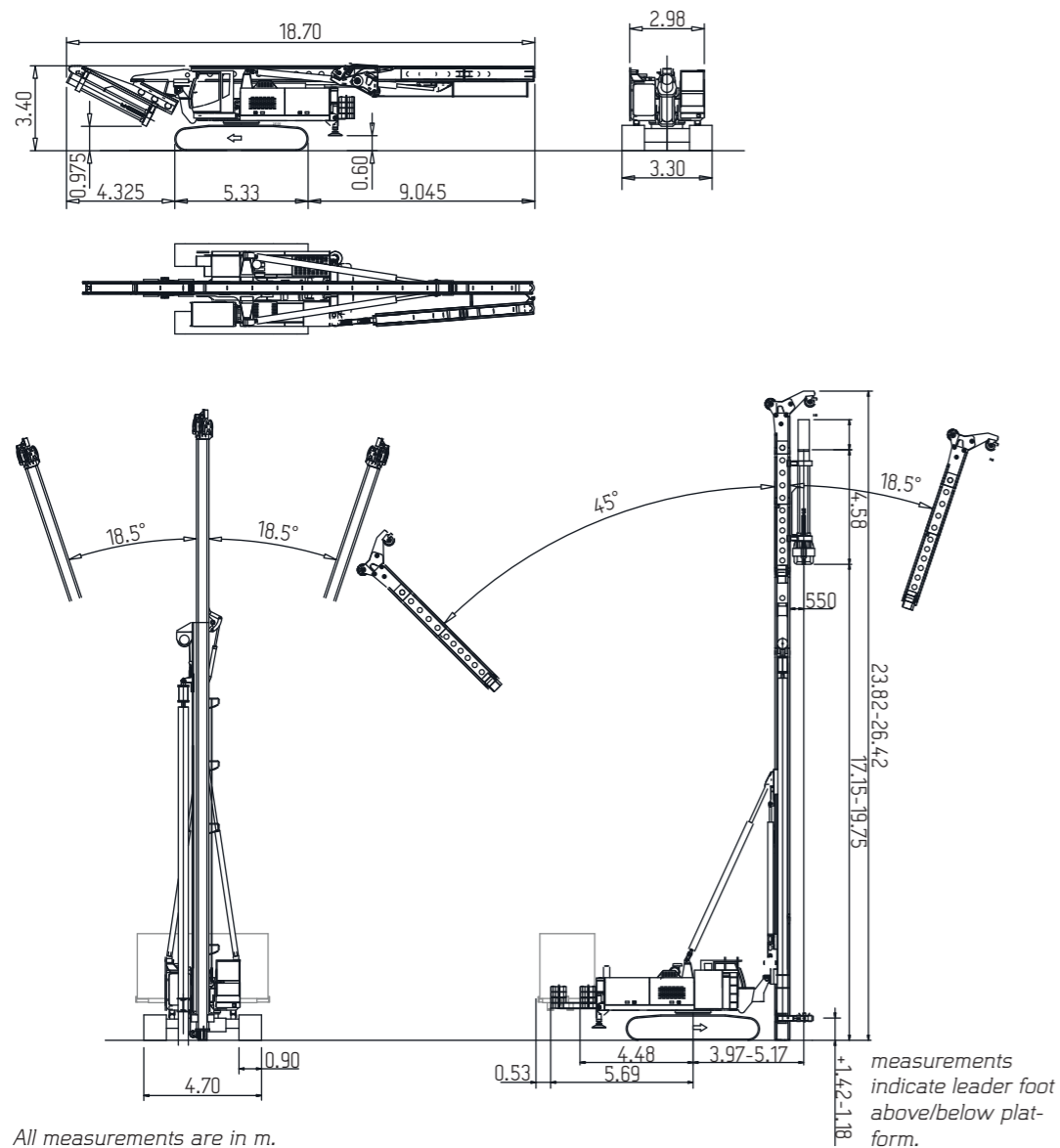




Banut 650

Piling rig no. 25-42225 and 26-42226



All measurements are in m.

Aarsleff's Piling division is one of Europe's leading piling contractors, and we undertake a wide variety of piling, drilling and foundation projects in Denmark and abroad. We have offices in Poland, Sweden, Germany and the UK.

Our extensive fleet ranges from mini piling rigs to large specialised machines and covers fully hydraulic piling and drilling rigs as well as cranes and vibrators.

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Fully hydraulic large capacity piling rigs

The rigs have extendable tracks and counterweights. When the tracks are extended, the undercarriages are almost quadratic which result in stable rigs with one-piece (not telescopic) leaders enabling the rigs to drive or vibrate heavy piles or sheet piles.

Mounted with a vibrator fixed directly to the leader, the rigs are also able to extract sheet piles.

The stable rigs make it possible to install inclined piles at large inclinations. Equipped with hydraulic support legs to the rear of the rigs, it is also possible to install piles with backward inclinations.

The engines of the rigs are capable of running hydraulic Uddcomb hammers of up to 6 tons, IHC hammers, or alternatively an auger motor (ordinary or VDW). When equipped with a vibrator, the additional power pack can be fitted to the rear of a rig allowing it to operate as one unit.

The main leader is mounted with pull-down of up to 10 tons.

The rigs can operate with double sheaved wire ropes.

On the right side of the main leader, a smaller drilling leader is mounted. A fixed auger motor and auger enable the rigs to predrill for precast concrete piles to reduce the vibratory impact originating from the piling which has shown positive effects in relation to fragile and old buildings nearby.

Normally, the rigs are transported with the hammer fixed to the leader. Mob/demob of rigs equipped with hydraulic hammers takes around one hour.

As standard, the piling rigs are equipped with a hydraulic hammer, type Uddcomb. The drop weight is raised to the preset drop height by hydraulic cylinders and falls by gravity towards the pile. When driving results in a bounce back of the drop weight, the hydraulic cylinders will catch it on

its way upwards. Already at this stage, the drop weight is lifted and prepared for the next blow.

This process avoids the need for the drop weight to come to rest before the next blow. Effortless, noisy blows are therefore omitted. This reduces the noise impact on surroundings.

Furthermore, the time after each blow is used optimally, and the blow frequency increases.

If preferred, the blow frequency can be reduced or a single stroke can be employed.

Specifications

Model	Banut 650
Leader length	24 m
Max forward inclination	18.5° (1:3)
Max backward inclination	45.0° (1:1)
Max lateral inclination	18.5° (1:3)
Max pile length	18 m
Hammer types etc.:	<ul style="list-style-type: none"> • IHC, Uddcomb H4H, H5H or H6H with turbo-ram • (H6H is standard) • Vibrator
Max drop height	1 m
Engine power and diesel emission	300kW, Level 2, cf. EU standards
Winches:	<ul style="list-style-type: none"> • Two 10-tons hoisting winches with free fall function • One 5.5-tons hoisting winch for predrill equipment and pull-down
Transport weight with ballast and H6H	72.6 tons
Transport weight without hammer	64.6 tons
Transport weight without ballast and hammer	59.2 tons (3 × 1,8 tons ballast can be dismounted)
Operational weight without hammer	64.6 tons
Ground pressure (at max operational mode)	Max 4.6kg/cm ² (H6H + 4-tons pile placed in the leader)

Standard equipment

- Driving helmets for precast concrete piles 25×25 cm and 30×30 cm
- Dollies for precast concrete piles 25×25 cm and 30×30 cm
- Hydraulic pile guide
- 10" container for equipment
- 17" container for crew's accomodation
- Diesel tank
- Supporting legs
- Extendable ballast
- Predrill equipment (only banut 25)
- Pull-down on leader, max 10 tons
- Hydraulic outlet for auger motor (predrilling and vdw)
- Hydraulic outlet for noise screen
- Drilling leader on the side of the main leader
- Electronic driving log

Additional equipment

- Driving helmets for precast concrete piles 35×35 cm and 40×40 cm
- Dollies for precast concrete piles 35×35 cm and 40×40 cm
- Driving helmets for sheet piles
- Carrier for power pack unit
- Various predrill equipment (predrilling and vdw)

Conditions for capacity chart

- Piling rig placed on horizontal, firm and stable platform.
- Counterweight extended when piling with vertical, forward or lateral inclination.
- Counterweight retracted when piling with backward inclination.
- Bracket fully retracted when piling with forward or lateral inclination.
- Bracket fully extended when piling with vertical or backward inclination.
- Leader foot placed just above firm and stable platform.
Except for the column "Leader supported". Here the leader is supported on horizontal, firm and stable platform.
- The stated capacities are of 360°, and the pile toe is just above ground.
- Supporting legs placed on horizontal and stable platform when piling with backward inclination.
- Tracks fully extended.
- Weight of hammer equals the total weight of hammer.

Capacity chart

Max allowed pile weight in tons

Inclination	Pile length	12 m				14 m				16 m				18 m				
		Weight of hammer	For-ward	Leader supported	Back-ward	Lateral	For-ward	Leader supported	Back-ward	Lateral	For-ward	Leader supported	Back-ward	Lateral	For-ward	Leader supported	Back-ward	Lateral
45° (1:1)	5.0	-	-	10.0	-	-	-	10.0	-	-	-	2.4	-	-	-	-	-	-
	6.0	-	-	10.0	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-
	7.0	-	-	10.0	-	-	-	6.2	-	-	-	-	-	-	-	-	-	-
	8.0	-	-	10.0	-	-	-	2.1	-	-	-	-	-	-	-	-	-	-
	9.0	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10.0	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26.5° (1:2)	5.0	-	-	10.0	-	-	-	10.0	-	-	-	10.0	-	-	-	8.1	-	-
	6.0	-	-	10.0	-	-	-	10.0	-	-	-	10.0	-	-	-	5.4	-	-
	7.0	-	-	10.0	-	-	-	10.0	-	-	-	10.0	-	-	-	2.6	-	-
	8.0	-	-	10.0	-	-	-	10.0	-	-	-	7.8	-	-	-	-	-	-
	9.0	-	-	10.0	-	-	-	10.0	-	-	-	4.7	-	-	-	-	-	-
	10.0	-	-	10.0	-	-	-	10.0	-	-	-	1.6	-	-	-	-	-	-
18.5° (1:3)	5.0	8.1	10.0	10.0	10.0	6.4	10.0	10.0	5.4	5.0	8.4	10.0	0.5	3.9	8.4	10.0	-	
	6.0	6.5	10.0	10.0	10.0	4.9	10.0	10.0	2.4	3.5	6.9	10.0	-	2.4	6.9	10.0	-	
	7.0	5.0	10.0	10.0	10.0	3.3	9.1	10.0	-	2.0	5.3	10.0	-	0.9	5.3	10.0	-	
	8.0	3.5	10.0	10.0	6.9	1.8	7.5	10.0	-	0.5	3.8	10.0	-	-	3.8	10.0	-	
	9.0	2.0	8.5	10.0	3.0	0.3	5.9	10.0	-	-	2.2	8.0	-	-	2.2	8.0	-	
	10.0	0.4	6.9	10.0	-	-	4.3	10.0	-	-	0.7	5.2	-	-	0.7	5.2	-	-
14° (1:4)	5.0	10.0	10.0	10.0	10.0	9.1	10.0	10.0	10.0	7.7	10.0	10.0	7.5	6.4	10.0	10.0	3.3	
	6.0	9.5	10.0	10.0	10.0	7.7	10.0	10.0	10.0	6.2	10.0	10.0	4.8	5.0	10.0	10.0	0.8	
	7.0	8.1	10.0	10.0	10.0	6.3	10.0	10.0	9.5	4.8	10.0	10.0	2.1	3.5	10.0	10.0	-	
	8.0	6.7	10.0	10.0	10.0	4.9	10.0	10.0	6.5	3.4	9.7	10.0	-	2.1	9.7	10.0	-	
	9.0	5.2	10.0	10.0	10.0	3.4	10.0	10.0	3.5	1.9	8.2	10.0	-	0.7	8.2	10.0	-	
	10.0	3.8	10.0	10.0	10.0	2.0	10.0	10.0	0.5	0.5	6.7	10.0	-	-	6.7	10.0	-	
11.5° (1:5)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0	8.2	10.0	10.0	8.5	
	6.0	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	8.2	10.0	10.0	10.0	6.8	10.0	10.0	6.0	
	7.0	10.0	10.0	10.0	10.0	8.4	10.0	10.0	10.0	6.8	10.0	10.0	9.0	5.5	10.0	10.0	3.5	
	8.0	8.9	10.0	10.0	10.0	7.0	10.0	10.0	10.0	5.4	10.0	10.0	6.3	4.1	10.0	10.0	1.0	
	9.0	7.5	10.0	10.0	10.0	5.6	10.0	10.0	10.0	4.0	10.0	10.0	3.6	2.7	10.0	10.0	-	
	10.0	6.2	10.0	10.0	10.0	4.2	10.0	10.0	10.0	2.7	10.0	10.0	0.9	1.3	10.0	10.0	-	
5.5° (1:4)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
	7.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
	8.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9	10.0	10.0	10.0	
	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.7	10.0	10.0	10.0	
	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.9	10.0	10.0	10.0	7.4	10.0	10.0	10.0	
Vertical	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
	6.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.9	
	7.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.6	9.6	9.6	9.6	8.9	8.9	8.9	8.9	
	8.0	10.0	10.0	10.0	10.0	9.4	9.4	9.4	9.4	8.6	8.6	8.6	8.6	7.9	7.9	7.9	7.9	
	9.0	9.2	9.2	9.2	9.2	8.4	8.4	8.4	8.4	7.6	7.6	7.6	7.6	6.9	6.9	6.9	6.9	
	10.0	8.3	8.3	8.3	8.3	7.4	7.4	7.4	7.4	6.6	6.6	6.6	6.6	5.9	5.9	5.9	5.9	
11.0	7.3	7.3	7.3	7.3	6.4	6.4	6.4	6.4	5.6	5.6	5.6	5.6	4.9	4.9	4.9	4.9		