Pioneering for You

wilo

Water, waste water, chemical and slurry process transport in mining operations

Smart and sustainable pumping solutions for mining applications

Enhancing operational reliability in mining: the key to efficiency lies in reliable pumps

Mining is a demanding working environment characterised by numerous challenges including extreme temperatures, abrasive materials and high pressure. In such conditions, pumps are susceptible to damage, leading to downtime, decreased production and potentially dangerous situations. However, these risks can be minimised by utilising high-quality pumps that have been specially developed for the mining industry.

Our robust pumps are suitable for most processes in open-cast, surface and underground mining – both for mining and for the infrastructure surrounding mining:

- → Super Duplex material for use in harsh operating conditions
- → Fully configurable pump range for surface dewatering, including slurry transport
- → High-quality borehole pumps with stainless steel hydraulics and Coolact technology
- → Monitoring and control solutions

→ Worldwide service and support with local contact persons

→ Reliable pump solutions for various mining processes

→ Engineered in Germany


Processing
Fire Fighting
Pressure boosting
Heating and Ventilation
Dust Suppression
Water treatment
Potable water transport
Gland Service
Waste water treatment
Dewatering
Raw water intake
Slurry tansport

Wilo-Atmos NHD

Standard pump according to ISO 2858 (DIN24256)

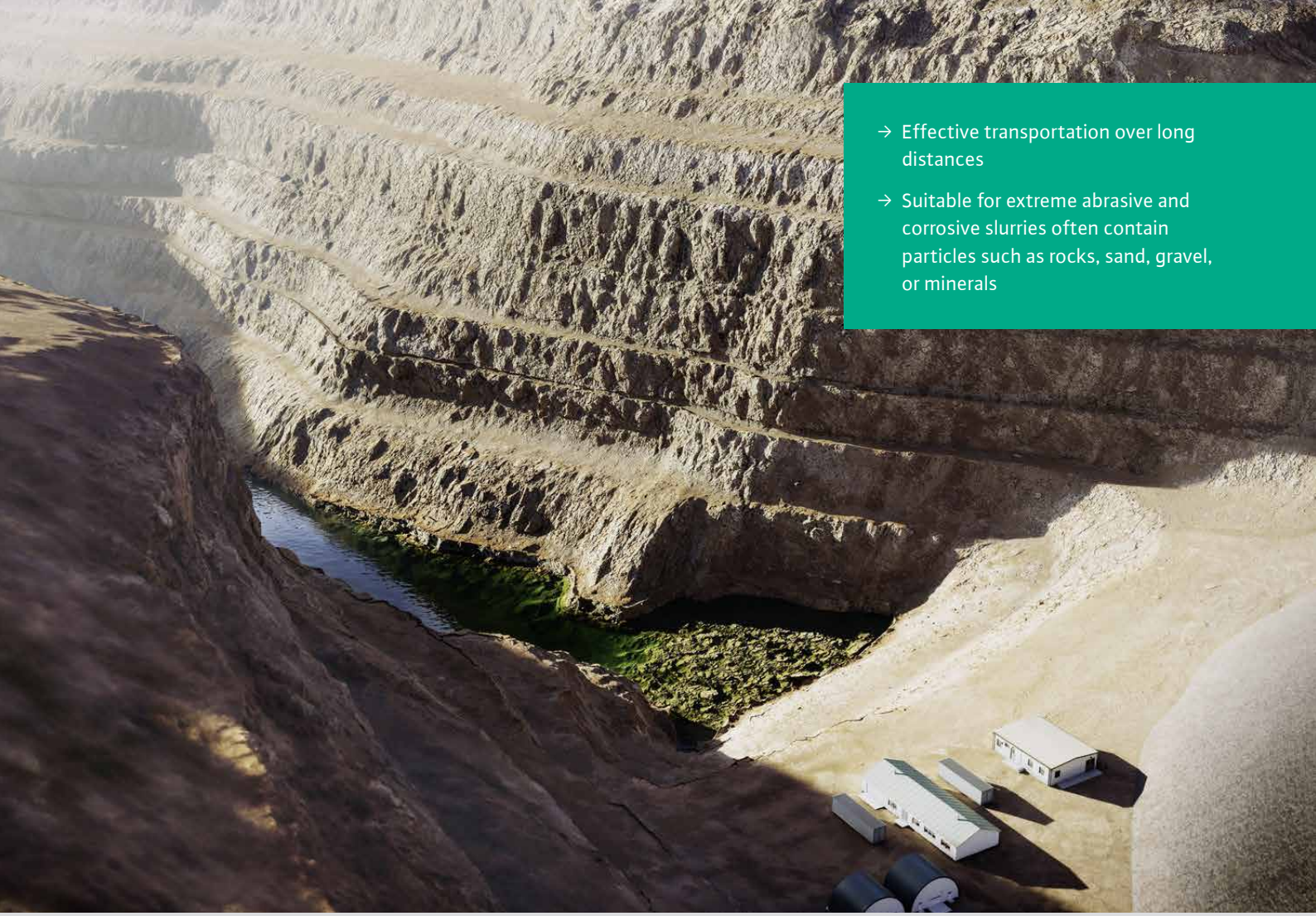
HIGH DEGREE OF OPERATIONAL RELIABILITY AND PERFORMANCE FOR CONTINUOUS AND EFFECTIVE DEWATERING IN MINING.

The robust Wilo-Atmos NHD is designed to withstand the harsh and demanding conditions in mining, including dealing with abrasive and corrosive fluids. This standard pump reliably transports large quantities of water at high delivery heads. The option to choose between different impeller designs, seal variants and high-quality materials means it can be optimally adapted to the respective requirements and conditions.

- Reliable transport of high volume flows
- Max. Delivery head up to 160 m with max. pressure up to 16 bar
- Temperature limits from – 40 °C up to 180 °C
- Super duplex available for aggressive and corrosive media

CUSTOMER BENEFITS

- Special bearings and pump housing, designed for heavy-duty operation, ensure a long product service life as well as high operational reliability
- Highly resistant by using durable materials and components that allow the pump to withstand abrasive and corrosive substances in mining water
- Powerful, efficient design for pumping large volume flows of water at high delivery heads for optimal use in mining
- The customer-specific design and dimensions according to ISO 2858, the different impeller versions and seal variants, and the high-quality materials (e.g. Super Duplex) ensure a high degree of flexibility



- → Effective transportation over long distances
- → Suitable for extreme abrasive and corrosive slurries often contain particles such as rocks, sand, gravel, or minerals

CUSTOMISED CONFIGURATION FOR YOUR REQUIREMENTS IN MINING:

Varous choice of impeller design:

- → Open Impeller 
- → Special Open Impeller 
- → Closed Impeller 
- → Vortex Impeller 

Sealing variants:

- → Mechanical seal
- → Gland packing
- → Dynamic Seal

Material selection:

- → Super Duplex steels (EN 1.4469)
- → Duplex steels (EN 1.4460)
- → Wear-resistant cast iron (5.5610)
- → Martensitic cast steels (1.4525/CB7Cu-2)

Motor selection:

- → Diesel engine or electric motor

Baseplate:

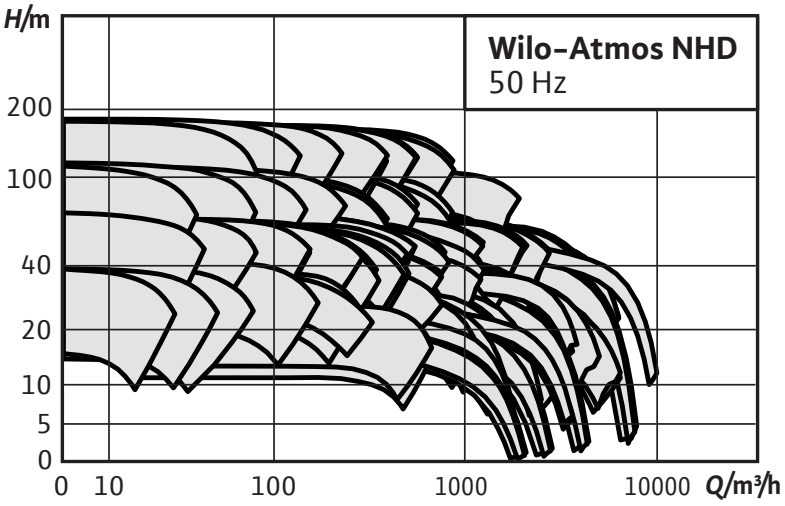
- → On customer request

Wilo-Atmos NHD at a glance

Technical data		
	Min.	Max.
Volume flow		7,200 m³/h
Delivery head		160 m
Fluid temperature	-40 °C	180 °C
Suction port	DN 50	DN 700
Discharge port	DN 32	DN 600
Pressure rating	16 bar	
Free ball passage	121 mm	
Equipment		
Impeller	Open impeller 	→ For materials with high solids content and fibrous materials → High clogging resistance and reliable performance under demanding conditions and operation in difficult environments
	Semi-open impeller 	→ Optimised for fibrous or medium solid content → Reliable performance with reduced clogging risk, ensuring smooth operation in challenging conditions.
	Closed impeller 	→ Efficient and reliable impeller for fluids containing minimum solids content and slightly loaded, clear fluids
	Vortex impeller 	→ High operational reliability when handling large solid particles with large diameters
Seal	Dynamic seal	
	Mechanical seals	
	Gland packing	
Bearing lubrication	Grease	
	Oil	
Materials		
Providing an extended range of high-performance materials, including corrosion-resistant cast steels and wear-resistant cast irons, tailored to meet specific applications and special requirements.		
Duplex steels (1.4460)	Housing: ASTM A890 Grade 1B	→ Resistant to corrosion, acids, chloride-containing media and seawater → Good machinability properties
	Housing cover: ASTM A890 Grade 1B	
	Impeller: ASTM A890 Grade 1B	
	Shaft: UNS S32900	

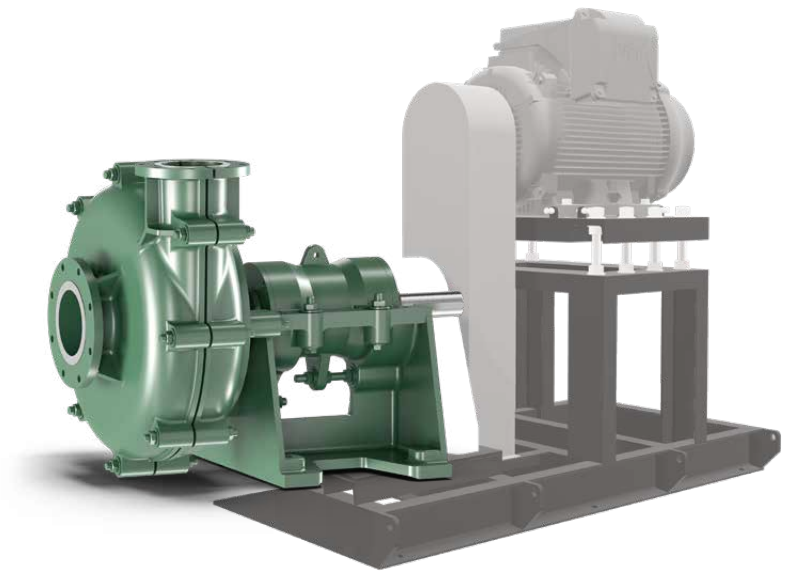
Super Duplex steels (1.4469)	Housing: ASTM A890 Grade 5A Housing cover: ASTM A890 Grade 5A Impeller: ASTM A890 Grade 5A Shaft: UNS S32900	→ Provides superior strength and corrosion resistance compared to standard duplex grades → particularly resistant to pitting, crevice corrosion, and chloride-induced stress corrosion cracking → High weldability, making it suitable for applications where both high strength and corrosion resistance are critical
Wear-resistant cast iron (5.5610)	Housing: ASTM A532 Grade 3A Housing cover: ASTM A532 Grade 3A Impeller: ASTM A532 Grade 3A Shaft: UNS S32900	→ Martensitic, precipitation-hardening stainless steel with excellent mechanical properties → High strength and excellent corrosion resistance with exceptional wear resistance → Suitable for components exposed to harsh and abrasive environments, including pump parts
Martensitic cast steels (1.4525) /CB7Cu-2)	Housing: ASTM A747 Grade CB7Cu-2 Housing cover: ASTM A747 Grade CB7Cu-2 Impeller: ASTM A747 Grade CB7Cu-2 Shaft: UNS S32900	→ High-chromium white cast iron: exceptional wear resistance and high hardness → Designed for use in environments subject to abrasion, impact and high temperatures → High chromium content not only increases wear resistance, but also provides good corrosion resistance in mildly corrosive conditions

PERFORMANCE RANGE



Wilo-Atmos NHD-S

Sludge pump for heavy-duty operation



HIGHLY RELIABLE AND POWERFUL SLURRY PUMP FOR TRANSPORTING SLURRY WITH SOLID PARTICLES.

The robust and durable design of the Wilo-Atmos NHD-S horizontal slurry pump ensures that it can withstand the harsh and demanding conditions of mining. It can reliably transport large quantities of slurry, even under the most difficult conditions. This is made possible, among other things, by the application-specific selection of different materials. Materials for these wear-resistant components – for example, chrome steel or elastomer – can be selected based on the requirements and conditions of the application.

- Capacity up to 5,400 m^3/h
- Max. pressure up to 16 bar
- Working temperature from 1 °C up to 90 °C
- Total head up to 118 m.w.c.

- Suitable for extremely aggressive and corrosive media with a special gravity of up to 1.75
- Effective transportation over long distances
- Suitable for extreme abrasive and corrosive slurries often contain particles such as rocks, sand, gravel, or minerals

CUSTOMER BENEFITS

- → Effectively pumps large quantities of slurry over long distances with impressive performance as a result of the efficient pump design
- → High operational reliability as a result of special bearings and a pump housing that are designed for heavy-duty operation in mining and ensure a long product service life
- → Configurable, application-specific design with lined housing (elastomer or chrome steel) and various seal types available for selection
- → Durable materials and components that make the pump resistant to abrasive, mineral-rich and highly corrosive substances in mining (e.g. Super Duplex) minimise down-time and ensure a high degree of durability

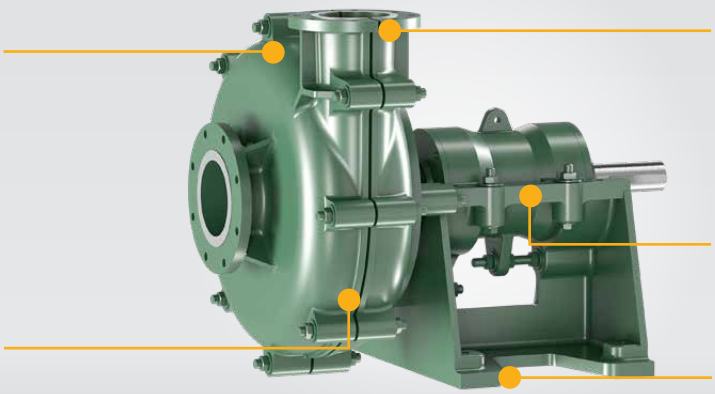
CUSTOMISED CONFIGURATION FOR YOUR REQUIREMENTS IN MINING:

Pump variants:

- → resistent pump out of hard metal
- → pump with rubber coated parts

Sealing variants_

- → Mechanical seal
- → Gland packing
- → Dynamic Seal



Material selection:

- → Martensitic cast steels (1.4525/CB7Cu-2)
- → Elastomer

Motor selection:

- → Diesel engine or electric motor

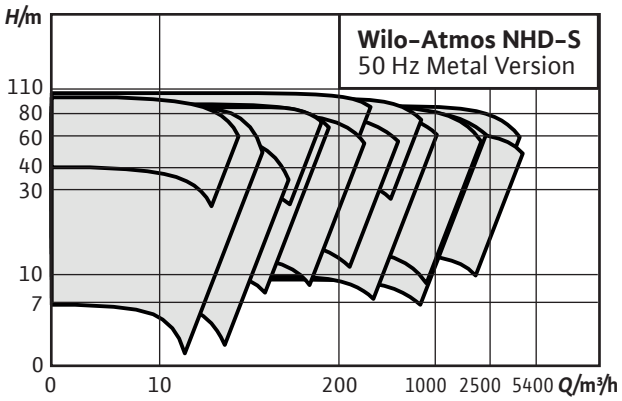
Baseplate:

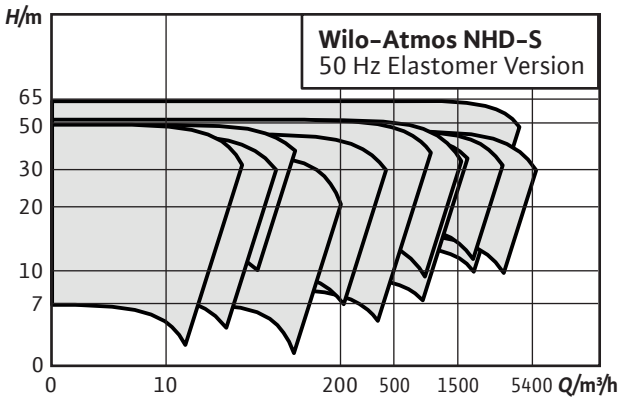
- → On customer request

Wilo-Atmos NHD-S at a glance

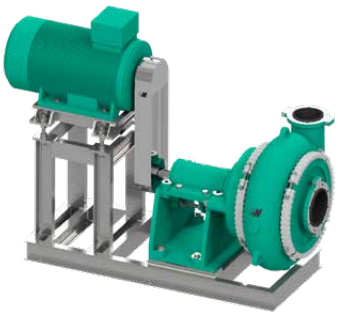
Technical data		
	Min.	Max.
Volume flow		5,400 m³/h
Delivery head		118 m
Pressure rating	16 bar	
Fluid temperature	1 °C	90 °C
Suction port	DN 32	DN 500
Discharge port	DN 25	DN 450
Pressure rating	16 bar	
Free ball passage	241 mm	
Equipment		
Impeller	Open impeller	→ For materials with high solids content and fibrous materials → High clogging resistance and reliable performance under demanding conditions and operation in difficult environments
	Special impeller options on request	
Seal	Dynamic seal	
	Mechanical seals	
	Gland packing	
Bearing lubrication	Grease, oil	
Materials		
Providing an extended range of high-performance materials, including corrosion-resistant cast steels and wear-resistant cast irons, tailored to meet specific applications and special requirements.		
Martensitic cast steels (1.4525) /CB7Cu-2)	Housing: ASTM A532 Grade 3A Housing cover: ASTM A532 Grade 3A Impeller: ASTM A532 Grade 3A Shaft: UNS S32900	→ High-chromium white cast iron: exceptional wear r esistance and high hardness → Designed for use in environments subject to abrasion, impact and high temperatures → High chromium content not only increases wear resistance, but also provides good corrosion resistance in mildly corrosive conditions
Elastomer	Housing: ASTM D2000 M2BC414 A14 Housing Cover: ASTM D2000 M2BC414 A14 Impeller: ASTM D2000 M2BC414 A14 Shaft: UNS G10450	→ Black, soft natural rubber with high erosion resistance for applications with fine-grained slurries → Optimised formulation with carefully selected antioxi-dants and antidegradants for a long shelf life → High erosion resistance and durability in demanding slurry processing applications

PERFORMANCE RANGE

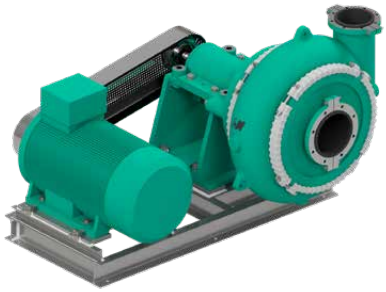




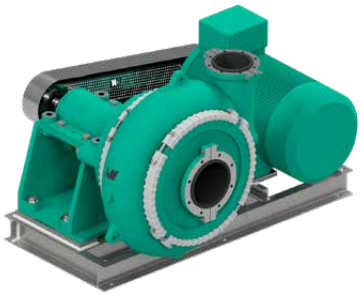
INSTALLATION SITUATION



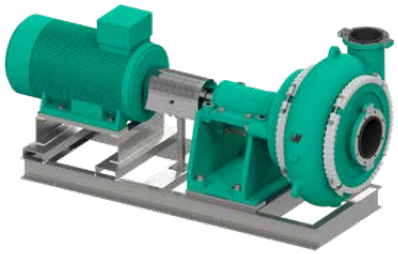
Motor installed on a raised common base behind the pump



Motor installed to the left of the pump



Motor installed to the right of the pump



Pump and the motor directly connected via a coupling

Motor installed above the bearing housing of the pump

- Low risk of clogging
- No flushing necessary
- Flexible application options – even in a tank
- Maximum particle Size: 12 mm up to 65 mm

Wilo-Atmos IHD-S

Sludge pump for heavy-duty operation

RELIABLE, POWERFUL AND VERSATILE PUMP FOR AGGRESSIVE SLURRIES.

The Wilo-Atmos IHD-S is a robust and flexible submersible slurry pump in a vertical design, which consists of wear-resistant components. Materials for these components – for example, chrome steel or elastomer – can be selected based on the requirements of the application. The pump is specially designed to withstand the abrasive and aggressive properties of slurry, to ensure fluid is pumped efficiently, and to guarantee a long service life.

- Capacity up to 1,267 m^3/h
- Pressure up to 7.5 bar max.
- Total head up to 40 m
- Working temperature from 1 °C to 90 °C

CUSTOMER BENEFITS

- → The efficient pump design and effective pumping of large quantities of aggressive and corrosive fluid makes it particularly powerful
- → Special bearings and a housing designed for the most demanding applications ensure a high degree of operational reliability and durability
- → The application-specific design of the highly wear-resistant chrome steel version for abrasive fluids (also available as elastomer version for abrasive and acidic, aggressive fluids) means that downtimes are minimised and high wear-resistance is guaranteed
- → The compact, vertical design for submersible operation (only the hydraulics are underwater) and application in a tank or sump both saves space and ensures versatility

CUSTOMISED CONFIGURATION FOR YOUR REQUIREMENTS IN MINING:

Pump variants:

- → resistent pump out of hard metal
- → pump with rubber coated parts

Sealing variants:

- → Mechanical seal
- → Packing
- → Dynamic Seal

Motor selection:

- → Diesel engine or electric motor

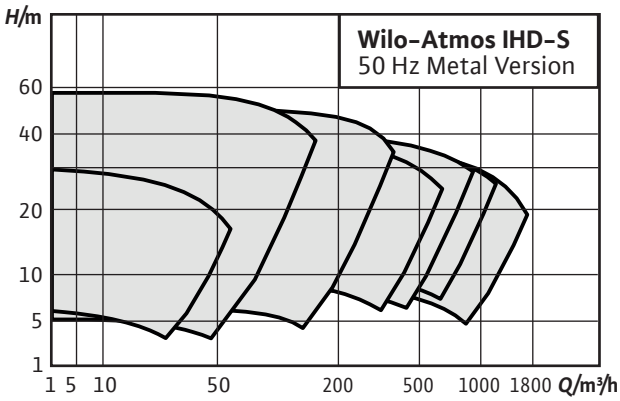
Material selection:

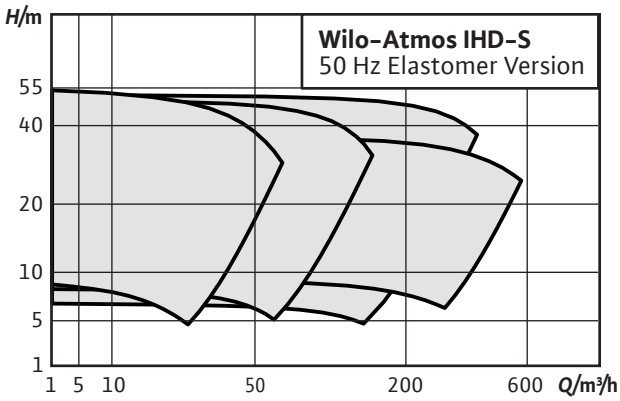
- → Martensitic cast steels (1.4525/CB7Cu-2)
- → Elastomer

Wilo-Atmos IHD-S at a glance

Technical data		
	Min.	Max.
Volume flow		1,267 m³/h
Delivery head		55 m
Fluid temperature	1 °C	90 °C
Discharge port	DN 40	DN 300
Pressure rating	7.5 bar	
Free ball passage	65 mm	
Equipment		
Impeller	Open impeller	→ For materials with high solids content and fibrous materials → High clogging resistance and reliable performance under demanding conditions and operation in difficult environments
	Special impeller options on request	
Seal	Dynamic seal	
	Mechanical seals	
	Gland packing	
Bearing lubrication	Grease, oil	
Materials		
Providing an extended range of high-performance materials, including corrosion-resistant cast steels and wear-resistant cast irons, tailored to meet specific applications and special requirements.		
Martensitic cast steels (1.4525) /CB7Cu-2)	Housing: ASTM A532 Grade 3A Housing cover: ASTM A532 Grade 3A Impeller: ASTM A532 Grade 3A Shaft: UNS S32900	→ High-chromium white cast iron: exceptional wear resistance and high hardness → Designed for use in environments subject to abrasion, impact and high temperatures → High chromium content not only increases wear resistance, but also provides good corrosion resistance in mildly corrosive conditions
Elastomer	Housing: ASTM D2000 M2BC414 A14 Housing Cover: ASTM D2000 M2BC414 A14 Impeller: ASTM D2000 M2BC414 A14 Shaft: UNS G10450	→ Black, soft natural rubber with high erosion resistance for applications with fine-grained slurries → Optimised formulation with carefully selected antioxidants and antidegradants for a long shelf life → High erosion resistance and durability in demanding slurry processing applications

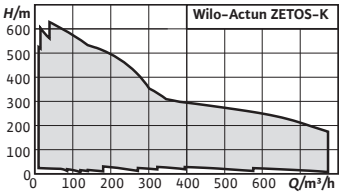
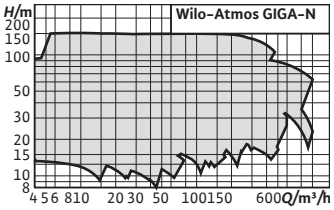
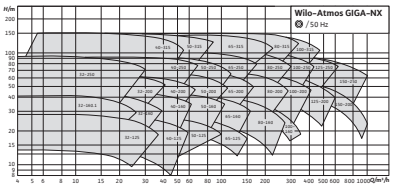
PERFORMANCE RANGE

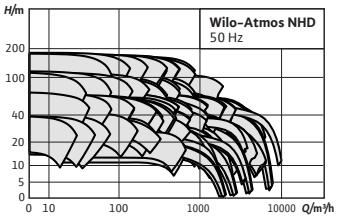




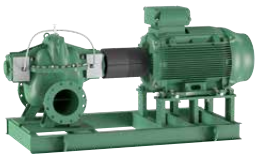
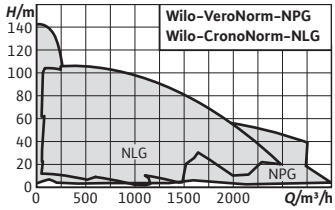
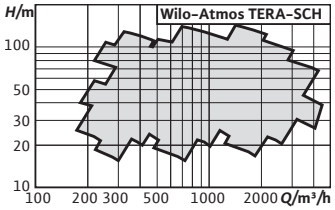
Product solutions for mining applications

Raw water intake, water treatment, potable water transport

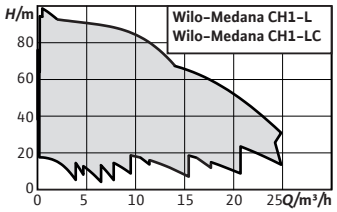
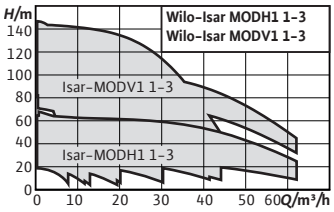
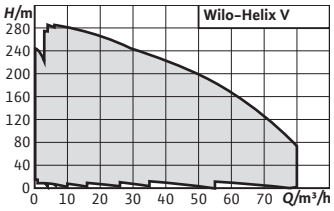
Series	Wilo-Actun ZETOS-K	Wilo-Atmos GIGA-N	Wilo-Atmos GIGA-NX
			
Design	Submersible pump in cast stainless steel with sectional construction	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate
Duty chart			
Volume flow Q_{max}	485 m³/h	1000 m³/h	1000 m³/h
Delivery head H_{max}	640 m	150 m	150 m

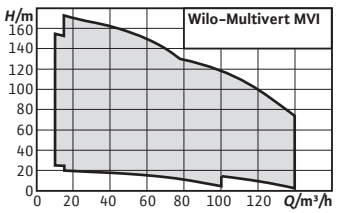
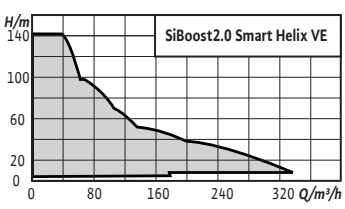
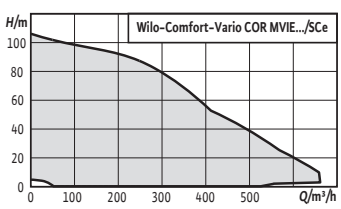
Series	Wilo-Atmos NHD
	
Design	The robust Wilo-Atmos NHD is designed to withstand the harsh and demanding conditions in mining, including dealing with abrasive and corrosive fluid. This standard pump reliably transports large quantities of water at high delivery heads.
	
Volume flow Q_{max}	7200 m³/h
Delivery head H_{max}	160 m

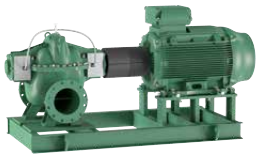
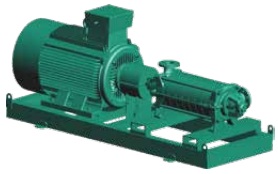
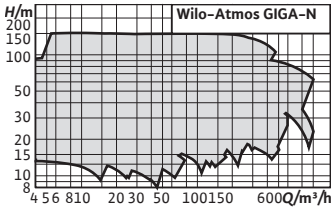
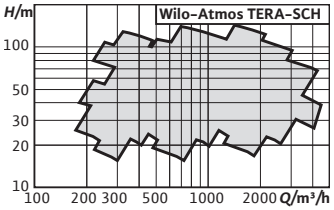
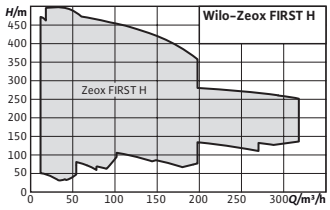
Subject to errors and technical changes without prior notice.

Series	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG	Wilo-Atmos TERA-SCH	Series VMF, CNE, VAF
			
Design	Single-stage low-pressure centrifugal pump with axial suction, according to ISO 5199, mounted on a baseplate	Axially spilt case pump mounted on a base frame	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics
Duty chart			
Volume flow Q_{max}	2,800 m³/h	4,675 m³/h	40,000 m³/h
Delivery head H_{max}	140 m	150 m	450 m

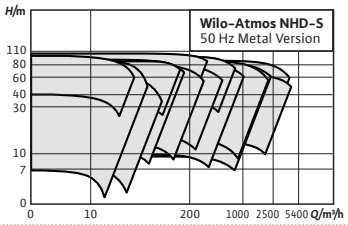
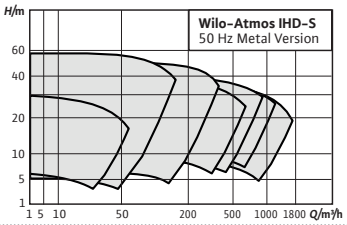
Pressure boosting

Series	Wilo-Medana CH1-L	Wilo-Isar MODH1 Wilo-Isar MODV1	Wilo-Helix V
			
Design	Non-self-priming Multistage horizontal centrifugal pumps	Pressure-boosting system with 1, 2 or 3 non-self-priming stainless steel high-pressure multistage centrifugal pumps switched in parallel	Non-self-priming multistage pump
Duty chart			
Volume flow Q_{max}	24 m³/h	62 m³/h	80 m³/h
Delivery head H_{max}	69 m	158 m	280 m

Series	Wilo-Multivert MVI 70, 95	Wilo-SiBoost Smart MVISE Wilo-SiBoost2.0 Smart Helix VE	Wilo-Comfort-Vario COR MVIE.../SCe Wilo-Comfort-Vario COR 1 MVIE...-GE
			
Design	Non-self-priming multistage pump	Highly efficient system with 2 to 4 stainless steel, non-self-priming, high-pressure multistage centrifugal pumps (Helix2.0 VE, MVISE) switched in cascade or synchronous motor speed	Pressure boosting system ready for connection with vertically arranged non-self-priming high-pressure multistage centrifugal pumps switched in parallel.
Duty chart			
Volume flow Q_{max}	140 m³/h	320 m³/h	650
Delivery head H_{max}	172 m	156 m	109

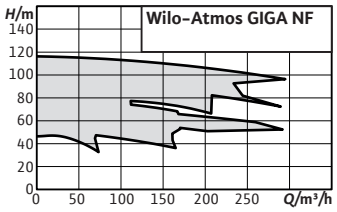
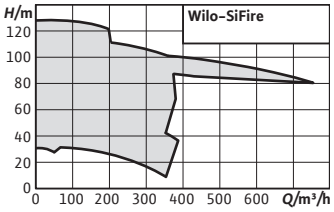
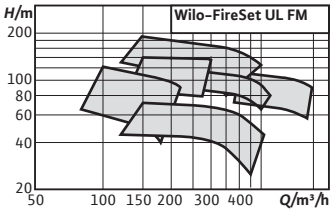
Series	Wilo-Atmos GIGA-N	Wilo-Atmos TERA-SCH	Wilo-Zeox FIRST H
			
Design	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate	Axially spilt case pump mounted on a base frame	Non-self-priming, highly efficient high-pressure multistage centrifugal pump
Duty chart			
Volume flow Q_{max}	1000 m³/h	4,675 m³/h	495 m
Delivery head H_{max}	150 m	150 m	320 m³/h

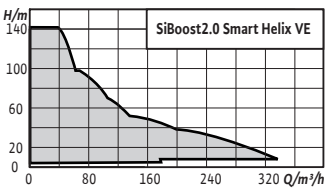
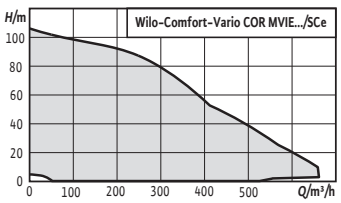
Slurry transport and backfill plant

Series	Wilo-Atmos NHD-S	Atmos IHD-S
		
Design	The robust and durable design of the Wilo-Atmos NHD-S horizontal slurry pump ensures that it can withstand the harsh and demanding conditions of mining. It can reliably transport large quantities of sludge, even under the most difficult conditions.	The Wilo-Atmos IHD-S is a robust and flexible submersible slurry pump in a vertical design, which consists of wear-resistant components. Materials for these components – for example, chrome steel or rubber – can be selected based on the requirements of the application.
Duty chart		
Volume flow Q_{max}	5400 m³/h	1267 m³/h
Delivery head H_{max}	118 m	55 lt. Noah m

Subject to errors and technical changes without prior notice.

Fire Fighting

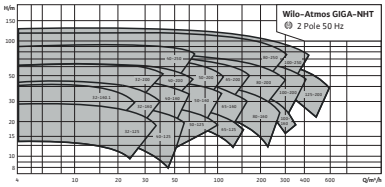
Series	Wilo-Atmos GIGA-NF	Wilo-SiFire EN SiFire Easy	Wilo-FireSet
			
Design	Single-stage, low-pressure centrifugal pump with axial suction in accordance to EN 733 and VdS 2100-7 for installation on a base frame	Pressure-boosting system for firefighting, 1 or 2 pumps on horizontal base frame – EN 733 – spacer coupling, electro or diesel motor and multistage, electrical, vertical jockey pump	Pressure-boosting system for firefighting according to NPFA standards and with UL and FM certifications, consisting of 1 pump with electric or diesel motor and a switchgear on horizontal baseplate
Duty chart			
Volume flow Q_{max}	295 m³/h	750 m³/h	681 m³/h
Delivery head H_{max}	115 m	128 m	179 m

Series	Wilo-SiBoost Smart MVISE Wilo-SiBoost2.0 Smart Helix VE	Wilo-Comfort-Vario COR MVIE.../SCe Wilo-Comfort-Vario COR 1 MVIE...-GE
		
Design	Highly efficient system with 2 to 4 stainless steel, non-self-priming, high-pressure multistage centrifugal pumps (Helix2.0 VE, MVISE) switched in cascade or synchronous motor speed	Pressure boosting system ready for connection with vertically arranged non-self-priming high-pressure multistage centrifugal pumps switched in parallel.
Duty chart		
Volume flow Q_{max}	320 m³/h	650
Delivery head H_{max}	156 m	109

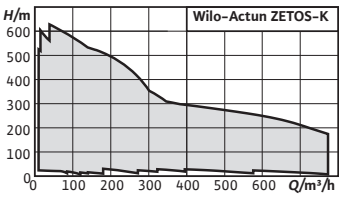
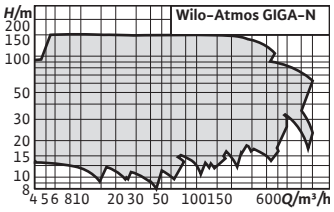
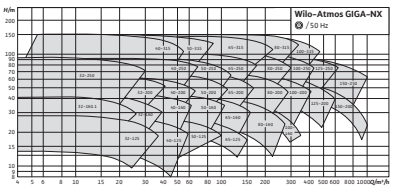
Subject to errors and technical changes without prior notice.

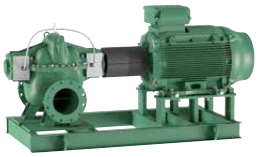
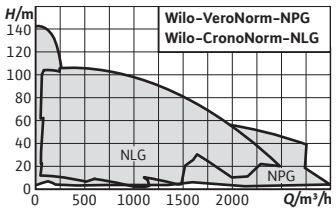
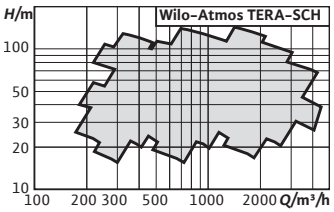
Processing

Series	Wilo-Atmos GIGA-NHT

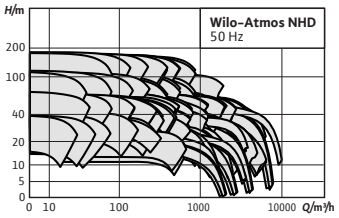
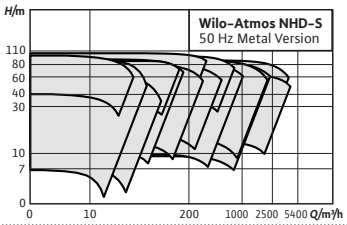
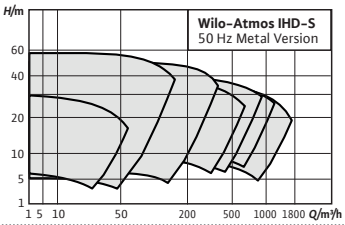
Design	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate
Duty chart	
Volume flow Q_{max}	400 m³/h
Delivery head H_{max}	100 m

TSF Return Water (Tailings Management)

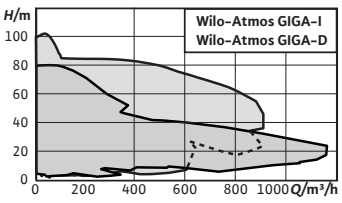
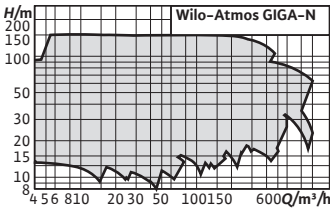
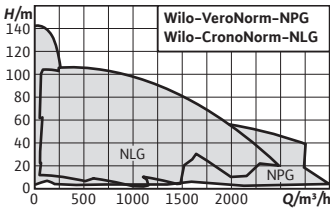
Series	Wilo-Actun ZETOS-K	Wilo-Atmos GIGA-N	Wilo-Atmos GIGA-NX
			
Design	Submersible pump in cast stainless steel with sectional construction	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate
Duty chart			
Volume flow Q_{max}	485 m³/h	1000 m³/h	1000 m³/h
Delivery head H_{max}	640 m	150 m	150 m

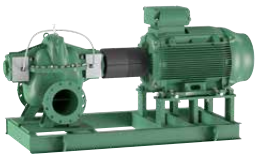
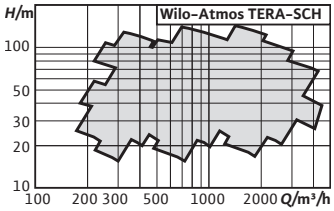
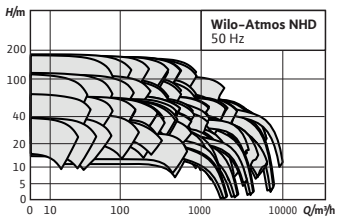
Series	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG	Wilo-Atmos TERA-SCH	Series VMF, CNE, VAF
			
Design	Single-stage low-pressure centrifugal pump with axial suction, according to ISO 5199, mounted on a baseplate	Axially spilt case pump mounted on a base frame	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics
Duty chart			
Volume flow Q_{max}	2,800 m³/h	4,675 m³/h	40,000 m³/h
Delivery head H_{max}	140 m	150 m	450 m

Subject to errors and technical changes without prior notice.

Series	Wilo-Atmos NHD	Wilo-Atmos NHD-S	Atmos IHD-S
			
Design	The robust Wilo-Atmos NHD is designed to withstand the harsh and demanding conditions in mining, including dealing with abrasive and corrosive fluid. This standard pump reliably transports large quantities of water at high delivery heads.	The robust and durable design of the Wilo-Atmos NHD-S horizontal slurry pump ensures that it can withstand the harsh and demanding conditions of mining. It can reliably transport large quantities of sludge, even under the most difficult conditions.	The Wilo-Atmos IHD-S is a robust and flexible submersible slurry pump in a vertical design, which consists of wear-resistant components. Materials for these components – for example, chrome steel or rubber – can be selected based on the requirements of the application.
Duty chart			
Volume flow Q_{max}	7200 m³/h	5400 m³/h	1267 m³/h
Delivery head H_{max}	160 m	118 m	55 m

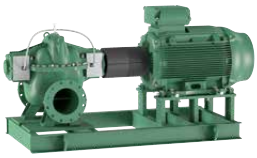
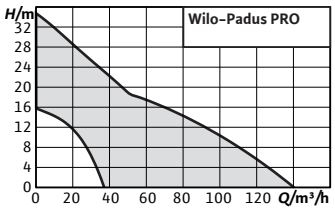
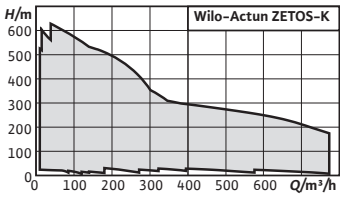
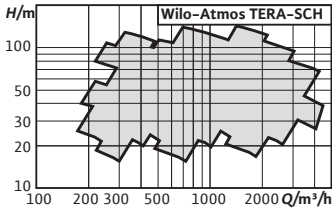
Heating and ventilation

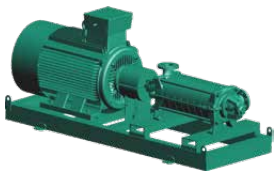
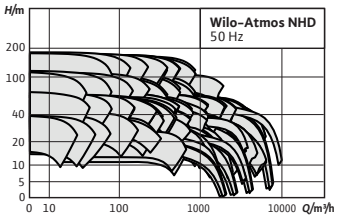
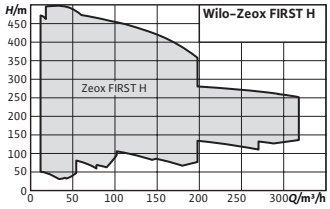
Series	Wilo-Atmos GIGA-I Atmos GIGA-D	Wilo-Atmos GIGA-N	Wilo-CronoNorm-NLG Wilo-VeroNorm-NPG
			
Design	Glanded pump (as single or twin-head pump) in in-line design with flange connection	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate	Single-stage low-pressure centrifugal pump with axial suction, according to ISO 5199, mounted on a baseplate
Duty chart			
Volume flow Q_{max}	1,170 m³/h	1000 m³/h	2,800 m³/h
Delivery head H_{max}	110 m	150 m	140 m

Series	Wilo-Atmos TERA-SCH	Wilo-Atmos NHD
		
Design	Axially spilt case pump mounted on a base frame	The robust Wilo-Atmos NHD is designed to withstand the harsh and demanding conditions in mining, including dealing with abrasive and corrosive fluid. This standard pump reliably transports large quantities of water at high delivery heads.
Duty chart		
Volume flow Q_{max}	4,675 m³/h	7200 m³/h
Delivery head H_{max}	150 m	160 m

Subject to errors and technical changes without prior notice.

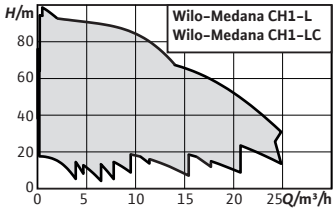
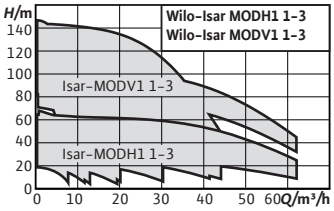
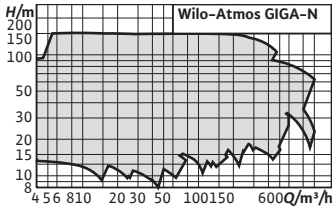
Dewatering

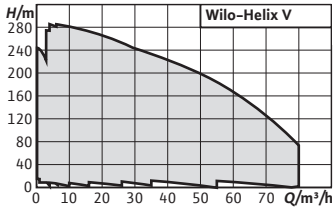
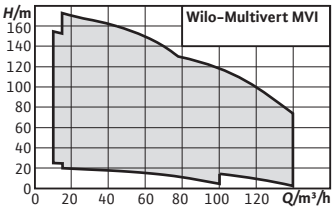
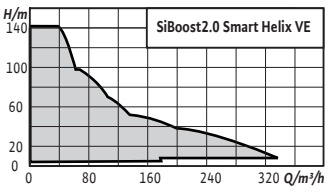
Series	Wilo-Padus PRO	Wilo-Actun ZETOS-K	Wilo-Atmos TERA-SCH
			
Design	Submersible drainage pump	Submersible pump in cast stainless steel with sectional construction	Axially spilt case pump mounted on a base frame
Duty chart			
Volume flow Q_{max}	140 m³/h	485 m³/h	4,675 m³/h
Delivery head H_{max}	34 m	640 m	150 m

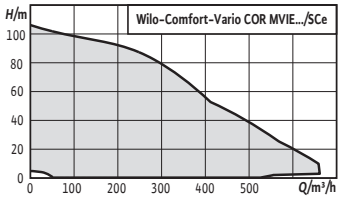
Series	Wilo-Atmos NHD	Series VMF, CNE, VAF	Wilo-Zeox FIRST H
			
Design	The robust Wilo-Atmos NHD is designed to withstand the harsh and demanding conditions in mining, including dealing with abrasive and corrosive fluid. This standard pump reliably transports large quantities of water at high delivery heads.	Vertical turbine pumps for dry well installation with submerged axial or semi-axial hydraulics	Non-self-priming, highly efficient high-pressure multistage centrifugal pump
Duty chart			
Volume flow Q_{max}	7200 m³/h	40,000 m³/h	495 m
Delivery head H_{max}	160 m	450 m	320 m³/h

Subject to errors and technical changes without prior notice.

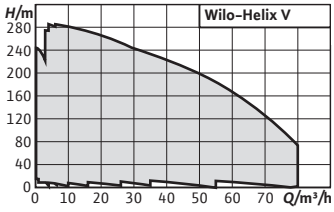
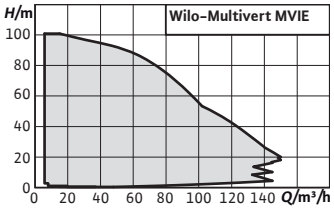
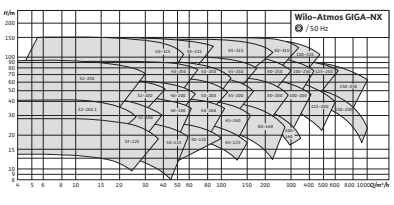
Dust suppression

Series	Wilo-Medana CH1-L	Wilo-Isar MODH1 Wilo-Isar MODV1	Wilo-Atmos GIGA-N
			
Design	Non-self-priming Multistage horizontal centrifugal pumps	Pressure-boosting system with 1, 2 or 3 non-self-priming stainless steel high-pressure multistage centrifugal pumps switched in parallel	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate
Duty chart			
Volume flow Q_{max}	24 m³/h	62 m³/h	1000 m³/h
Delivery head H_{max}	69 m	158 m	150 m

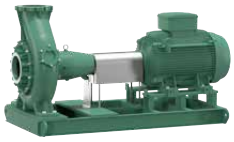
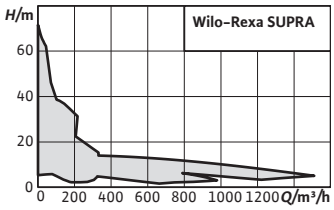
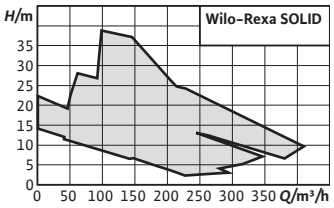
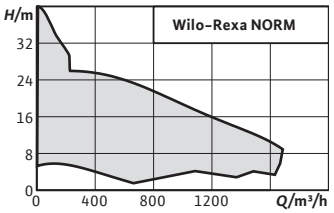
Series	Wilo-Helix V	Wilo-Multivert MVI 70, 95	Wilo-SiBoost Smart MVISE Wilo-SiBoost2.0 Smart Helix VE
			
Design	Non-self-priming multistage pump	Non-self-priming multistage pump	Highly efficient system with 2 to 4 stainless steel, non-self-priming, high-pressure multistage centrifugal pumps (Helix2.0 VE, MVISE) switched in cascade or synchronous motor speed
Duty chart			
Volume flow Q_{max}	80 m³/h	140 m³/h	320 m³/h
Delivery head H_{max}	280 m	172 m	156 m

Series	Wilo-Comfort-Vario COR MVIE.../SCe Wilo-Comfort-Vario COR 1 MVIE...-GE
	
Design	Pressure boosting system ready for connection with vertically arranged non-self-priming high-pressure multistage centrifugal pumps switched in parallel.
Duty chart	
Volume flow Q_{max}	650
Delivery head H_{max}	109

Gland service and reverse osmosis

Series	Wilo Helix V	Wilo-Multivert MVIE 70, 95	Wilo-Atmos GIGA-NX – for reverse osmosis
			
Design	Non-self-priming multistage pump	Non-self-priming multistage pump with integrated frequency converter	Single-stage, low-pressure centrifugal pump with axial suction, mounted on a baseplate
Duty chart			
Volume flow Q_{max}	80 m³/h	145 m³/h	1000 m³/h
Delivery head H_{max}	280 m	100 m	150 m

Waste water treatment

Series	Wilo-Rexa SUPRA	Wilo-Rexa SOLID	Wilo-Rexa NORM
			
Design	Submersible sewage pump	Submersible sewage pump	Non-submersible sewage pump with standard motor, fully mounted on baseplate
Duty chart			
Volume flow Q_{max}	1500 m³/h	410 m³/h	1,660 m³/h
Delivery head H_{max}	71 m	38 m	40 m

Series	Wilo-Vardo WEEDLESS-VM	Wilo-Flumen OPTI-TR 22-1 ... 40-1 Wilo-Flumen EXCEL-TRE 20 ... 40
		
Design	Low-speed vertical mixer with gear motor for stationary installation.	Fast running, directly driven submersible mixer, in continuous or intermittent operation.
	Propeller diameter: 1.50/2.00/2.50 m Diameter of mixer shaft: 70 ... 114 mm Fluid temperature: 3 ... 40 °C Mains connection: 3~400 V, 50 Hz/ 3~460 V, 60 Hz Drive power: max. 7.50 kW Ambient temperature: -20 ... +40 °C Motor efficiency class: IE3 and IE4 Motor version: Ex-rated in accordance with FM as option	Mains connection: 3~400 V, 50 Hz Fluid temperature: 3 ... 40 °C (37 ... 104 °F) Submerged operating mode: S1 Protection class: IP68 Insulation class: H Max. switching frequency: 15/h Max. immersion depth: 20 m (66 ft)
Volume flow Q_{max}	Max. thrust: 4315 N	Max. thrust: 105 - 950 N

Wilo-Services

A carefree package for you as our partner

With Wilo as your partner, you cannot only be sure of choosing high-quality product solutions, but also of benefiting from a comprehensive, carefree package of well-thought-out services.

In short: Wilo is always by your side. In person and on site. With local services in over 60 countries and more than 1,200 Wilo technicians worldwide.

System Consulting

- On site trainings with professional pump and system experts from Wilo
- Several training sites
- Practically experienced experts
- Topics of highest quality and practical relevance
- Personal exchange of experiences between the participants

Maintenance

- Professional pump and system inspection, maintenance and repair by Wilo pump and system experts
- Maintenance and refit
- Standardised maintenance options and packages
- Individual maintenance solutions and full service contracts
- All maintenance work recorded in a check list

Inhouse-repair

- Check of failure cause
- Repair or replacement offer
- Repair exclusively with genuine Wilo spare parts
- Optical preparation
- Electric and hydraulic test run
- Repair and test recorded in service report

Commissioning

- Installation checks
- Setting of optimised system parameters
- Test run
- Checked and recorded with standardised check list
- Practical introduction to the operation

On-site repair

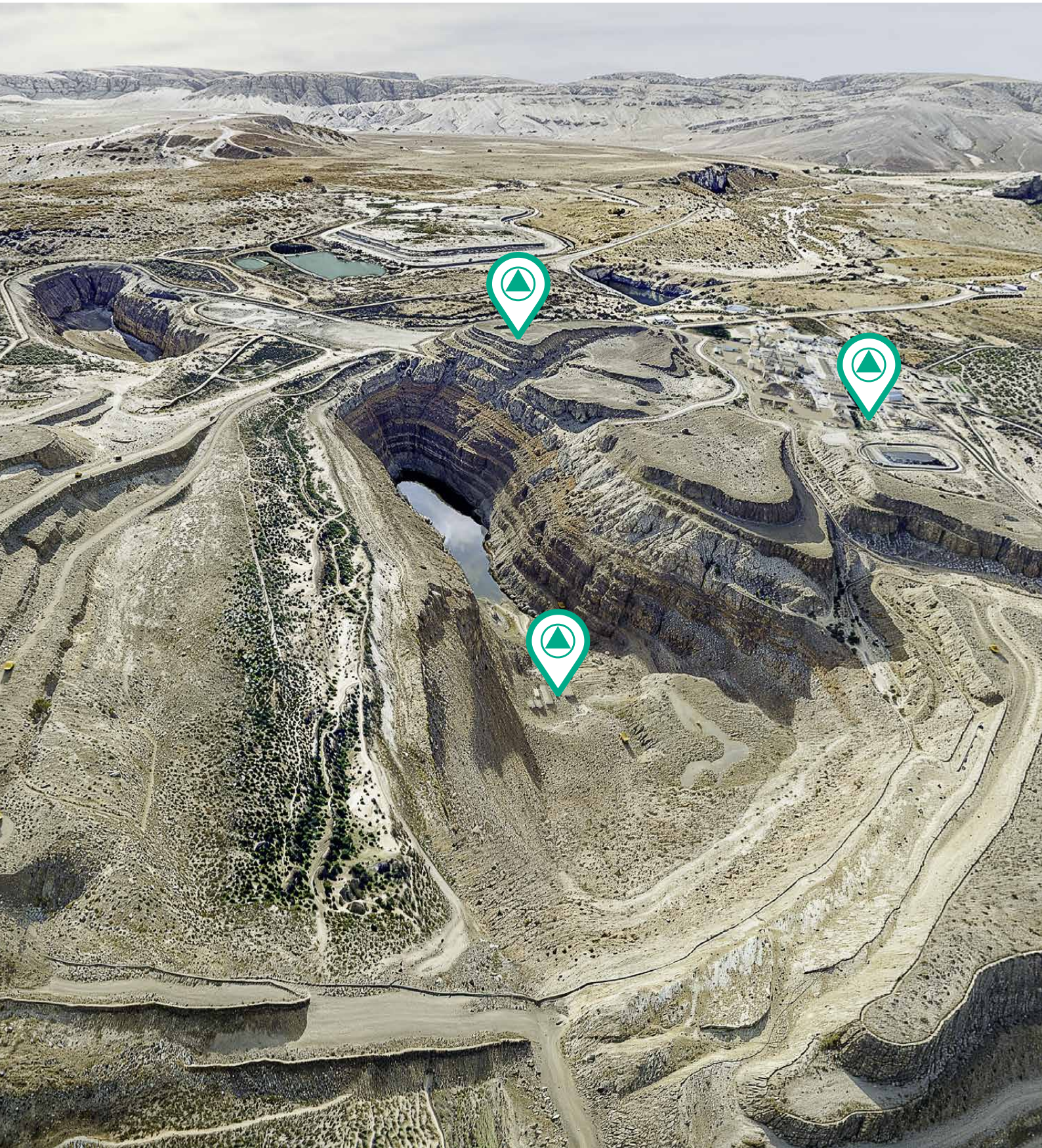
- Check of failure cause and system conditions
- Repair with genuine Wilo spare parts
- Corrective maintenance of failure cause
- Electric and hydraulic test run
- Repair recorded in service report

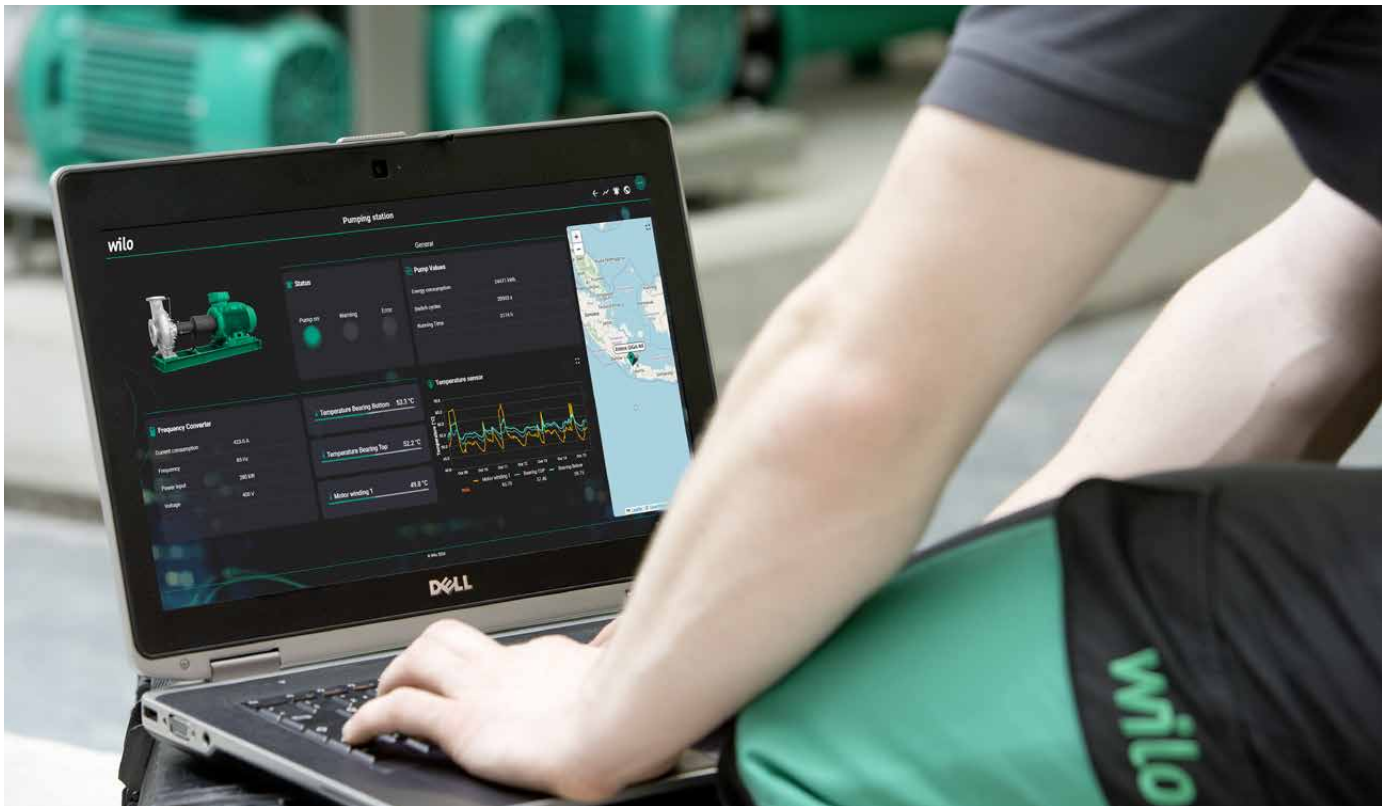
Spare parts

- Genuine spare parts in proven Wilo quality
- Customised spare parts stocks around the world
- Delivery capability of more than 92 %
- All popular spare parts available within 24 hours
- Individual advice on spare part selection and stock solution

Monitoring and Controls

Real time monitoring at a glance.





The Wilo-Monitor is our digital solution for remote monitoring of your pumps and pump systems, ensuring operational safety and performance. Our standardised dashboards provide an overview of important data points, which can be customised according to your specific requirements. This way, you always have full control over your data and can conveniently and flexibly analyze it. The collected data is transmitted to the cloud-based Wilo-Monitor via Modbus or signaling contacts, allowing real time access and visualisation.

Our service for you:

- → Digital monitoring of all pumps
- → Reduce system downtime
- → Direct digital, cloud-based connection of up to 20 pumps or pump systems
- → Integration of third-party products upon request
- → Data accessible anytime and from all common devices
- → Data history available for 12 months
- → Visualization of your relevant operating data through dashboards
- → Real time alarm notifications via SMS/email

Pioneering for You

The Wilo-World.

Our solutions for a sustainable future.

In our interactive Wilo-World, you can learn more about us as a company, about current topics from the industry and about our products and solutions that are in use around the world. Click through the various Smart Urban Areas, explore the different building types and experience what Wilo stands for: digital and sustainable water solutions.

www.wilo.de/wilo-world

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