



**Vertical  
Multistage Pumps  
Series 4700**

SOLUTION OUTLINE

**LENNTECH**  
WATER TREATMENT Solutions

**HIGH-EFFICIENCY  
RELIABLE PERFORMANCE**

# **VERTICAL MULTISTAGE PUMPS**

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**EFFICIENT**  
**DURABLE**  
**PERFORMANT**

With higher pressure capabilities, one pump can serve multiple floors

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**300+PSI**

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Armstrong's Vertical Multistage pumps deliver optimum hydraulic efficiency and significantly reduce axial thrust loads for leading performance and longevity. The pumps feature cartridge type mechanical seals and hydraulic coverage to 390 GPM and 930 feet TDH, making them ideal for a range of industrial and building services applications.



# INNOVATIVE HYDRAULIC DESIGN

## Motor flexibility

Compatible with standard NEMA motor sizes

## Easy maintenance

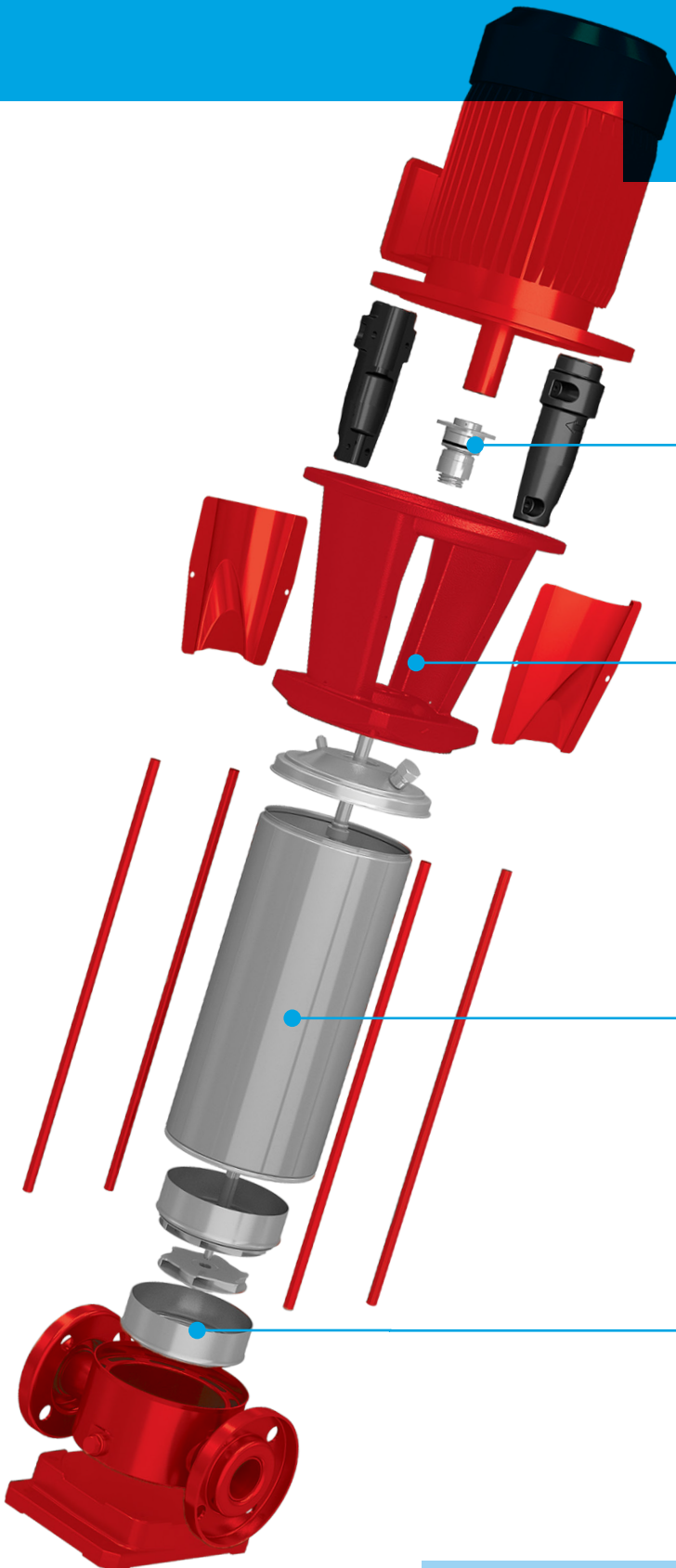
Innovative design allows replacement of the cartridge shaft seal without disassembling the motor bracket. The spacer coupling allows maintenance without having to remove heavy motors over 7 ½ HP.

## Diverse shaft seal materials

- Resin impregnated carbon graphite
- Sintered silicon carbide
- Silicon carbide with carbon graphite
- Conforms with EN12756

## Smart plug solutions

- Air ventilation plug
- Water filling & sensor plug
- Drain plug



# KEY BENEFITS

## Reduce operating costs

Integrated base simplifies installation to reduce labor time and cost.

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## Save floor space

Vertical design minimizes footprint.

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## Application configurable

10 different pump sizes and expanded pressure performance opens opportunities for wide range of applications.

## Extend system lifetime

Innovative impeller design reduces axial thrust load for longer operating life of the motor bearing. Durable mechanical seals last 25+ years.

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## NSF Certification

All impellers and components are NSF 61 certified for clean water applications.

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## Lower project costs

Inverter-ready motor can accept operating instructions from industry-standard controllers.

# KEY FEATURES

## Innovative hydraulics

Stainless steel impellers

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Extends life of motor bearing

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Durable, mechanical seal design

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Tungsten carbide bearings & sleeves

## Versatile, reliable design

Multiple stages boost to beyond 300psi

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Serves lower flows and higher heads

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Vertical design with integrated base

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Inverter-ready motor

# TYPICAL APPLICATIONS

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**A**rmstrong's Vertical Multistage pumps are a versatile, flexible and durable solution for a wide range of applications including industrial, building service, and water supply. With superior performance in lower flow ranges at higher pressures the VMS is ideal as a pressure maintenance (jockey) pump in a fire system.

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## FEATURED APPLICATION



**Water Supply**  
water treatment, pressure boosting  
irrigation, agriculture

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TRUST ARMSTRONG PUMPS FOR  
CLEAN WATER APPLICATIONS

## INDUSTRIAL APPLICATIONS

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Condensate and steam boiler

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feed systems

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Wash and clean systems

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Chilling

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Machine tool

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Pressure boosting

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Food and beverage

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Pharmaceutical industries

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Marine applications

## BUILDING SERVICES

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Pressure boosting

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Sprinkler systems

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Firefighting systems

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District heating

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Heat exchangers/fan heaters

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Air conditioning systems

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Heating systems

## PUMP

Version		VMS B						VMS		
Performance Range	Nominal size	1	3	5	10	15	20	32	45	64
	Motor Power	1/2 to 25 HP (0.37 to 18.5 kW)						5 to 50 HP (4 to 37 kW)		
	Capacity	3 to 132 US gpm (0.19 to 8.33 l/s)						66 to 390 US gpm (4.16 to 24.61 l/s)		
	Total Head	24 to 860 ft (7 to 262 m)						44 to 930 ft (13 to 284 m)		
Liquid Handling	Type of liquid	Clean water (for other clean liquids, consult factory)								
	Maximum working pressure	230 / 375 PSI (16/26 Bar) max. (depending on model)						up to 440 PSI (up to 30 Bar) max. (depending on model)		
	Liquid temperature	-22°F to 248°F (-30°C to 120°C)						5°F to 248°F (-15°C to 120°C)		
Size	Suction	1 1/4" (32 mm)			2" (50 mm)		2 1/2" (65 mm)		3" (80 mm)	4" (100 mm)
	Discharge	1 1/4" (32 mm)			2" (50 mm)		2 1/2" (65 mm)		3" (80 mm)	4" (100 mm)
Key Component Materials	Impeller	SS 304								
	Intermediate casing	SS 304								
	Liner ring	SS 304						SS 316		
	Bottom casing	SS 304						Cast iron		
	Casing cover	SS 304						Cast iron		
	Shaft	SS 304 (depending on model)						SS 316		
		SS 329A (depending on model)								
	Shaft sleeve bearing	Tungsten carbide								
	Shaft Seal	Silicon Carbide/Carbon/FPM								
	O-ring	FPM								
	Outer casing	SS 304								
	Motor bracket	Cast iron								
Motor	Base	Die cast aluminium						Cast iron		
	Type	NEMA C/TC/TSC frame						NEMA TC/TSC frame		
	Speed	50–60 hz, 3000-3600 RPM								
	Direction of Rotation	Clockwise when viewed from motor end								



# OUR SUSTAINABILITY VISION



## PLANET PROPOSITION

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**T**hrough our Planet Proposition charter, Armstrong has committed to minimizing our impact on the environment. Around the world, Armstrong's Planet Proposition teams have taken on projects that are helping us meet our targets. Two examples of ongoing projects are:

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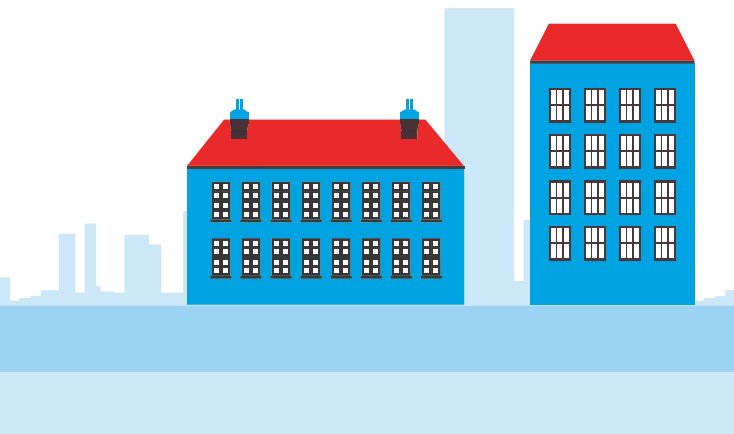
Armstrong is committed to helping existing customers reduce GHG emissions of installed equipment by two million tons by the year 2022. Under this initiative, Armstrong works with customers to upgrade existing installations and continues to develop new energy-savings solutions.

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### NET ZERO CARBON BUILDINGS COMMITMENT

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The Net Zero Commitment positions energy efficiency as a central component to achieving decarbonization globally. In signing the Net Zero Carbon Buildings Commitment, Armstrong has pledged to ensure our entire portfolio of buildings operates at net zero carbon by the year 2030.





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For more information, contact your  
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