

Häny Mixing and Injection Technology

# Product Portfolio



Mixing and grouting equipment for ground improvement, anchorages, reinforcing, sealing, pipe jacking, micro-tunneling, and directional drilling.

# Product Portfolio

## Mixers



Häny high-shear colloidal mixers are recognized worldwide for their excellent mixing performance, efficiency, and wear resistance. The vortex impeller generates high shear forces, separating the particles very efficiently. This ensures that the mix is thoroughly hydrated. Additional mixing units are available for mixing of microfine cements. Optional weight-batching systems enable automated mixing of dry products, chemical additives, and water.

Model HCM		100	300	600	800	2500
Max. mixing capacity <sup>1</sup>	m <sup>3</sup> /h	2.0	5.0	8.0	20.0	40.0
Circulation capacity	l/min	540	1400	1400	2400	4800
Holding capacity	l	100	260	550	800	2500
Max. aggregate size	mm	5	8	8	3	no sand
Nominal power	kW	3.0	9.2	9.2	22.0	45.0

## Agitators



Agitators ensure continuous operation by holding and homogenizing the mixed suspension and removing any air bubbles by means of a slowly rotating paddle. Optional level sensors enable fully automatic operation.

Model HRW		150	350	800	1200	2000	3000
Holding capacity	l	150	350	800	1050	2000	3000
Nominal power	kW	0.55	0.55 / 1.10	0.55 / 1.10	1.5	3.0	3.0

## Compact grout plants



This solution arranges a mixer, agitator, and grout pump in a functional configuration on a frame, forming a compact grout plant that is suitable for any kind of grouting work. The central lifting point makes transport extremely easy. Various levels of automation are available, from manual to fully automated - resulting in an economical solution that delivers excellent productivity, enables quality control and reduces labor costs.<sup>2</sup>



IC 325CCP is a compact, high-performance injection system designed for use under extreme conditions in pressurized water zones. For the first time, the system enables combined processing of cement suspension and 2-component polyurethane (PU) in a fully integrated system. The IC 325CCP was specially developed for confined spaces and for seamless integration into tunnel boring machines (TBMs), shaft boring machines (SBMs) and other special civil engineering setups.

Model IC		310	311	325	650			1100				1400			
Configuration	HCM/HRW	100/150	100/150	100/150	300/350			300/800				600/800			
Grout pump	ZMP	610	611	625	710	712	725	710	712	725	726	710	712	725	726
Max. capacity <sup>1</sup>	m <sup>3</sup> /h	1.5	2.0	2.0	5.0	4.9	5.0	5.0	4.9	5.0	5.0	7.5	4.9	8.0	8.0
Max. pressure	bar	100	75	100	100	88	100	100	88	100	100	100	88	100	100
Nominal power	kW	9.1	9.1	9.1	17.5	17.5	19.0	17.5	17.5	19.0	39.8	17.5	17.5	19.0	39.8



## Grout pumps

Häny grout pumps set the standard for low-wear, easy-to-maintain plunger-type injection and transfer pumps. With delivery pressure levels from 1 to 100 bars and flow rates up to 1000 l/min, they cover a broad range of applications. The standard gravity ball valves allow aggregates up to 8 mm to pass and are at the same time easy to clean. All models include pressure and flow control valves, which make it possible to limit the maximum pumping pressure and flow in the case of delicate formations.<sup>2</sup>



### SINGLE-ACTING GROUT PUMPS

Model ZMP		610	611	710			712		
Max. capacity <sup>1</sup>	m <sup>3</sup> /h	1.5	2.0	3.9	5.5	7.5	2.4	3.8	4.9
Max. pressure	bar	100	75	100	68	50	88	58	44
Max. aggregate size	mm	5	5	8			8		
Nominal power	kW	5.5	5.5	7.5			7.5		

### DOUBLE AND TRIPLE-ACTING GROUT PUMPS

Model ZMP		625		725			726		
Max. capacity <sup>1</sup>	m <sup>3</sup> /h	2.0	5.9	9.0	11.7	6.5	9.9	13.0	
Max. pressure	bar	100	100	68	50	100	68	50	
Max. aggregate size	mm	5		8			8		
Nominal power	kW	5.5		9.2			30.0		

## Container grout plants

Mixers, agitators, and grout pumps are installed in a standard sea container, providing a solution that is not only highly portable, but also delivers protection against harsh environments and vandalism. PLC controls featuring a touchscreen panel and data logging ensure a consistently high level of quality at maximum throughput. The components are arranged in an intelligent way, allowing easy access for operation and maintenance. External connections to silos and integration into higher control levels enable complete system supervision and remote control of the plant.<sup>2</sup>



Model MCM		2000		5500		30000	
Configuration	HCM/HRW	800 / 1200		2500 / 3000		2x 2500 / 25000	
Mixing capacity	m <sup>3</sup> /h	12 - 25		25 - 45		50 - 90	
Circulation capacity	l/min	2400		4800		9600	
Holding capacity HCM	l	800		2500		2x 2500	
Max. aggregate size	mm	3		no sand		no sand	
Nominal power	kW	25.0		50.0		140.0	

1: Water to cement ratio = 1

2: Data recording system available



1



2



3



4



5



6

- 1 **Tunnelling** Equipment for backfilling, contact, and consolidation grouting
- 3 **Anchoring** Mixing and injection equipment for cement suspensions and mortars
- 5 **Diaphragm walls / slurry walls** Fully automated mixing plants for bentonite, cement, and slurry wall suspensions

- 2 **Microtunnelling / pipe jacking / directional drilling** Mixing and injection plants for bentonite and cement suspensions
- 4 **Dam construction** Compact grouting units, fully automated mixing and grouting plants
- 6 **Soil mixing** High-volume mixing and pumping

Document No. PM2-101780 02/06.25. Legal Notice © Copyright 2017, Häny AG, Jona/Switzerland. Any unauthorized use or copying of the contents or any part hereof is prohibited. Illustrations and photos may show equipment with optional extras. No warranty is made regarding specifications or otherwise. Specifications and equipment are subject to change without notice.