EXTRA HIGH HEAD RANGE

### Built for mining operations.

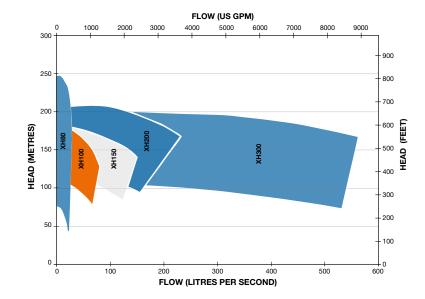
As mines and quarries go deeper, the Extra High Head automatic-priming, solids-handling, pumpset is designed to dewater more efficiently and effectively.

Extra High Head pumps come with increased shaft stiffness ratios so that they can withstand very high pressures and loads without any threat of compromise to the seal integrity through shaft flexing.



#### AT A GLANCE

- Low fuel usage
- Reduced engine sizes
- Lower maintenance costs
- Dry self prime and reprime
- Close coupled SAE bearing frames
- Suction lifts to 9m
- Operates in 'snore' conditions
- · Diesel, electric or hydraulic drive
- Solids handling
- Simple maintenance
- Replaceable wear parts
- · Chassis skid, road tow, wheeled, caged
- Powered by Perkins or Cat engines (other engines available on request)
- Custom build available
- Sykes purpose built control panel
- Able to operate unattended at high discharge heads
- Available in Base (BR), Standard (SR), Premium (PR) and Acoustic (AR) build configurations



Range	Connections mm (inch)	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
XH80	75 x 75 (4 x 3)	247 (810)	9 (30)	28 (444)	18 (0.71)	4,030 x 1,650 x 2,400 (159 x 65 x 95)	4,113 (9,067)
XH100	150 x 100 (6 x 4)	185 (607)	9 (30)	82 (1,299)	22 (0.88)	4,030 x 1,650 x 2,400 (159 x 65 x 95)	4,091 (9,016)
XH150	200 x 150 (8 x 6)	185 (607)	9 (30)	150 (2,376)	43 (1.7)	4,030 x 1,650 x 2,400 (159 x 65 x 95)	4,390 (9,678)
XH200	250 x 200 (10 x 8)	209 (686)	9 (30)	232 (3,677)	31 (1.2)	6,500 x 2,270 x 3,425 (256 x 89 x 135)	9,934 (21,900)
XH300	300 x 300 (12 x 12)	200 (656)	9 (30)	590 (9,352)	50 (2)	6,500 x 2,270 x 3,425 (256 x 89 x 135)	11,310 (24,934)

#### **APPLICATIONS**



Construction & Civil



Oil & Gas



Mining & Quarries

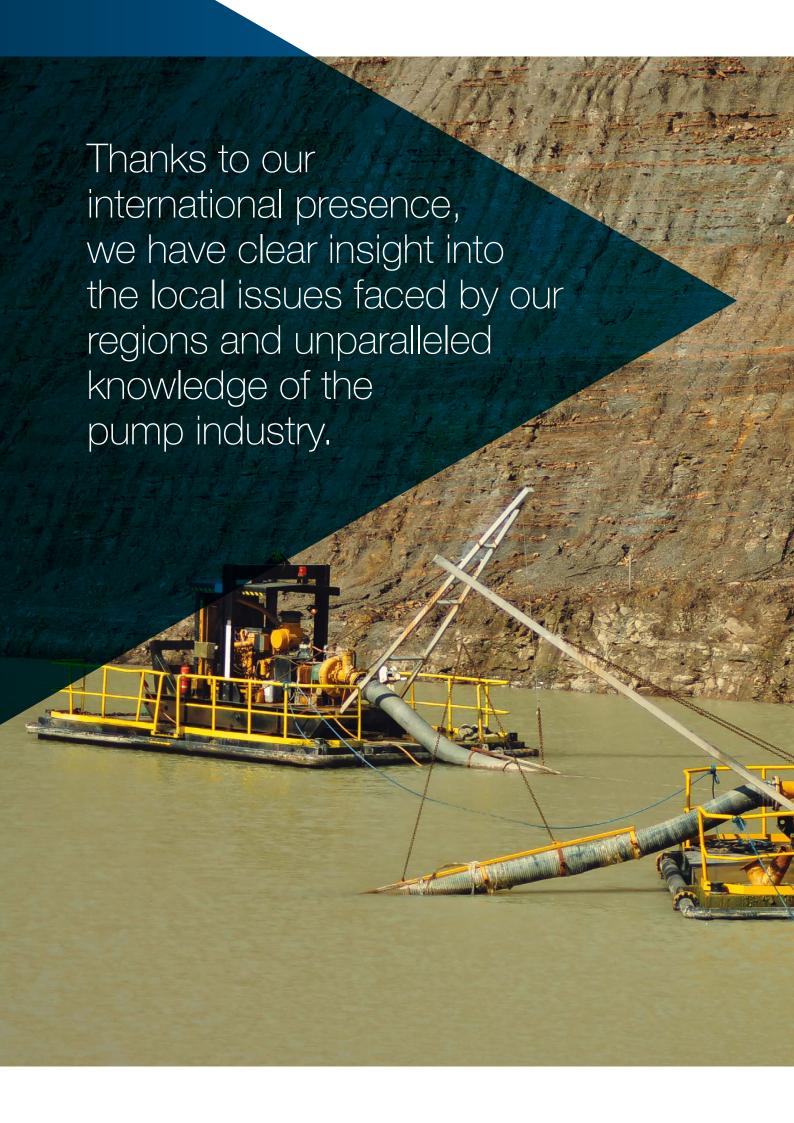


Rental



Industrial







## QUIET SOLUTIONS RANGE

## Whisper-quiet pumps.

Designed to comply with noise output regulations governing worksites and urban areas, the Quiet Range (QS) has a noise level output of 65dBA at 7 meters at full load.

QS pumps are available with either compressor, vacuum or prime systems, and a range of diesel power options. QS pump sets can be fixed to a common skid base, which incorporates a 24-hour (minimum) fuel tank and bunded area. QS pumps can be bolted onto a twin axle galvanised trailer.



#### AT A GLANCE

- Easy access to pump via large access doors, engine and associated equipment, for servicing and fault-finding purposes
- Fluid repellant and fire retardant acoustic foam
- Galvanised steel base frame
- Bunded 24-hour fuel tank
- Compact and light to allow for units to be easily transported and moved into restricted and tight spaces
- Closed coupled to engines and vibration mounted for ease of fitting, and to eliminate any misalignment issues during transport or pump operation
- Plug-and-play options available to easily upfit standard units and meet customer requirements

Range	Connections mm (inch)	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
AR-HH80	75 x 75 (3 x 3)	105 (344)	9 (30)	28 (444)	25 (0.98)	2,000 x 1,100 x 1,500 (79 x 43 x 59)	1,085 (2,392)
AR-CP80i	75 x 75 (3 x 3)	28.5 (93)	9 (30)	40 (634)	38 (1.49)	2,000 x 1,100 x 1,500 (79 x 43 x 59)	941 (2,075)
AR-CP100i	100 x 100 (4 x 4)	54 (177)	9 (30)	67 (1,062)	45 (1.77)	2,000 x 1,100 x 1,500 (79 x 43 x 59)	1,038 (2,288)
AR-CP150i	150 x 150 (6 x 6)	44 (144)	9 (30)	163 (2,584)	77 (3.03)	2,650 x 1,200 x 1,950 (104 x 47 x 77)	1,800 (3,970)
AR-CP150iC	150 x 150 (6 x 6)	60 (197)	9 (30)	172 (2,726)	77 (3.03)	2,000 x 1,100 x 1,500 (79 x 43 x 59)	1,163 (2,570)
AR-CP220i	200 x 200 (8 x 8)	64 (213)	9 (30)	220 (3,487)	90 (3.54)	2,650 x 1,200 x 1,950 (104 x 47 x 77)	1,903 (4,195)

#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Mining & Quarries



Rental



Industrial



## YAKKA RANGE

## Compact and versatile.

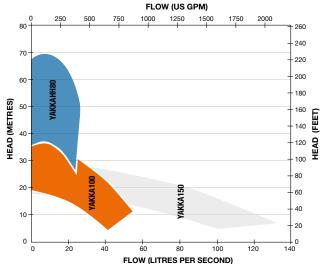
Widely considered to be the world's most versatile pump, the Yakka pump is designed to suit the requirements of almost any three, four or six-inch pump application. It is ideal for mining, construction, sewer bypass and rental.

As well as being versatile, it is also very quiet. Acoustic casing enables it to emit only 65 dBA at seven metres when operating at 1,500 rpm and 67.5 dBA at 1,800 rpm.

#### AT A GLANCE

- QS silent canopy design
- Impact resistant polyethylene panels, easily removed for maintenance
- Tubular steel side/end protection
- Lockable gull wing doors for easy access
- Fuel tank bunding
- Lightweight in design
- 30-hour fuel tank
- Pod can be mounted on any trailer or skid
- Able to be mounted on a single axle trailer for improved maneuverability
- Single-point lift
- High performance pump ends
- Increased flows
- Reduced fuel usage
- Solids handling
- Stainless steel impeller and wearplates as standard





Range	Connections mm (inch)	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
<b>УАККАНН80</b>	75 x 75 (3 x 3)	67 (220)	9 (30)	28 (444)	25 (0.8)	2,250 x 1,100 x 1,375 (88 x 43 x 54)	1410 (310)
YAKKA100	100 x 100 (4 x 4)	37 (122)	9 (30)	55 (872)	45 (1.8)	2,250 x 1,100 x 2,300 (88 x 43 x 90)	1,325 (2,915)
YAKKA150	150 x 150 (6 x 6)	29 (96)	9 (30)	132 (2,091)	77 (3)	3,400 x 1,600 x 2,300 (133 x 62 x 90)	1,800 (3,968)

#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Quarries



Rental



Industrial

# SEWAGE & WASTE RANGE

# Suitable for heavy duty operations with efficient suction performance.

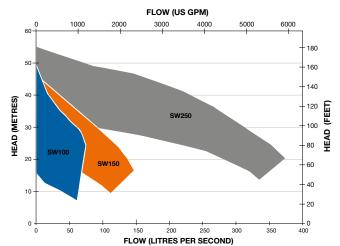
The SW Range is specifically designed for sewage and waste water applications. With an innovative design, this unit is capable of pumping large solids up to 100mm. It chops and shreds debris and other stringy materials that would normally clog pumps.

#### **AT A GLANCE**

- · Heavy duty, robust design
- Large solids handling
- Cutter pockets
- Inspection cover
- · Non-clog impeller
- Shredder claw
- Available in Base (BR), Standard (SR), Premium (PR) and Acoustic (AR) build configurations







#### **APPLICATIONS**



Construction & Civil



Rental



Sewage & Waste Water



Industrial

Range	Connections mm (inch)	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Efficiency %	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
SW100	100 x 100 (4 x 4)	57 (187)	9 (30)	75 (1,188)	75 (3)	60	2,250 x 1,125 x 2,070 (89 x 44 x 82)	1,065 (2,348)
SW150	150 x 150 (6 x 6)	46 (150)	9 (30)	140 (2,218)	100 (4)	65	2,250 x 1,125 x 2,070 (89 x 44 x 82)	1,605 (3,538)
SW250	250 x 200 (10 x 8)	55 (180)	9 (30)	370 (5,865)	100 (4)	61	3,130 x 1,405 x 225 (123 x 55 x 88)	2,735 (6,030)

## HYDRAULIC RANGE

# Supplied with their own diesel or electric drive power pack.

The compact HD Hydraulic range of pumps are designed for use in applications dealing with heavy solids, laden liquids, and where suction lifts are excessive.

#### **AT A GLANCE**

- Heavy duty, robust design
- Submersible, hydraulic-drive pump
- Solids up to 100mm
- No priming required
- Replaceable wear plates
- Available in Standard (SR), Premium (PR) and Acoustic (AR) build configurations



Range	Connections mm (inch)	Max Head m (ft)	Max Flow L/sec, (US gal/m)	Solids Handling mm (inch)	Efficiency %	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)
HD80i	75 x 75 (3 x 3)	28.5 (93)	28 (444)	38 (1.5)	50	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,620 (3,564)
HD100i	100 x 100 (4 x 4)	40 (131)	67 (1,061)	45 (1.75)	71	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,625 (3,575)
HD150ic	150 x 150 (6 x 6)	44 (144)	163 (2,582)	77 (3)	74	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,640 (3,608)
HD150i	150 x 150 (6 x 6)	60 (197)	172 (2,756)	77 (3)	81	2,500 x 1,200 x 2,050 (98 x 47 x 81)	2,150 (4,730)
HD220i	200 x 200 (8 x 8)	64 (210)	220 (3,485)	80 (3.15)	75	2,500 x 1,200 x 2,050 (98 x 47 x 81)	2,150 (4,730)
HDSW100	100 x 100 (4 x 4)	57 (187)	75 (1,188)	75 (3)	60	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,625 (3,575)
HDSW150	150 x 150 (6 x 6)	46 (150)	140 (2,218)	100 (4)	65	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,640 (3,608)
НДНН80	75 x 75 (3 x 3)	105 (344)	28 (444)	25 (1)	53	2,200 x 1,100 x 2,050 (86 x 43 x 81)	1,640 (3,608)

#### **APPLICATIONS**



Construction & Civil



Sewage & Waste Water



Oil & Gas



Mining & Quarries



Rental



Industrial



## **AllightSykes**

## End-to-end solutions





## AUTOMATIC SELF PRIMING

## A wide range of pumpends.

Whether you're an OEM, a pump packager or a solution provider to the end customer, we have the right pumpend to fit your application needs. With an extensive selection of end suction pumps in a wide range of materials and configurations, AllightSykes has become the supplier of choice for the resource industry in the major markets around the world.





### **SYKES PUMPENDS**

#### **SEALING**

 Dry running mechanical or gland packed seals

#### **DISCHARGE**

- Vertical
- Left side / underslung
- Right side / overslung

#### **WEAR**

- Wear plates provides superior longevity compared to wear rings
- · Easily adjustable in the field
- No machining required to replace wear plates
- Not reliant on tight tolerances which are easily affected by suspended solids
- Longer run times between maintenance intervals

#### **ENGINEERING**

- Designed in Australia for over 40 years
- All pump ends are fully tested prior to dispatch

#### SHAFT STIFFNESS RATIO

- Shaft stiffness (L³/D⁴ between 0.25
   1.5) exceeds industry standards
- Heavy duty designs ensure reliable operation in any condition

#### **STANDARD MATERIALS**

- Pump Casing:
   S.G. IRON 400/12 / 65-45-12
- Suction Cover: S.G. IRON 400/12 / 65-45-12
- Air Separation Tank:
   S.G. IRON 400/12 / 65-45-12
- Bearing Bracket: S.G. IRON 400/12 / 65-45-12
- Pump Shaft:431 Stainless Steel / A276-98B431
- Impeller: 316 Stainless Steel / CF8M
- Wear Plates:
   316 Stainless Steel / CF8M
- Mechanical Seal: Silicon Carbide / Silicon Carbide
- N.R.V. (Flap or Ball Type):
   S.G. IRON 400/12 / 65-45-12

Material variances are available.

#### **OTHER MATERIALS AVAILABLE**

- CS340 Chrome Steel / 90/60
- CS500 Chrome Steel / 150/135
- Full 316 Stainless Steel / CF8MU
- CD4MCU / 1A
- SAF 2205
- SAF 2507



## SULZER RANGE

# Submersible pumps designed to move water and abrasives.

Submersible dewatering pumps XJ, XJC and XJS have several options for electronic supervision that make them even more reliable and easy to use. Most importantly, the AquaTronic unit ensures correct motor rotation every time. By replacing the built-in contactor in the basic pump configurations, the motor always rotates correctly, no matter how the phases are connected.





#### **APPLICATIONS**



Construction & Civil



Mining & Quarries



Rental



Agriculture

Our Sulzer range is only available in Australia.

Range	Delivery (ø mm)	Capacity (m³/h)	Head (m)	A (400/1000 V)	HP (kW)	RPM (50/60 Hz)	Solids Handling (ø mm)	Weight (kg)
J5	50	15	11	2.9	0.48	2,960	6	9.5
J12-WKS	50	30	15	5.2	0.9	2,750	6.5 x 22	16
J12-DKS	50	30	16	2.3	1	2,800	6.5 x 22	16
J15-WKS	50	40	19	8.1	1.4	2,800	6.5 x 22	18
J15-DKS	50	50	19	2.9	1.4	2,800	6.5 x 22	16.5
J205HD	100	140	72	39	21	2,910	8 x 34	155
J205HD 1000V	100	140	72	16	21	2,910	8 x 34	155
J205ND	150	360	32	39	21	2,910	8 x 34	155
J405HD	100	250	90	62	35	2,930	8 x 34	270
1405HD 1000V	100	250	90	25	35	2,930	8 x 34	270
1405ND	200	540	44	62	35	2,930	8 x 34	270
1604HD	150	500	58	106	56	1,450	12 x 60	525
1604HD 1000V	150	500	58	42	56	1,450	12 x 60	525
1604ND	250	1200	32	106	56	1,450	12 x 60	525
(J25HDAT	75	50	26	5.1	2.5	2,920	7.5 x 22	39
(J25NDAT	75	70	22	5.1	2.5	2,920	7.5 x 22	39
(J40HDAT	75	70	33	7.6	3.7	2,860	7.5 x 22	42
(J40NDAT	75	90	26	7.6	3.7	2,860	7.5 x 22	42
(J50HDAT	75	70	44	11.3	5.6	2,930	7.5 x 22	59
(J50HD 1000V	75	70	44	4.5	5.6	2,930	7.5 x 22	59
(J50LDAT	150	180	23	11.3	5.6	2,930	7.5 x 22	59
(J50NDAT	100	130	32	11.3	5.6	2,930	7.5 x 22	59
(J80LDAT	150	190	27	16	8.3	2,920	7.5 x 22	63
(J80NDAT	100	140	36	16	8.3	2,920	7.5 x 22	63
(J80SD 1000V	75	40	73	6.4	8.3	2,920	7.5 x 22	78
(J80SDAT	100	40	73	16	8.3	2,920	7.5 x 22	78
(J110HDAT	125	120	52	21.5	11.8	2,920	7.5 x 22	81
(J110NDAT	100	200	37	21.5	11.8	2,920	7.5 x 22	81
JS25D143AT	75	60	18	5.1	2.5	2,920	45 x 55	39
(JS40D160AT	75	70	23	7.6	3.7	2,860	45 x 55	41
(JS50D175AT	75	90	26	11.3	5.6	2,930	48 x 60	59
KJS80D195AT	75	110	33	16	8.3	2,920	48 x 60	64



## **EXELNS**RANGE

# Our complete range of slurry and process pumps.

The Exelns pump range caters to a range of conditions, and encompasses heavy duty slurry and process pumps, horizontal slurry pumps, vertical slurry pumps, gravel, FGD and froth pumps.

These pumps are widely used in:

- Iron ore dressing plants
- · copper concentration plants
- Gold mine concentration plants
- Molybdenum concentration plants
- Potash fertiliser plants
- Other mineral processing plants
- Alumina industry
- · Coal washeries
- Power plants
- Sand excavations
- Building material industry
- · Chemical industry

Our Exelns range is not available in the USA.



#### AT A GLANCE

- Interchangeable anti-abrasive wet parts
- The discharge branch can be oriented to any eight positions at the interval of 45 degrees
- Various drive types: DC (direct connection), V-belt drive, gear box reducer, hydraulic couplings, VFD and SCR control
- The shaft seal uses the packing seal, expeller seal and mechanical seal



#### IMPULSE RANGE

# Fully automatic, self-priming Impulse Piston pumps.

With positive displacement, these pumps can handle air, water or any mixture of both without the need of an additional priming system. The units are able to operate for long uninterrupted periods of time with high fuel efficiency and low maintenance. They can run dry without damage or wear to any part of the unit.

The Ecomizer-Pro (with optional internet connection) is an emission-reducing and fuel-saving pump and engine controller that allows you to remotely monitor the pump set and even operate from any computer or mobile phone with internet connection.



#### **APPLICATIONS**



Construction & Civil



Rental



Range	Max Head m (ft)	Max Suction m (ft)	Max Flow L/sec (US gal/m)	Fuel consumption L/hr (US gal/hr)	Fuel Tank Capacity L (US gal)	Approx. Dimensions LxWxH, mm (inch)	Approx. Dry Weight kg (lb)	Pump End Size
Abu Dhabi Ili IP 175	22 (72)	9 (30)	25 (396)	0.80 (0.21)	100 (26)	2,200 x 810 x 1,100 (6.6 x 2.7 x 3.6)	1,365 (3,003)	IP175
Yamuna IP175	22 (72)	9 (30)	25 (396)	0.80 (0.21)	230 (60)	2,250 x 1,050 x 1,400 (7.4 x 3.44 x 4.6)	1,985 (4,367)	IP175
Mini Mumbai IP130	20 (66)	9 (30)	12 (190)	N/A	N/A	1,700 x 750 x 900 (77 x 29.5 x 35.4)	600 (1,320)	IP175
Mumbai IP175	22 (72)	9 (30)	25 (396)	N/A	N/A	2,000 x 780 x 1,120 (6.6 x 2.56 x 3.67)	955 (2,101)	IP175
Hamburg IP175	22 (72)	9 (30)	25 (396)	N/A	N/A	2,250 x 1,050 x 1,100 (7.48 x 3.44 x 3.61)	1,400 (3,080)	IP175
Oriental IP175	22 (72)	9 (30)	25 (396)	0.80 (0.21)	185 (49)	2,750 x 950 x 1,200 (9.02 x 3.12 x 3.94)	2,215 (4,873)	IP175





#### **ALLIGHTSYKES**

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#### **JOHANNESBURG, SOUTH AFRICA**

T +27 (0) 66 299 0099

### **SULZER**

## **Submersible Dewatering Pumps**





#### **Dewatering Solutions for the Real World**

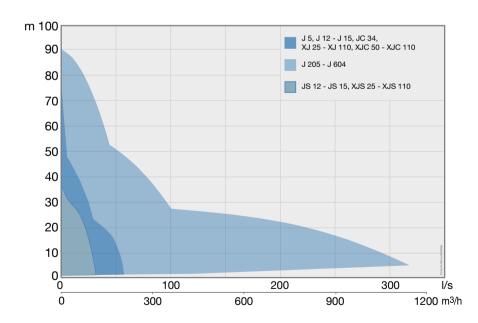
In the real world time is money, and worksites have no time for unwanted water. Sulzer has the solutions in a complete pump range for reliable dewatering.

This brochure is an overview of Sulzer's submersible dewatering pumps, which are the result of more than 50 years of technical and real-world experience. Each pump type is presented with its key features, as well as dimensions, performance curves and the most important technical data for specific pump models.

Whether you work in mining, tunneling or construction, the pumps here are your best insurance against water-related downtime. From purchasing to service, you can turn to Sulzer for dewatering solutions that make a difference in the real world.

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#### Performance range 50 Hz



Sulzer's complete range of submersible dewatering pumps provides reliable solutions for all major dewatering needs.

#### Submersible Drainage Pump J

Submersible drainage pump J is suitable for pumping water and dirty water mixed with light abrasives. The low weight and compact design makes for convenient transport, handling and installation.

#### 1 Easy start

A built-in contactor connected to the thermal sensors in the stator windings protects the motor from overheating and features an automatic restart function.

#### Wear resistance

An impeller in white cast iron with a full upper shroud and adjustable wear parts coated in nitrile rubber ensure high abrasion resistance.

#### Reliable operation

A double mechanical shaft seal in an oil bath, with primary and secondary seal surfaces in silicon carbide, extends the life of the pump. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

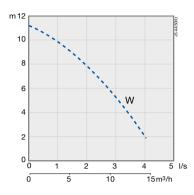
#### 4 Serviceability

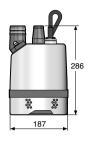
Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. An adjustable diffuser ensures proper clearance throughout the impeller lifetime. By removing the top cover of the pump, the electrical junction area can easily be checked.



#### SUBMERSIBLE DRAINAGE PUMP J 5

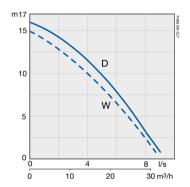
J 5 W	1-PHASE
Motor rating P2	0.48 kW, 1~
Voltage (V)	230
Full load (A)	2.9
Speed	2690 rpm
Strainer hole	6 mm
Discharge connections	Hose 2"
	Thread G/BSP 2'
Weight (excl. cable)	9.5 kg
Motor protection	Built-in
Electric cable	10 m

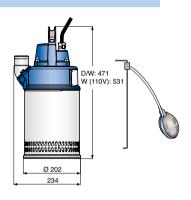




#### SUBMERSIBLE DRAINAGE PUMP J 12

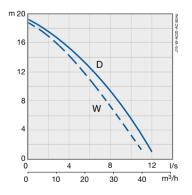
J 12 W/J 12 WKS* J 12 D/J 12 DKS**	1-PHASE	3-PHASE
- 12 B/G 12 B/G		
Motor rating P2	0.9 kW, 1~	1 kW, 3~
Voltage (V)	110 / 230	230 / 400 / 500
Full load (A)	10.9 / 5.2	4.0 / 2.3 / 1.9
Speed	2750 rpm	2800 rpm
Strainer hole	6.5 x 22 mm	•
Discharge connections	Hose 1½", 2",	2½", 3""
•	Thread G/BSF	2", 21/2", 3"
Weight (excl. cable)	16 kg	
Motor protection	Built-in	
Electric cable	20 m	

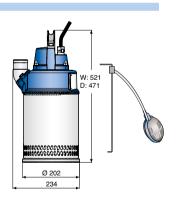




#### SUBMERSIBLE DRAINAGE PUMP J 15

J 15 W/J 15 WKS* J 15 D/J 15 DKS**	1-PHASE	3-PHASE
Mater ratios DO	4 4 144/ 4	1 4 1/1/1 2
Motor rating P2	1.4 kW, 1~	1.4 kW, 3~
Voltage (V)	230	230 / 400 / 500
Full load (A)	8.1	5.0 / 2.9 / 2.3
Speed	2800 rpm	2800 rpm
Strainer hole	6.5 x 22 mm	
Discharge connections	Hose 11/2", 2"	, 2½", 3"
_	Thread G/BSI	P 2", 2½", 3"
Weight (excl. cable)	18 kg (W), 16	.5 kg (D)
Motor protection	Built-in	
Electric cable	20 m	





- \* Built-in float switch available as option.
  \*\* KS version not available in 500 V.

#### Submersible Drainage Pump XJ

Submersible drainage pump XJ is excellent for pumping water and dirty water mixed with light abrasives. The slim design makes the pump easy to move and easy to handle.

#### 1 Easy and fail-safe starting

Instead of a built-in contactor, an optional AquaTronic unit can be used. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.)

#### Wear resistance

An impeller and wear ring in white cast iron, as well as diffusers coated in oil-resistant nitrile rubber, provide high abrasion resistance.

#### Reliable operation

Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. A double cable-entry seal system increases the protection against moisture entering the electrical junction area. A double outer casing and good

entering the electrical junction area. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

#### 4 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. The adjustable wear ring ensures proper clearance throughout the impeller lifetime. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

#### 5 Less energy and environmental impact

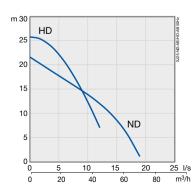
The high-efficiency motor and new hydraulics combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

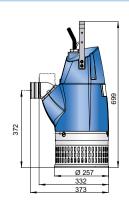
#### 6 Flexibility

Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application.

#### SUBMERSIBLE DRAINAGE PUMP XJ 25

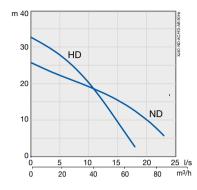
XJ 25 ND* XJ 25 HD*	MEDIUM HEAD HIGH HEAD
Motor rating P2	2.5 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	8.8 / 5.1 / 4.3 / 2.9 / 2.0
Speed	2920 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 21/2", 3", 4"
•	Thread G/BSP 21/2", 3", 4"
Weight (excl. cable)	39 kg
Motor protection	Built-in
Electric cable	20 m
Strainer hole Discharge connections Weight (excl. cable) Motor protection	7.5 x 22 mm Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4" 39 kg Built-in

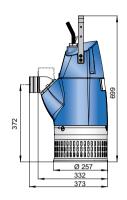




#### SUBMERSIBLE DRAINAGE PUMP XJ 40

XJ 40 ND* XJ 40 HD*	MEDIUM HEAD HIGH HEAD
Motor rating P2	3.7 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	13.2 / 7.6 / 6.1 / 4.4 / 3.0
Speed	2860 rpm
Strainer hole	7.5 x 22 mm
Discharge connections	Hose 21/2", 3", 4"
•	Thread G/BSP 21/2", 3", 4"
Weight (excl. cable)	42 kg
Motor protection	Built-in
Electric cable	20 m





#### SUBMERSIBLE DRAINAGE PUMP XJ 50

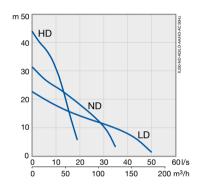
XJ 50 ND*	MEDIUM HEAD
XJ 50 LD*	HIGH FLOW
XJ 50 HD*	HIGH HEAD

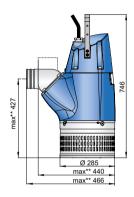
Motor rating P2 5.6 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 19.7 / 11.3 / 9.0-10.8 / 6.6 / 4.5

Speed 2930 rpm
Strainer hole 7.5 x 22 mm
Discharge connections Hose 3", 4", 6"
Thread G/BSP 3", 4", 6"

Weight (excl. cable) 59 kg Motor protection Built-in Electric cable 20 m





#### SUBMERSIBLE DRAINAGE PUMP XJ 80

XJ 80 ND*	MEDIUM HEAD
XJ 80 LD*	HIGH FLOW
XJ 80 SD*	HIGH HEAD

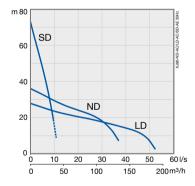
Motor rating P2 8.3 kW, 3~

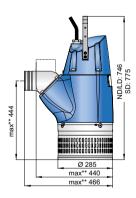
Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 27.8 / 16 / 13.8 / 9.3 / 6.4

Speed 2920 rpm 5trainer hole 7.5 x 22 mm 5trainer hole 7.5 x 22 mm 6trainer hole 7.5 x 22 mm 7.5 x 22

Motor protection Built-in Electric cable 20 m

Y I 110 ND\*



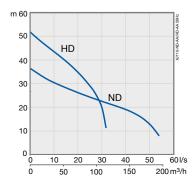


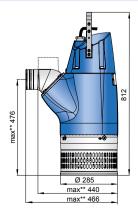
#### SUBMERSIBLE DRAINAGE PUMP XJ 110

XJ 110 HD*	HIGH HEAD	
Motor rating P2	11.8 kW, 3~	
Voltage (V)	230 / 400 / 500-550 / 690 / 1000	
Full load (A)	37.4 / 21.5 / 17.2 / 12.5 / 8.6	
Speed	2920 rpm	
Strainer hole	7.5 x 22 mm	
Discharge connections	Hose 3", 4", 6"	
_	Thread G/BSP 3", 4", 6"	
Weight (excl. cable)	81 kg	
Motor protection	Built-in	

MEDILIM HEAD

Motor protection Built-in Electric cable 20 m





 $<sup>^{\</sup>star}\,$  Option: AquaTronic, built-in electronic pump control.

<sup>\*\*</sup> Max measurement based on largest discharge size.

#### Submersible Drainage Pump J

Submersible drainage pump J is suitable for pumping water and dirty water mixed with light abrasives. The pump design enables convenient transport, handling and installation.

#### Easy to start

Pump J 205 has a built-in contactor connected to the thermal sensors in the stator windings, which protects the motor from overheating and features an automatic

restart function. Pumps J 405 and J 604 have thermal sensors in the stator windings that protect the motor from overheating by means of an external control panel.

#### Wear resistance

Abrasive-resistant impellers, combined with diffusers and wear rings coated in oil-resistant nitrile rubber, provide extended pump life in tough applications.

#### Reliable operation

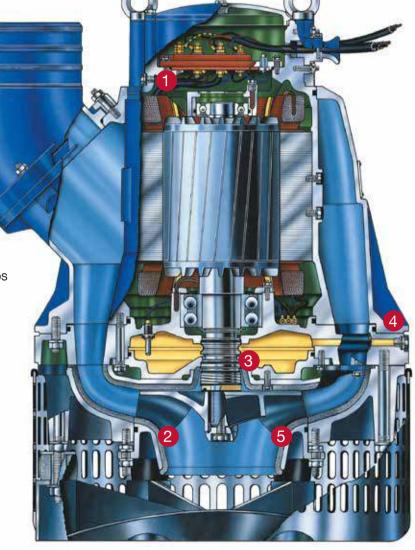
Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide, extend the life of the pump. In pumps J 205 and J 405, the primary and secondary seals comprise an easy-to-replace seal cartridge. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

#### 4 Serviceability

External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked. The adjustable wear ring ensures proper clearance throughout the impeller lifetime.

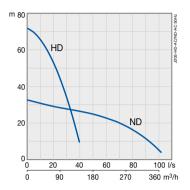
#### 6 Flexibility

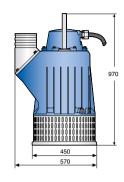
Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application.



#### SUBMERSIBLE DRAINAGE PUMP J 205

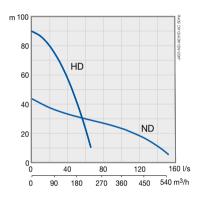
J 205 ND J 205 HD	MEDIUM HEAD HIGH HEAD
Motor rating P2	21 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	68 / 39 / 31.2 / 23 / 16
Speed	2910 rpm
Strainer hole	8 x 34 mm
Discharge connections	Hose 4", 6", 8"
	Thread G/BSP 4", 6", 8"
Weight (excl. cable)	155 kg
Motor protection	Built-in
Electric cable	20 m

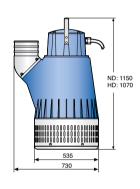




#### SUBMERSIBLE DRAINAGE PUMP J 405

J 405 ND J 405 HD	MEDIUM HEAD HIGH HEAD
Motor rating P2	35 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	108 / 62 / 51 / 36 / 25
Speed	2930 rpm
Strainer hole	8 x 34 mm
Discharge connections	Hose 4", 6", 8"
•	Thread G/BSP 4", 6", 8"
Weight (excl. cable)	270 kg
Motor protection	Thermal overload sensors
Electric cable	20 m



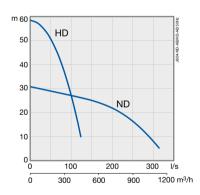


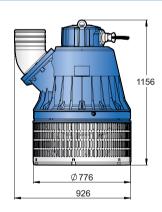
#### SUBMERSIBLE DRAINAGE PUMP J 604

J 604 ND

J 604 HD	HIGH HEAD
Motor rating P2	56 kW, 3~
Voltage (V)	230 / 400 / 500-550 / 690 / 1000
Full load (A)	184 / 106 / 84 / 61 / 42
Speed	1450 rpm
Strainer hole	12 x 60 mm
Discharge connections	Hose 6", 8", 10"
	Thread G/BSP 6", 8"
Weight (excl. cable)	525 kg
Motor protection	Thermal overload sensors
Electric cable	20 m

MEDIUM HEAD





#### Submersible Drainage Center-Line Pumps JC and XJC

Submersible drainage center-line pumps JC and XJC are excellent for pumping water and dirty water mixed with light abrasives. The slim design makes them easy to move and easy to handle, and they are perfect for applications with limited installation space.

#### 1 Easy and fail-safe starting

In XJC pump models, an optional AquaTronic unit can be used instead of a built-in contactor. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.) In JC pump models, a built-in contactor with an automatic restart function protects the motor.

#### Wear resistance

An impeller and wear ring in white cast iron, as well as diffusers coated in oil-resistant nitrile rubber, provide high abrasion resistance.

#### Reliable operation

Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. Pumps XJC 50 - XJC 110 have a double cable-entry seal system that increases the protection against moisture entering the electrical junction area. A double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor.

#### 4 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. The adjustable wear ring ensures proper clearance throughout the impeller lifetime. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

#### 5 Less energy and environmental impact

Pumps XJC 50 - XJC 110 are equipped with high-efficiency motors and new hydraulics, which combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

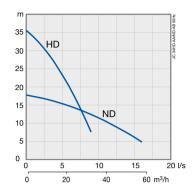
#### 6 Flexibility

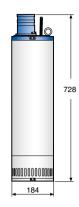
Pumps XJC 50 - XJC 110 allow conversion between highvolume and high-head hydraulics with only a few parts, ensuring the right performance for the application.



#### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP JC 34

MEDIUM HEAD HIGH HEAD
3 kW, 3~
230 / 400 / 500
12.7 / 7.3 / 5.5
2850 rpm
8 x 33 mm
Hose 2", 3"
Thread G/BSP 2", 3"
31 kg
Built-in
20 m





#### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP XJC 50

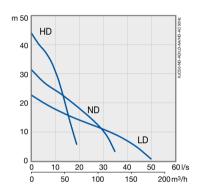
XJC 50 ND*	MEDIUM HEAD
XJC 50 LD*	HIGH FLOW
XJC 50 HD*	HIGH HEAD

XJC 50 HD\* HIGH HEAD

Motor rating P2 5.6 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 19.7 / 11.3 / 9.0-10.8 / 6.6 / 4.5 Speed 2930 rpm Strainer hole 7.5 x 22 mm Discharge connections Hose 3", 4", 6" Thread G/BSP 3", 4", 6"

Weight (excl. cable) 59 kg Motor protection Built-in Electric cable 20 m





#### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP XJC 80

XJC 80 ND*	MEDIUM HEAD
XJC 80 LD*	HIGH FLOW
XJC 80 SD*	HIGH HEAD

Motor rating P2 8.3 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 27.8 / 16 / 13.8 / 9.3 / 6.4

 Speed
 2920 rpm

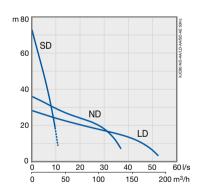
 Strainer hole
 7.5 x 22 mm

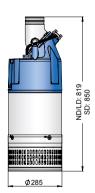
 Discharge connections
 Hose 3", 4", 6"

 Thread G/BSP 3", 4", 6"

 Weight (excl. cable)
 63 kg (ND/LD), 78 kg (SD)

Motor protection Built-in Electric cable 20 m





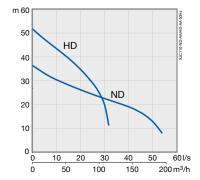
#### SUBMERSIBLE DRAINAGE CENTER-LINE PUMP XJC 110

XJC 110 ND*	MEDIUM HEAD
XJC 110 HD*	HIGH HEAD
Motor rating P2	11.8 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 37.4 / 21.5 / 17.2 / 12.5 / 8.6 Speed 2920 rpm

Strainer hole 7.5 x 22 mm
Discharge connections Hose 3", 4", 6"
Thread G/BSP 3", 4", 6"

Weight (excl. cable) 80 kg Motor protection Built-in Electric cable 20 m





<sup>\*</sup> Option: AquaTronic, built-in electronic pump control.

#### Submersible Sludge Pump JS

Submersible sludge pump JS is excellent for pumping dirty water and water mixed with solids. The pump has a slim design and low weight, which makes it easy to move and easy to handle.

#### 1 Easy to start

A built-in contactor connected to the thermal sensors in the stator windings protects the motor from overheating and features an automatic restart function.

#### 2 Clog-free pumping

A free-flow vortex impeller and pump volute make the pump ideal for pumping solids. The impeller is available in different sizes to meet specific requirements.

#### Reliable operation

Both the impeller and volute are made from heavyduty ductile iron for maximum durability. Double mechanical shaft seals in an oil bath, with primary and secondary seal surfaces in silicon carbide, extend the life of the pump.

#### 4 Convenient handling

The top cover and motor housing are made of lightweight aluminum, which creates a pump that is very easy to handle and install.

#### 6 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.



#### SUBMERSIBLE SLUDGE PUMP JS 12

JS 12 W/WKS* -104	1-PHASE
JS 12 W/WKS* -114	1-PHASE
JS 12 D/DKS* -104	
JS 12 D/DKS* -114	

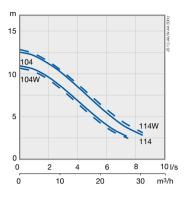
3-PHASE 3-PHASE 0.9 kW, 3~ 230 / 400 / 500 3.3 / 1.9 / 1.5 Motor rating P2 0.9 kW, 1~ Voltage (V) 230 Full load (A) 5.1 2850 rpm

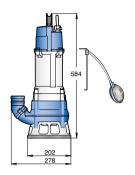
Speed 2850 rpm Free passage 45 x 40 mm

Hose 2", 2½", 3" Discharge connections Thread G/BSP 2", 21/2", 3"

18 kg Built-in Weight (excl. cable) Motor protection

Electric cable 20 m



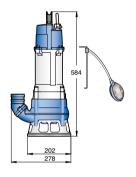


#### SUBMERSIBLE SLUDGE PUMP JS 15

JS 15D/DKS\* -114 JS 15D/DKS\* -126 3-PHASE 3-PHASE

1.3 kW, 3~ 230 / 400 / 500 Motor rating P2 Voltage (V) Full load (A) 4.5 / 2.6 / 2.1 Speed 2850 rpm 45 x 40 mm Hose 2", 2½", 3" Thread G/BSP 2", 2½", 3" Free passage Discharge connections

Weight (excl. cable) 18 kg Motor protection Built-in Electric cable 20 m



 $^{\star}\,$  Built-in float switch available as option. KS version not available in 500 V.



#### Submersible Sludge Pump XJS

Submersible sludge pump XJS is excellent for pumping dirty water and water mixed with solids. The slim design makes the pump easy to move and easy to handle.

#### 1 Easy and fail-safe starting

Instead of a built-in contactor, an optional AquaTronic unit can be used. The AquaTronic unit compensates for incorrect phase order, which ensures correct motor rotation every time. (Additional AquaTronic functions for electronic supervision are explained on pages 16-17.)

#### 2 Clog-free pumping

A free-flow vortex impeller and pump volute make the pump ideal for pumping solids. The impeller is available in different sizes to meet specific requirements.

#### Reliable operation

Both the impeller and volute are made from heavy-duty ductile iron for maximum durability. Double mechanical shaft seals in an oil bath, with primary seal surfaces in silicon carbide and secondary seal surfaces in silicon carbide on carbon, extend the life of the pump. A double cable-entry seal system increases the protection against moisture entering the electrical junction area.

#### 4 Convenient handling

The top cover and motor housing are made of lightweight aluminum, which creates a pump that is very easy to handle and install.

#### 6 Serviceability

Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs. External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service. By removing the top cover of the pump, the electrical junction area can easily be checked.

#### 6 Less energy and environmental impact

The high-efficiency motor and hydraulics combine with low-friction bearings to reduce power losses. The result is low total energy costs and minimized carbon footprint.

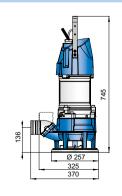
#### SUBMERSIBLE SLUDGE PUMP XJS 25

XJS 25 D\* -128 XJS 25 D\* -143

Motor rating P2 2.5 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 8.8 / 5.1 / 4.3 / 2.9 / 2.0

Weight (excl. cable) 39 kg Motor protection Built-in Electric cable 20 m 16 12 143 143 12 16 20 l/s 0 10 20 30 40 50 60 70 m<sup>3</sup>/h





#### SUBMERSIBLE SLUDGE PUMP XJS 40

XJS 40 D\* -143 XJS 40 D\* -160

Motor rating P2 3.7 kW, 3~

Voltage (V) 230 / 400 / 500-550 / 690 / 1000

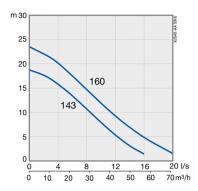
Full load (A) 13.2 / 7.6 / 6.1 / 4.4 / 3.0 Speed 2860 rpm

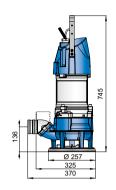
Discharge connections 45 x 55 mm

Discharge connections Hose 2½", 3", 4"

Thread G/BSP 2½", 3", 4"

Weight (excl. cable) 41 kg Motor protection Built-in Electric cable 20 m





#### SUBMERSIBLE SLUDGE PUMP XJS 50

XJS 50 D\* -160 XJS 50 D\* -175

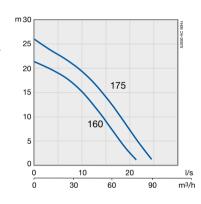
Motor rating P2 5.6 kW, 3~

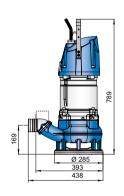
Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 19.7 / 11.3 / 9.0 / 6.6 / 4.5

Speed 2930 rpm Free passage 48 x 60 mm Discharge connections Hose 2½", 3", 4

Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4"

Weight (excl. cable) 59 kg Motor protection Built-in Electric cable 20 m





#### SUBMERSIBLE SLUDGE PUMP XJS 80

XJS 80 D\* -175 XJS 80 D\* -195

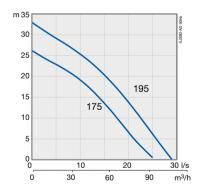
Motor rating P2 8.3 kW, 3~

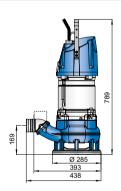
Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 27.8 / 16 / 12.8 / 9.3 / 6.4

Speed 2920 rpm Free passage 48 x 60 mm Discharge connections Hose 2½", 3", 4"

Thread G/BSP 2½", 3", 4"

Weight (excl. cable) 64 kg Motor protection Built-in Electric cable 20 m





#### SUBMERSIBLE SLUDGE PUMP XJS 110

XJS 110 D\* -170 XJS 110 D\* -195

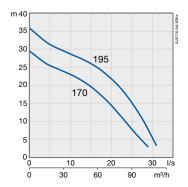
Motor rating P2 11.8 kW, 3~

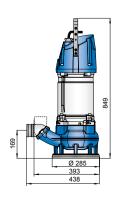
Voltage (V) 230 / 400 / 500-550 / 690 / 1000 Full load (A) 37.4 / 21.5 / 17.2 / 12.5 / 8.6

Speed 2920 rpm Free passage 48 x 60 mm Discharge connections Hose 2½", 3", 4

Hose 2½", 3", 4" Thread G/BSP 2½", 3", 4"

Weight (excl. cable) 80 kg Motor protection Built-in Electric cable 20 m





<sup>\*</sup> Option: AquaTronic, built-in electronic pump control.

#### AquaTronic and Other Supervision Options

Submersible dewatering pumps XJ, XJC and XJS have several options for electronic supervision that make them even more reliable and easy to use. Most important is the AquaTronic unit, which ensures correct motor rotation every time.

#### AquaTronic

The AquaTronic unit replaces the built-in contactor in the basic pump configurations and ensures that the motor always rotates correctly, no matter how the phases are connected. Key benefits of the AquaTronic unit include:

- Correction of motor rotation if phases are improperly connected
- Run mode
- Integrated start equipment (direct or soft start depending on pump model)
- Motor protection against high temperature, high amperage and missing phase

If the pump is also equipped with an optional Level sensor, AquaTronic provides:

- Precise level control
- Protection against dry running

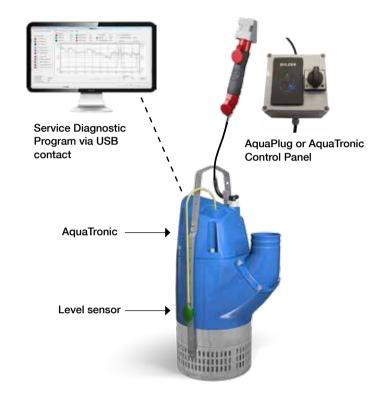
#### AquaTronic Service Diagnostic Program

Connecting a PC to the AquaTronic unit via USB cable provides access to the Service Diagnostic Program, which offers:

- Pump status data (temp, voltage, moisture, etc.)
- Pump operating history
- Pump failure history
- Pump service and maintenance history
- Digital manual and spare parts documentation

#### AquaPlug and AquaTronic Control Panel

AquaPlug and AquaTronic Control Panel are options that combine with AquaTronic to provide additional alarm and start/stop functions, as well as indications for important parameters. AquaPlug is incorporated into the power line via 16A or 32A sockets.



#### **Overview of Electronic Supervision Features**

The table below shows the range of features available when the AquaTronic unit and other electronic supervision options are used with the submersible dewatering pumps XJ, XJC and XJS.

Electronic supervision feature	Basic pump configuration with contactor	Pump with AquaTronic	Pump with AquaTronic + Level Sensor	Pump with AquaTronic + AquaPlug/ AquaTronic Control Panel	Pump with AquaTronic + AquaPlug/ AquaTronic Control Panel + Level Sensor
Run mode	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Integrated start equipment	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Automatic correction of rotation		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Motor protection - high temp	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Motor protection - high amp		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Protection against missing phase		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Level control			$\checkmark$		$\checkmark$
Protection against dry running			$\checkmark$		$\checkmark$
Automatic restart			$\checkmark$		$\checkmark$
Stop mode				$\checkmark$	$\checkmark$
E-mode (automatic stop/run)					✓
Indication of water in oil				$\checkmark$	$\checkmark$
Indication of low motor insulation				$\checkmark$	$\checkmark$
Indication of high/ low voltage				$\checkmark\checkmark$	$\checkmark\checkmark$
Indication of high temp				$\checkmark\checkmark$	$\checkmark\checkmark$
Indication of high amp				$\checkmark\checkmark$	$\checkmark\checkmark$
Indication of phase imbalance				$\checkmark\checkmark$	$\checkmark\checkmark$
USB cable connection		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

✓ ✓ = Fault indication when pump is automatically stopped to protect the motor

#### **Pump Options and Accessories**

#### AQUATRONIC UNIT FOR CORRECT MOTOR ROTATION

Our built-in AquaTronic unit integrates electronic intelligence into the pump, ensuring correct motor rotation by automatically adjusting for incorrect phase order. It also protects the motor by stopping the pump in the event of over-amperage, overheating, low or high voltage or missing phase. Another feature of the AquaTronic unit is the internal software that allows pump performance and service diagnostics data to be viewed on a PC via USB link, enabling accurate evaluation of service and maintenance needs. The workshop manual and spare parts list, readily available in the AquaTronic unit, can be viewed via the link as well. The AquaTronic unit must be ordered when ordering the pump. Retrofitting is not possible.



#### AQUAPLUG AND AQUATRONIC CONTROL PANEL

AquaPlug and AquaTronic Control Panel are options that combine with AquaTronic to provide additional alarm and start/stop functions, as well as indications for important parameters. AquaPlug is incorporated into the power line via 16A or 32A sockets.



#### LEVEL SENSOR FOR PRECISE AND COST EFFECTIVE WATER LEVEL CONTROL

Together with AquaTronic, the level sensor provides precise and cost-effective water level control, and helps lower power consumption.



#### SOFTDRIVE FOR COST EFFECTIVE OPERATION

Sulzer offers a built-in SoftDrive concept on the J 205 pumps. It reduces starting current dramatically and provides smooth operation for both the power net and pump equipment. The pump can be started with a smaller-sized generator compared to a standard pump started directly on-line.



#### QUICK AND EASY INSTALLATION WITH FLOATATION RING

Sulzer offers a solution for pumps up to 45 kg. The ring is easy to install and can be used with dewatering pumps J 12-15, XJ 25-40.



#### FLOATATION SYSTEM TO PREVENT UNNECESSARY WEAR

A modular flotation system is available, covering pumps from 59 to 600 kg. The modular floatation system is easy to build and used with dewatering pumps XJ 50-110, XJS 50-110, J 205-604.



#### PROTECTIVE BELTS FOR MORE DURABLE OPERATION

Sulzer submersible dewatering pumps can easily be fitted with zinc anode belts providing protection against galvanic corrosion. The cast parts of the pump can also be protectively coated, ensuring trouble-free operation when pumping salty or brackish water.



#### POLYURETHANE FOR PROLONGED DRAINAGE PUMP LIFE

Sulzer offers wear rings in polyurethane, which increases resistance when pumping fine sand and other abrasive mediums. Polyurethane-coated wear rings are available as an option on J 205-604.



#### SERIES CONNECTIONS FOR PUMPING HIGH HEADS

With minimal effort, the standard Sulzer drainage pumps can be rebuilt to function in series for high head applications.



#### BOTTOM SUCTION ADAPTER FOR TOTAL WATER REMOVAL

On pumps J 12-15 and J 24, the standard bottom plate may be replaced by a bottom suction adapter. A basement floor or a tank can be pumped practically dry with this adapter.



#### REPAIR KITS THAT SAVE TIME AND MONEY

Sulzer offers repair kits for all submersible dewatering pumps. The repair kits include common parts required for a typical repair. Our modular pump design makes it possible to repair all drainage and sludge pumps with just a few repair kits.



# www.sulzer.com E10361 en 2.2016 (3,000), Copyright © Sulzer Ltd 2016 This brochure is a general product presentation. It does not provide a warranty or guarantee of any kind. Please, contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.



# Engine solutions

Reliable, robust engines for your equipment





# AllightSykes is the well-known driving force behind the growth of one of the world's best-regarded engine brands across Australia.

As one of the world's leading suppliers of off-highway diesel and gas engines in the 4 – 2000 kW market, Perkins engines are trusted by more than 1,000 manufacturers in the agricultural, construction, materials handling, electrical power generation and marine markets. We are tremendously proud to be Australia's exclusive distributor of Perkins loose engines.

Perkins engines are tailored precisely to meet customers' requirements, that's why they are at the core of many of AllightSykes products, improving our clients performance and productivity.

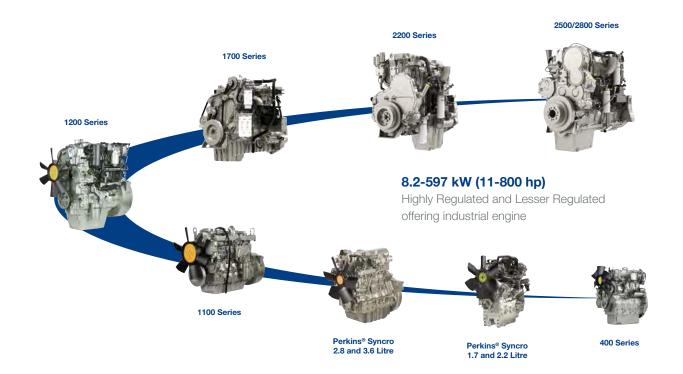


# Perkins Industrial Engines

Perkins has been building diesel engines since 1932, and have decades of experience in the industrial engine applications. Through AllightSykes we are able to offer the entire range of Perkins industrial engines.

Whether it is moving snow, earth, rocks, water, air or containers, we have an engine to meet your needs, ranging from the ultra-compact 400 Series to our powerful 2800 Series.

Every engine is optimised to deliver the most appropriate power at each nodal point, and all come with a choice of options and configurations to simplify machine installation and integration.



#### Ratings definitions

Perkins Engines are available in a number of rating categories depending on power requirement.

#### IND-A (Continuous)

Continuous heavy-duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

For service where power and/or speed are cyclic (time at full load not to exceed 80%).

#### IND-C (Intermittent)

Is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

#### IND-D

For service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

#### IND-

For service where maximum power is required for a short time for initial starting or sudden overload.

For emergency service where standard power is unavailable (time at full load not to exceed 5% of the duty cycle).

#### **Overview**

The ability to power your machine line-up with one engine supplier is truly achievable with Perkins. 400 Series offers 6 displacements 0.5L, 0.7L, 1.1L, 1.5, 1.7L and 2.2L.

#### **Power**

8.2-49.3 kW (10.7-66 hp).

#### **Emissions**

Designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.



#### **Applications**











#### A lifetime of low cost

Long Service Intervals reducing total operating cost – 500 hour and standard, 1000hr as option on some products.

#### Proven quality and reliability

- Solid core product with documented examples of engines running extremely high hours (e.g. >62K hours, UK 2018.
- In-line fuel injection system robust to fuel quality issues.

#### Low cost of installation

- SAE 4 and 5 flywheel housings.
- SAE 6.5 and 7.5 flywheels, in both high and low inertia.
- Choice of fans and fan speed ratios to optimise noise and cooling pack design.

Litres	Model	Cylinders	Aspiration	Power kW (hp)	Rated speed rpm	Maximum torque Nm (lb ft)	Maximum torque speed rpm	Rating type	Available as a power unit	Aftertreatment
0.51	402D-05	2	NA	8.2 (11) – 10.2 (13.7)	2800 – 3600	30 (22)	2000 – 2100	С	N	-
0.76	403D-07	3	NA	13.2 (17.7) - 15.3 (21)	3000 – 3600	45 (33)	2200	С	N	-
1.1	403D-11	3	NA	14.7 (19.7) – 21 (28)	2200 – 3400	67 (49) – 70 (52)	1800 – 2300	С	Υ	-
1.5	403D-15	3	Т	25 (34)	2400	96 (71)	1800	С	Υ	-
1.7	403D-17	3	NA	18.4 (25)	2200 – 2800	92 (68) - 85 (63)	1600 – 1800	0	N	-
1.7	403J-17T	3	Т	17.7 (24) – 18.4 (25)	2200 – 2800	100 (74) – 90 (66)	1600 – 1800	С	N	-
	404D-22		NA	31 (42) – 38 (51)	2200 – 3000	143 (105)	1800			-
2.2	404D-22T		Т	32 (43) – 46 (62)	2800 – 3000	154 (114) – 189 (139)	1800	С	Υ	-
	404D-22TA		TA	40 (54) – 49 (66)	2800	170 (125) – 208 (153)	1800			-

# Syncro Series

#### 2.8L and 3.6L Engine Series

#### **Overview**

The ability to power your machine line-up with one engine supplier is truly achievable with Perkins. Perkins have introduced a platform of 2.8 and 3.6l industrial engines for your compact equipment.

#### **Power**

50-100 kW (70-134 hp).

#### **Emissions**

Electronic turbocharged, designed to meet EU Stage IIIA/U.S. EPA Tier 3 and Tier 4f/Stage V emissions standards.

#### **Applications**











#### Enhanced performance

The 4 cylinder 2.8 litre 904J-E28TA provides a maximum of 55 kW (74 hp) with torque of up to 325 Nm. The 3.6 litre 904J-E36TA option delivers 100 kW (134 hp) and up to 500 Nm of torque.

The high power and torque density will give OEMs who are looking to move to smaller, more compact engines.

#### Extreme reliability

As an off-highway engine specialist, we validate the technologies we use in our engines for heavy duty work in harsh environments.

#### Low cost of installation

Ease of machine installation through compact, flexible & quiet engine systems, with application engineering support.

Litres	Model	Cylinders	Aspiration	Power kW (hp)	Rated speed rpm	Maximum torque Nm (lb ft)	Maximum torque speed rpm	Rating type	Available as a power unit	Aftertreatment			
				45 (60)	2200 – 2400	260 (192)	1600		N	DOC			
				45 (60)	2200 – 2400	260 (192)	1600		N	DOC+DPF			
			_	55 (74)	2200 – 2400	265 (195)	1600	0	N	DOC			
2.8	2.8 Perkins Syncro 2.8 4	4	Т	55 (74)	2200 – 2400	265 (195)	1600	С	N	DOC+DPF			
				55 (74)	2200 – 2400	300 (221)	1600		N	DOC			
				55 (74)	2200 – 2400	300 (221)	1600		N	DOC+DPF			
			TA	55 (74)	2200 – 2400	380 (280)	1380	С	N	DOC+DPF			
							55 (74)	2200 – 2400	424 (313)	1200		N	DOC+DPF
						70 (94)	2200 – 2400	450 (332)	1500	С	N		
3.6	Perkins Syncro 3.6	4	TA	90 (121)	2000 – 2400	500 (369)	1500		N	DOC+DPF +SCR			
	.,			95 (127)	2000 – 2400	530 (391)	1500	_	N				
				100 (134)	2000 – 2200	550 (406)	1500	D	N				

#### **Overview**

A compact design for medium-sized power generation, the 1100 Series engines are at the appropriate technology level for compliant and non-emissions compliant territories. We can offer a range of engines in 3.3L, 4.4L, 6.6L and 7L in 3, 4 and 6 cylinder configuration.

#### **Power**

30-200 kVA (28-174 kWm).

#### **Emissions**

Electronic turbocharged aspirated, designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.



#### **Applications**

















#### Component commonality

Rationalised inventory, streamlined service training and consistent serviceability stem from 1100 Series having a single platform.

#### Compact design

A compact design for medium-sized power generation.

Litres	Model	Cylinders	Aspiration	Power kW (hp)	Rated speed rpm	Maximum torque Nm (lb ft)	Maximum torque speed rpm	Rating type	Available as a power unit	Aftertreatment
3.3	1103D-33	3	NA	37 (50)	2200	189 (139)	1400	С	N	-
3.3	1103D-33TA	3	TA	58 (78)	2200	310 (229)	1400	C	IN	-
	1104A-44		NA	64 (86)	2200	293 (216)	1400		N	-
	1104A-44T		Т	81 (109)	2200	404 (298)	1400		N	-
	1104C-44		NA	64 (86)	2400	302 (223)	1400		Υ	-
	1104C-44T		Т	75 (101)	2300	408 (301)	1400		Υ	-
4.4	1104C-44TA	4	TA	97 (130)	2200	500 (369)	1400	С	Υ	-
4.4	1104D-44	4	NA	56 (75)	2200	265 (195)	1700	C	N	-
	1104D-44T		Т	75 (101)	2200	392 (289)	1400		Υ	-
	1104D-44TA		TA	83 (111)	2200	418 (308)	1400		Υ	-
	1104D-E44T		Т	75 (101)	2200	420 (310)	1400		N	-
	1104D-E44TA		TA	75 (101) – 106 (142)	2200	441 (325) – 558 (412)	1400		Υ	-
	1106C-70TA		TA	112 (150) – 162 (217)	1950 – 2200	687 (507) – 900 (664)	1200 – 1400			-
7	1106D-70TA	6	TA	112 (150)	2200	672 (496)	1100	С	Υ	-
	1106D-E70TA		TA	117 (157) – 205 (275)	2200 – 2500	706 (521) – 1050 (774)	1400			-

#### **Overview**

Responsive, high-productivity 4- and 6-cylinder engines complying with the toughest global emissions legislation, offering you flexible features and low ownership costs.

#### **Power**

61.5-225 kW (82.5-301.7 hp).

#### **Emissions**

Compliant with EU Stage IIIB / Stage IV, EPA Tier 4 Interim / Tier 4 Final.

#### **Applications**











#### The performance you need – no compromises

The 1200 Series tackle the emissions challenge head on and it gives you improved productivity levels and fuel consumption compared to previous generation Tier 3 engines.

#### Tailored technology

The 1200 Series has been created with hundreds of variables that make it easy for our engine to fit your applications. Its hook-up points are common to our previous generation 1100 Series so you can easily transition from Tier 3 to Tier 4.

#### Low cost of ownership

With improved productivity and fuel consumption comes lower ownership costs. Factor in a standard two-year warranty and great value Extended Service Contracts – and the 1200 Series is as cost-effective as it is powerful.

Litres	Model	Cylinders	Aspiration	Power kW (hp)	Rated speed rpm	Maximum torque Nm (lb ft)	Maximum torque speed rpm	Rating type	Available as a power unit	Aftertreatment					
				74 (99)	2200	450 (332)	1400	С							
	1204F-E44TA		TA	86 (115) – 93 (125)	2200	500 (369) – 530 (391)	1400	В		DOC+SCR					
				102 (137) – 110 (148)	2200	560 (413)	1400	С							
4.4	1204F-E44TTA	4	TTA	105 (141) – 112 (150)	2200	630 (465) - 650 (479)	1400	В	Υ	DOC+SCR or					
4.4	1204F-E4411A	4	4	4	4	4	4	HA	117 (157) – 129 (173)	2200	683 (504) – 750 (553)	1400			DOC+DPF+SCR
	1204J-E44TA		J-E44TA	TA	82 (110) – 110 (148)	2000 – 2200	560 (413)	1400	С						
	1004   544774			TTA	105 (141) – 140 (188)	2000 – 2200	750 (553) – 825 (609)	1400							
	1204J-E4411A						150 (201)	2200	825 (609)	1400	D				
	1206F-E70TA		TA	116 (156) – 129 (173)	2200	755 (557) – 842 (621)	1400	В	N						
	1200F-E701A			IA	151 (202)	2200	870 (642)	1400	С		DOC+DPF+SCR				
	1000F F70TTA	1206F-E70TTA		TT4	151 (202) – 168 (225)	2200	922 (680) – 1028 (758)	1400	В	Y					
7	1200F-E/011A	6	TTA	186 (249) – 225 (302)	2200	1142 (842) – 1274 (940)	1400		'						
	1206J-E70TA		TA	129 (173) – 151 (202)	1800 – 2200	842 (621) – 870 (642)	1400	С	N						
	1206J-E70TTA		TTA	151 (202) – 225 (302)	1800 – 2200	983 (725) – 1282 (946)	1400		Y						
	12000-E/011A		TIA	239 (320)	1800	1268 (935)	1400	D							

#### **Overview**

The ability to power your machine line-up with one engine supplier is truly achievable with Perkins. We have introduced a platform of 9–18 litre industrial engines that completes our market-leading industrial power range.

#### **Power**

230-470 kW (385-630 hp).

#### **Emissions**

Electronic turbocharged aspirated, designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.

#### **Applications**









#### A Lifetime Of Low Cost

We have designed the Perkins 2000 range with optimised fuel consumption in mind, matching it to the operating cycles of a wide range of equipment and applications. Low cost maintenance is achieved through 500 hour oil change intervals.

#### Dependable power

The Perkins 2000 range is suitable for the toughest operating conditions. With proven core engine designs you can be assured of many hours of productive life.

#### Low cost of installation

Features built into the 2000 Range provide opportunities to reduce the cost of installation into your machine. With a compact package size of the engine, supported by multiple options available to support optimisation for your application.

Litres	Model	Cylinders	Aspiration	Power kW (hp)	Rated speed rpm	Maximum torque Nm (lb ft)	Maximum torque speed rpm	Rating type	Available as a power unit	Aftertreatment										
				287 (385)	1800 – 2100	1760 (1298)	1400	Α		-										
				310 (416)	1800 – 2100	1896 (1398)	1400	В		-										
12.5	2206D-E13TA	6	TA	328 (440)	1800 – 2100	2011 (1483)	1400	С	Υ	-										
				354 (475)	1800 – 2100	2095 (1545)	1400	D		-										
				388 (520)	1800 – 2100	2215 (1634)	1400	E		-										
		6		328 (440)	1800 – 2100	2012 (1484)	1400	Α		-										
				354 (475)	1800 – 2100	2169 (1600)	1400	В		-										
15.2	2506D-E15TA		6	6	6	6	TA	403 (540)	1800 – 2100	2468 (1820)	1400	С	Υ	-						
															433 (581)	1800 – 2100	2649 (1954)	1400	D	
							444 (595)	1800 – 2100	2717 (2004)	1400	Е		-							
			TA	429 (575)	1800 – 2100	2627 (1938)	1400	Α		-										
	2806D-E18TA				448 (601)	1800 – 2100	2742 (2022)	1400	В		-									
18.1		6		470 (630)	1800 – 2100	2769 (2042)	1400	0	Y	-										
10.1		6		522 (700)	1800 – 2100	3201 (2361)	1400	С	Ť	-										
	2806D-E18TTA						A	TTA	571 (766)	1800 – 2100	3495 (2578)	1400	D		-					
				597 (801)	1800 – 2100	3655 (2696)	1400	E		-										



# Perkins Electric Power

Perkins is amongst very few engine suppliers that have a continuous product range covering 6-2000 kW, meeting global power requirements. The range includes both gas and diesel engines, this is offered only by very few engine competitors.

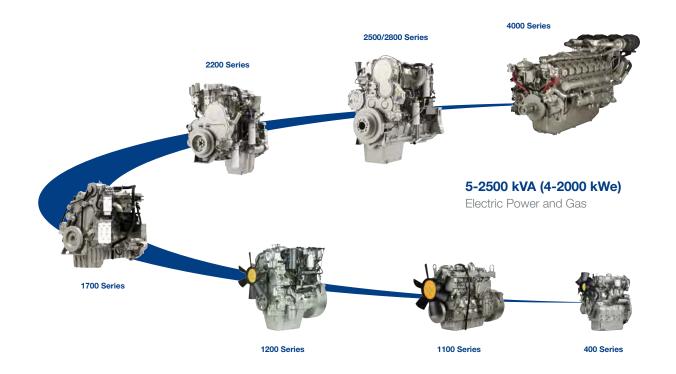
Designed to provide dependable, reliable and cost effective power for continuous and emergency use, the Perkins electric power product range provides prime power from 6-2250 kW with standby power from 33-2500 kW.

With 87 models spanning 6-2500 kW, the range can be used in both emissions regulated and unregulated territories.

The Perkins electric power range has been designed to provide instant response with thousands of hours

of dependable running in harsh environments and strenuous conditions. In the last five years, we have sold 600,000 engines for electric power installations worldwide providing 141,000 MW of power.

The global manufacturing footprint and supply from the United Kingdom (UK), United States (USA), India (from 2015), China and Brazil, provides more customer choice and enables us to align efficiently with customer lead times.



#### **Overview**

Reliable and cost-effective way of meeting your power generation needs. 400 Series offers 6 displacements 0.5L, 0.7L, 1.1L, 1.5L, 1.7L and 2.2L in 2, 3 and 4 Cylinder Configuration.

#### **Power**

8-27 kVA (7.7-25 kWm).

#### **Emissions**

Designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.

#### **Applications**







#### A lifetime of low cost

Long Service Intervals reducing total operating cost-500 hour and standard, 1000hr as option on some products.

#### Proven quality and reliability

- Solid core product with documented examples of engines running extremely high hours (e.g. >62K hours, UK 2018.
- In-line fuel injection system robust to fuel quality issues in comparison with rotary or common rail technology.
- All 3 factories (UK, China, USA) delivered the highest "platinum" quality performance throughout 2017\*.

#### Low cost of installation

- SAE 4 and 5 flywheel housings.
- SAE 6.5 and 7.5 flywheels, in both high and low inertia.
- Choice of fans and fan speed ratios to optimise noise and cooling pack design.
- · Air inlet and outlet choices for simple hose routing.
- Choice of alternators and starter motors.

50 Hz		Emissions Certification	Net Engine Output				1500/1800					
			Baseload	Prime	Standby	Baseload		Prime		Standby		rev/min
Litres	Model		kWm	kWm	kWm	kWe	kVA	kWe	kVA	kWe	kVA	switchable
3000 rpm	(8 kVA to 36 kVA)						,					
1.1	403D-11G	EU Stage IIIA	-	17	18	-	-	14	18	16	20	-
1.5	403D-15G	EU Stage IIIA	-	18	20	-	-	18	22	20	24	-
2.2	404D-22G2	EU Stage IIIA	-	30	33	-	-	27	33	29	36	-
1800 rpm	ı (3.9 kWe)											
0.5	402F-05G*	Tier 4 Final	-	3.3	3.6	-	-	3	4	3.1	4	-
	402D-05G*	Tier 4 Final **	-	4.5	5.0	-	-	4	5	4.3	5	-
1500 rpm	(9 kVA to 750 kVA)											
0.7	403D-07G*	N/A <19 kW	-	5.4	5.9	-	-	4.5	5.6	4.9	6.1	-
1.1	403D-11G	N/A <19 kW	-	8	9	-	-	7	9	8	10	-
1.5	403D-15G	N/A <19 kW	-	12	13	-	-	10	13	11	14	-
2.2	404D-22G	EU Stage IIIA	-	18	20	-	-	16	20	18	22	-
	404D-22TG	EU Stage IIIA	-	25	27	-	-	22	27	24	30	•

- Available as Electro Unit only.
- Switchable engines must be requested at point of order, please consult with your local Perkins representative.

  Engineering targets pending final confirmation, please consult with your local Perkins representative for the latest information.

#### **Overview**

A compact design for medium-sized power generation, the 1100 Series engines are at the appropriate technology level for compliant and non-emissions compliant territories. This range of electric power engines comes in 3.3L, 4.4L, 6.6L and 7L in 3, 4 and 6 cylinder configurations.

#### **Power**

30-200 kVA (28-174 kWm).

#### **Emissions**

Electronic turbocharged aspirated, designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.

#### **Applications**





#### Component commonality

Rationalised inventory, streamlined service training and consistent serviceability stem from 1100 Series having a single platform. Within the 1100D, pistons, con rods and valve gear become 'repeated' components and common front and rear.

#### Compact design

A compact design for medium-sized power generation.

#### Low cost of installation

The 1100D has the same variety of hook-up points and the same size of envelope as its predecessor, the 1100C. This facilitates a seamless transition for manufacturers during the emission changeover process.

50 Hz		Emissions Certification	Net Engine Output				- 1500/1800					
			Baseload Prime		Standby	Baseload		Prime		Standby		rev/min
Litres	Model		kWm	kWm	kWm	kWe	kVA	kWe	kVA	kWe	kVA	switchable
1500 rpm (9 kVA to 750 kVA)												
3.3	1103A-33G	-	-	28	31	-	-	24	30	26	33	-
	1103A-33TG1	-	-	42	46	-	-	36	45	40	50	•
	1103A-33TG2	-	-	54	59	-	-	48	60	53	66	-
4.4	1104A-44TG2	-	-	72	79	-	-	64	80	70	88	<b>+=</b>
	1104C-44TAG1	-	-	72	79	-	-	64	80	71	89	
	1104C-44TAG2	-	-	90	100	-	-	81	101	90	112	
	1104D-44TG2	EU Stage IIIA	-	54	59	-	-	48	60	53	66	
	1104D-44TG3	EU Stage IIIA	-	54	59	-	-	48	60	53	66	-
	1104D-E44TAG1	EU Stage IIIA	-	74	81	-	-	64	80	70	89	•
	1104D-E44TAG2	EU Stage IIIA	-	91	101	-	-	80	100	88	110	•
7.0	1106D-E70TAG2	EU Stage IIIA	-	136	143	-	-	114	142	126	157	•
	1106D-E70TAG3	EU Stage IIIA	-	141	156	-	-	120	150	138	172	•
	1106D-E70TAG4	EU Stage IIIA	-	165	182	-	-	144	180	160	200	•
	1106A-70TG1	-	-	118	131	-	-	108	135	120	150	-
	1106A-70TAG2	-	-	131	144	-	-	120	150	132	165	
	1106A-70TAG3	-	-	158	175	-	-	144	180	160	200	•
	1106A-70TAG4	-	-	174	191	-	-	160	200	176	220	-

- Switchable engines must be requested at point of order, please consult with your local Perkins representative.
- Can be switched between 1500 and 1800 rpm

# 1200 Series

#### **Overview**

Responsive, high-productivity 4- and 6-cylinder engines complying with the toughest global emissions legislation, offering you flexible features and low ownership costs.

#### Power

200-250 kVA (175-217 kWm).

#### **Emissions**

Compliant with EU Stage IIIB / Stage IV, EPA Tier 4 Interim / Tier 4 Final.

### **Applications**





# The performance you need – no compromises

The 1200 Series tackle the emissions challenge head on, but and it gives you improved productivity levels and fuel consumption compared to previous generation Tier 3 engines.

# Tailored technology

Perkins have created the 1200 Series with hundreds of variables that make it easy for our engine to fit your applications. Its hook-up points are common to our previous generation 1100 Series so you can easily transition from Tier 3 to Tier 4, while a simple, compact aftertreatment can be flexibly fitted.

# Low cost of ownership

With improved productivity and fuel consumption comes lower ownership costs Factor in a standard two-year warranty and great value Extended Service Contracts – and the 1200 Series is as cost-effective as it is powerful.

50 Hz			Net Engine Output				1500/1800					
		Emissions Certification	Baseload	Prime	Standby	Baseload		Prime		Standby		rev/min
Litres	Model		kWm	kWm	kWm	kWe	kVA	kWe	kVA	kWe	kVA	switchable
1500 rpm (9 kVA to 750 kVA)												
7.0	1206A-E70TTAG1	-	-	177	195	-	-	160	200	180	225	•
	1206A-E70TTAG2	-	-	195	217	-	-	184	230	200	250	•
	1206A-E70TTAG3	-	-	217	238	-	-	200	250	220	275	•
	1206D-E70TTAG1	EU Stage IIIA	-	175	192	-	-	160	200	176	220	•
	1206D-E70TTAG2	EU Stage IIIA	-	201	217	-	-	184	230	200	250	•
	1206D-E70TTAG3	EU Stage IIIA	-	217	238	-	-	200	250	220	275	•

■ Switchable engines must be requested at point of order, please consult with your local Perkins representative.

# 2000 Series

#### **Overview**

The ability to power your machine line-up with one engine supplier is truly achievable with Perkins. We have introduced a platform of 9-18 litre industrial engines that completes our market-leading industrial power range.

#### **Power**

305-652 kW (320-600 kWe).

#### **Emissions**

Electronic turbocharged aspirated, designed to meet EU Stage IIIA ,EPA Tier 3 (ESE),India CPCBII.

# **Applications**





## A lifetime of low cost

We have designed the Perkins 2000 range with optimised fuel consumption in mind, matching it to the operating cycles of a wide range of equipment and applications. Low cost maintenance is achieved through 500 hour oil change intervals.

## Dependable power

The Perkins 2000 range is suitable for the toughest operating condition and with proven core engine designs. You can be assured of many hours of productive life.

#### Low cost of installation

With a compact package size of the engine, supported by multiple options available to support optimisation for your application.

50 Hz			Net Engine Output				- 1500/1800					
		Emissions Certification	Baseload Prime Standby		Baseload		Prime		Standby		rev/min	
Litres	Model		kWm	kWm	kWm	kWe	kVA	kWe	kVA	kWe	kVA	switchable
1500 rpm (9 kVA to 750 kVA)												
12.5	2206D-E13TAG3	China Stage III	-	349	392	-	-	320	400	360	450	-
		EU Stage IIIA	-	349	392	-	-	320	400	360	450	-
		India CPCBII	-	349	-	-	-	320	400	-	-	-
15.2	2506D-E15TAG2	China Stage III	-	435	478	-	-	400	500	440	550	-
		EU Stage IIIA	-	435	478	-	-	400	500	440	550	-
		India CPCBII	-	435	-	-	-	400	500	-	-	-
18.1	2806D-E18TAG1A	China Stage III	-	522	574	-	-	480	625	528	660	-
		India CPCBII	-	522	574	-	-	480	625	528	660	-

# 4000 Series

#### **Overview**

The engine Choice for the power generation market. The 4000 Series is available in 23 to 61 lite with In-line 6 and 8 cylinder / Vee 12 and 16 cylinder configuration.

#### **Power**

746-2250 kVA (507-1875 kWm).

#### **Emissions**

Electronic turbocharged aspirated, designed to meet EU Stage IIIA/U.S. EPA Tier 3 equivalent emissions standards.

# **Applications**





# High power to weight ratio

The 4000 Series engines are noted for achieving high power outputs per cylinder and offering high power to weight ratios. Their compact size and low weight reduces shipping costs and allows for easier installation. The 4000 Series offers considerably reduced maintenance downtime and lower parts costs.

# Ease of servicing

The 4000 Series provides excellent service access and ease of maintenance. The individual cylinder heads can be easily removed. The unit fuel injection system considerably aids reliability and maintains overall engine efficiency while providing an easily serviced system.

# Proven power

The 4000 Series are manufactured to the highest quality standards. Advanced computer predictive techniques and finite element analysis were extensively used, allowing Perkins engineers to optimise component design, to achieve maximum reliability and component life.

50 Hz			Net Engine Output				1500/1800						
		Emissions Certification	Baseload	Prime	Standby	Baseload		Prime		Standby		rev/min	
Litres	Model		kWm	kWm	kWm	kWe	kVA	kWe	kVA	kWe	kVA	switchable	
1500 rpm (9 kVA to 750 kVA)													
23.0	4006D-E23TAG1	India CPCBII	507 *	634 *	698 *	-	-	600	750	660	825	-	
30.0	4008D-E30TAG1	India CPCBII	546 *	682 *	758 *	-	-	648	810	720	900	-	
	4008D-E30TAG2	India CPCBII	628 *	763 *	840 *	-	-	728	910	800	1000	-	

<sup>\*</sup> Engineering targets pending final confirmation, please consult with your local Perkins representative for the latest information.

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**ALLIGHTSYKES** 

# Unrivalled expertise

in the fields of:



**LIGHT TOWERS** 



**PUMPS** 



**ENGINES** 



**GENERATORS** 



# Global reach with local expertise.

AllightSykes is a market leader in the design, manufacturing and distribution of lighting, dewatering and power solutions globally, and the driving force behind FG Wilson generators and Perkins engines in Australia and New Zealand. With an active history stretching back 30 years as a well-known brand, we pride ourselves on providing robust, reliable machinery for demanding conditions, with built-in features that make ownership and operation simple and cost-effective for customers.

# Helping you to get the job done.

With every product supported by our dedicated, highly-trained Service teams, we've proven to optimise productivity, slash project downtime and improve workplace safety.

# Reliable product support.

We understand that you need to be able to rely on fast, fuss-free genuine parts and service and warranty back-up long after your pump has started doing its job. That's why our genuine Parts and Product Support teams are on hand to make sure you can access qualified, professional and highly skilled technicians when you need them most.

# Looking for a tailored solution?

Our in-house engineering team can custom-design and manufacture bespoke equipment to match any specification supplied. Discover out how AllightSykes can offer you a tailored solution by visiting allightsykes.com.



# SERVICE AND SUPPORT

## All brands. All models. One team.

We understand that our clients rely on fast, fuss-free genuine parts, service and warranty backup. That's why our customer support team is on-hand to make sure you can access qualified, professional and highly skilled technicians when you need them most.

We back our capability with our 24/7 Service availability, as we understand that equipment downtime can be a significant detriment to productivity and efficiency, as well as the quality of safety in a work site, and the quality of care for the environment.

#### **OUR SERVICE OFFERING**

- Country-wide services and regional support
- 24/7 mobile services
- Equipped workshops
- Genuine parts
- Installation and commissioning
- Routine maintenance
- Warranty support
- Emergency repair

#### **ADDITIONAL SERVICES**

We can support your business with additional services, such as:

- Load bank testing
- 24/7 site refuelling
- · Battery condition testing and monitoring
- Oil testing
- Fuel testina
- Coolant testing

# People you know. Brands you trust.

The AllightSykes Service and Support department offers the most comprehensive maintenance and service capability for our family of products. We proudly have the expertise to undertake the support of these product and of most other heavy machinery, particularly in diesel-powered equipment, that is complementary within your fleet of assets.







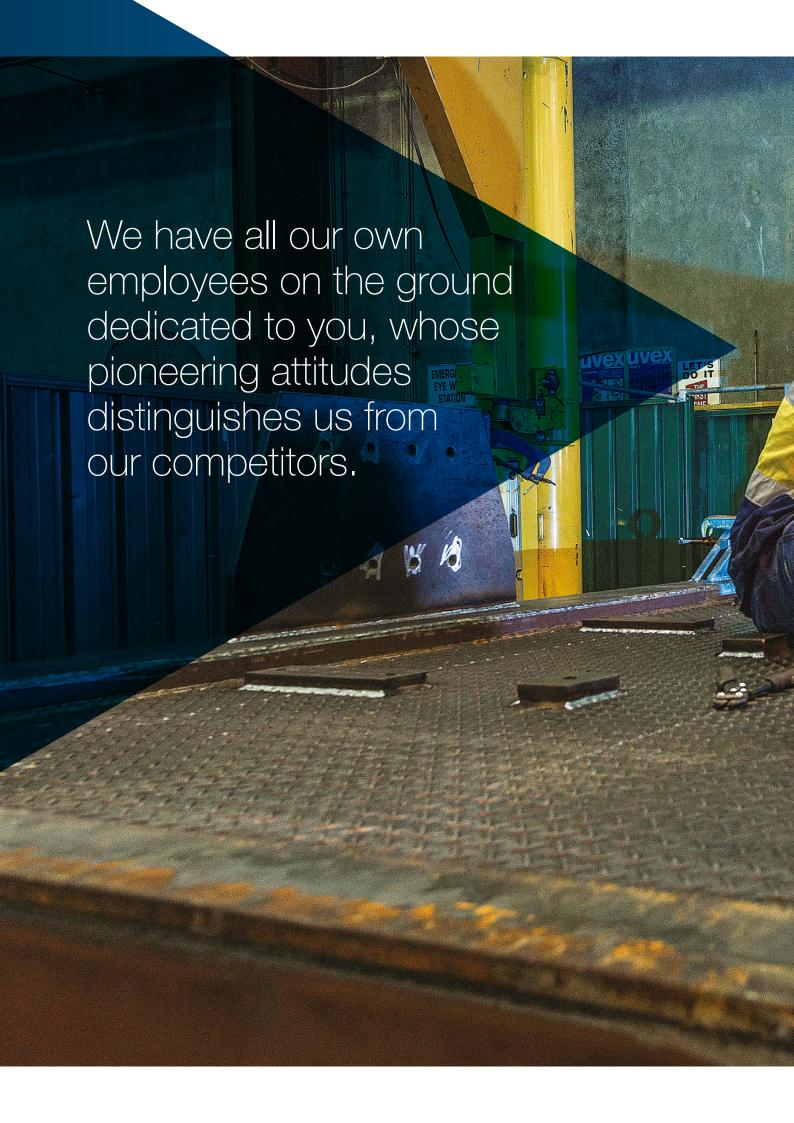


# Our experience.

We have over 25 years' experience in the industry as a well-known brand, building reliable, quality products with the highest level of service.

# Need to know more?

If brochures aren't your thing, mouse over to www.allightsykes.com. You'll be able to get hold of relevant general information, specification sheets, news and thought leadership articles.





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