

Boring excavator BB5010

Drilling excavator



MORATH®

areas of application OF

Range of application IN

injection anchor drilling
Injection anchor drillings

Anchor and blast hole drilling
Anchor and blast hole drillings

excavation securing
Construction pit stabilisations

tunnels / underground
Tunnel / Underground

➔ Self-propelled drilling units drilling excavators
➔ Mobile drilling rigs ➔ Drilling excavator

The model impresses with the following features:

• Compact short tail excavator with optimized hydraulic and cooling system
• Radio remote control FFS Standard and FFS Professional

* Ideal basic machine for e.g. a GGx21 rod grab, SMxx3H spraying manipulator, etc.

• High level of mobility and functionality
• Reduction in personnel

costs thanks to the patented FFS Professional radio remote control
• Telescopic drill mast ecoDRILL TBT233 with 360° slewing ring and 90° tilting cylinder
• High cost-effectiveness due to the universal application options for excavation, drilling and shotcrete work
• Complete device from one source including CE certification

* Fulfills safety requirements according to drill rig standard EN16228

The model stands out with the following characteristics:

* Short tail excavator with optimized hydraulic and cooling system

• Radio remote control FFS-Standard and FFS-Professional

* Ideal base carrier machine for drill rod gripper GGx21, shotcrete manipulator SMxx2H, etc.

• High degree of flexibility and functionality

• Reduction of personnel costs due to the patented radio remote control FFS-Professional

• Telescopic drilling tower ecoDrill (TBT-233) with 360°- slewing ring and 90°- tilting
• High efficiency due to the universal application possibilities for digging-, drilling- and shotcreting

• Complete unit from the one source with CE-declaration of conformity

• Meets the safety requirements for drilling and foundation equipment EN16228



Boring excavator BB5010

Drilling excavator

Technical data

Technical data

Motor //Engine	
Turbodieselmotor //Turbocharger diesel	V2607-CR-T
Emission regulations	EU Stage 5 / US EPA Tier 4
Number of cylinders	4
power //power	45 kW
RPM //Speed	2.200 U/min rpm
Displacement //Capacity	2.615 cc
Dieseltankvolumen //Fuel tank capacity	85 l
Batteriespannung //Battery voltage	12 V
Hydraulikanlage (Load Sensing) //Hydraulic system (load sensing)	
Delivery capacity P1	141 l/min
Systemdruck //Operating pressure	280 bar
Hydrauliktankvolumen //Hydraulic tank capacity	60 l
Hydrauliksysteminhalt // Hydraulic system content	80 l
Crawler chassis //Undercarriage	
Gesamtbreite //Overall width	1.980 mm
Gesamtlänge Fahrwerk //Overall length of crawler track	2.600 mm
Achsabstand //Distance between axles	2.060 mm
Rubber track shoes	400 mm
Bodenpressung //Ground pressure	4,55 N/cm ²
Driving speed //Excavator speed	2.3 – 4.5 km/h
Bohrlafette //Drilling mast	
carriage; with oil motor feed //mast; with oil motor feed	TBT233
feed force //Feed force	15.000 N
//Retraction force	15.000 N
feed length; Mount (V1) //Feed length; mast (V1)	2.550 mm
feed length; Total (V1+V2) //Feed length; total (V1+V2)	3.350 mm
Empfohlener Bohrantrieb //Recommended drilling drive	
Hydraulikhammer //Hydraulic hammer	HB70-GD70, HF41, HF57
Rotary motor //Rotary head	HD25, HD60
Overburden drill drive //Overburden head	-

Technical data without consideration of efficiency. Subject to errors and changes.

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3.2 Boring excavator BB5010

Drilling excavator

The drilling excavator BB5010 is characterized by a high degree of flexibility. Thanks to the quick-change system, an attachment can be changed in the shortest possible time. This enables a hitherto unachieved utilization of the universal carrier. Due to the high mobility with compact dimensions and the wide range of possible uses, the drilling excavator BB5010 sets new standards in special civil engineering and is suitable as a versatile carrier device (e.g. for spray manipulator or rod grab).

Another advantage is the modular system, which allows quick conversion of the different drilling methods such as rotary percussion drilling with top and down-the-hole hammers and rotary drilling with or without flushing fluid. The functional features described enable universal use in the areas of shoring, excavation pit securing, foundation and subsequent foundations, rehabilitation and tunnel construction.

In combination with the patented FFS600 FP radio remote control, specially developed for the Morath drilling rigs, the drilling excavator achieves unique user-friendliness. The FFS 600 Professional radio remote control allows the operator to freely choose his location from which he can carry out all drilling, set-up and driving functions precisely using the proportional valve technology. This maximizes safety for operating and drilling personnel and provides maximum transparency during the drilling process.

The BB5010 drill excavator is characterised by a high degree of flexibility. Due to the quick-change system, an attachment can be exchanged in short time period. This enables a previously unattained utilisation of the universal carrier. Due to the high maneuverability with compact dimensions and the versatile application possibilities, the drilling excavator BB5010 sets new standards in foundation engineering and is suitable as universal carrier machine (e.g. for shotcrete - manipulator or drill rot gripper).

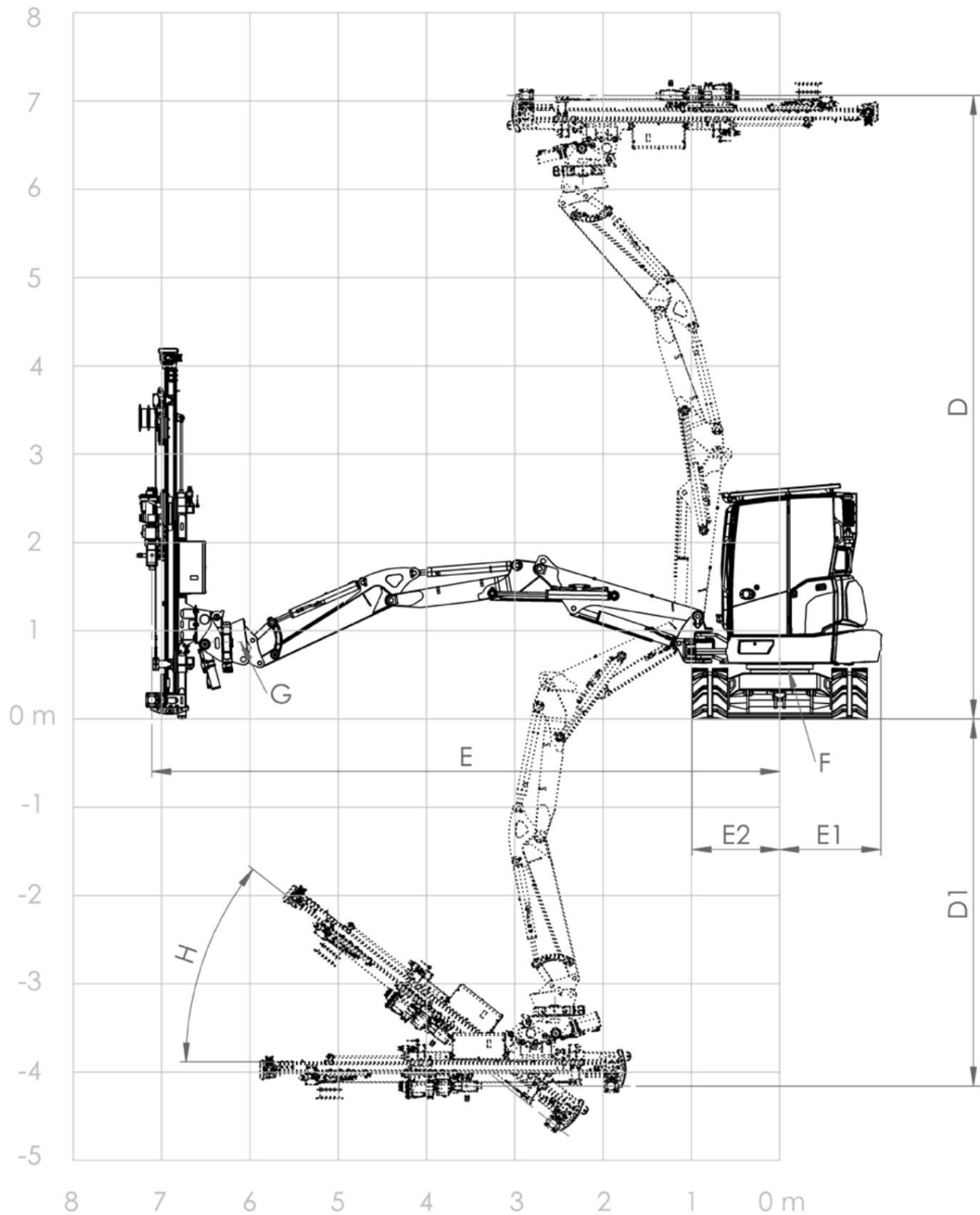
Another advantage is the modular construction system, which enables quick changeover of the different drilling methods such as rotary percussive drilling with external and down-the-hole hammer and rotary drilling with or without flushing fluid. The described functional features enable universal use in the areas of bench shoring, excavation support, foundation and post-foundation, restructuring and tunnel construction.

In combination with the patented radio remote control FFS600 FP, specially developed for Morath drilling rigs, the excavator achieves a unique ease of operation. With the FFS600 Professional radio remote control the operator can freely select his location, from which he can precisely drive all drilling, setup and travel functions via the proportional valve technology. This maximises the safety for operators and drilling personnel and ensures maximum transparency during the drilling process.



Boring excavator BB5010

Drilling excavator



Boring excavator BB5010

Drilling excavator

Accessories

Hydraulic breakers

Hydraulic hammers

Rotary motors

Rotary heads

FFS standard (radio remote control drill)

FFS-Standard (Radio remote control of drilling rig)

FFS-Professional (radio remote control drilling excavator)

FFS-Professional (Radio remote control of drilling rig and excavator)

Spritzbeton-Manipulator

Shotcrete manipulator

Boom grab

Drill rod gripper

Deep/Swivel Bucket

Backhoe-/ swivel bucket

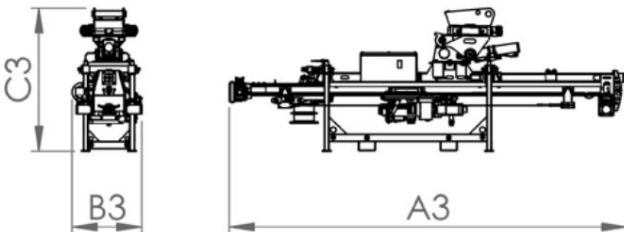
special paint

Special painting

Technical data

Dimensions //Dimensions

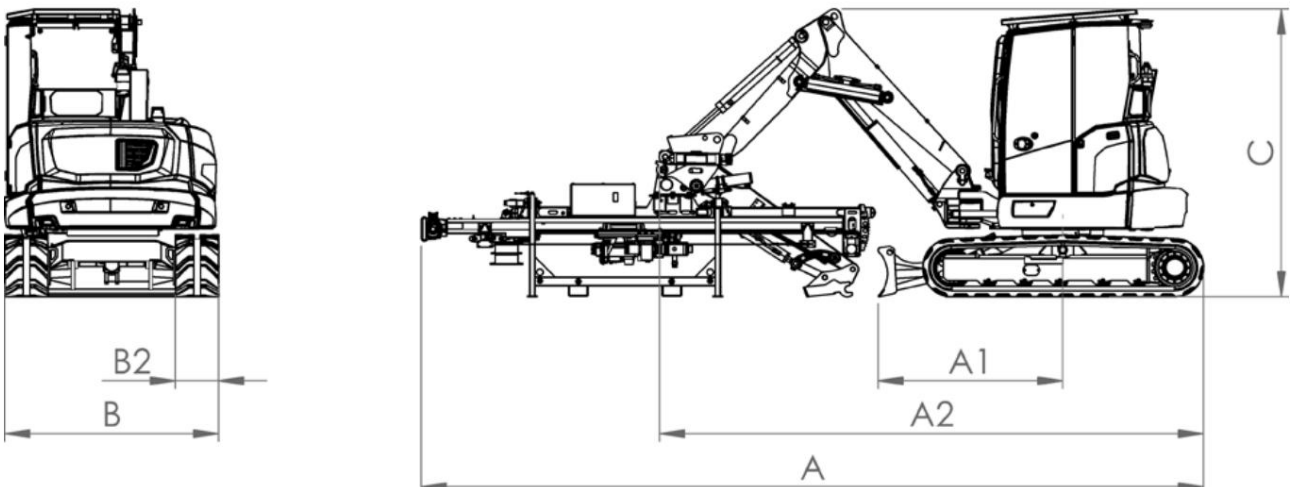
A	7.250 mm
A1	1.700 mm
A2	5.500 mm
A3	4.200 mm
B	1.980 mm
B2	400 mm
B3	740 mm
c	2.700 mm
C3	1.520 mm
D	7.050 mm
D1	4.150 mm
AND***	7.100 mm
E1	1.150 mm
E2	990 mm
F	360°
G	360°
H	94°
Carrier*/Excavator*	6.900 kg
Total weight**/Total weight**	7.740 kg



* including additional weight // * including additional weight
 ** basic device; without equipment // ** Basic unit; without fittings
 *** Theoretical value (deviating according to EN16228)//
 *** Theoretical value (according to EN16228 divergent)

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Teleskopbohrturm TBT233

Telescopic drilling tower

The telescopic derrick consists of a holding beam with a walking foot, a shifting cylinder (V2), an aluminum drilling rig with an integrated feed cylinder (V1) and a sliding saddle. The total feed length is increased (V1+V2) by the displacement cylinder (V2). The complete shifting of the derrick (A) enables a comfortable and easy alignment of the drilling position.

The telescopic drilling tower consists of a mounting beam with outrigger, a displacement cylinder (V2), aluminium drilling mast with integrated feed cylinder (V1) and a sliding saddle.

By means of the moving cylinder (V2) the total feed length is increased (V1 + V2). The displacement of the total tower (A) enables comfortable and easy adjusting of the drilling tower.

Technical data

Technical data

Dimensions //Dimensions

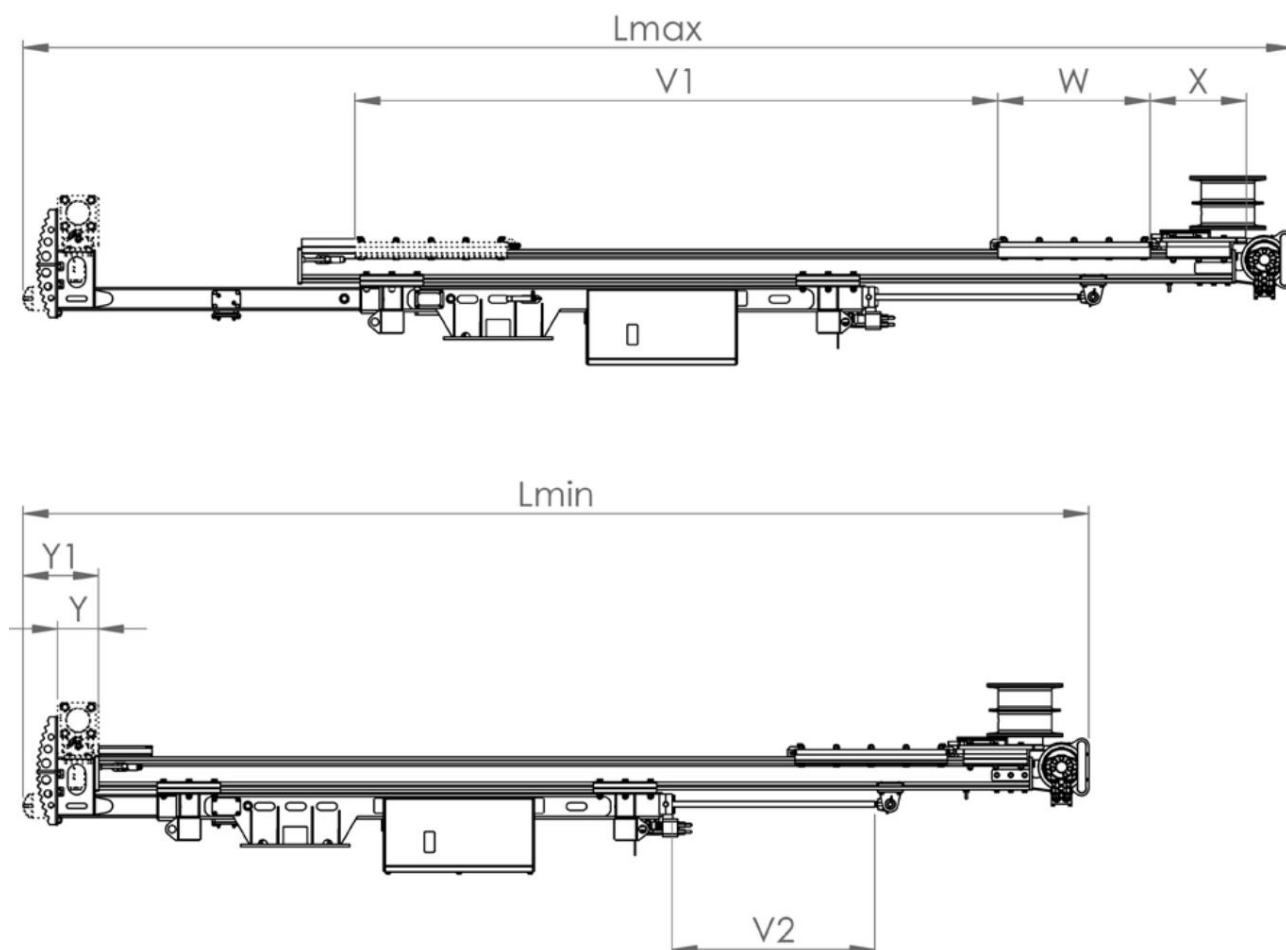
Gesamtlänge //Overall length	L max 5.000 mm	
Minimale Länge //Minimum length	L min	4.200 mm
Feed** //Feed**	V1	2.550 mm
feed //Feed	v2	800 mm
Total Feed** //Total Feed**	V1 + V2 3.350 mm	
Sattel //Saddle	IN	600 mm
Hose trolley //hose drum	x	325 mm
Clamping device* Y	160 mm	
Clamp total * //Clamp total*	Y1	305 mm

* Depends on type of clamping tongs //Depends on type of clamping device

** Without drilling drive and without clamping device

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Bohrbagger BB6000-2

Drilling excavator

MORATH®

areas of application OF

Range of application IN

injection anchor drilling
Injection anchor drillings

Anchor and blast hole drilling
Anchor and blast hole drillings

excavation securing
Construction pit stabilisations

tunnels / underground
Tunnel / Underground

➔ Self-propelled drilling units drilling excavators
➔ Mobile drilling rigs ➔ Drilling excavator



The model impresses with the following features:

• Compact short-tail excavator with optimized hydraulic and cooling system • FFS standard radio remote control

• Ideal for large construction sites with combined digging and drilling applications • High degree of mobility and functionality • Lightweight drill carriage

ecoDRILL BT235 with 360° slewing ring and 90° tilting cylinder • Highly economical due to the universal application options for excavation, drilling and shotcreting work • Complete device from a single source including CE certification

• Fulfills safety requirements according to drill rig standard EN16228

The model stands out with the following characteristics:

• Short tail excavator with optimized hydraulic and cooling system

• Radio remote control FFS-Standard

• Ideal for big construction sites with combined digging and drilling applications

• High degree of flexibility and functionality • Lightweight

drilling tower with ecoDRILL mast BT235 with 360°- slewing ring and 90°- tilting • High efficiency due to the universal

application possibilities for digging-, drilling- and shotcreting • Complete unit from the one source with CE-declaration of conformity

• Meets the safety requirements for drilling and foundation equipment EN16228



Bohrbagger BB6000-2

Drilling excavator

Technical data

Technical data

Motor //Engine	
Turbodieselmotor //Turbocharger diesel	4TNV98CT
Emission regulations	EU Stage 5 / US EPA Tier 4
Number of cylinders	4
power //power	54 kW
RPM //Speed	2.100 U/min rpm
Displacement //Capacity	3.319 cc
Dieseltankvolumen //Fuel tank capacity	105 l
Batteriespannung //Battery voltage	12 V
Hydraulikanlage (Load Sensing) //Hydraulic system (load sensing)	
Delivery capacity P1	185 l/min
Systemdruck //Operating pressure	290 bar
Hydrauliktankvolumen //Hydraulic tank capacity	90 l
Hydrauliksysteminhalt // Hydraulic system content	120 l
Crawler chassis //Undercarriage	
Gesamtbreite //Overall width	2.320 mm
Gesamtlänge Fahrwerk //Overall length of crawler track	2.880 mm
Achsabstand //Distance between axles	2.270 mm
3-bar base plate steel //3-bar base plate steel	450 mm
Bodenpressung //Ground pressure	4,6 N/cm ²
Driving speed //Excavator speed	2.6 – 5.2 km/h
Bohrlafette //Drilling mast	
carriage; with oil motor drive //mast; with oil motor drive	BT235
feed force //Feed force	15.000 N
//Retraction force	15.000 N
feed length; Mount (V1) //Feed length; mast (V1)	3.500 mm
Empfohlener Bohrantrieb //Recommended drilling drive	
Hydraulikhammer //Hydraulic hammer	HB70-GD70; HB100-GD100; HB100-GD100-M2; HF41; HF57
Rotary motor //Rotary head	HD60, HD200
Overburden drill drive //Overburden head	-

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Bohrbagger BB6000-2

Drilling excavator

The drilling excavator BB6000-2 is characterized by a high degree of flexibility. Thanks to the quick-change system, an attachment can be changed in the shortest possible time. This enables a hitherto unachieved utilization of the universal carrier. The BB6000-2 drilling excavator sets new standards in foundation engineering due to its high mobility with compact dimensions and the wide range of possible uses.

Another advantage is the modular system, which allows quick conversion of the different drilling methods such as rotary percussion drilling with top and down-the-hole hammers and rotary drilling with or without flushing fluid. The functional features described enable universal use in the areas of shoulder shoring, excavation pit securing, foundation and subsequent foundations, rehabilitation and tunnel construction.

The FFS 400 radio remote control allows the operator to choose his location from which he can carry out all drilling functions precisely using the proportional valve technology. This maximizes the safety for operating and drilling personnel and guarantees maximum transparency during the drilling process.

The BB6000-2 drill excavator is characterised by a high degree of flexibility. Due to the quick-change system, an attachment can be exchanged in short time period. This enables a previously unattained utilisation of the universal carrier. Due to the high maneuverability with compact dimensions and the versatile application possibilities, the drilling excavator BB6000-2 sets new standards in foundation engineering and is suitable as universal carrier machine.

Another advantage is the modular construction system, which enables quick changeover of the different drilling methods such as rotary percussive drilling with external and down-the-hole hammer and rotary drilling with or without flushing fluid.

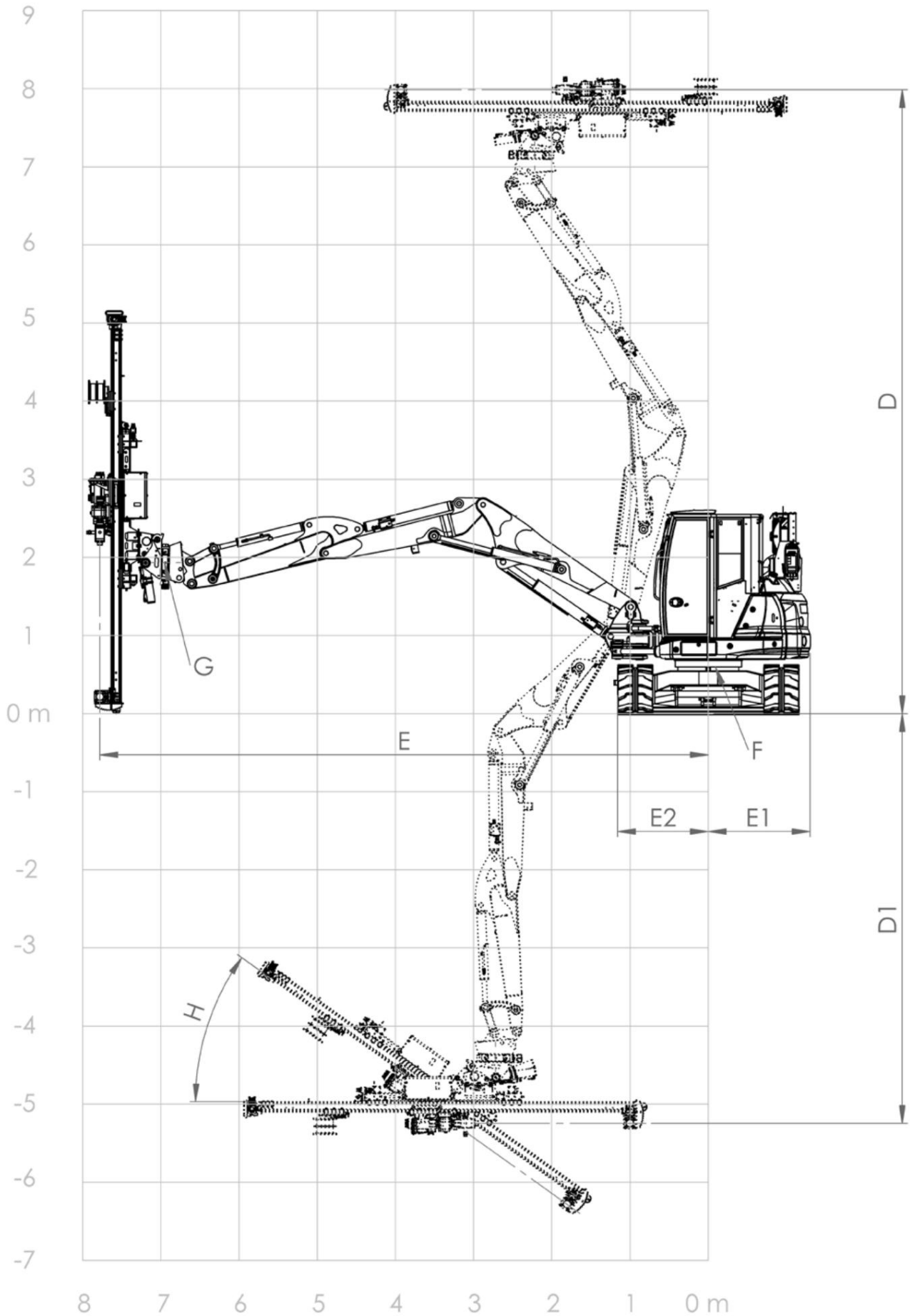
The described functional features enable universal use in the areas of bench shoring, excavation support, foundation and post-foundation, restructuring and tunnel construction.

With the FFS400 radio remote control the operator can freely select his location, from which he can precisely drive all drilling functions via the proportional valve technology. This maximises the safety for operators and drilling personnel and ensures maximum transparency during the drilling process.



Bohrbagger BB6000-2

Drilling excavator



Bohrbagger BB6000-2

Drilling excavator

Accessories

Hydraulic breakers

Hydraulic hammers

Rotary motors

Rotary heads

Vulcanized rubber pads for steel crawler chassis

Vulcanized rubber pads for steel crawler tracks

FFS standard (radio remote control drill)

FFS-Standard (Radio remote control of drilling rig)

Spritzbeton-Manipulator

Shotcrete manipulator

Deep/Swivel Bucket

Backhoe-/ swivel bucket

special paint

Special painting

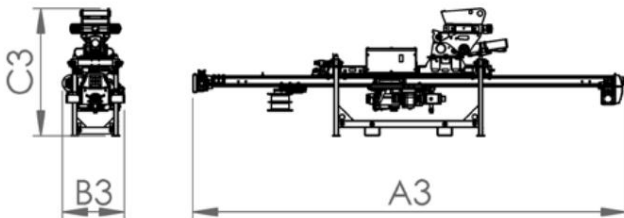
Accessories

Technical data

Technical data

Dimensions //Dimensions

A	8.540 mm
A1	1.960 mm
A2	6.600 mm
A3	5.150 mm
B	2.320 mm
B1	450 mm
B3	740 mm
c	2.600 mm
C3	1.520 mm
D	7.980 mm
D1	5.240 mm
AND***	7.780 mm
E1	1.300 mm
E2	1.160 mm
F	360°
G	360°
H	94°
Carrier*/Excavator*	10.350 kg
Total weight**/Total weight**	11.150 kg



* including additional weight // * including additional weight

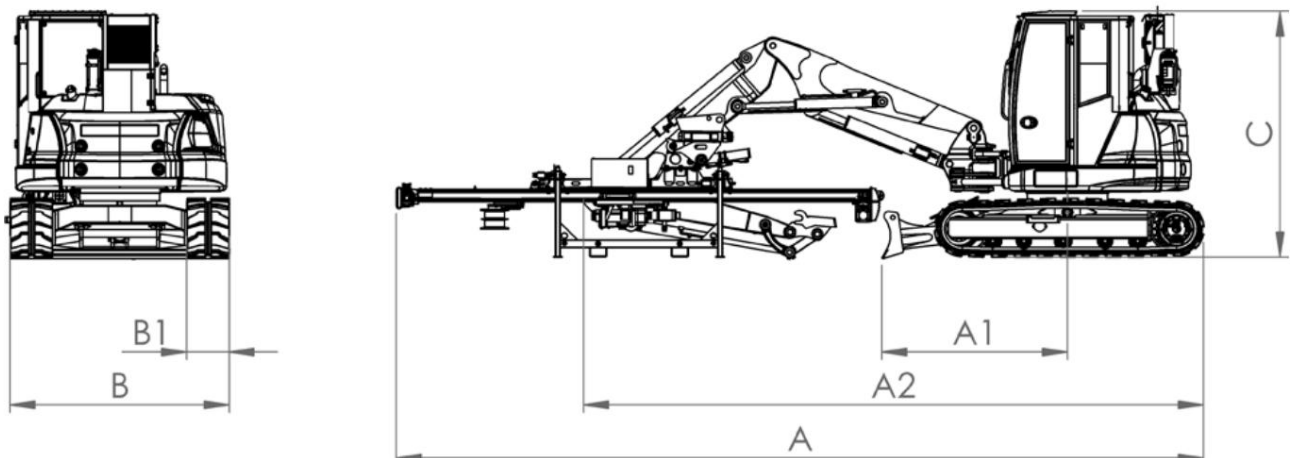
** basic device; without equipment // ** Basic unit; without fittings

*** Theoretical value (deviating according to EN16228 //

*** Theoretical value (according to EN16228 divergent)

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Drilling tower

The derrick consists of a holding beam, a shifting cylinder (V2), an aluminum drilling rig with a feed motor (V1) and a sliding caliper. The carriage is moved on the holding beam by the shifting cylinder (V2). The 360° rotation and the 90° tilt of the derrick allow for comfortable and easy alignment of the drilling position.

The drilling tower consists of a mounting beam, moving cylinder (V2), aluminium drilling mast with feed motor (V1) and a sliding saddle. The moving cylinder (V2) enables the shifting of the drilling mast on the beam. The 360° rotation and the 90° tilting of the drilling tower enables a comfortable and easy adjustment of the drilling position.

Technical data

Technical data

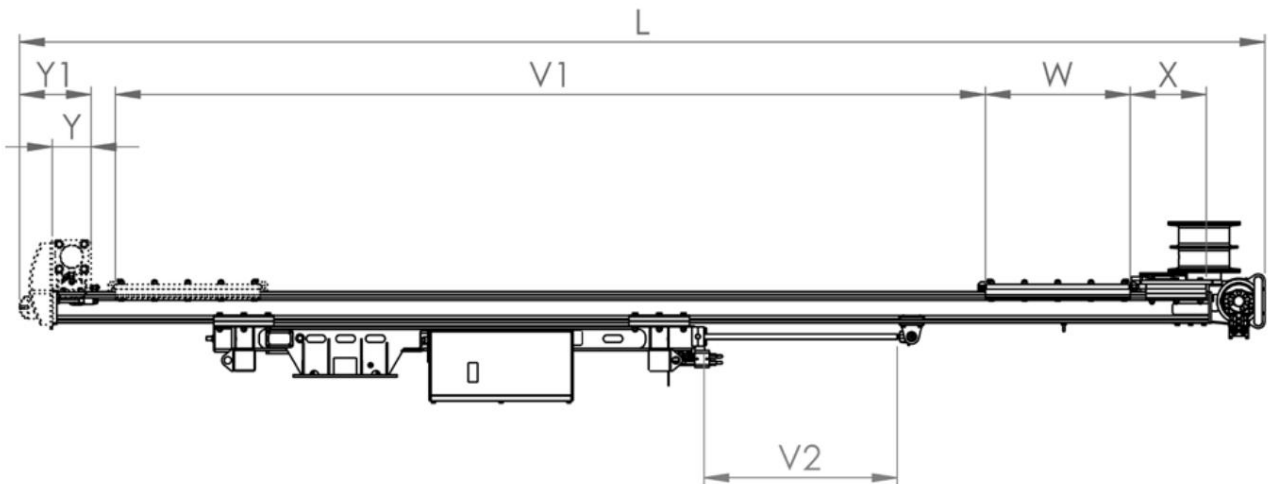
Dimensions //Dimensions

Gesamtlänge //Overall length	L	5.150 mm
Feed** //Feed**	V1	3.500 mm
Displacement //Displacement	v2	1.000 mm
Sattel //Saddle	IN	600 mm
Hose trolley //hose drum	x	325 mm
Clamping device* Y		160 mm
Clamp total * //Clamp total*	Y1	305 mm

* Depends on type of clamping tongs //Depends on type of clamping device
 ** Without drilling drive and without clamping device

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Bohrbagger BB7000-5 / BB7000-7

Drilling excavator

MORATH®

areas of application OF

Range of application IN



injection anchor drilling
Injection anchor drillings

overburden drilling
Overburden drillings

high-pressure injection wells
High pressure injection drilling systems

Exploratory and rotary drilling
Exploratory and rotary drillings

Anchor and blast hole drilling
Anchor and blast hole drillings

➔ Self-propelled drilling units drilling excavators
➔ Mobile drilling rigs ➔ Drilling excavator

The model impresses with the following features:

• Compact short tail excavator with optimized hydraulic and cooling system • Radio remote control FFS Standard and FFS Professional

• Ideal for large construction sites with combined digging and drilling applications • High degree of mobility and functionality • High level of stability thanks

to the patented excavator swivel brake or rear weight • Reduction in personnel costs thanks to the patented FFS

Professional radio remote control • Telescopic drill carriage (TBT-A35) with 360°- slewing ring and 90° tilting cylinder

• High cost-effectiveness due to the universal application options for excavator, drilling and shotcrete

work • Complete device from a single source including CE certification

• Fulfills safety requirements according to drill rig standard EN16228

The model stands out with the following characteristics:

• Short tail excavator with optimized hydraulic and cooling system

• Radio remote control FFS-Standard and FFS-Professional

• Ideal for big construction sites with combined digging and drilling applications

• High degree of flexibility and functionality • High stability

due to the patented excavator slewing ring brake system and rear weights

• Reduction of personnel costs due to the patented radio remote control FFS-Professional

• Telescopic drilling tower (TBT-A35) with 360°- slewing ring and 90°- tilting • High efficiency due to the universal application possibilities for digging-, drilling- and shotcreting

• Complete unit from the one source with CE-declaration of conformity

• Meets the safety requirements for drilling and foundation equipment EN16228



Bohrbagger BB7000-5 / BB7000-7

Drilling excavator

Technical data

Technical data

Motor //Engine	
Turbodieselmotor //Turbocharger diesel	4TNV98CT
Emission regulations	EU Stage 5 / US EPA Tier 4
Number of cylinders	4
power //power	54 kW
RPM //Speed	2.100 U/min rpm
Displacement //Capacity	3.319 cc
Dieseltankvolumen //Fuel tank capacity	105 l
Batteriespannung //Battery voltage	12 V
Hydraulikanlage (Load Sensing) //Hydraulic system (load sensing)	
Delivery capacity P1	185 l/min
Systemdruck //Operating pressure	290 bar
Hydrauliktankvolumen //Hydraulic tank capacity	90 l
Hydrauliksysteminhalt // Hydraulic system content	120 l
Crawler chassis //Undercarriage	
Gesamtbreite //Overall width	2.320 - 2.920 mm
Gesamtlänge Fahrwerk //Overall length of crawler track	2.880 mm
Achsabstand //Distance between axles	2.270 mm
3-bar base plate steel //3-bar base plate steel	450 mm
Bodenpressung //Ground pressure	5,5 N/cm ²
Driving speed //Excavator speed	2.6 – 5.2 km/h
Bohrlafette //Drilling mast	
carriage; with cylinder feed //mast; with cylinder feed	I-A26
feed force //Feed force	20.800 N
//Retraction force	28.050 N
feed length; Mount (V1) //Feed length; mast (V1)	2.600 mm
feed length; Total (V1+V2) //Feed length; total (V1+V2)	3.500 mm
Empfohlener Bohrantrieb //Recommended drilling drive	
Hydraulikhammer //Hydraulic hammer	HB100-GD100/M2, HB100-GD150
Rotary motor //Rotary head	HD60
Overburden drill drive //Overburden head	HD52S

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Bohrbagger BB7000-5 / BB7000-7

Drilling excavator

The drilling excavator BB7000-5/-7 is characterized by a high degree of flexibility. Thanks to the quick-change system, an attachment can be changed in the shortest possible time. This enables a hitherto unachieved utilization of the universal carrier. Due to the optional telescopic chassis, the very good stability, the high mobility with compact dimensions and the versatile application possibilities, the drilling excavator BB7000-5/-7 sets new standards in special civil engineering.

Another advantage is the modular system, which allows quick conversion of the different drilling methods such as rotary percussion drilling with top and down-the-hole hammers, rotary drilling with or without flushing fluid and overburden drilling. The functional features described enable universal use in the areas of verge shoring, excavation pit securing, foundation and post-foundation, rehabilitation and tunnel construction.

In combination with the patented FFS600 FP radio remote control, specially developed for the Morath drilling rigs, the drilling excavator achieves unique user-friendliness. The FFS 600 Professional radio remote control allows the operator to freely choose his location from which he can carry out all drilling, set-up and driving functions precisely using the proportional valve technology. This maximizes safety for operating and drilling personnel and provides maximum transparency during the drilling process.

The BB7000-5/-7 drilling excavator is characterized by a high degree of flexibility. Due to the quick-change system, an attachment can be exchanged in short time period. This enables a previously unattained utilisation of the universal carrier. Due the available telescopic track, its good stability, its high mobility with compact dimensions and versatility the BB7000-5/-7 drilling excavator sets new standards in foundation engineering.

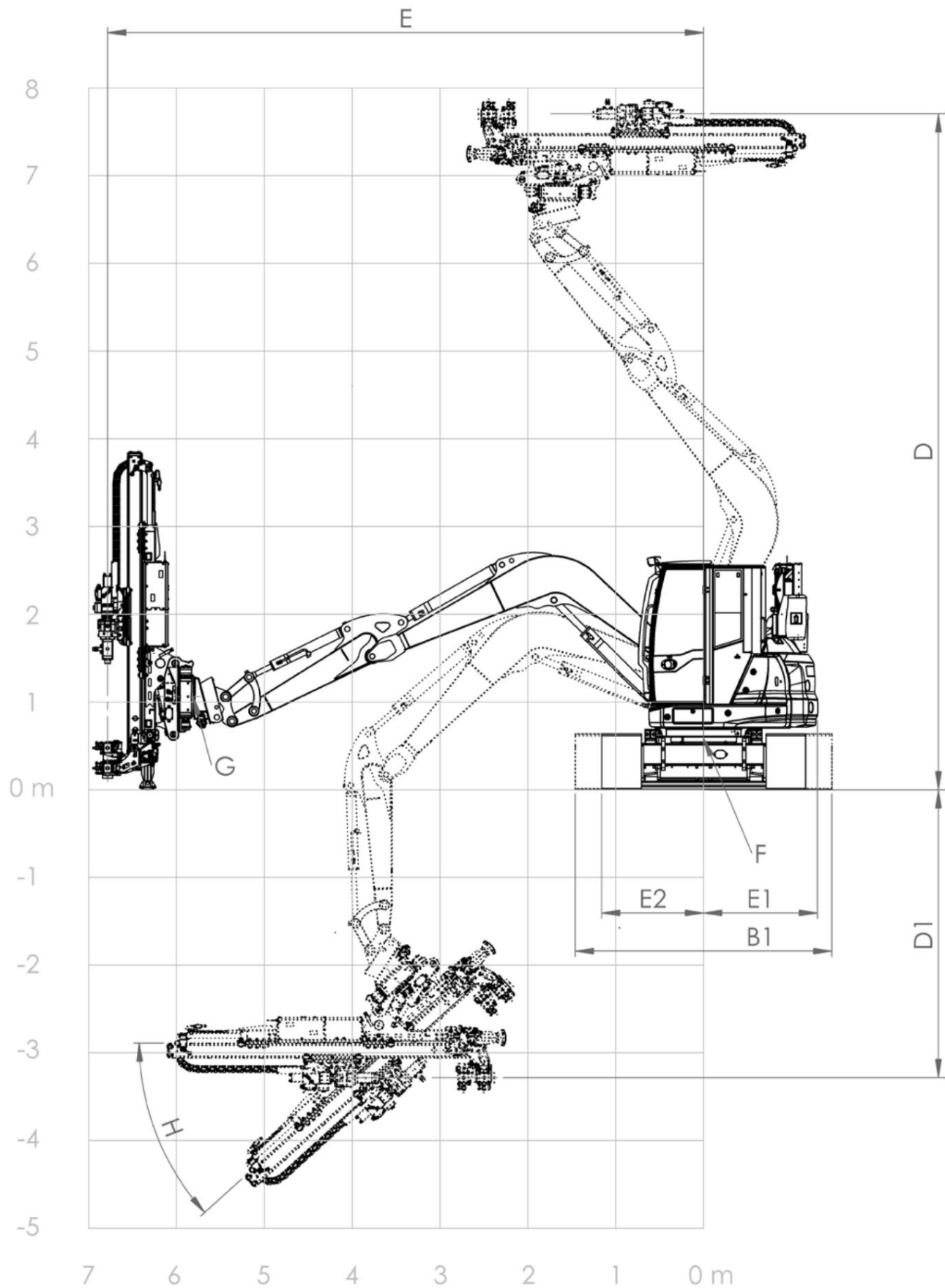
Another advantage is the modular construction system, which enables quick changeover of the different drilling methods such as rotary percussive drilling with external and down-the-hole hammer, rotary drilling with or without flushing fluid and overburden drilling. The described functional features enable universal use in the areas of bench shoring, excavation support, foundation and post-foundation, restructuring and tunnel construction.

In combination with the patented radio remote control FFS600 FP, specially developed for Morath drilling rigs, the excavator achieves a unique ease of operation. With the FFS600 Professional radio remote control the operator can freely select his location, from which he can precisely drive all drilling, setup and travel functions via the proportional valve technology. This maximises the safety for operators and drilling personnel and ensures maximum transparency during the drilling process.



Bohrbagger BB7000-5 / BB7000-7

Drilling excavator



Bohrbagger BB7000-5 / BB7000-7

Drilling excavator

Accessories

Accessories

Hydraulic breakers

Hydraulic hammers

Rotary motors

Rotary heads

FFS standard (radio remote control drill)

FFS-Standard (Radio remote control of drilling rig)

FFS Professional (radio remote control drilling excavator)

FFS-Professional (Radio remote control of drilling rig and excavator)

Mechanical/fully hydraulic quick coupler

Mechanical/full hydraulic quick-coupler

Spritzbeton-Manipulator

Shotcrete manipulator

Deep/swivel bucket

Backhoe-/ swivel bucket

Special paint

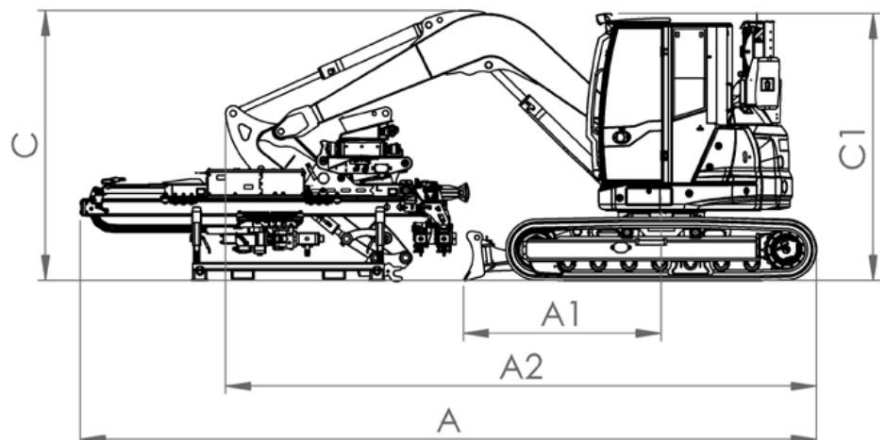
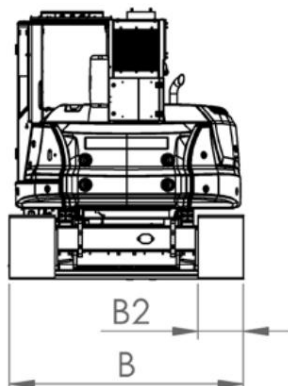
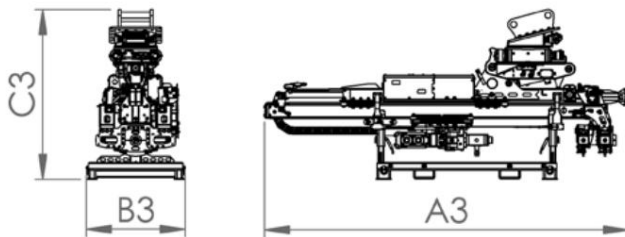
Special paint

Patented upper carriage swivel brake

Patented slewing brake on the revolving superstructure

Electro-hydraulic rotary drive on the drill

Electronic-hydraulic swivel joint at the drilling rig



Technical data

Technical data

Dimensions //Dimensions	BB7000-5 BB7000-7	
A	7.300 mm 7.300 mm	
A1	1.960 mm 1.960 mm	
A2	5.860 mm 5.860 mm	
A3	3.840 mm 3.840 mm	
B	2.320 mm 2.320 mm	
B1	2.920 mm	
B2	450 mm	450 mm
B3	1.200 mm 1.200 mm	
c	2.680 mm 2.680 mm	
C1	2.650 mm 2.650 mm	
C3	1.800 mm 1.800 mm	
D	7.660 mm 7.660 mm	
D1	3.300 mm 3.300 mm	
AND***	6.750 mm 6.750 mm	
E1	1.300 mm 1.300 mm	
E2	1.160 mm 1.160 mm	
F	360°	360°
G	360°	360°
H	95°	95°
Carrier*/Excavator*	10.450 kg	11.280 kg
Total weight** //Total weight**	11.750 kg	12.580 kg

* including additional weight // * including additional weight
 ** basic device; without equipment // ** Basic unit; without fittings
 *** Theoretical value (deviating according to EN16228) //
 *** Theoretical value (according to EN16228 divergent)

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Telescopic derrick TBT-A35

Telescopic drilling tower

The telescopic derrick consists of a holding beam, a shifting cylinder (V2), an aluminum drill rig with an integrated feed cylinder (V1) and a sliding saddle. The total feed length is increased (V1+V2) by the displacement cylinder (V2). The complete displacement of the derrick (A) enables a comfortable and easy adjustment of the drilling position.

The telescopic drilling tower consists of a mounting beam, moving cylinder (V2), aluminium drilling mast with integrated feed cylinder (V1) and a sliding saddle. By means of the moving cylinder (V2) the total feed length is increased (V1+V2). The displacement of the total tower (A) enables comfortable and easy adjusting of the drilling tower.

* Depends on type of clamping tongs // * Depends on type of clamping device
 ** Without drill drive and without clamping device
 ** Without drilling drive and clamping device

Technical data

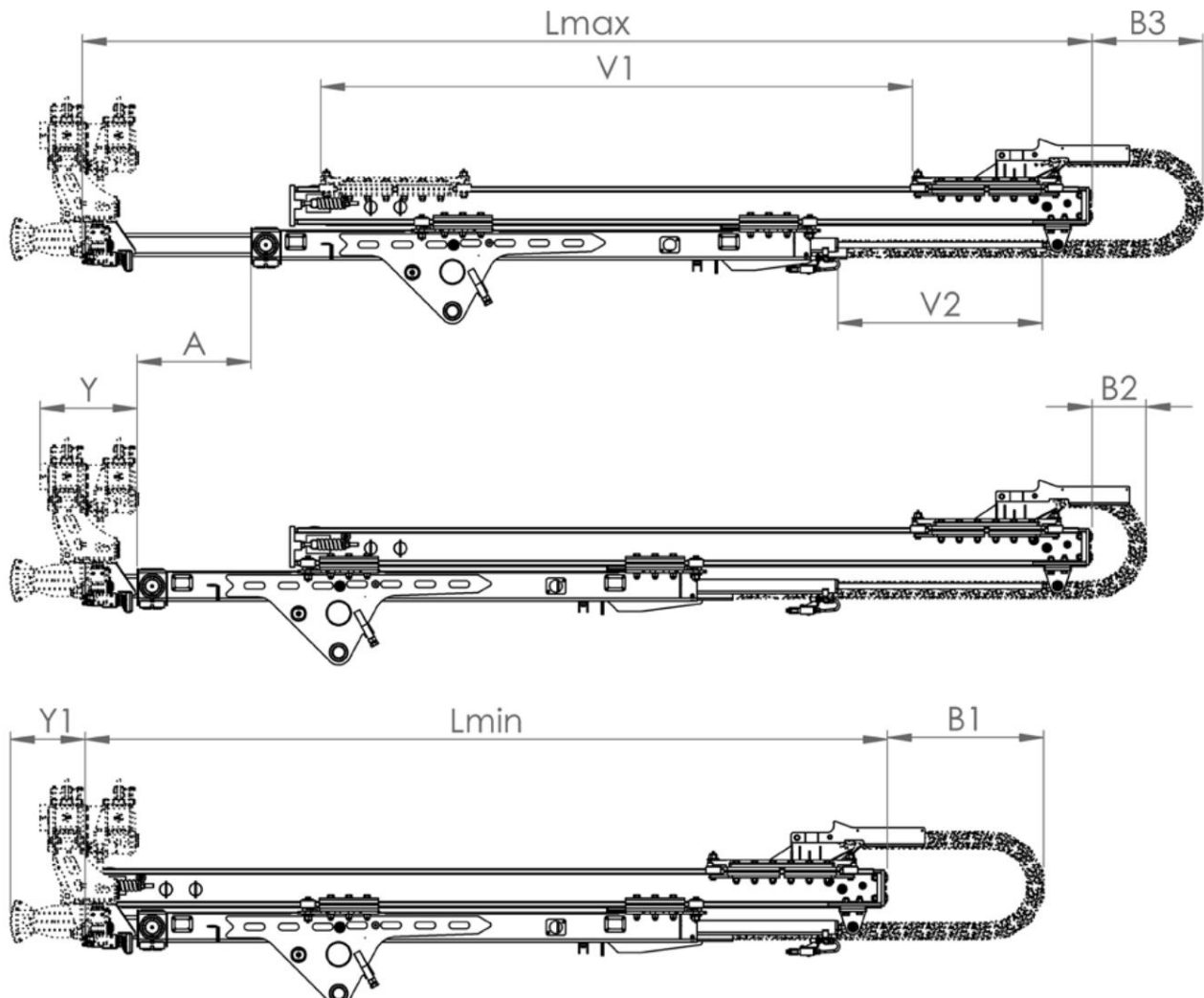
Technical data

Dimensions //Dimensions

Gesamtlänge //Overall length	L max	4.400 mm
Minimale Länge //Minimum length	L min	3.540 mm
Feed** //Feed**	V1	2.600 mm
feed //Feed	v2	900 mm
Total Feed** //Total Feed**	V1 + V2	3.500 mm
Complete displacement //Displacement A		500 mm
Energiekette //Energy chain	B1	700 mm
Energiekette //Energy chain	B2	250 mm
Energiekette //Energy chain	B3	500 mm
Clamping device* // Clamping device* Y		440 mm
Clamp total* // Clamping total*	Y1	560 mm

Technical data without consideration of efficiency. Subject to errors and changes.

Technical data without consideration of efficiency. Subject to errors and changes.



Bohrbagger BB8000-1

Drilling excavator

MORATH®

areas of application OF

Range of application IN

injection anchor drilling
Injection anchor drillings

overburden drilling
Overburden drillings

high-pressure injection wells
High pressure injection drilling systems

Exploratory and rotary drilling
Exploratory and rotary drillings

Anchor and blast hole drilling
Anchor and blast hole drillings

- ➔ Self-propelled drilling units drilling excavators
- ➔ Mobile drilling rigs ➔ Drilling excavator



The model impresses with the following features:

- Compact short tail excavator with optimized hydraulic and cooling system
- Radio remote control FFS Standard and FFS Professional
- Ideal for large construction sites with combined digging and drilling applications
- High degree of mobility and functionality
- Reduction in personnel costs thanks to the patented FFS Professional radio remote control
- Telescopic drill rig (TBT-A35) with 360° slewing ring and 90° tilting cylinder
- High cost-effectiveness due to the Universal applications for excavator, drilling and shotcrete work
- Complete device from a single source including CE certification
- Fulfills safety requirements according to drill rig standard EN16228

The model stands out with the following characteristics:

- Short tail excavator with optimized hydraulic and cooling system
- Radio remote control FFS-Standard and FFS-Professional
- Ideal for big construction sites with combined digging and drilling applications
- High degree of flexibility and functionality
- Reduction of personnel costs due to the patented radio remote control FFS-Professional
- Telescopic drilling tower (TBT-A35) with 360°- slewing ring and 90°- tilting
- High efficiency due to the universal application possibilities for digging-, drilling- and shotcreting
- Complete unit from the one source with CE-declaration of conformity
- Meets the safety requirements for drilling and foundation equipment EN16228



Bohrbagger BB8000-1

Drilling excavator

Technical data
Technical data

Motor //Engine	
Turbodieselmotor // Turbocharger diesel	Deutz TCD 3.6 L4
Emission regulations	EU Stage 5 / US EPA Tier 4
Number of cylinders	4
Power according to ISO 14396 //Power according to ISO 14396	85 kW
RPM //Speed	2.000 U/min rpm
Displacement //Capacity	3.621 cc
Dieseltankvolumen //Fuel tank capacity	220 l
AdBlue Tank volume // AdBlue tank capacity	20 l
Batteriespannung //Battery voltage	24 V
Hydraulikanlage (Load Sensing) //Hydraulic system (load sensing)	
Delivery capacity P1	275 l/min
Systemdruck //Operating pressure	340 bar
Hydrauliktankvolumen //Hydraulic tank capacity	130 l
Crawler chassis //Undercarriage	
Gesamtbreite //Overall width	2.490 mm
Gesamtlänge Fahrwerk //Overall length of crawler track	3.795 mm
Achsabstand //Distance between axles	3.080 mm
3-bar base plate steel //3-bar base plate steel	500 mm
Bodenpressung //Ground pressure	5,4 N/cm ²
Driving speed //Excavator speed	5.3 km/h
Bohrlafette //Drilling mast	
carriage; with cylinder feed //mast; with cylinder feed	I-A26
feed force //Feed force	20.800 N
//Retraction force	28.050 N
feed length; Mount (V1) //Feed length; mast (V1)	2.600 mm
feed length; Total (V1+V2) //Feed length; total (V1+V2)	3.500 mm
Empfohlener Bohrantrieb //Recommended drilling drive	
Hydraulikhammer //Hydraulic hammer	HB100-GD150 HB120-GD150
Drehmotor //Rotary head	HD60
Overburden head	HD52S

Technical data without consideration of efficiency. Subject to errors and changes.

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Drilling excavator

The drilling excavator BB8000-1 is characterized by a high degree of flexibility. Thanks to the quick-change system, an attachment can be changed in the shortest possible time. This enables a hitherto unachieved utilization of the universal carrier. Due to the optional additional rear weight, the very good stability, the high mobility with compact dimensions and the versatile application possibilities, the drilling excavator BB8000-1 sets new standards in special civil engineering.

Another advantage is the modular system, which allows quick conversion of the different drilling methods such as rotary percussion drilling with top and down-the-hole hammers, rotary drilling with or without flushing fluid and overburden drilling. The functional features described enable universal use in the areas of verge shoring, excavation pit securing, foundation and post-foundation, rehabilitation and tunnel construction.

In combination with the FFS600 radio remote control, which was specially developed and patented for Morath drilling rigs, the drilling excavator achieves unique user-friendliness. The FFS 600 Professional radio remote control allows the operator to freely choose his location from which he can carry out all drilling, set-up and driving functions precisely using the proportional valve technology. This maximizes safety for operating and drilling personnel and provides maximum transparency during the drilling process.

The BB8000-1 drill excavator is characterised by a high degree of flexibility and a compact design. Due to the quick-change system, an attachment can be exchanged in short time period. This enables a previously unattained utilisation of the universal carrier. Due to the optional counter weight, the very good stability, the high maneuverability with compact dimensions and the versatile application possibilities, the drilling excavator BB8000-1 sets new standards in foundation engineering.

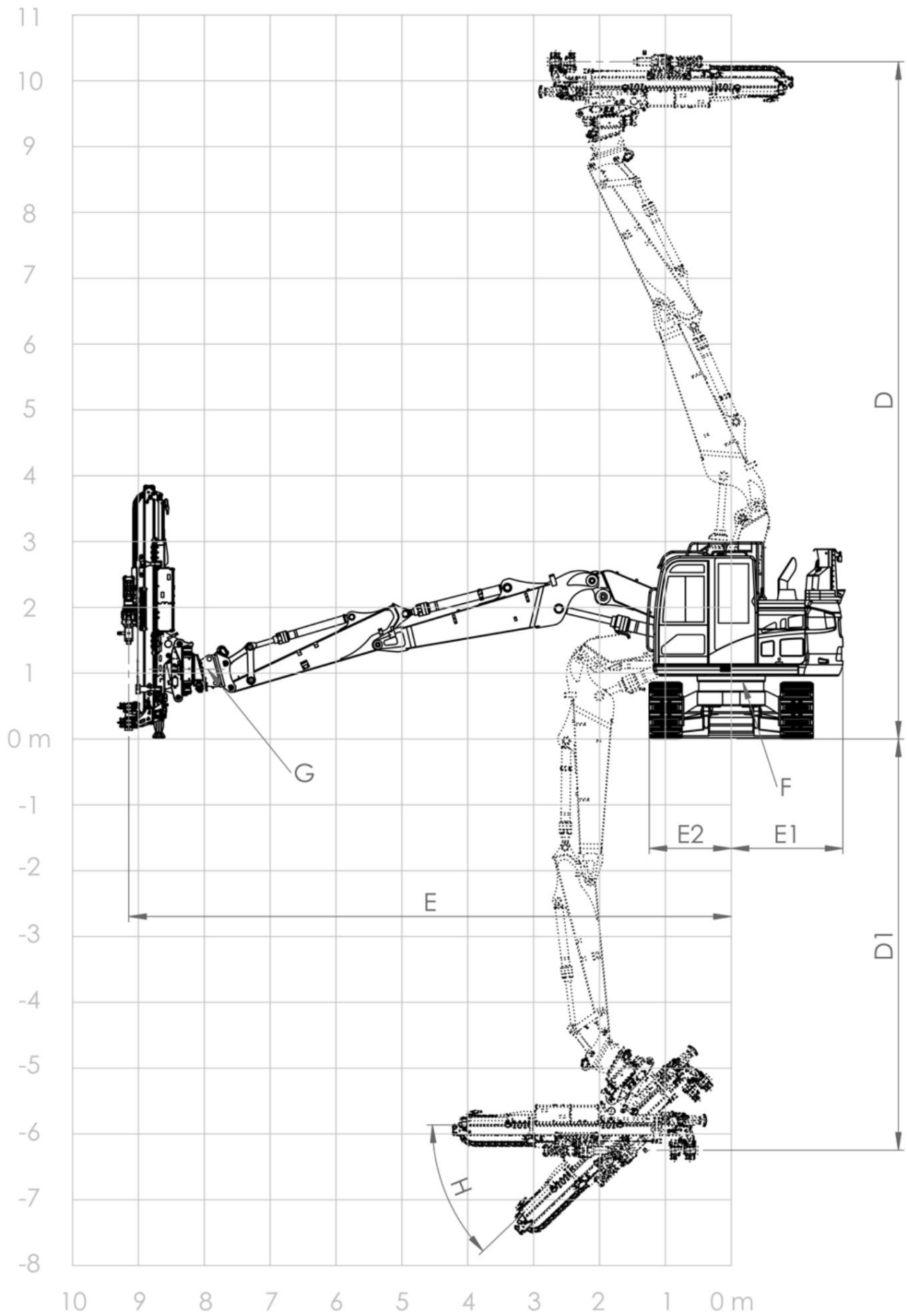
Another advantage is the modular construction system, which enables quick changeover of the different drilling methods such as rotary percussive drilling with external and down-the-hole hammer, rotary drilling with or without flushing fluid and overburden drilling. The described functional features enable universal use in the areas of bench shoring, excavation support, foundation and post-foundation, restructuring and tunnel construction.

In combination with the patented radio remote control FFS600, specially developed for Morath drilling rigs, the excavator achieves a unique ease of operation. With the FFS600 Professional radio remote control the operator can freely select his location, from which he can precisely drive all drilling, setup and travel functions via the proportional valve technology. This maximises the safety for operators and drilling personnel and ensures maximum transparency during the drilling process.



Bohrbagger BB8000-1

Drilling excavator



Bohrbagger BB8000-1

Drilling excavator

Accessories

Hydraulic breakers

Hydraulic hammers

Rotary motors

Rotary heads

Vulcanized rubber pads for steel crawler chassis

Vulcanized rubber pads for steel crawler tracks

FFS standard (radio remote control drill)

FFS-Standard (Radio remote control of drilling rig)

FFS-Professional (radio remote control drilling excavator)

FFS-Professional (Radio remote control of drilling rig and excavator)

Spritzbeton-Manipulator

Shotcrete manipulator

Deep/Swivel Bucket

Backhoe-/ swivel bucket

special paint

Special painting

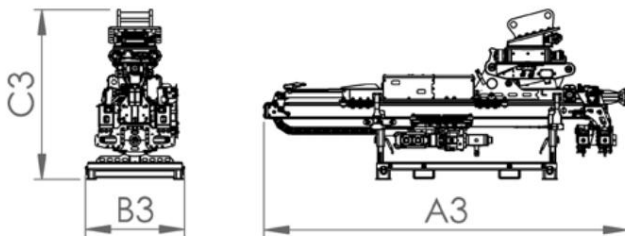
Accessories

Technical data

Technical data

Dimensions //Dimensions

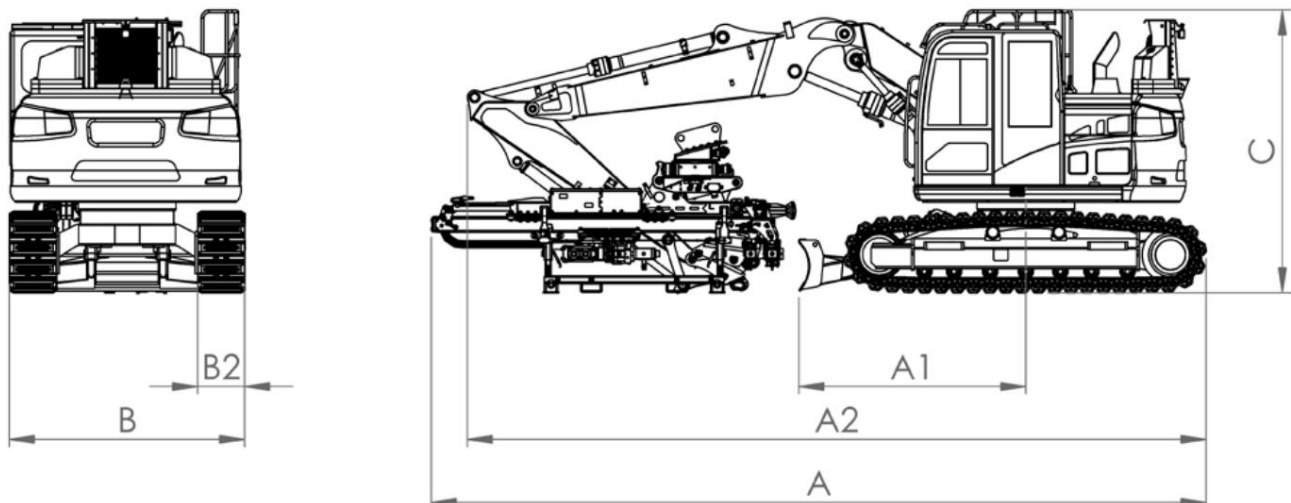
A	8.100 mm
A1	2.400 mm
A2	7.820 mm
A3	3.800 mm
B	2.500 mm
B2	500 mm
B3	1.200 mm
c	3.010 mm
C3	1.800 mm
D	10.290 mm
D1	6.240 mm
AND***	9.110 mm
E1	1.700 mm
E2	1.245 mm
F	360°
G	360°
H	95°
Carrier*/Excavator*	16.600 kg
Total weight**/Total weight**	17.950 kg



* including additional weight // * including additional weight
 ** basic device; without equipment // ** Basic unit; without fittings
 *** Theoretical value (deviating according to EN16228)
 *** Theoretical value (according to EN16228 divergent)

Technical data without consideration of efficiency. Subject to errors and changes.

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Telescopic derrick TBT-A35

Telescopic drilling tower

The telescopic derrick consists of a holding beam, a shifting cylinder (V2), an aluminum drill rig with an integrated feed cylinder (V1) and a sliding saddle. The total feed length is increased (V1+V2) by the displacement cylinder (V2). The complete displacement of the derrick (A) enables a comfortable and easy adjustment of the drilling position.

The telescopic drilling tower consists of a mounting beam, a displacement cylinder (V2), aluminium drilling mast with integrated feed cylinder (V1) and a sliding saddle. By means of the moving cylinder (V2) the total feed length is increased (V1 + V2). The displacement of the total tower (A) enables comfortable and easy adjusting of the drilling tower.

* Depends on type of clamping tongs // * Depends on type of clamping device

** Without drill drive and without clamping device

** Without drilling drive and clamping device

Technical data

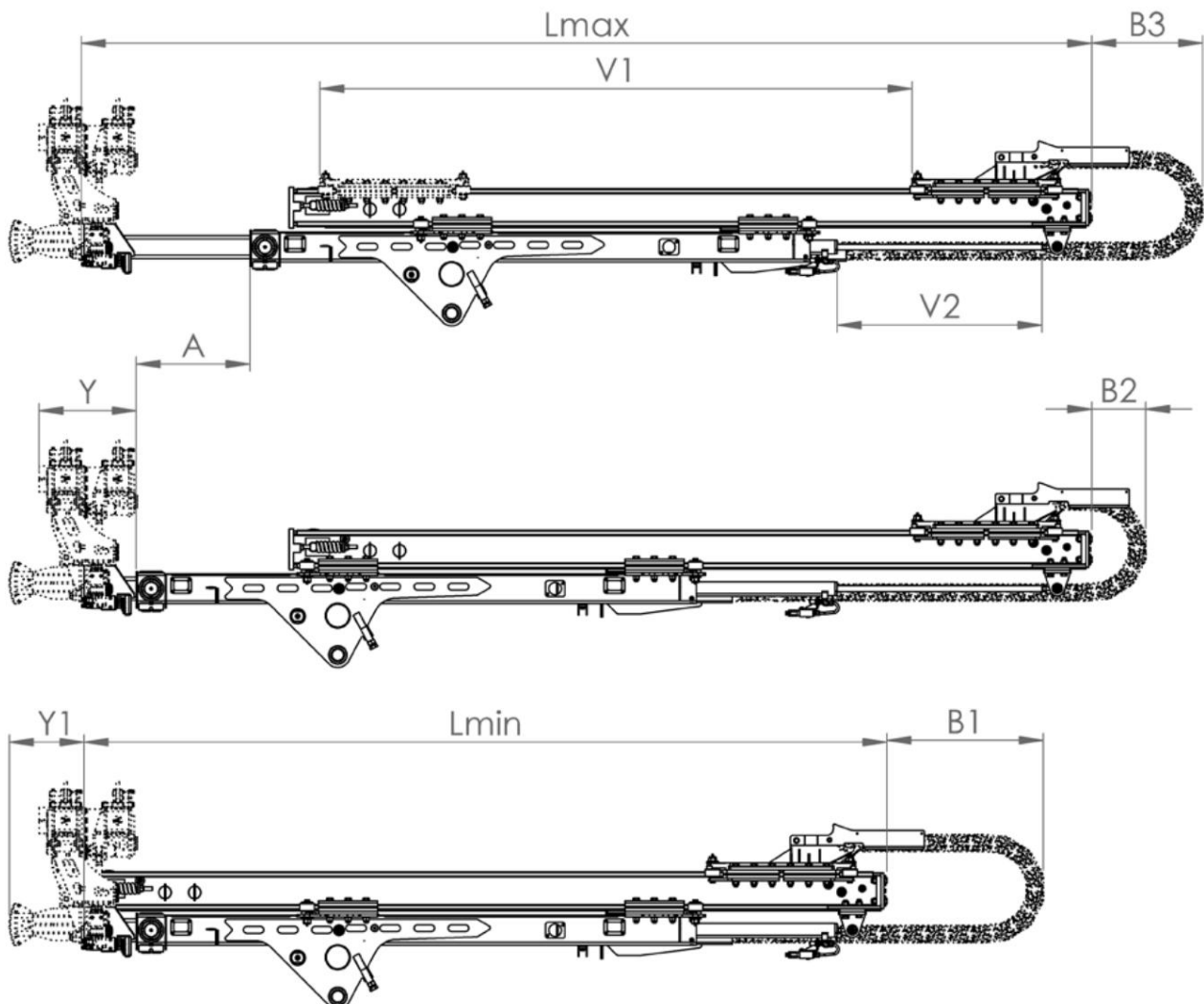
Technical data

Dimensions //Dimensions

Gesamtlänge //Overall length	L max	4.400 mm
Minimale Länge //Minimum length	L min	3.540 mm
Feed** //Feed**	V1	2.600 mm
feed //Feed	v2	900 mm
Total Feed** //Total Feed**	V1 + V2	3.500 mm
Complete displacement //Displacement A		500 mm
Energiekette //Energy chain	B1	700 mm
Energiekette // Energy chain	B2	250 mm
Energiekette //Energy chain	B3	500 mm
Clamping device* Y		440 mm
Clamp total * //Clamp total*	Y1	330 mm

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Technical data without consideration of efficiency. Subject to errors and changes.



Bohrbagger BB9000

Drilling excavator

MORATH®

areas of application OF

Range of application IN

injection anchor drilling

Injection anchor drillings

overburden drilling

Overburden drillings

high-pressure injection wells

High pressure injection drilling systems

Exploratory and rotary drilling

Exploratory and rotary drillings

Anchor and blast hole drilling

Anchor and blast hole drillings

➔ Self-propelled drilling units drilling excavators

➔ Mobile drilling rigs ➔ Drilling excavator



The model impresses with the following features:

• Compact short tail excavator with optimized hydraulic and cooling system
• Radio remote control FFS Standard and FFS Professional

• Ideal for large construction sites with combined digging and drilling applications
• High degree of mobility and functionality
• Reduction in personnel

costs thanks to the patented FFS Professional radio remote control
• Telescopic drill rig (TBT-D35) with 360° slewing ring and 90° tilting cylinder
• High cost-effectiveness due to the Universal applications for excavator, drilling and shotcrete work
• Complete device from a single source including CE certification

• Fulfills safety requirements according to drill rig standard EN16228

The model stands out with the following characteristics:

• Short tail excavator with optimized hydraulic and cooling system

• Radio remote control FFS-Standard and FFS-Professional

• Ideal for big construction sites with combined digging and drilling applications

• High degree of flexibility and functionality

• Reduction of personnel costs due to the patented radio remote control FFS-Professional

• Telescopic drilling tower (TBT-D35) with 360°- slewing ring and 90°- tilting
• High efficiency due to the universal application possibilities for digging-, drilling- and shotcreting

• Complete unit from the one source with CE-declaration of conformity

• Meets the safety requirements for drilling and foundation equipment EN16228



Bohrbagger BB9000

Drilling excavator

Technical data

Technical data

Motor //Engine	
Turbodieselmotor //Turbocharger diesel	D924 A7-04
Emission regulations	EU Stage 5 / US EPA Tier 4
Number of cylinders	4
Power according to ISO 9249 //Power according to ISO 9249	110 kW
RPM //Speed	2.000 U/min rpm
Displacement //Capacity	4.500 cc
Dieseltankvolumen //Fuel tank capacity	250 l
AdBlue Tank volume //AdBlue tank capacity	46 l
Batteriespannung //Battery voltage	24 V
Hydraulikanlage (Load Sensing) //Hydraulic system (load sensing)	
Delivery capacity P1	300 l/min
Systemdruck //Operating pressure	300 bar
Hydrauliktankvolumen //Hydraulic tank capacity	130 l
Hydrauliksysteminhalt // Hydraulic system content	300 l
Crawler chassis //Undercarriage	
Gesamtbreite //Overall width	2.600 mm
Gesamtlänge Fahrwerk //Overall length of crawler track	4.150 mm
Achsabstand //Distance between axles	3.370 mm
3-bar base plate steel //3-bar base plate steel	600 mm
Bodenpressung //Ground pressure	6,3 N/cm²
Driving speed //Excavator speed	2.6 – 5.7 km/h
Bohrlafette //Drilling mast	
carriage; with cylinder feed //mast; with cylinder feed	I-D25
feed force //Feed force	33.500 N
//Retraction force	45.250 N
feed length; Mount (V1) //Feed length; mast (V1)	2.500 mm
feed length; Total (V1+V2) //Feed length; total (V1+V2)	3.500 mm
Empfohlener Bohrantrieb //Recommended drilling drive	
Hydraulikhammer //Hydraulic hammer	HB100-GD150, HB120-GD150, HB200-GD200
Drehmotor //Rotary head	HD60, HD200
Overburden head	HD52S, HD200-HD60

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Technical data without consideration of efficiency. Subject to errors and changes.

Bohrbagger BB9000

Drilling excavator

The BB9000 drilling excavator is characterized by a high degree of flexibility. Thanks to the quick-change system, an attachment can be changed in the shortest possible time. This enables a hitherto unachieved utilization of the universal carrier. Due to the optional additional rear weight, the very good stability, the high mobility with compact dimensions and the versatile application possibilities, the drilling excavator BB9000 sets new standards in special civil engineering.

Another advantage is the modular system, which allows quick conversion of the different drilling methods such as rotary percussion drilling with top and down-the-hole hammers, rotary drilling with or without flushing fluid and overburden drilling. The functional features described enable universal use in the areas of verge shoring, excavation pit securing, foundation and post-foundation, rehabilitation and tunnel construction.

In combination with the patented FFS600 FP radio remote control, specially developed for the Morath drilling rigs, the drilling excavator achieves unique user-friendliness. The FFS 600 Professional radio remote control allows the operator to freely choose his location from which he can carry out all drilling, set-up and driving functions precisely using the proportional valve technology. This maximizes safety for operating and drilling personnel and provides maximum transparency during the drilling process.

The BB9000 drill excavator is characterised by a high degree of flexibility. Due to the quick-change system, an attachment can be exchanged in short time period. This enables a previously unattained utilisation of the universal carrier. Due to the optional counter weight, the very good stability, the high maneuverability with compact dimensions and the versatile application possibilities, the drilling excavator BB9000 sets new standards in foundation engineering.

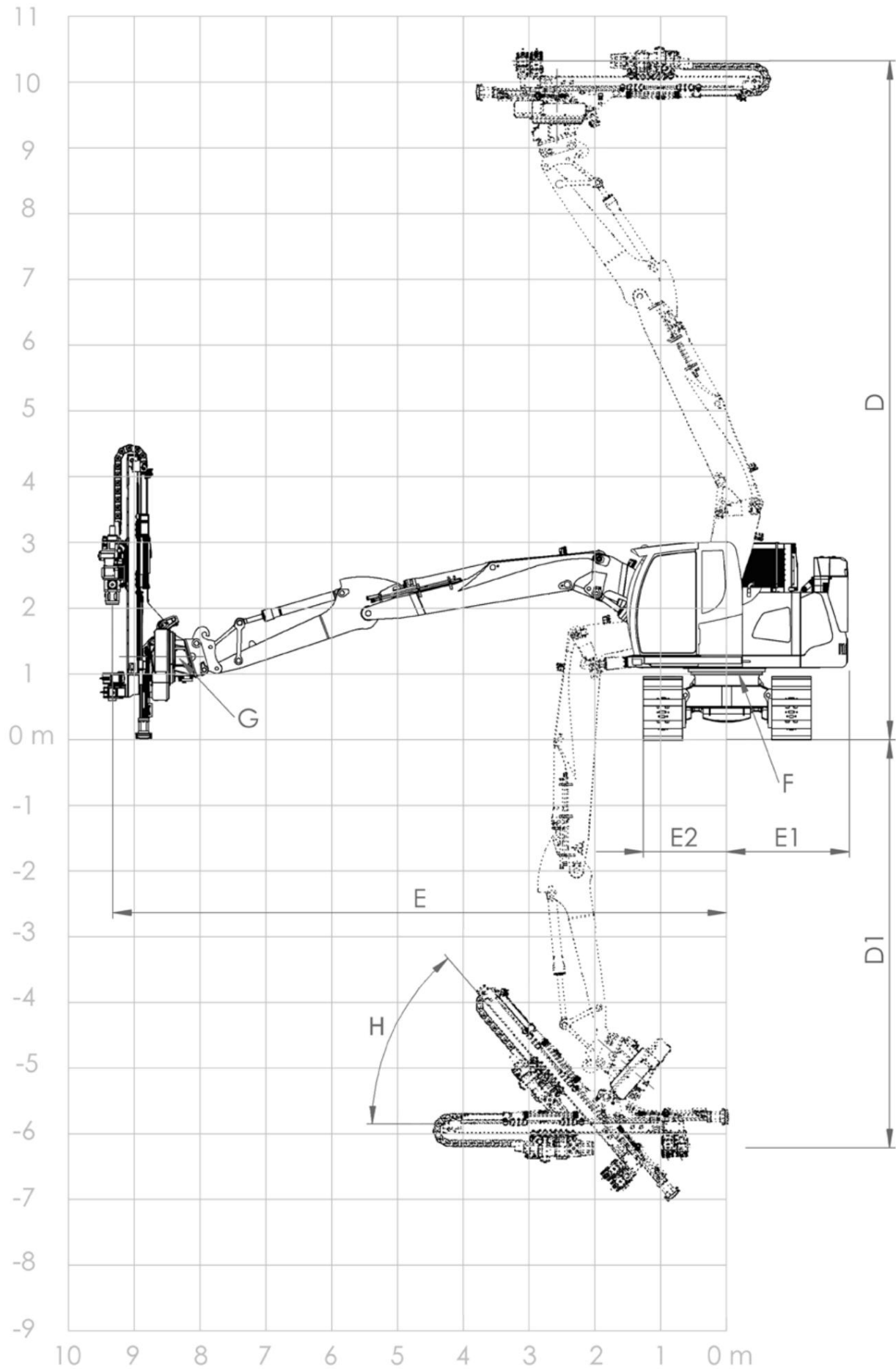
Another advantage is the modular construction system, which enables quick changeover of the different drilling methods such as rotary percussive drilling with external and down-the-hole hammer, rotary drilling with or without flushing fluid and overburden drilling. The described functional features enable universal use in the areas of bench shoring, excavation support, foundation and post-foundation, restructuring and tunnel construction.

In combination with the patented radio remote control FFS600 FP, specially developed for Morath drilling rigs, the excavator achieves a unique ease of operation. With the FFS600 Professional radio remote control the operator can freely select his location, from which he can precisely drive all drilling, setup and travel functions via the proportional valve technology. This maximises the safety for operators and drilling personnel and ensures maximum transparency during the drilling process.



Bohrbagger BB9000

Drilling excavator



Bohrbagger BB9000

Drilling excavator

Accessories

Accessories

- Hydraulic breakers

- Hydraulic hammers

- Rotary motors

- Rotary heads

- Vulcanized rubber pads for steel crawler chassis

- Vulcanized rubber pads for steel crawler tracks

- FFS standard (radio remote control drill)

- FFS-Standard (Radio remote control of drilling rig)

- FFS-Professional (radio remote control drilling excavator)

- FFS-Professional (Radio remote control of drilling rig and excavator)

- Spritzbeton-Manipulator

- Shotcrete manipulator

- Deep/Swivel Bucket

- Backhoe-/ swivel bucket

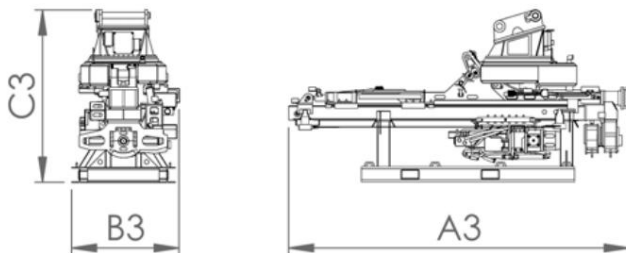
- special paint

- Special painting

Technical data

Technical data

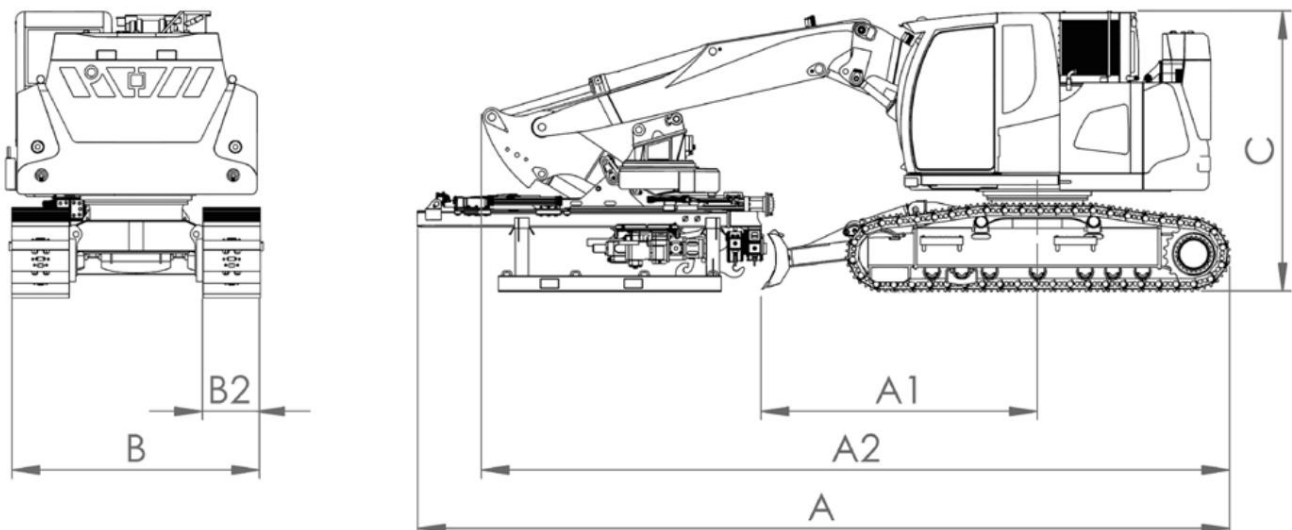
Dimensions //Dimensions	
A	8.800 mm
A1	2.970 mm
A2	8.300 mm
A3	3.840 mm
B	2.660 mm
B2	600 mm
B3	1.250 mm
c	3.035 mm
C3	1.930 mm
D	10.300 mm
D1	6.050 mm
AND***	9.330 mm
E1	1.850 mm
E2	1.300 mm
F	360°
G	360°
H	95°
Carrier*/Excavator*	23.700 kg
Total weight**/Total weight**	25.800 kg



* including additional weight // * including additional weight
 ** basic device; without equipment // ** Basic unit; without fittings
 *** Theoretical value (deviating according to EN16228)
 *** Theoretical value (according to EN16228 divergent)

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Telescopic drill tower TBT-D35

Telescopic drilling tower

The telescopic derrick consists of a holding beam with a walking foot, a shifting cylinder (V2), an aluminum drilling rig with an integrated feed cylinder (V1) and a sliding saddle. The total feed length is increased (V1+V2) by the displacement cylinder (V2). The complete shifting of the derrick (A) enables a comfortable and easy alignment of the drilling position.

The telescopic drilling tower consists of a mounting beam with outrigger, a displacement cylinder (V2), aluminium drilling mast with integrated feed cylinder (V1) and a sliding saddle.

By means of the moving cylinder (V2) the total feed length is increased (V1 + V2). The displacement of the total tower (A) enables comfortable and easy adjusting of the drilling tower.

Technical data

Technical data

Dimensions //Dimensions

Gesamtlänge //Overall length	L max	5.340 mm
Minimale Länge //Minimum length	L min	3.840 mm
feed //Feed	V1	2.500 mm
feed //Feed	v2	1.000 mm
Total Feed //Total Feed	V1 + V2	3.500 mm
Complete displacement //Displacement A		500 mm
Energiekette //Energy chain	B1	970 mm
Energiekette //Energy chain	B2	520 mm
Energiekette //Energy chain	B3	270 mm

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