

## Multiple auger drives Twinmix, Triplemix and Quadmix - for high production rates

The TMBA's are auger drives that have been specially developed for soil mixing processes. The mixing tools are designed in such a way that the grout suspension being used is injected into the soil and mixed with the loosened soil material. The mixing process takes place while the mixing tools are being inserted and extracted. The end results are stable pile elements, which e.g. are used for shoring or soil improvements.

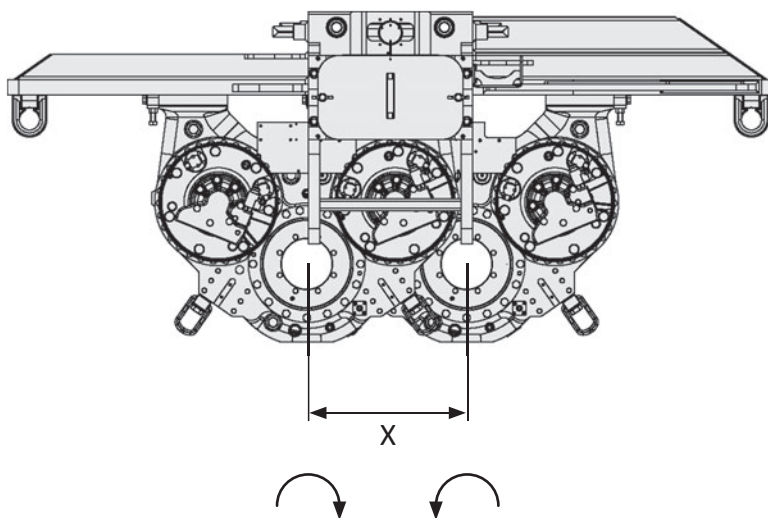
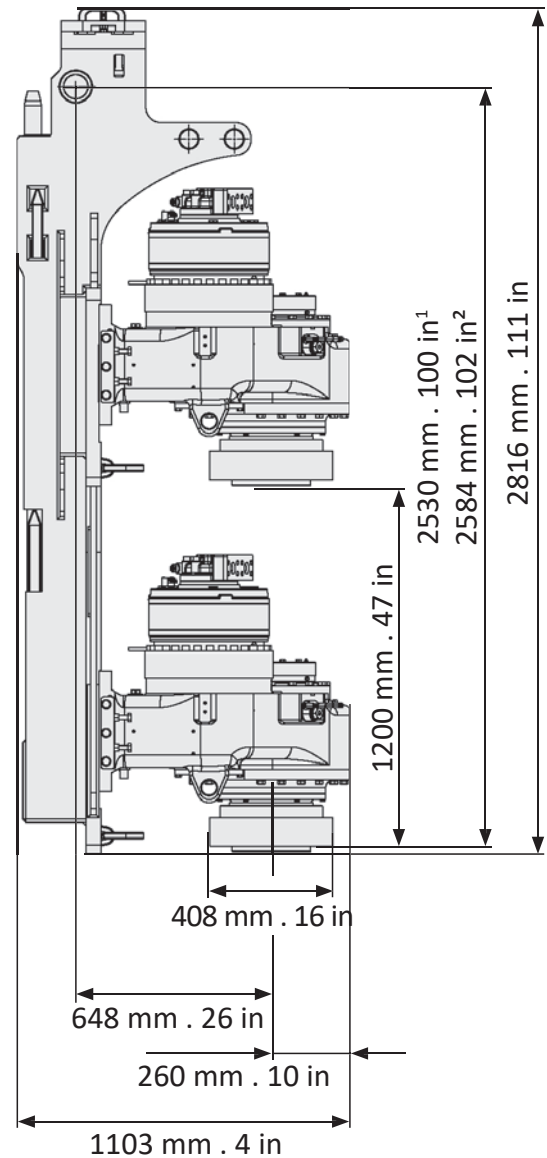
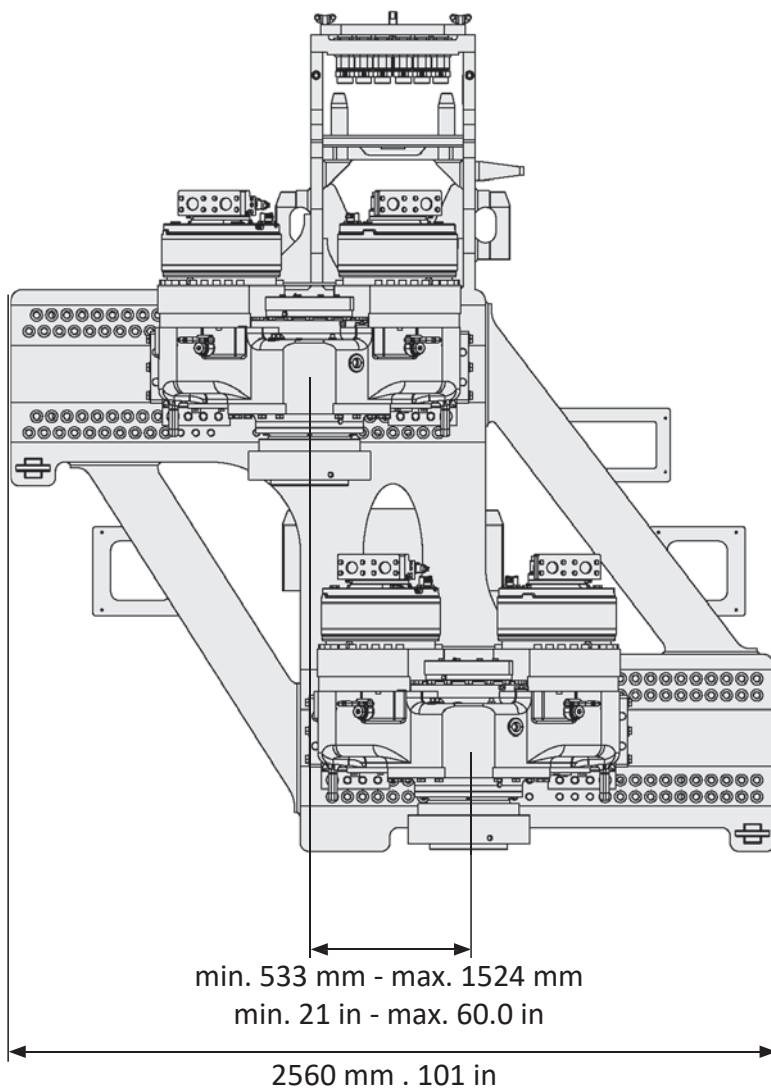
A major benefit of the Wet-Speed-Mixing (WSM) process is that no material extraction is required because the existing soil is directly mixed with the suspension. This not only makes the process more efficient and cost effective, but also more environmentally friendly, because there is no requirement to transport any soil involved in the process. In addition, the process has low-noise emission and low-vibration.

Originally, the WSM process was carried out using just one auger drive. Over time, the TMBA series has been expanded to include the double, triple and quadruple auger drives, means the Twinmix, Triplemix and Quadmix. Thanks to these developments, the productivity of the WSM process has been significantly increased.

The Twinmix auger drive is available in the following versions TMBA 2-4000, TMBA 2-7000 and TMBA 2-10000, while the Triplemix is offered in the TMBA 3-7000 and TMBA 3-10000 versions. The largest TMBA auger drive, the Quadmix, is available in the TMBA 4-10000 version and is an excellent match for the new ABI MOBILRAM TM 26. The variety of models offered enable great flexibility when it comes to handling construction tasks with a wide variety of requirements.



# ABI Multiple Auger Drive Twinmix TMBA 2-10000



<sup>1</sup> vertical offset of auger drives at:  
 $X = 533 \text{ mm} / 21 \text{ in}$  (min. distance of drilling axis)

<sup>2</sup> vertical offset of auger drives at:  
 $X = 1524 \text{ mm} / 60 \text{ in}$  (max. distance of drilling axis)

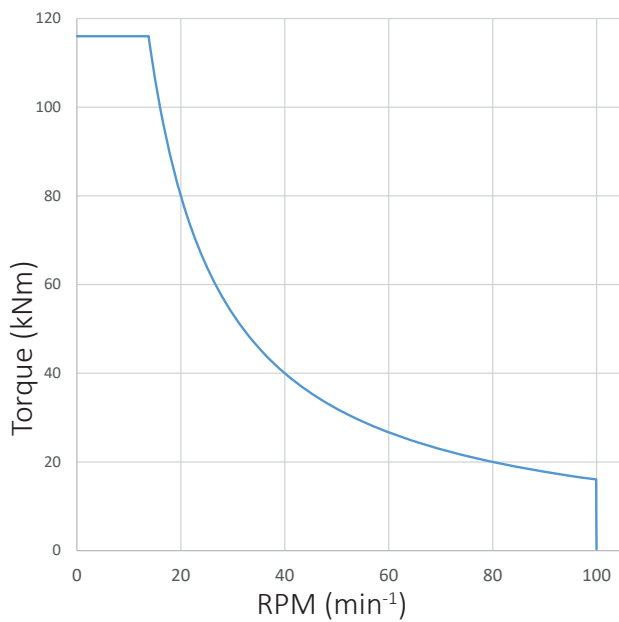
## TMBA 2-10000 - technical data

Leader mast guided multiple auger drive with adjustable hydraulic displacement

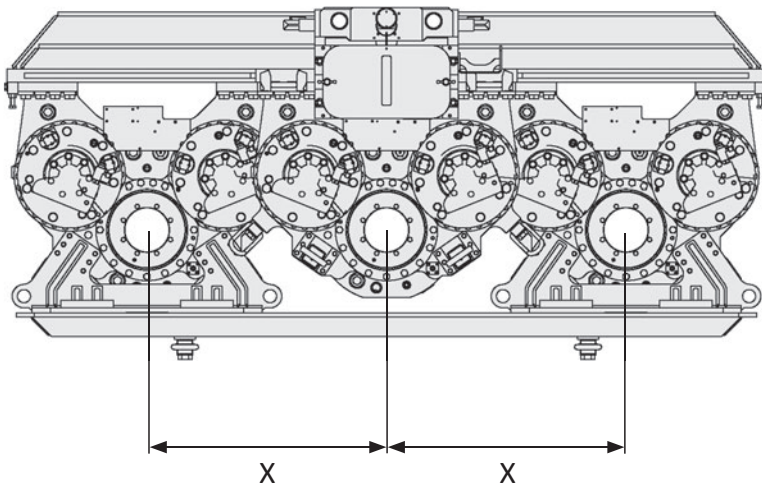
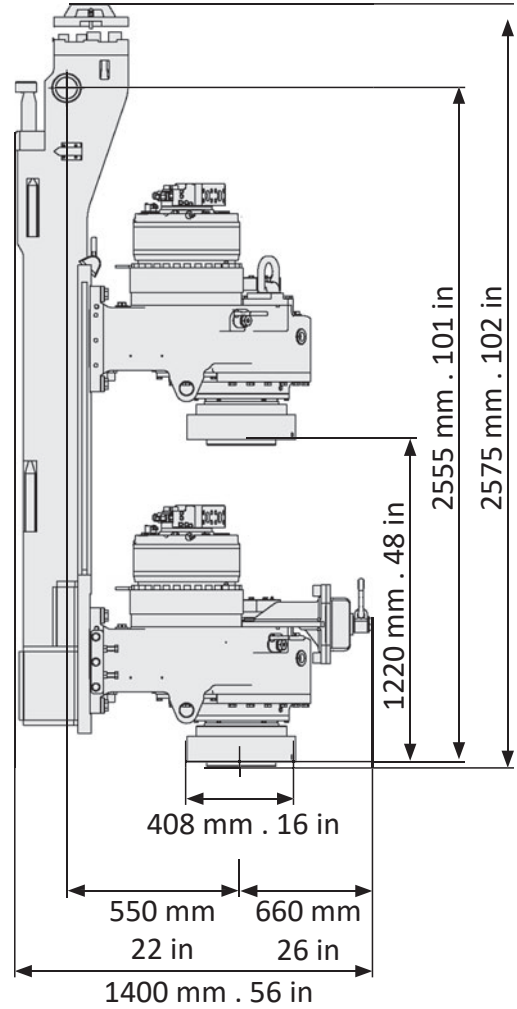
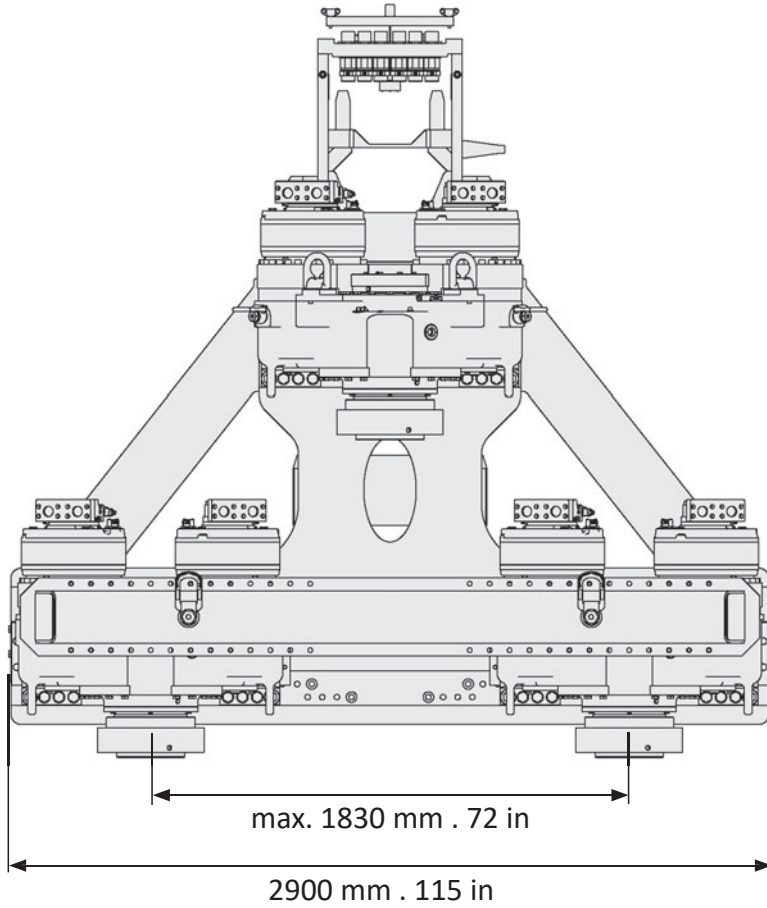
Torque	daNm	2 x 116	lbf ft	2 x 85,560
Revolutions per minute	min <sup>-1</sup>	2 x 100	rpm	2 x 100
Max prestressing and extraction force	kN	300	lbf	67,400
Nominal oil pressure	MPa	33	psi	4,780
Recommended installed power carrier approx.	kW	470 - 563	kW	470 - 563
Total weight	kg	5150	lbs	11,344
Tranport weight	kg	5250	lbs	11,564
Transport dimensions Height / Width / Depth	mm	2186 / 2560 / 1103	ft	9 / 8 / 4
Passage auger drive	mm	171	in	6.73
X = possible distance between drilling / mixing axis	Drill axis distance is adjustable at 1 inch intervals from min 533 mm to max. 1524 mm from min. 21 inch to max 60 inch			

Pile diameter depends on the selected mixing tool.

Torque diagram TMBA 2-10000  
(2 x single drive)



# ABI Multiple Auger Drive Triplemix TMBA 3-10000



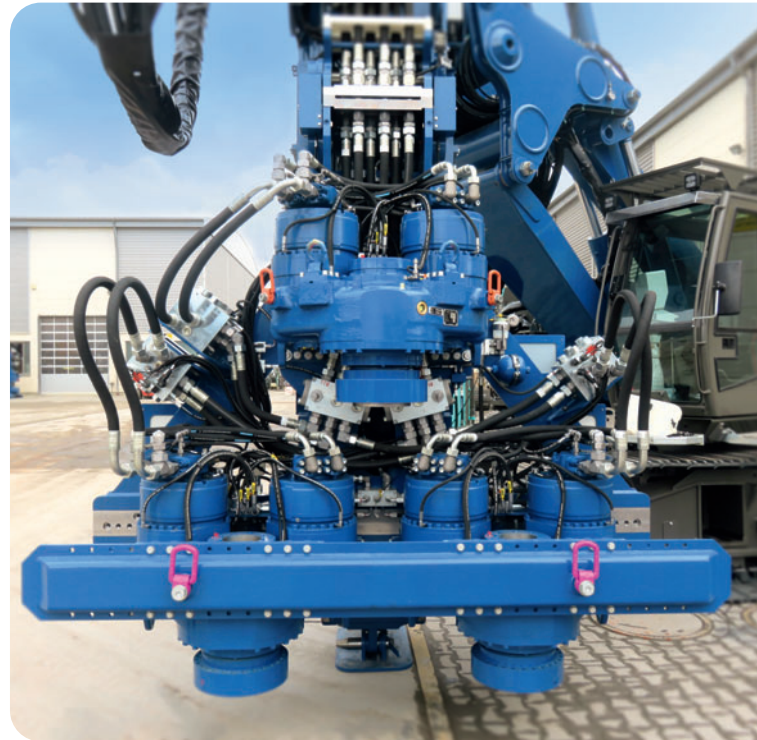
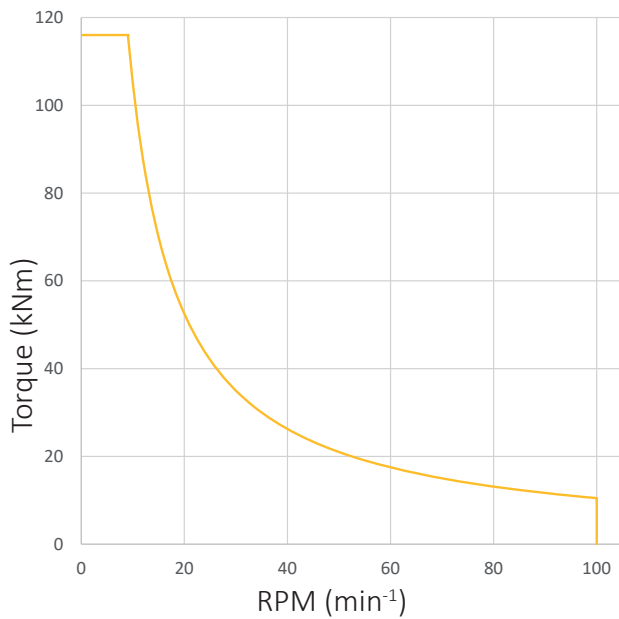
## TMBA 3-10000 - technical data

Leader mast guided multiple auger drive with adjustable hydraulic displacement

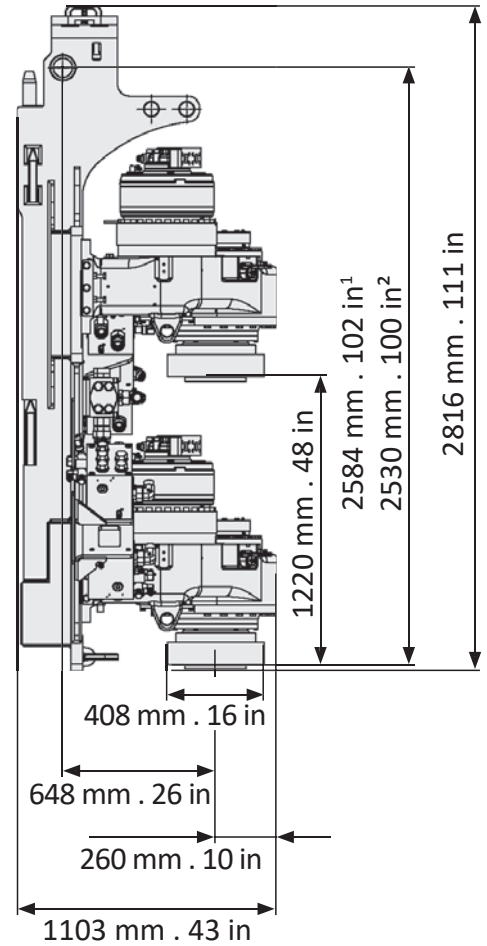
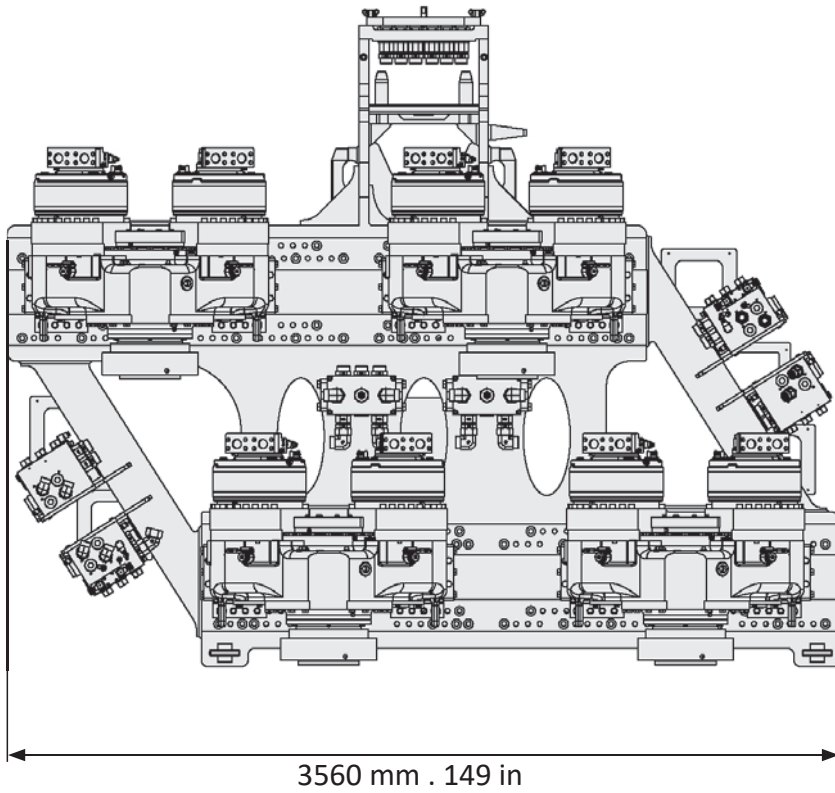
Torque	daNm	3 x 12000 - 1900	lbf ft	3 x 88,510 - 14,000
Revolutions per minute	min <sup>-1</sup>	10 - 62	rpm	10 - 62
Max prestressing and extraction force	kN	300	lbf	67,400
Nominal oil pressure	MPa	33	psi	4,780
Recommended installed power carrier approx.	kW	470 - 563	kW	470 - 563
Total weight	kg	7800	lbs	17,181
Transport weight	kg	8060	lbs	17,753
Transport dimensions Height / Width / Depth	mm	3000 / 3200 / 1800	ft	10 / 10 / 6
Passage auger drive	mm	171	in	6.73
X = possible distance between drilling / mixing axis	mm	610 / 762 / 915	in	24 / 30 / 36

Pile diameter depends on the selected mixing tool.

Torque diagram TMBA 3-10000  
(3 x single drive)



# ABI Multiple Auger Drive Quadmix TMBA 4-10000

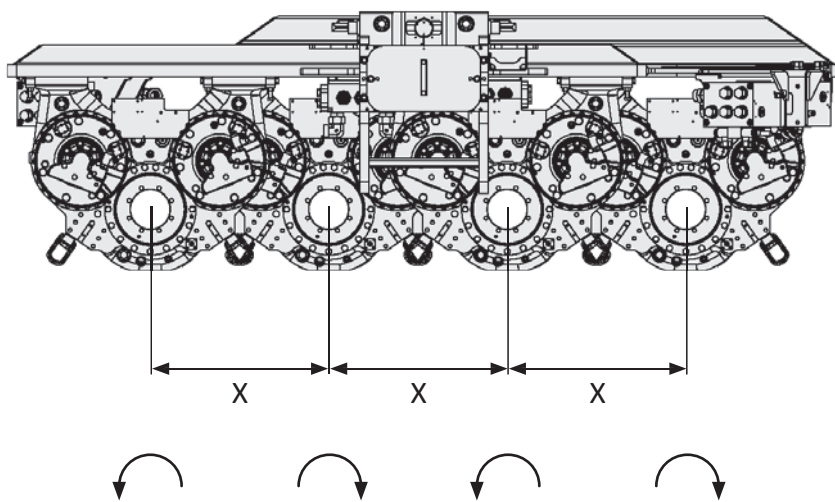


<sup>1</sup> vertical offset of auger drives at:

- X = 533 mm / 21 in,
- X = 686 mm / 27 in,
- X = 838 mm / 33 in

<sup>2</sup> vertical offset of auger drives at:

- X = 610 mm / 24 in
- X = 762 mm / 30 in



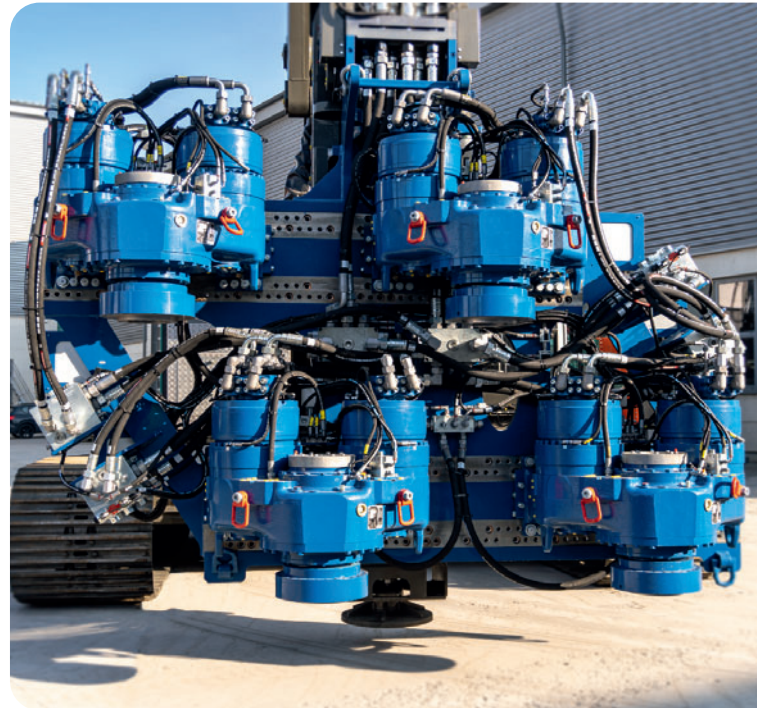
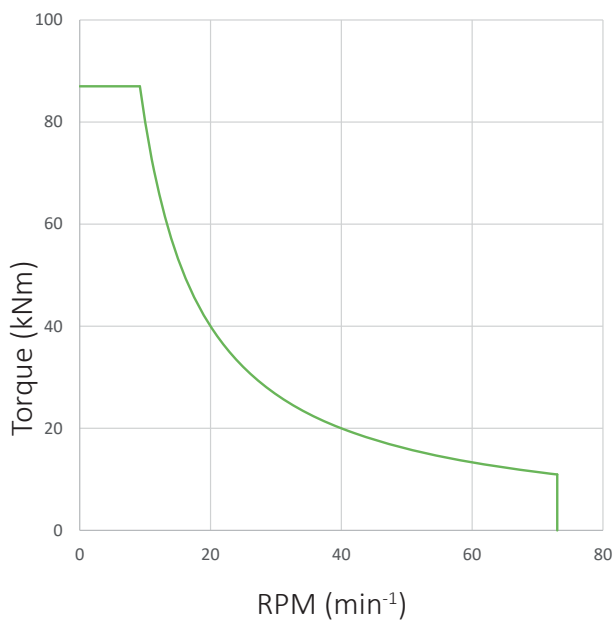
## TMBA 4 -10000 - technical data

Leader mast guided multiple auger drive with adjustable hydraulic displacement

Torque	daNm	4 x 90	lbf ft	4 x 66,383
Revolutions per minute	min <sup>-1</sup>	4 x 67	rpm	4 x 67
Max prestressing and extraction force	kN	300	lbf	67,400
Nominal oil pressure	MPa	33	psi	4,780
Recommended installed power carrier approx.	kW	470 - 563	kW	470 - 563
Total weigh	kg	9700	lbs	21,366
Tranport weight	kg	9800	lbs	21,586
Transport dimensions Height / Width / Depth	mm	2900 / 3400 / 1120	ft	10 / 11 / 4
Passage auger drive	mm	171	in	6.73
X = possible distance between drilling / mixing axis	mm	533 / 610 / 686 / 762 / 838	in	21 / 24 / 27 / 30 / 33

Pile diameter depends on the selected mixing tool.

Torque diagram TMBA 4-10000  
(4 x single drive)





*Photos:*

*Quadmix auger drive TMBA 4-10000 working at job site in Berkeley, USA*

*Quadmix can be equipped with cardanic joint for easier setup and dismantling.*

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