

683 TP.

Telescopic Pile-Driver.



SENEBOGEN[®]

AVH

Multifunctional.

Efficient.

Versatile.

A company
of ThyssenKrupp
Services

ThyssenKrupp GfT Bautechnik



ThyssenKrupp

Telescopic Pile-Driver 683 TP. A model of versatility.

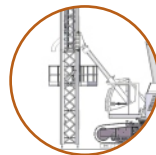
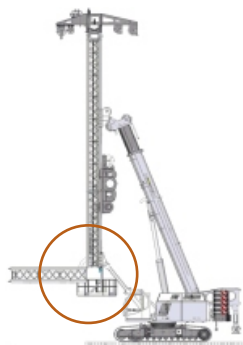
As an integrated supplier of port and specialized civil engineering solutions, ThyssenKrupp GfT Bautechnik is now supplementing its product range with this new multifunctional telescopic leader.

With a century of experience of pile-driving systems behind it, A. VAN HATTEM B.V. has teamed up with SENNEBOGEN in developing a patented self-supporting, crawler-mounted telescopic leader.

The telescopic cranes from SENNEBOGEN have been a model of versatility, efficiency and quality for over 15 years.

The crawler-mounted SENNEBOGEN 683 TP Telescopic Pile-Driver is the ideal combination of an A. VAN HATTEM B.V. leader system with a telescopic crane.

This novel product exhibits rugged design, compact dimensions, outstanding performance and extra-quick assembly on site, which is supported by its crane functions.



Technical details.

Carrier

Carrier	Sennebogen 683 TP Telescopic Pile-Driver
Telescopic length	10.8 - 18.6 m
Diesel engine	186 kW
Carrier transport weight without counterweight	approx 54 t

Leader

Type B	Leader with pile draw head
Leader length	23 m / 28 m / 33 m / 38 m
Leader weight	Approx 22 t with winch frame, excluding hammer and accessories
Leader inclination	Backward 3:1 / 18.4° Forward 4:1 / 14.0° Lateral 20:1 / 2.9°
Horizontal leader adjustment	0 - 1750 mm
Vertical leader adjustment	10 m
Leader attachment	Fast attachment

Telescopic pile-driver type B

Carrier	683 TP
Winch leader slide	2 x 16 t + 1 x 7 t
Winch carrier	1 x 16 t
(Optional)	2 x 16 t + 2 x 7 t
Max. hammer & pile weight	32 t
Max. pulling capacity (supported foot)	60 t
Telescopic boom & jib length (max.)	34.8 m
Counterweight	25.9 t ¹⁾ + 13.0 t ²⁾
Service weight with leader	116 t
Crawler type	B7

¹⁾Upper carriage counterweight ²⁾Lower carriage counterweight Both detachable for transport

Highly versatile ... thanks to a variety of attachments.

The SENNEBOGEN 683 TP crawler-mounted telescopic pile-driver displays outstanding performance with the attachment of leaders up to roughly 38 m long. They can be used for all conventional pile-driving methods.

The leader with its lattice boom design is extremely strong and torsion-resistant, which makes it ideal for pile-driving operations. Up to four winches can be attached to the leader itself with the patented sliding system.

The unit is equipped with a complete set of crane safety equipment permitting crane assignments with a maximum lifting force of up to 80 t with the twin-section telescopic boom. The wide-tracked lower carriage provides excellent stability.

The SENNEBOGEN 683 TP Telescopic Pile-Driver combines the functions of two conventional machines in one. And, as a result of its telescoping system, it can be quickly and flexibly assembled and dismantled.

The machine is equipped with the SENNEBOGEN maXcab cabin with a sliding door and integrated climate control for outstanding operator working conditions.



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DELMAG Diesel Pile Hammer up to D62 **1**

BANUT SuperRAM up to 10,000XL **2**

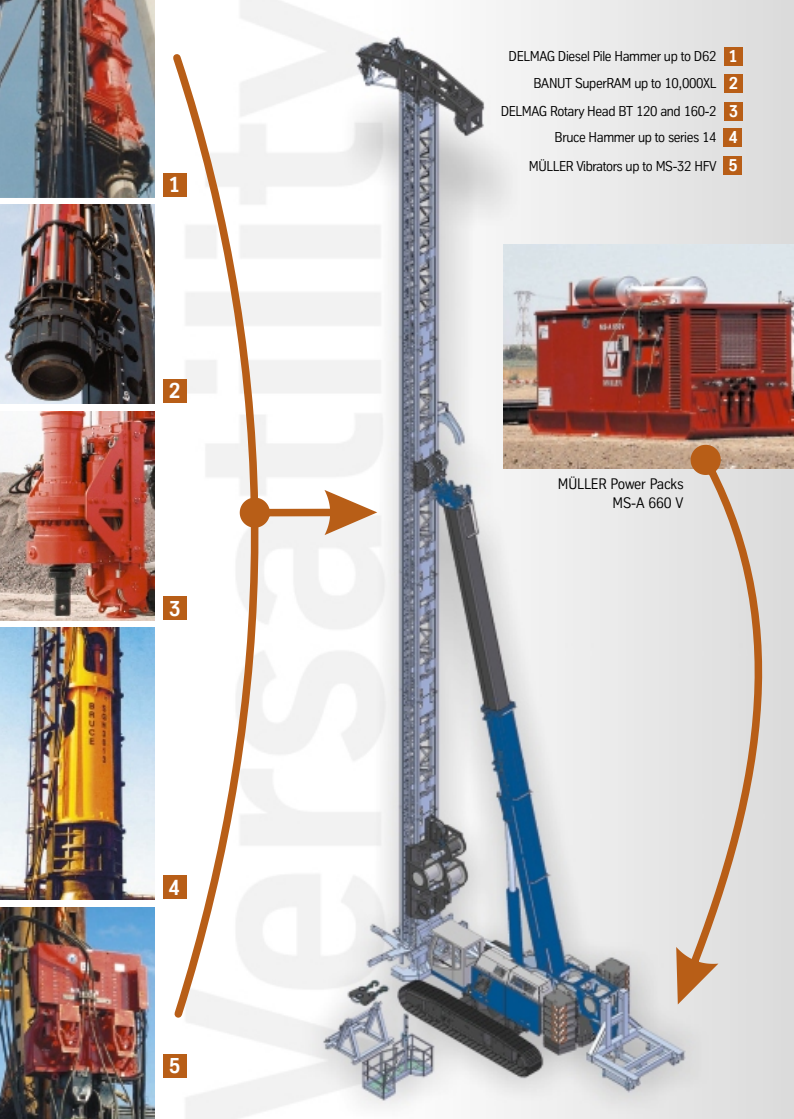
DELMAG Rotary Head BT 120 and 160-2 **3**

Bruce Hammer up to series 14 **4**

MÜLLER Vibrators up to MS-32 HFV **5**



MÜLLER Power Packs
MS-A 660 V



Attachments:

DELMAG Diesel Pile Hammer up to D62.



The DELMAG Diesel Pile Hammer is an extremely rugged and reliable driving hammer.

Diesel pile hammers are mainly used for foundation work such as the driving of steel piles and precast concrete piles or for the placement of piles in load-bearing soil strata.

They are also used for determining the load-bearing capacity of driven piles. They can be employed in all drivable soils, free-riding or leader-guided.

Type	Impact weight	Energy per impact	Impact frequency	Suitable for driving piles (depending on soil and pile)	Diesel oil consumption	Lubricant consumption	Weight	Length overall
	kg	kNm	rpm	kg	l/h	l/h	kg	mm
D 16-32	1600	54 - 25	36 - 52	1000 - 6000	5.0	0.50	3620	5160
D 19-42	1820	66 - 46	35 - 52	1100 - 6000	7.5	0.50	3840	5160
D 25-32	2500	90 - 40	35 - 52	1600 - 7500	7.5	0.60	5670	5500
D 30-32	3000	103 - 48	36 - 52	2000 - 9000	10.0	1.00	6170	5500
D 36-32	3600	123 - 56	36 - 53	2500 - 12000	11.5	1.50	7990	5470
D 46-32	4600	166 - 71	35 - 53	3000 - 16000	16.0	1.50	8990	5470
D 62-22	6200	224 - 107	35 - 50	4000 - 30000	20.0	2.00	12250	5910

Attachments: BANUT SuperRAM up to 10,000XL.



The SuperRAM XL free-fall hammer is ideal for driving concrete piles, placing piles in soils not amenable to pressing or vibration, the final driving of piles and in all situations where proof of load-bearing capacity is demanded.

Gentle impact prevents damage to the piles. The machines are kind to the environment thanks to low noise emissions.

Type	Weight of impact body	Total weight excluding driving cap	Dropping height steplessly adjustable to max.	Impact frequency, steplessly adjustable to max.	Working pressure	Hydraulic flow rate	Required hydraulic power	Total length max.
	kg	kg	mm	rpm	bar	l/min.	kW	mm
5000	5060	7000	1200	100	280	200	93	3900
6000	6075	8000	1200	100	300	210	105	4120
6000XL	6110	9200	1200	100	300	240	120	4435
8000XL	8060	11560	1200	100	300	300	150	4435
10000XL	10100	13600	1200	80	300	325	162	4435

Attachments:

DELMAG Rotary Head BT 120 and 106-2.



The DELMAG Rotary Head can be used for cased and uncased borehole drilling with a Kelly bar or for drilling with an endless worm or with partial or full displacement tools.

The rotary head is attached to the guide slide on the leader and can be displaced on the leader with the aid of a winch feed system.

The rotary head is powered by the carrier's hydraulic system.

Type		BT 120	BT 160-2
Torque	kNm	0-120	0-160
Speed	rpm	0-46	0-30/60
Total weight	kg	3100	4500

Attachments:

Bruce Hammer up to series 14.



Thanks to the efficient design of the hammer body and its special cushioning system, the impact energy from the hammer can be transferred to the pile head with little energy loss.

As a result of its versatility, the Bruce Hammer is suitable for almost all types of piles. Its gentle and controlled impacts prevent damage to the piles.

Bruce Hammer series		3	4	5	7	10	12	14
Weight of impact body	kg	3000	4000	5000	7000	10000	12000	14000
Total length	mm	5300	5300	5300	5660	5910	6290	6380
Maximum dropping height	mm	1200	1200	1200	1200	1200	1200	1200
Impact frequency	rpm	42	42	40	40	38	38	35
Working pressure	bar	230	230	230	230	250	250	250
Total weight	kg	7000	8000	9000	11000	15300	18600	22300

Attachments: MÜLLER Vibrators up to MS-32 HFV.



MÜLLER vibrators are distinguished by their high standard of quality. Ease of operation is combined with low maintenance requirements and a long service life.

Their benefits can be found in their universal applications – free-riding attached to the excavator or leader-guided as well as for angled driving, given appropriate prestressing.

In addition, its vibration action generates little noise or ambient vibration despite its exceptionally high power.

Type	Centrifugal force max.	Static moment of area	Speed max.	Frequency max.	Pulling force max.	Power input p (max.)	Height	Weight without clamping devices
	kN	kgm	rpm	Hz	kN	kW	mm	kg
MS-25 H3	774	25	1680	28.0	400	218	1745	3600
MS-50 H3	1430	50	1615	26.9	500	419	2105	6790
MS-25 HHF	750	25	2170	39.3	280	174/274	1885	3700
MS-50 HHF	1500	50	2362	39.3	500	356/562	2465	6100
MS-16 HFV	969	0-16	2350	39.2	300	220/294	1995	3500
MS-24 HFV	1480	0-24	2350	39.2	400	404/551	2145	5050
MS-32 HFV	1979	0-32	2375	39.6	600	610/720	2455	7250

MÜLLER Power Packs up to MS-A 660V.

For the energy supply, power packs are used in which diesel-engine-driven hydraulic pumps supply pressurized oil to the hydraulic motors on the vibrator.



All power packs are silenced and controlled and constantly monitored during operation by a specially adapted PLC.

Power packs				MS-A 420 V	MS-A 660 V	
Diesel engine				CAT	CAT	
Type				C15 ATAC	3412 C DITA	
Exhaust certification		EU / EPA	EU 3 / Tier 3	-	-	
Power	P (max.)	kW	433	656		
Speed	n (max.)	rpm	2000	2100		
Pumps:						
Feed rate	Q (max.)	l/min	740	1065		
Operating pressure	p (max.)	bar	380	380		
Fuel tank		l	850	1200		
Hydraulic tank		l	280	250		
Dimensions						
	Length	L	mm	4250	4800	
	Width	B	mm	1700	2020	
	Height	H	mm	2435	2500	
Weight with oil/without fuel				kg	6200	9300

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