

# WEDA Submersible pumps

WEDA electric submersible pumps and accessories are designed for an extensive range of dewatering applications, across multiple industries.

They provide the performance, reliability and ease of use you need. WEDA pumps feature a built-in starter and motor protection system along with optional automatic level control. Starting with the WEDA D70 more and more WEDA pump models are updated with patented Wear Deflector Technology that provides state-of-theart wear resistance as well as quick readjustment to asnew performance.

At Atlas Copco, we understand pumps, their applications and, most importantly, the people using them. We have a complete range of high-quality and lightweight electric submersible pumps designed specifically for drainage, sludge and slurry pumping applications.

WEDA pumps are made for durability. The unique cartridge sealing system and modular design make them among the most flexible pumps on the market. Easy to use and maintain, WEDA pumps promise optimal performance. The WEDA seal system is designed to provide the optimum maintenance solution and can be easily fitted at the job site. Repairability of our products is built-in right from the design stage. This minimizes down-time and reduces environmental footprint, a testament to our pledge to sustainability.













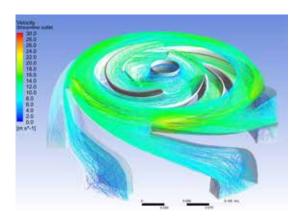


### **Wear Deflector Technology**

WEDA submersible drainage pumps are equipped with a revolutionary hydraulic design that minimizes wear and keeps performance up, even under the toughest conditions.

The patented Wear Deflector Technology consists of several aspects that combine to provide unrivaled resistance to wear by abrasive particles in the pumped media:

	D70	D80	D81	D91	D95
State-of-the-art hydraulic design techniques	<b>⊘</b>	<b>Ø</b>	<b>⊘</b>	<b>⊘</b>	<b>⊘</b>
State-of-the-art manufacturing techniques	<b>⊘</b>	$\odot$	<b>Ø</b>	<b>⊘</b>	$\oslash$
High chrome wear resistant impeller	<b>⊘</b>	$\odot$	<b>⊘</b>	Ø	$\oslash$
Closed impeller with auxiliary vanes	Ø H	H&SH ⊘	Ø H	H	H&SH ⊘
Polyurethane upper diffuser	<b>⊘</b>		<b>⊘</b>	<b>⊘</b>	
Lower difuser with wear deflector vanes	H		H	H	







### WEDA pump for every dewatering application

We understand the dewatering needs of our customers, which vary with location and application. Accordingly our submersible range is developed for drainage (D), sludge (S) and slurry (L) applications.

**DRAINAGE PUMPS (WEDA D)** 

**SLUDGE PUMPS (WEDA S)** 

**SLURRY PUMPS (WEDA L)** 







**SPECIFIC** 

**SPECIFIC** 

**SPECIFIC** 

SOLIDS OO **UPTO 12** mm

SOLIDS ON HANDLING UP TO 50 mm

SOLIDS OO **UPTO 60** mm





pH values FROM 4 TO 10



# DESIGNED FOR REPAIRABILITY

#### **Applications:**

- General dewatering
- Ground water
- Raw water
- Construction sites

- Sludge or light slurry
- Tank clean-out
- Trench and pond cleaning
- Mining and quarries

- Water containing mud
- Abrasive media with solids content
- Dredging
- Settling ponds

#### Did you know?

WEDA extended the patented Wear Deflector Technology

The WEDA drainage pumps handle clean as well as dirty water, with the best performance and efficiency.

1

Compact design and high power-to-weight-ratio for real transportability.



Built-in starter (DOL/ Softstarter) and motor protection (D10 - D91): less equipment to move around. Plug and pump!



Dry running capability due to carefully oversized motor and heat dissipating design.





Patented Wear Deflector Technology for as-new performance for longer periods of time.



Double mechanical seal in a stainless steel cartridge and robust o-ring design prevent water ingress and is easy to service.



External oil screws make sure that preventive maintenance gets done, instead of postponed until too late.



High-chrome cast-iron alloy wear-resistant impeller (55 HRC) and readjustable hydraulics to compensate for wear.

55 ₩ HRC

<sup>\*</sup>Some features and options on selected models only.



The WEDA sludge pumps can handle thick, soft, wet mud or other similarly viscous mixtures of liquids and solids.

1

Compact design and high power-to-weight-ratio for real transportability.

2

Built-in starter and motor protection: less equipment to move around. Plug and pump! 3

Dry running capability due to carefully sized motor and heat dissipating design.

4

External oil screws making sure that preventive maintenance gets done, instead of postponed until too late.

5

Double mechanical seal running in an oil bath and robust o-ring design prevent water ingress and is easy to service.

6

High-chrome cast-iron alloy wear-resistant impeller (55 HRC) of vortex type for large solids passage.

**55** ₩ HRC

\*Some features and options on selected models only.

The WEDA slurry pumps are the toughest pumps, designed to handle the most challenging slurries and solids.

1

Heavy-duty motor (class H) with thermal contacts for overload protection.

2

Heavy-duty bearings to handle typical slurry pumping loads.

3

Mechanical- and labyrinth type shaft seals optimized for slurry applications.



4

High-chrome abrasion resistant impeller and wear plates.

4

Solids handling up to 60 mm (2.4 in).



5

High-chrome agitator to get and keep solids in suspension increasing output.

<sup>\*</sup>Some features and options on selected models only.



## **Technical data**



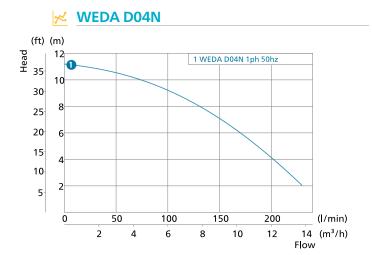


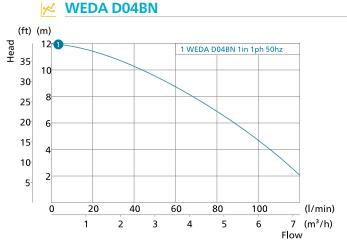




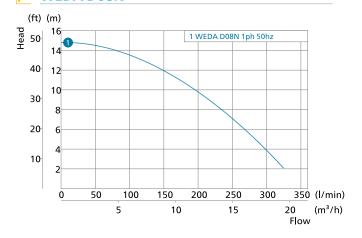
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SPECIFICATIONS		1ph	1ph	1ph	1ph	3ph	1ph	3ph	1ph	3ph	3ph
Max. head	m	11.2	12.0	14.8	14.7	14.4	15.7	15.1	22	22	20
Max. nead	ft	37	39	49	48	47	52	50	74	72	67
	l/min	230	120	330	490	490	1480	1450	860	850	1580
Max. flow	m³/h	14	7	20	30	29	89	87	52	51	95
	gpm	61	32	86	131	129	390	380	230	220	420
Shaft speed	r.p.m.	2900	2900	2900	2900	2900	2900	2900	2900	2900	2900
Rated output	kW	0.4	0.4	0.8	1.0	1.0	2.0	2.0	2.0	2.0	3.0
nated output	HP	0.5	0.5	1.0	1.3	1.3	2.7	2.7	2.7	2.7	4.0
Max. power input	kW	0.7	0.7	1.2	1.6	1.3	2.6	2.6	2.6	2.6	3.6
Discharge	mm	50	25	50	50	50	75	75	75	75	75
connection	inch	2	1	2	2	2	3	3	3	3	3
Max. solids	mm	7.5	4.5	7.5	4.0	4.0	7.0	7.0	7.0	7.0	7.0
handling size	inch	0.30	0.18	0.30	0.16	0.16	0.28	0.28	0.28	0.28	0.28
WEIGHT & DIMENS	IONS										
387 ° 17	kg	9.0	9.5	12.4	13.0	13.0	20	20	20	20	25
Weight	lbs	20	21	28	29	29	44	44	44	44	56
Height	mm	340	415	358	395	395	525	525	495	495	525
neignt	inch	13.4	16.3	14.1	15.6	15.6	20.7	20.7	19.5	19.5	20.7
Width	mm	182	220	183	225	225	290	290	290	290	290
vviatri	inch	7.2	8.7	7.2	8.9	8.9	11.4	11.4	11.4	11.4	11.4
Diameter	mm	182	220	183	185	185	220	220	220	220	220
Diameter	inch	7.2	8.7	7.2	7.3	7.3	8.7	8.7	8.7	8.7	8.7

- General construction
  - eneral construction F
- Ground water
- Raw water
- Construction sites
- Mining & Quarries
- Industrial dewatering
- Flooding & Emergency relief

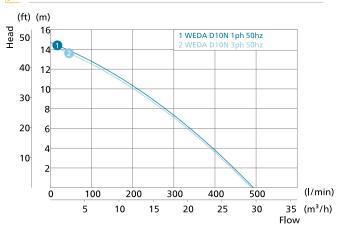




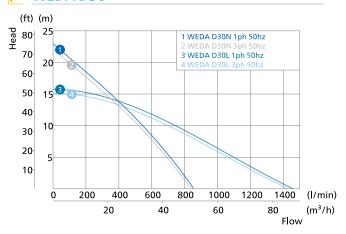
#### **⋉ WEDA D08N**



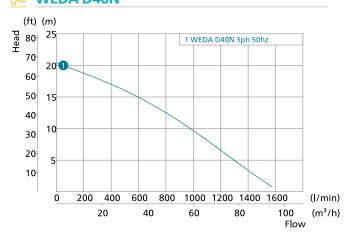
#### **₩ WEDA D10N**



#### ✓ WEDA D30



#### ✓ WEDA D40N



**Technical data** 







	•		•	•		•			
		WEDA D50N	WEDA D50H	WEDA D60N	WEDA D60H	WEDA D60SH	WEDA D80N	WEDA D80H	WEDA D80SH
SPECIFICATIONS		3ph	3ph	3ph	3ph	3ph	3ph	3ph	3ph
Max. head	m	24	38	28	38	58	41	64	100
IVIAX. Head	ft	78	124	92	123	191	133	210	327
Max. flow	l/min	2250	1160	2590	1460	1030	5810	2510	1850
Max. flow	m³/h	135	70	156	88	62	350	151	111
Shaft speed	gpm	590	310	690	390	270	1540	660	490
Shaft speed	r.p.m.	2900	2900	2900	2900	2900	2900	2900	2900
Rated output	kW	5.6	5.6	7.5	7.5	7.5	20	20	20
rated output	HP	7.5	7.5	10.1	10.1	10.1	27	27	27
Max. power input	kW	6.7	6.7	8.8	8.8	8.8	22	22	22
Discharge connection	mm	100	75	100	75	75	150	100	75
	inch	4	3	4	3	3	6	4	3
Max. solids	mm	8.0	8.0	8.0	8.0	8.0	12.0	12.0	12.0
handling size	inch	0.31	0.31	0.31	0.31	0.31	0.47	0.47	0.47
WEIGHT & DIMENSIONS									
	kg	55	55	61	61	62	175	175	215
Weight	lbs	122	122	136	136	138	389	389	478
II-i-ha	mm	720	720	760	760	760	980	980	1060
Height	inch	28.3	28.3	29.9	29.9	29.9	38.6	38.6	41.7
Width	mm	330	302	330	302	302	690	665	650
vviatn	inch	13.0	11.9	13.0	11.9	11.9	27.2	26.2	25.6
Diameter	mm	278	278	278	278	278	530	530	530
Diameter	inch	10.9	10.9	10.9	10.9	10.9	20.9	20.9	20.9

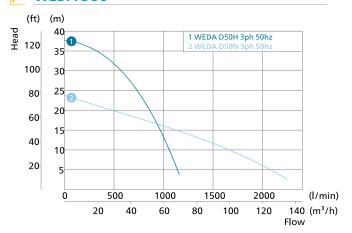
# **Typical applications**

• General construction

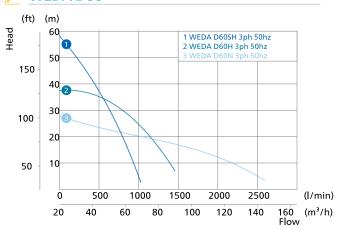
• Ground water

- Raw water
- Construction sites
- Mining & Quarries
- Industrial dewatering
- Flooding & Emergency relief

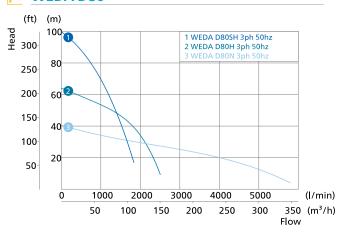
#### ✓ WEDA D50



#### ✓ WEDA D60



#### ✓ WEDA D80





### **Technical data**





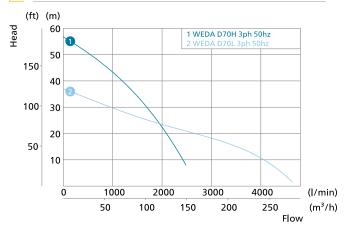


		WEDA D70L	WEDA D70H	WEDA D81N	WEDA D81H	WEDA D91N	WEDA D91H
SPECIFICATIONS		3ph	3ph	3ph	3ph	3ph	3ph
May bood	m	37	57	42	73	48	82
Max. head	ft	121	186	139	238	159	269
Max. flow	l/min	4640	2490	6810	3420	7560	4140
	m³/h	280	150	410	210	450	250
	gpm	1220	660	1800	900	2000	1090
Shaft speed	r.p.m.	2900	2900	2900	2900	2900	2900
Rated output	kW	12.0	12.0	20	20	27	27
	HP	16.1	16.1	27	27	36	36
Max. power input	kW	13.8	13.8	22	22	30	30
Discharge connection	mm	150	100	150	100	150	100
	inch	6	4	6	4	6	4
Max. solids	mm	10.0	10.0	12.0	12.0	12.0	12.0
handling size	inch	0.39	0.39	0.47	0.47	0.47	0.47
WEIGHT & DIMENSIONS							
	kg	110	110	190	190	205	205
Weight	lbs	244	244	422	422	456	456
	mm	943	943	1075	1075	1125	1125
Height	inch	37.1	37.1	42.3	42.3	44.3	44.3
	mm	415	393	465	440	465	440
Width	inch	16.3	15.5	18.3	17.3	18.3	17.3
Di	mm	370	370	425	425	425	425
Diameter	inch	14.6	14.6	16.7	16.7	16.7	16.7

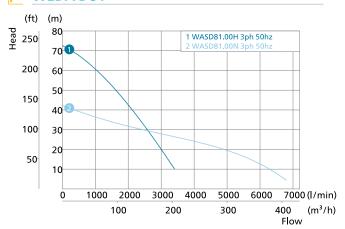
- General construction
- Raw water Ground water
  - Construction sites
- Mining & Quarries
- Industrial dewatering
- Flooding & Emergency relief



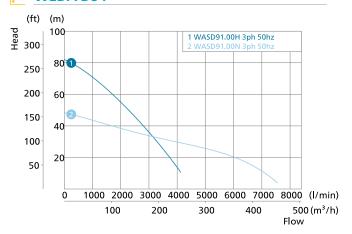
### ✓ WEDA D70



#### ✓ WEDA D81



### ✓ WEDA D91





### **Technical data**





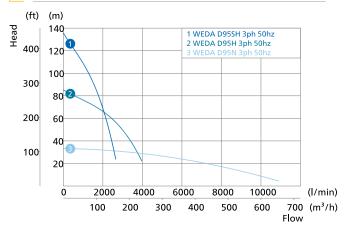


		-	· · · · · · · · · · · · · · · · · · ·				
		WEDA D95N	WEDA D95H	WEDA D95SH	WEDA D100N		
SPECIFICATIONS		3ph	3ph	3ph	3ph		
Max. head	m	33	85	136	42		
wax. nead	ft	109	280	445	139		
	l/min	10930	3980	2660	18090		
Max. flow	m³/h	660	240	160	1090		
	gpm	2890	1050	700	4780		
Shaft speed	r.p.m.	2900	2900	2900	1450		
Date of autout	kW	37	37	37	60		
Rated output	HP	50	50	50	81		
Max. power input	kW	43	43	43	65		
Discharge	mm	200	100	100	250		
connection	inch	8	4	4	10		
Max. solids	mm	16.0	12.0	12.0	12.0		
handling size	inch	0.63	0.47	0.47	0.47		
WEIGHT & DIMENSIONS							
	kg	265	265	300	520		
Weight	lbs	589	589	667	1156		
	mm	1330	1330	1350	1412		
Height	inch	52.4	52.4	53.1	55.6		
and tel	mm	460	460	465	650		
Width	inch	18.1	18.1	18.3	25.6		
D	mm	460	460	465	600		
Diameter	inch	18.1	18.1	18.3	23.6		

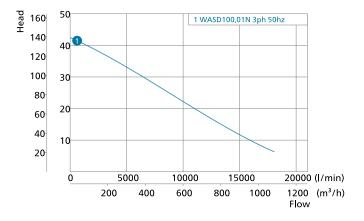
- General construction
- Ground water
- Raw water
- Construction sites
- Mining & Quarries
- Industrial dewatering
- Flooding & Emergency relief



### ✓ WEDA D95



#### ✓ WEDA D100





### **Technical data**







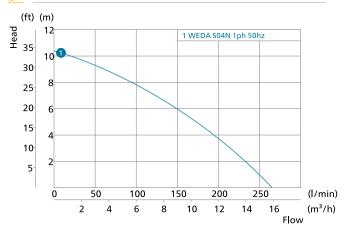




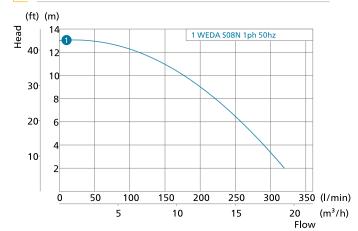
		WEDA S04N	WEDA S08N	WEDA S30N	WEDA S30N	WEDA S50N	WEDA S60N
SPECIFICATIONS		1ph	1ph	1ph	3ph	3ph	3ph
Max. head	m	10.4	13.0	13.0	14.9	23	25
iviax. Heau	ft	34	43	43	49	75	81
	l/min	270	320	820	960	1450	1740
Max. flow	m³/h	16	19	49	58	87	104
	gpm	70	85	220	250	380	460
Shaft speed	r.p.m.	2900	2900	2900	2900	2900	2900
Rated output	kW	0.4	0.8	1.8	2.5	4.8	6.9
nated output	HP	0.5	1.0	2.4	3.4	6.4	9.3
Max. power input	kW	0.7	1.2	2.4	3.0	5.7	8.1
Discharge connection	mm	50	50	75	75	100	100
	inch	2	2	3	3	4	4
Max. solids	mm	25.0	25.0	50.0	50.0	50.0	50.0
handling size	inch	1.0	1.0	2.0	2.0	2.0	2.0
WEIGHT & DIMENSIONS							
10/-:	kg	11.0	13.0	25	25	59	65
Weight	lbs	24	29	56	56	131	144
Hainbé	mm	375	416	620	620	810	870
Height	inch	14.8	16.4	24.4	24.4	31.9	34.3
Width	mm	277	277	326	326	450	450
vviatn	inch	10.9	10.9	12.8	12.8	17.7	17.7
Diameter	mm	241	241	250	250	350	350
Diameter	inch	9.5	9.5	9.8	9.8	13.8	13.8

- Sludge or light slurry
- Trench and pond cleaning
- Tank clean-out
- Mining

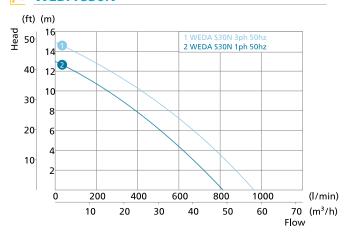
#### ✓ WEDA S04N



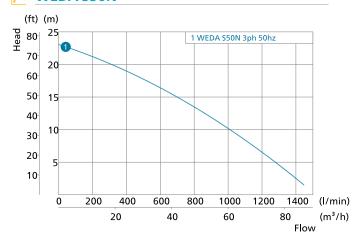
#### **₩ WEDA S08N**



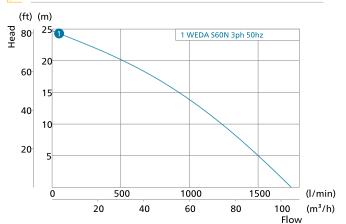
#### **⋉ WEDA S30N**



#### **₩ WEDA S50N**



#### **₩ WEDA S60N**



## **Technical data**







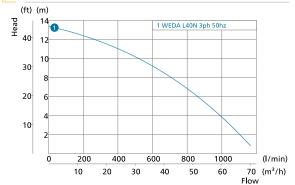


		WEDA L40N	WEDA L50N	WEDA L60N	WEDA L70N	WEDA L80N	WEDA L95N	WEDA L100N	WEDA L110N
SPECIFICATIONS		3ph	3ph						
Mary hand	m	13.4	17.1	23	24	27	47	30	43
Max. head	ft	44	56	75	79	87	155	99	142
	l/min	1170	1670	1170	1500	3330	4830	11000	12500
Max. flow	m³/h	70	100	70	90	200	290	660	750
	gpm	310	440	310	400	880	1280	2910	3300
Shaft speed	r.p.m.	1450	1450	1450	1450	1450	1450	980	1450
Rated output	kW	3.7	5.5	9.0	11.0	15.0	37	45	75
rated output	HP	5.0	7.4	12.1	14.8	20	50	60	101
Max. power input	kW	4.5	6.8	10.4	12.8	16.1	40	49	80
Discharge	mm	75	100	100	100	100	100	150	150
connection	inch	3	4	4	4	4	4	6	6
Max. solids	mm	20.0	25.0	25.0	25.0	25.0	35.0	60.0	60.0
handling size	inch	0.8	1.0	1.0	1.0	1.0	1.4	2.4	2.4
WEIGHT & DIMENSIONS									
	kg	185	260	260	270	310	750	1005	1070
Weight	lbs	411	578	578	600	689	1667	2233	2378
II-laha	mm	793	914	914	914	1080	1605	1605	1605
Height	inch	31.2	36.0	36.0	36.0	42.5	63.2	63.2	63.2
Width	mm	388	435	435	435	580	935	935	935
wiath	inch	15.3	17.1	17.1	17.1	22.8	36.8	36.8	36.8
Diameter	mm	337	413	413	413	495	546	546	546
Diameter	inch	13.3	16.3	16.3	16.3	19.5	21.5	21.5	21.5

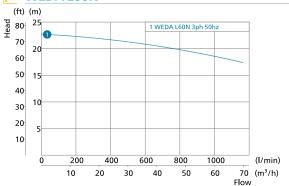
- Abrasive media with high solids content
- Mining and Quarries

- Dredging
- Settling ponds

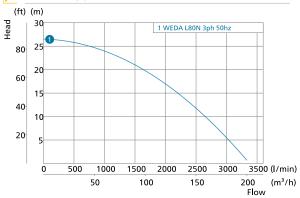
#### ✓ WEDA L40N



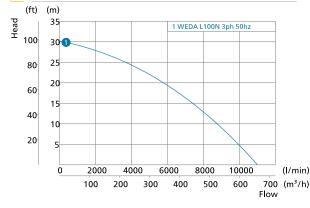
#### **∠** WEDA L60N



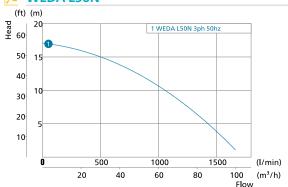
#### **⋉ WEDA L80N**



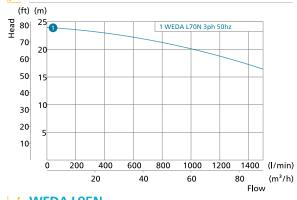
#### ✓ WEDA L100N



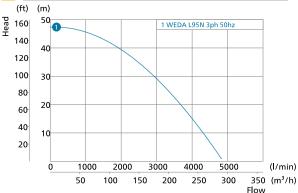
#### **⋉ WEDA L50N**



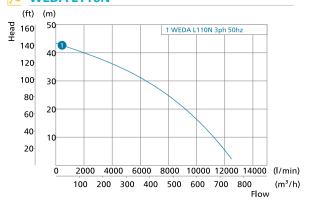
#### ✓ WEDA L70N



#### ✓ WEDA L95N



#### **⋉ WEDA L110N**



# WEDA Pumps in versatile applications



At construction sites dewatering pumps are used to remove unwanted surface water or for lowering ground water levels to allow for deeper excavations. Submersible sludge and slurry pumps are used to handle bentonite and other liquids containing larger and more abrasive particles.

Selecting the correct dewatering pump and system begins with an understanding of the characteristics of the construction site; required flow rate and head, liquid specifics such as type of liquid, pH, and solids content. This understanding will be important when selecting the correct type of pump for the job site.

The WEDA range of dewatering pumps is designed to handle liquids from clean water to dirty and abrasive liquids containing sludge or larger particles. The WEDA dewatering pumps come with built-in soft starters, unique and robust cartridge seal and the most wear resistant hydraulics.





Dewatering pumps are used in several applications both in underground mines, open pit mines as well as quarries for the removal of water and to keep ground water at low levels. The main objective for dewatering pumps in a mine is to keep the site dry at all times to allow for safe and continuous operations.

Designing a dewatering system is one of the main challenges of mines today, this since water can be both scarce and expensive. The influx of water, the head requirements and liquid characteristics will determine the type of dewatering pumps to be used.

WEDA pumps are of the most robust design and capable of handling the most abrasive and tough applications. Available in high, super high head and high volume versions they are versatile for handling any dewatering requirements in quarries, open pit mines and underground mines.





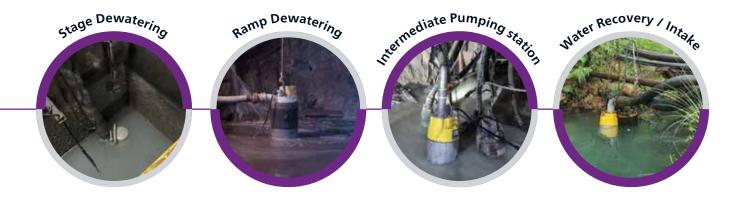
There is a great need for using submersible dewatering pumps in industrial applications, both for temporary dewatering and for more permanent installations.

The selection of dewatering pumps is based on the liquid specifications together with the head and flow requirement. One of the advantages with submersible dewatering pumps is that they do not need fixed infrastructure or priming and can be installed submerged into the sump.

The WEDA pumps come with built-in soft starter eliminating the need for external panels making the installation quick and easy. Whether there is a need for pumping dirty water, sludge or slurry WEDA pumps offer a solution.









### **Accessories**

#### **DISCHARGE CONNECTIONS**

We understand that there is a need and preference for different types of discharge connections and we offer four types. All can be mounted in either a vertical or horizontal position.









Hose

Storz

ISO-G

NPI

#### **SLIM ADAPTER**

For lowering pumps in narrow pipes and manholes.



#### **LEVEL REGULATORS**

For easy control of water level by automatic pump switch-on/-off:



#### **LOW SUCTION COLLAR**

To easily drain the water level down to the floor.

#### **RAFT**

For easy floatation of pump with fluctuating water levels and to keep the pump in a suspended position. Strainer option available.



#### **ZINC ANODES**

Specifically required for pumping water with a high concentration of salts such as seawater, brine, etc.



### **Service**

#### **SERVICE NETWORK**

With a global network of sales channels, distributors, service workshops and partners, pumps can be kept in working condition, ready to deal with tomorrow's challenge.

#### **SEAL KIT**

The seal kit is the proper selection of high quality components for a mechanical seal change to ensure trouble-free operation after servicing.

- O-ring kit
- Mechanical shaft seal



#### **WEAR PART KIT**

The wear part kit is a typical selection of components to bring the pump performance back to factory standard. The ideal solution for a machine overhaul or refurbishment.

- Impeller
- Wear plate
- Diffuser

<sup>\*</sup>Some features and options on selected models only.



# **Product portfolio**

#### **ENERGY STORAGE SYSTEMS**

EXTRA SMALL 2–10 kVA













#### **GENERATORS**

PORTABLE 1,6–12 kVA











\*Multiple configurations available to produce power for any size application

#### **DEWATERING PUMPS**

### ELECTRIC SUBMERSIBLE

up to 18 000 l/min







833-23.300 l/min





SELF-PRIMING CENTRIFUGAL

833-23.300 l/min



#### **LIGHT TOWERS**















#### **ONLINE SOLUTIONS**

#### FLEETLINK

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

### PUMP SIZING CALCULATOR

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

#### LIGHT THE POWER: YOUR SIZING TOOL

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



Atlas Copco Power and Flow www.atlascopco.com

