

SLUDGE-PUMP-SYSTEMS MUCK PUMPS

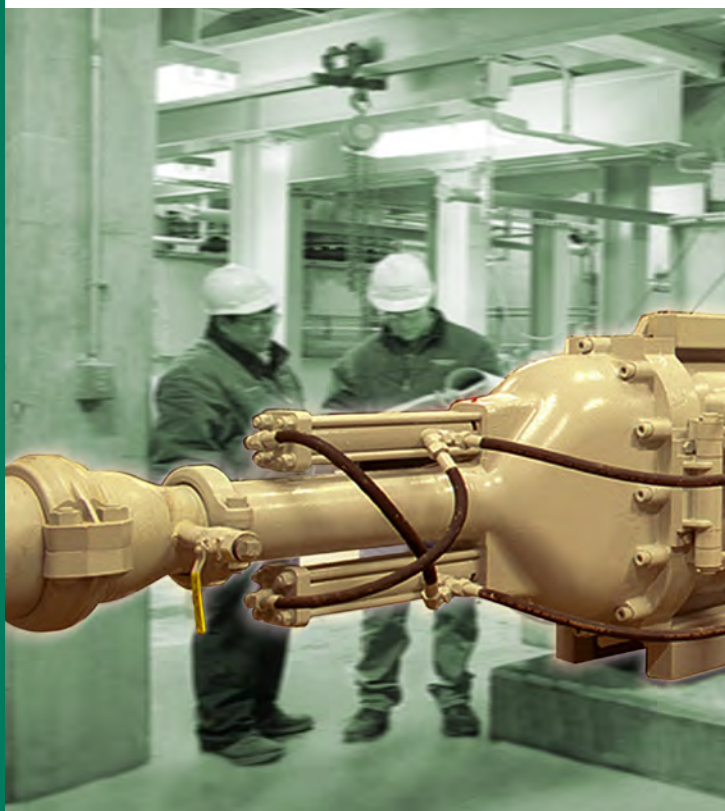
overview



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MUCK PUMPS

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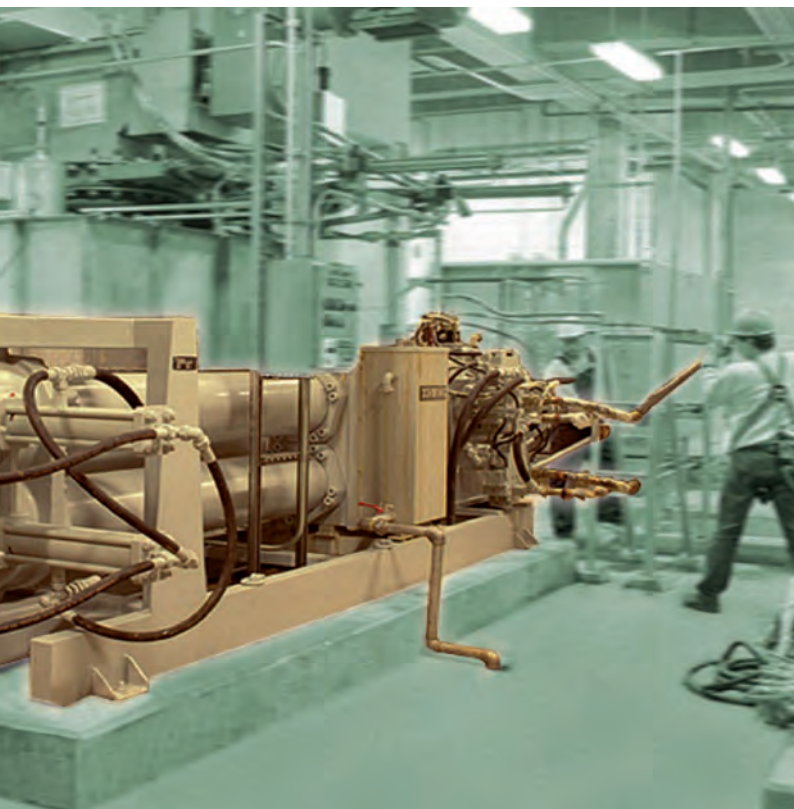
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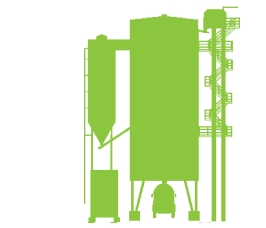
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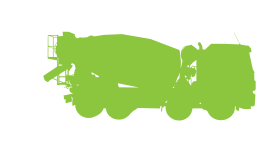
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CONCRETE BATCHING PLANTS



TRUCK MIXERS



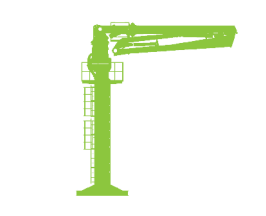
TRUCK MIXER CONCRETE PUMPS



TRUCK-MOUNTED CONCRETE PUMPS



STATIONARY CONCRETE PUMPS



SEPARATE PLACING BOOMS



CONCRETE RECYCLERS



SLUDGE PUMPS

KSP - FIELDS OF APPLICATION

WASTE WATER TREATMENT PLANTS (WWTP)

- Sewage sludge mechanically dewatered and with foreign particles

WASTE RECYCLING

- Waste sludge
- Oil sludge
- Salt mud
- Radioactive waste
- Et al.

CONSTRUCTION INDUSTRY

- Bentonite
- Clay mud
- Mortar
- Tailings
- Et al.

MINING | REFINERIES | POWER PLANTS

- Red mud
- Gold slime
- Iron sludge
- Zinc sludge
- Metallic oxide sludge
- Fly ash
- Et al.

CHEMISTRY AND INDUSTRY

- Organic and inorganic materials
- Stabilized chemical waste
- Lime slurry
- Food-processing by-products
- Paint sludges

SLUDGE PUMPS

EXAMPLE

- **KSP 25 HDV (k)**

KSP = Piston Sludge Pump
25 = Volume of material cylinder in litres
HD = High pressure version
k = Differential cylinder on piston side

- **KSP 12-2D (s)**

12 = Volume of material cylinder in litres
w/o marking = horizontal pump configuration
(material cylinders side by side)
2D = Dual outlet (one outlet per cylinder)
s = Differential cylinder on rod side

- **KSP 45 R**

45 = Volume of material cylinder in litres
R = Rock Valve

- **KSP 80 V**

80 = Volume of material cylinder in litres
V = Vertical pump configuration
(material cylinders over / under)

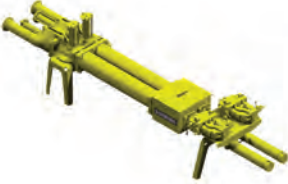
MUCK PUMPS

EXAMPLE

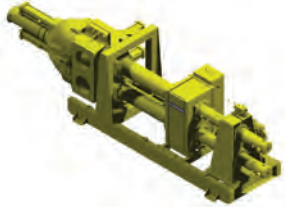
- **TAP 90 R**

TAP = Tunnel Muck Pump
90 = Volume of material cylinder in litres
R = Rock Valve

KSP with dual outlet



KSP with XL poppets and vertical configuration



KSP with horizontal configuration



KSP with Rock valve system

AVAILABLE PUMP CONFIGURATIONS

Both

- horizontal “H” (material cylinders side by side)

and

- vertical “V” (material cylinders over / under)

with

a) Poppet Valve System

- small (KSP 5 - 40)
- large (KSP 12 - 220)
- XL (KSP 45 - 315)

Ø diameter suction valves / pressure valves

DN 125 mm / DN 100 mm
DN 210 mm / DN 150 mm
DN 280 mm / DN 250 mm

b) Rock Valve System

- KSP 5 - 40
- KSP 12 - 220
- KSP 12 - 220

Model

Rock small(RK / 80 bar)
Rock large/medium (RML-TAP / 100 bar)
Rock large/medium (RMHP / 160 bar)

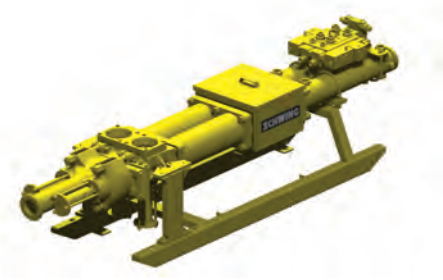
All pump models with small and large poppet valves are also available with dual outlet (-2D).



TECHNICAL DATA

Min. and max. output*	m³/hr	0,4 - 3,0
Max. design pressure	bar	130
Length	mm	2800
Width	mm	700
Height	mm	850
Weight approx.	kg	900
Diam. of material cylinder	mm	115
Diam. of differential cylinder	mm	125
Stroke length	mm	500

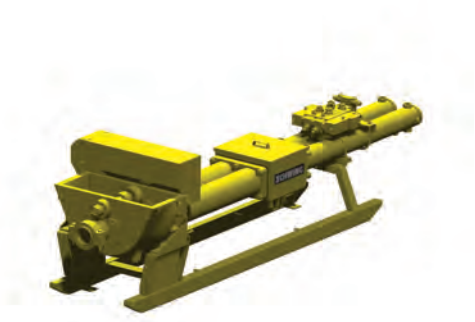
* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m³/hr	1,0 - 7,0
Max. design pressure	bar	120
Length	mm	3150
Width	mm	700
Height	mm	850
Weight approx.	kg	980
Diam. of material cylinder	mm	180
Diam. of differential cylinder	mm	125
Stroke length	mm	500

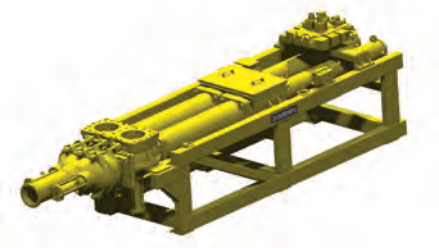
* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m ³ /hr	2,0 - 15,0
Max. design pressure	bar	80
Length	mm	3650
Width	mm	1050
Height	mm	1100
Weight approx.	kg	1.300
Diam. of material cylinder	mm	180
Diam. of differential cylinder	mm	125
Stroke length	mm	1000

* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m³/hr	2,5 - 30,0
Max. design pressure	bar	106
Length	mm	4300
Width	mm	1000
Height	mm	1000
Weight approx.	kg	2.250
Diam. of material cylinder	mm	230
Diam. of differential cylinder	mm	150
Stroke length	mm	1000

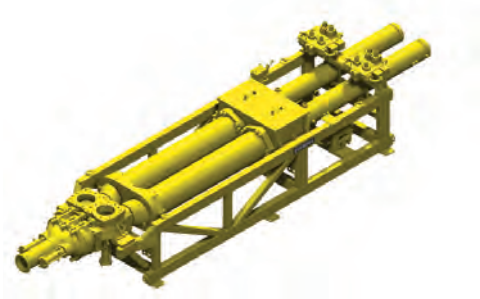
* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m³/hr	4,0 - 60,0
Max. design pressure	bar	100
Length	mm	5800
Width	mm	1350
Height	mm	1100
Weight approx.	kg	2.850
Diam. of material cylinder	mm	230
Diam. of differential cylinder	mm	150
Stroke length	mm	1600

* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m³/hr	8,0 - 90,0
Max. design pressure	bar	120
Length	mm	6420
Width	mm	1350
Height	mm	1450
Weight approx.	kg	5.700
Diam. of material cylinder	mm	300
Diam. of differential cylinder	mm	200
Stroke length	mm	1600

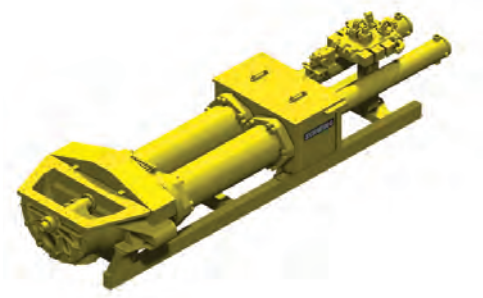
* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Min. and max. output*	m³/hr	15,0 -150,0
Max. design pressure	bar	100
Length	mm	8810
Width	mm	1500
Height	mm	1450
Weight approx.	kg	5.800
Diam. of material cylinder	mm	300
Diam. of differential cylinder	mm	200
Stroke length	mm	3100

* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

TAP 30 R

Min. and max. output*	m ³ /hr	3,0 - 31,0
Max. design pressure	bar	80
Length	mm	3700
Width	mm	950
Height	mm	750
Weight approx.	kg	1.800
Diam. of material cylinder	mm	230
Diam. of differential cylinder	mm	150
Stroke length	mm	700

* Max. output depending on consistency of material to be pumped.

TAP 50 R

Min. and max. output*	m ³ /hr	5,0 - 50,0
Max. design pressure	bar	100
Length	mm	3600
Width	mm	1350
Height	mm	1100
Weight approx.	kg	2.700
Diam. of material cylinder	mm	300
Diam. of differential cylinder	mm	150
Stroke length	mm	500

* Max. output depending on consistency of material to be pumped.



TECHNICAL DATA

Model	Power
EHS 100	5,5 kW
	7,5 kW
	11,0 kW
	15,0 kW
EHS 190	15,0 kW
	18,5 kW
	22,0 kW
	30,0 kW
EHS 300	15,0 kW
	22,0 kW
	30,0 kW
	37,0 kW
	45,0 kW
EHS 400	37,0 kW
	45,0 kW
	55,0 kW
EHS 630	55,0 kW
	75,0 kW
	90,0 kW
EHS 800	90,0 kW
	110,0 kW
	132,0 kW

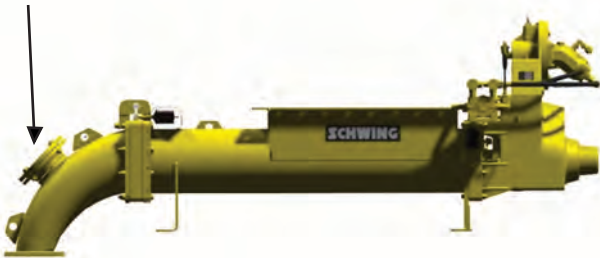
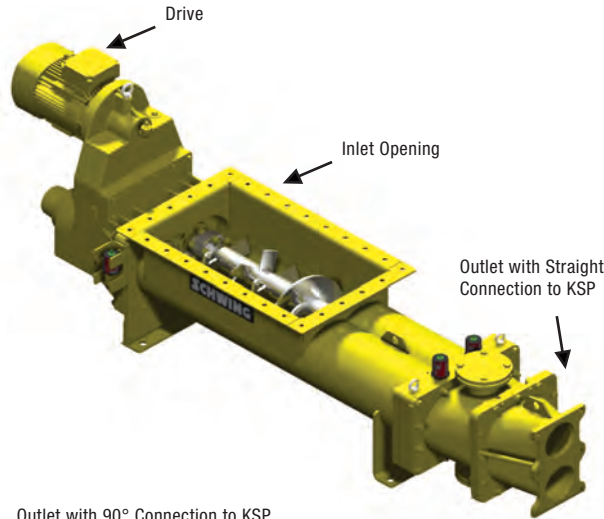
* These data apply to electric motors 400 / 690 V – 50 Hz, 1500 rpm.
Models listed above are equipped with an oil tank on top.

SCHWING SYSTEM ENGINEERING PROVIDES:

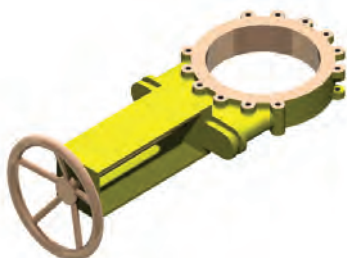
- all control systems are equipped with programmable logic controllers (PLC)
- switch cabinets in the range from 5,5 kW to 1000 kW according to customers request
- fully automatic control and monitoring of the complete sludge pump system
- full system operation by remote control from customers control centre
- control systems manufactured in accordance with all international standards
- modern automation and visual display systems
- problem-free interface and running system integration

Our service includes consultancy, design, engineering as well as delivery and start-up on site.

TECHNICAL DATA



Model	inlet width	inlet length
SD 180	320 mm	variable
SD 250	433 mm	variable
SD 350	600 mm	variable
SD 350 HD	600 mm	variable
SD 425	650 mm	variable
SD 500	883 mm	variable
SD 500 HD	883 mm	variable







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