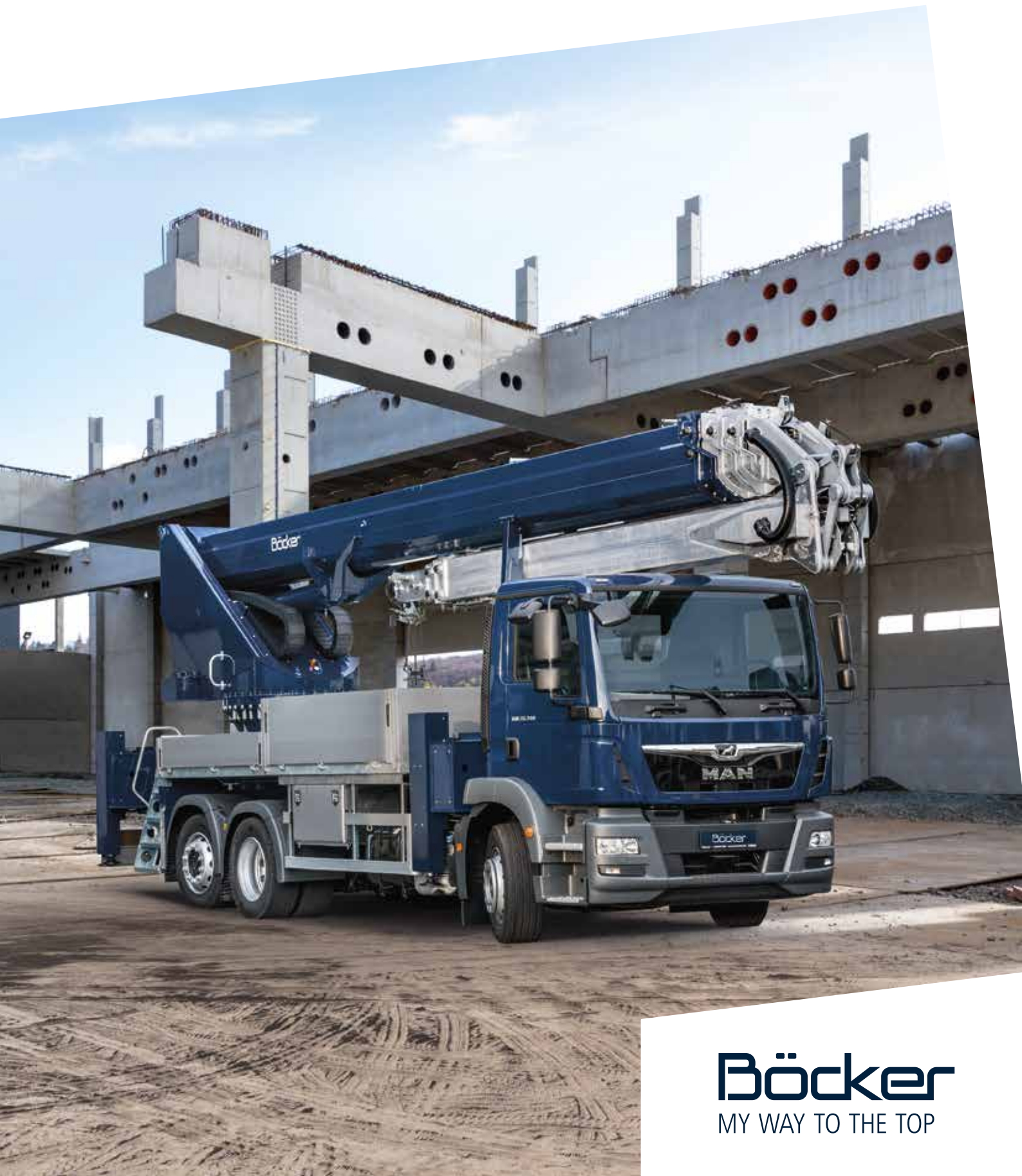


Crane Technology

Truck, trailer and tracked cranes



Böcker
MY WAY TO THE TOP



Extension lengths up to 55 metres and payloads of up to 12 tonnes

Böcker crane technology offers you a reliable and adaptable solution whenever you need to safely and efficiently lift large and bulky loads to lofty heights. Besides having extension lengths of up to 55 metres and payloads of up to 12 tonnes, our truck cranes, trailer cranes and tracked cranes are characterised by extremely high safety standards, a comparatively low weight and compact dimensions. For example, it is easy to transport Böcker cranes from one site to the next and set them up without requiring a lot of space.

Outstanding crane technology

The sky is the limit with Böcker innovations

Shortly after founding the company in 1958, the master blacksmith Albert Böcker developed his first innovation, the hydraulic inclined lift. This was later followed by the inclined lift with an elbow section. From then on, it was possible for roofers to transport roof tiles comfortably right up to the apex of the roof. Since then, we have been working constantly to improve our products to match the needs of our customers and have repeatedly set new standards in quality and safety in the area of lifting technology.

Pioneer in aluminium crane technology

In 1989, Böcker entered crane technology as a pioneer, with the introduction of the first mobile truck crane in aluminium lightweight construction. The manoeuvrability of the space-saving Böcker aluminium cranes make the work in the construction industry a lot easier with their great out-reach. Following on from this, in 1997 we developed the first aluminium trailer crane.



Quality thanks to decades of experience

To be able to develop our crane technology on an ongoing basis, we not only observe the latest technical developments in the market, but also enter into close communication with partners from a wide variety of trades. We do this so we can understand the specific needs of the trade and industry to develop truck cranes, trailer cranes and tracked cranes that not only meet the expectations of our customers, but actually surpass them. Today, our cranes are leading in the field in terms of technology and quality thanks to nearly three decades of experience in building aluminium cranes and the growing expertise of working with high-tensile steel.

High performance makes the difference

Being the quality and innovation leader in the area of lifting technology for our customers, we owe this to our highly qualified and long-term workforce of over 400 employees. As a company active on the global stage with a worldwide presence, we are not only known for our high-tech and expertise; but we also take a sense of responsibility with a clear commitment to its German location. Therefore, at Böcker we strive to ensure it does not lose sight of its own tradition, and after more than 60 years, it still remains loyal to the corporate philosophy of this third-generation family-owned business: Be it as a customer or an employee, people are at the centre of everything we do.





Developed responsibly, reliably and with pride

Advantages of the Böcker crane technology

The Böcker performance promise

01 Durability and environmental friendliness

Böcker crane technology convinces primarily through uncompromising durability. Thus, we only use galvanised steel hydraulic piping. We regularly perform long term load tests with our cranes, during which the telescope and outrigger cylinders, chassis, sliding rails and wire ropes must verifiably prove themselves. Those components that we do not manufacture at our own site, we order from known and reliable manufacturers who offer a world-wide service.

Due to the stability of the value of our crane technology, we therefore, not only offer you security in the cost calculation but also a safe investment.

The biodegradable hydraulic oil also plays a part in the durability of your Böcker crane, as well as reducing maintenance costs and protecting the environment. Due to the most modern engine technology with the highest combustion efficiency, both you and the environment profit from optimal performance with excellent exhaust gas values and a reduced fuel and oil consumption.



Overview of the benefits

- Excellent cost efficiency due to low operating and servicing costs
- Very safe investment due to higher than average value stability and the Böcker guarantee promise
- Environmentally friendly due to biodegradable hydraulic oil and reduced petrol consumption

Effective working and highest reach



02

The Böcker mast and telescope system

We manufacture our mast and telescope systems from an optimal combination of highly tensile steel and aluminium alloys, thanks to the decades of experience in consequent light-weight construction. Benefit from our enclosed mast system, which offers you maximum stability, safety and torsional rigidity; and furthermore, it is extremely reliable.

And for erecting the mast, we also rely on a long proven combination. Remain on top of every task thanks to the use of hydraulic cylinders in combination with chains or ropes. You will also be impressed by the fully hydraulic extending boom, which helps you reach comfortable boom lengths of up to 14 m.*



Overview of the benefits

- Precise work thanks to the stability and torsional rigidity of the profiles
- Sensitive and judder-free telescoping even with high loads and flat mast angles
- Highest reaches even up to the back of the roof for effective work without having to relocate the crane due to the fully hydraulic extendible boom*

*optionally available for some models





Work in very confined spaces

thanks to unsurpassed flexibility and safety

03

The Böcker support technology

The Böcker support technology lets you extend each individual crane outrigger as far as required and thus every available cm of space can be used - a decisive advantage especially in restricted spaces. This fully variable extension of the outriggers allows you flexible positioning and the optimal erection geometry of your crane, positively influencing the crane reaches.

The practical self-levelling function warrants fast and safe erection of the crane, which can be regulated comfortably from beginning to end using the remote control, and thus can also be carried out easily from a distance.

Furthermore, the enclosed and multiply secured concept allows weather-independent crane stability. The site, in turn, is optimally secured by the flashing LED lights integrated into every outrigger. Also take advantage of the largest possible ground clearance and overcome uneven ground thanks to the large lift of the Böcker support technology.

Overview of the benefits

- Erection and work in the smallest spaces thanks to fully variable extension of every individual outrigger
- Fast and comfortable crane erection thanks to self-levelling and wireless colour remote control
- Optimal crane stability and securing of the site
- Greatest possible ground clearance through the large lift of the outriggers



The clever answer to every challenge

Innovative control concept by Böcker

04 The Böcker operating concept

We at Böcker rely on the particularly intuitive wireless remote controls with full colour display from HBC-radiomatic. The user-friendly and clear depiction of the operating situation is supported by self-explanatory pictograms, thereby ensuring intuitive and safe operation.

Already during erection, constantly updating reach dials make it possible to position the crane optimally for the target area. During operation, several crane functions can be controlled simultaneously, which makes working with a Böcker crane particularly efficient.

As standard, every Böcker wireless remote control is equipped with a diagnosis function in the display. Fuel level and maintenance intervals are also displayed. A hook camera is an optional extra, which transmits the image onto the display of the wireless remote control - giving the crane operator an optimal view of the work area.

Overview of the benefits

- Particularly intuitive wireless remote control with full colour graphic display
- Optimal erection without repositioning thanks to the constantly updated reach display
- Efficient work thanks to concomitant operation of several crane functions
- Diagnosis function as standard in the display
- Optional hook camera with image transfer



Overview of the benefits

- The software developed by Böcker warrants greatest possible flexibility and optimised reach in any situation while offering highest possible safety at the same time
- Several software features create excellent operating comfort both in the fore- and background

05

BICS control

Our state-of-the-art and TÜV-tested BICS (Böcker intelligent computer-based safety) control makes it possible for you to work sensitively, precise and with low pendulum effect. Maximum work range and maximum reach are automatically verified depending on the outrigger position and the attached load. This automatically guarantees safe work at all times.

When using near power lines, the selectable turn and lift angle restriction helps you remain within the available work space. Depending on the work situation, the BICS control allows you to swap between fast and crawler gear, while the redundant sensors warrant highest fail safety, function and operating safety.

Several software features create operating comfort both in the fore- and background, which is in a class of its own. For instance, the BICS control prevents the load from becoming stuck in any position and also provides a gentle start and precise control of all the crane functions, independent of the operating conditions.



Standing out in every application

Unique comfort and individuality



06 The Böcker accessories

Crane technology by Böcker goes a long way, using the matching Böcker accessories brings you even further! Already for decades, we have been in intensive exchange with our customers to be able to adapt our cranes to the specific needs of the individual trades.

And this is why we offer for every trade and industry the matching crane accessories in different sizes: Roof tile grippers, tile distributors, tipper baskets and pallet forks, tool boxes, additional lighting and much more. Whereby the payload and reach are not restricted due to the consequent aluminium light-weight construction of our accessories.

Overview of the benefits

- Multiple applications thanks to the large number of accessories on offer for every trade.
- Still exceptional payloads and reaches thanks to the consequent aluminium light-weight construction

07

The Böcker platform technology

Thanks to the Easy-Lock-System, many Böcker truck, trailer and tracked cranes are refitted as fully fledged lifting platforms with at the ease and without requiring any tools. Depending on the application and type of crane, you can choose between several platforms with payloads of between 200 to 600 kg. When working in difficult to reach areas, the tiltable platform is particularly well suited. As the platform does not need to be removed to change locations, you are able to move the crane to a different place whilst working with the platform.

Thanks to the automatic levelling system of the platform, you can always work safely and comfortably, no matter what the external circumstances are. Every Böcker platform is equipped with a 230 V supply for working as standard. As you are using the on-board electricity supply, no separate motor is necessary; no additional emissions are produced, and you benefit from more space and operating safety.

Overview of the benefits

- Maximum flexibility through the combination of crane and platform technology
- Thanks to the Easy-Lock-System swapped over with a ease
- Several applications covered by different platform models
- Highest work comfort thanks to automatic levelling and on-board electrics

TRUCK CRANES

An overview of the benefits





Groundbreaking technology thanks to decades of experience

and patented expertise in aluminium crane building

08

The drive concept

As a matter of principle, Böcker truck cranes always work without separate ancillary drives and, thanks to the well-considered and long-established concept of a single engine for lorry, crane and platform, this not only reduces fuel usage but also operating costs and the maintenance work. This is supplemented by more comfortable handling, one tank, one fuel and one refuelling process.

The one engine concept offers the highest failure safety and more than enough power reserve for every operating situation. The battery operated emergency control warrants functionality even in the case of engine failure.

Particularly in platform operation, you will be delighted by the Böcker one engine concept without the noise of an additional drive unit.

Overview of the benefits

- Low fuel usage and maintenance requirements lead to reduced operating costs
- Comfortable handling, one tank, one fuel, one refuelling process
- Highest failure safety thanks to the battery-operated emergency control system



Low space requirements, higher sustainability



The Böcker hybrid crane

A sensible and environmental extension of the one engine concept is presented by having an additional electric drive, which turns your desired truck crane into a hybrid crane. The electric drive means your Böcker hybrid crane operates with extremely low noise and emissions, e.g. when used in towns or built-up areas.



09

Unique design of turret and loading area

The uniquely small slewing radius of the turret specific to the model makes it possible to use it supported on one side and with traffic flow. Benefit every day from the low space requirements and use your Böcker truck crane even in the tightest spaces in cities or housing estates.

A clever fixation system on the crane structure and on the load bay warrants safe and space-saving transport of your Böcker accessories. Erecting the crane is made easy by the simple fitting of the hook counterweight from the transport position. The unique superstructure of the Böcker turrets and load bays offers many functions – a really clever system in every aspect!

Overview of the benefits

- The small slewing radius makes it possible to erect the crane in the smallest of all spaces and with flowing traffic
- Clever fixation system for Böcker accessories

10

Trend-setting environmental sustainability

We at Böcker place utmost importance on the environmental sustainability of our crane technology. That is why we use only bio-degradable – and durable – hydraulic oil of the lowest water hazard class.

Thanks to the modern lorry engine technology (Euro 6c), fuel and oil consumption are reduced, while the highest combustion efficiency warrants optimal performance at excellent exhaust gas values. Böcker truck cranes can be operated within environmental zones – a future-proof purchase!

Overview of the benefits

- Low fuel usage and low emissions
- Can be operated in all environmental zones



DIRECT COMPARISON

Truck cranes



Technical Data

AK 37/4000

AK 35/3000

Permissible gross vehicle weight (t)	7,49 / 8,6 (8,8)	8,6
Max. payload (kg)	2.000 (optional 4.000)	1.500 (optional 3.000)
Max. extension length (m)	35,0 (optional 37,0)	35,0
Working height up to boom (m)	23,6	23,7
Boom extendable (m)	4,9 / 8,0 / 11,1 (opt. 13,1)	5,2 / 8,3 / 11,3
Boom payload (kg)	2.000 / 800 / 500 / (250)	1.500 / 1.000 / 700
Main mast angle (degrees)	85	85
Boom angle (degrees)	162	160
Pivoting range (degrees)	+/- 310	+/- 310
Hook speed (m/min)	45 (55)	60
Range for crane operation at 250 kg (m)	28,0	26,6
Range for crane operation at 500 kg (m)	21,0 (22,0 / 450 kg)	20,0 (22,7 / 450 kg)
Range for crane operation at 1 t (m)	14,0	13,4
Range for crane operation at 2 t (m)	8,0	6,5
Range for crane operation at 4 t (m)	5,0	-
Range for crane operation at 6 t (m)	-	-
Range for crane operation at 12 t (m)	-	-
Range for platform operation with rotatable basket (m)	21,1 at 250 kg 24,0 at 100 kg	21,1 at 250 kg 24,1 at 100 kg
Range for platform operation with hooped basket (m)	22,0 at 200 kg 24,0 at 100 kg	22,0 at 250 kg 24,5 at 100 kg
Working height with rotatable basket max. (m)	30,5	32,8
Working height with hooped basket max. (m)	30,5	33,0

AK 36/4000

AK 42/4000

AK 46/6000

AK 52

11,99	16 / 18	18 / 26	26 / (32)
2.000 (optional 4.000)	2.000 (optional 4.000)	3.000 (optional 6.000)	3.000 (optional 6.000/12.000)
36,0	42,0	44,0 (optional 46,0)	52,0 (optional 55,0)
24,2	33,7	33,8	38,0
5,2 / 8,3 / 11,3	4,6 / 6,8 / 9,0	5,3 / 8,1 / 11,0	6,3 / 10,3 / 14,3
2.000 / 1.000 / 700	2.000 / 1.500 / 800	3.000 / 1.500 / 800 / (400)	3.000 / 2.000 / 1.000
85	87	85	85
160	157	162	157
+/- 310	+/- 310	+/- 310	endless
45 (55)	50	45	50
30,0	35,0 / 32,3	38,0 (39,0)	43,0
24,0	30,0 / 28,0	34,5	40,0
16,0	22,0 / 21,0	26,0	34,0
8,0	14,0 / 14,0	17,7	22,0
4,0	8,2 / 8,2	11,0	13,0
-	-	8,0	10,0
-	-	-	5,0
- 23,5 at 250 kg 26,0 at 100 kg	- 30,2 / 27,5 at 250 kg 33,0 / 30,0 at 100 kg	- 33,1 at 250 kg 35,3 at 100 kg	30,0 at 600 kg 33,0 at 250 kg 36,0 at 100 kg
24,5 at 250 kg 26,8 at 100 kg	30,2 / 27,5 at 250 kg 33,0 / 30,0 at 100 kg	34,3 at 250 kg 37,4 at 100 kg	37,5 at 250 kg 40,0 at 100 kg
32,7	38,1	43,3	51,0
34,0	42,2	46,0	53,0

Subject to technical changes. Measurements can fluctuate slightly.

Extensive information is available on the internet at www.boecker.de or in our technical datasheets for the respective product.

TRAILER AND TRACKED CRANES

An overview of the benefits





A consistent well-considered concept from erection to operation

11 The outrigger concept

Our patented swivelling outriggers and foldable swivelling outriggers from high-tensile fine grain steel warrant the greatest possible flexibility and stability. The auto-levelling function of the outrigger system not only ensures the crane is automatically positioned optimally, but also offers extremely comfortable handling.

Thanks to the large lift of the outriggers, you can enjoy a large ground clearance of up to 50 cm, making sites on sloping or uneven ground easy to master for the trailer cranes by Böcker. Our tracked crane can even be jacked up to 1.20 m. A further advantage of the well-considered superstructure concept of our trailer cranes is the practical swivelling drawbar: Simple swivelling of the drawbar reduces the overall length by more than 2 meters. The particularly compact space requirements resulting from this considerably reduce the footprint of your Böcker trailer crane during use.

Overview of the benefits

- Patented swivelling and foldable swivelling outriggers from high-tensile fine grain steel for highest flexibility
- Optimal and comfortable erection thanks to the auto-levelling function
- High ground clearance of up to 50 cm thanks to large lift of the outriggers makes it possible to use it on sloping ground
- Tracked crane with a ground clearance of up to 1.20 m
- Particularly compact manoeuvring dimensions and small footprint due to reduction of the overall length by two meters thanks to the swivelling drawbar



Optimal performance take-off and precise manoeuvring

12

The drive concept

Böcker trailer cranes offer a choice of a Honda petrol engine or a Yanmar diesel engine, with 15.5 kW each or an electric motor with 15 kW. Our tracked crane features a powerful diesel engine and, on request, can be fitted with an additional electric motor. Thanks to the state-of-the-art engines and noise reduction technology, all drive types offer low noise emissions.

The optimal power take-off in all the operating situations guarantees that the maximum load is lifted at any time. Also benefit from the low fuel usage of the Böcker trailer and tracked cranes at constantly high performance reserves.

Part of the well-considered drive concept is also the service-friendly accessibility of all components, which also results in lower maintenance costs. In the unlikely case of an engine failure, the battery-operated emergency control ensures the functionality of your Böcker trailer crane.



13

The manoeuvring concept

The standard tandem axle used in Böcker trailer cranes warrants an optimal distribution of the ground load at all times and safe manoeuvring over obstacles. In this way, inclines of up to 25 % can be mastered without problem – even when wet. And thanks to the sensitive control of the manoeuvring drive, you will master even the narrowest driveways.

The well-considered manoeuvring concept of our Böcker trailer cranes ensures that the axles and jockey wheel are not overloaded even under the most adverse building site conditions and with the narrowest drive movements. Excessive tyre wear is prevented through the form-locking gear wheel drive.

Also benefit from the lowest noise levels thanks to the increased air flow of the highly efficient cooling fan. Of course, trailer and tracked cranes by Böcker adhere to the world-wide strictest emission standards.



Overview of the benefits

- You have the choice: Honda petrol engine, Yanmar diesel engine (15.5 kW each) or electric motor (15 kW)
- Battery operated emergency control
- Guaranteed lifting of the maximum load through optimal performance take-off
- Low fuel consumption at constantly high performance in all operating situations
- Reduced noise emissions thanks to the most up-to-date technology

Overview of the benefits

- Optimal distribution of the ground load and safe manoeuvring over obstacles thanks to tandem axle
- Axles are guaranteed not to be overloaded
- Sensitive control of the manoeuvring drive for narrowest gateways
- Mastering inclines of up to 25 %
- Interlocking drive prevents increased tyre wear
- Crawler tracks with 2 speeds: crawl 2.4 km/h and fast 4.5 km/h



DIRECT COMPARISON

Trailer and tracked cranes



Technical Data

	AHK Easyline	AHK 30/1500
Permissible gross vehicle weight (t)	3,5	3,5
Max. payload (kg)	1.200	1.500
Max. extension length (m)	26,5	30,0
Working height up to boom (m)	20,2	22,3
Boom extendable (m)	4,4 / 7,1	4,8 / 7,4 / 9,1
Boom payload (kg)	1.200 / 300 (horizontal)	1.500 / 350 / 250 (horizontal)
Main mast angle (degrees)	85	85
Boom angle (degrees)	135 / 150 / 165	158
Pivoting range (degrees)	+/- 310	+/- 310
Hook speed (m/min)	40	50
Range for crane operation at 250 kg (m)	18,8	21,1
Range for crane operation at 500 kg (m)	11,5	13,9
Range for crane operation at 800 kg (m)	7,6	9,5
Range for crane operation at 1 t (m)	5,3	8,1
Range for crane operation at 1,5 t (m)	-	3,6
Range for crane operation at 2 t (m)	-	-
Range for platform operation at 250 kg (m)	-	-
Range for platform operation at 100 kg (m)	-	-
Working height in platform operation max. (m)	-	-

AHK 30/1500 KS

AHK 36

RK 36/2400

	AHK 30/1500 KS	AHK 36	RK 36/2400
Permissible gross vehicle weight (t)	3,5	3,5	4,5
Max. payload (kg)	1.500	1.500 (optional 2.400)	1.500 (optional 2.400)
Max. extension length (m)	30,0	34,0 (optional 36,0)	34,0 (optional 36,0)
Working height up to boom (m)	22,4	22,7	23,4
Boom extendable (m)	4,8 / 7,4 / 9,1	4,9 / 8,0 / 11,1 (opt. 13,1)	4,9 / 8,0 / 11,1 (opt. 13,1)
Boom payload (kg)	1.500 / 350 / 250 (horizontal)	2.400 / 1.500 / 800 / 500 / (250)	2.400 / 1.500 / 800 / 500 / (250)
Main mast angle (degrees)	85	85	85
Boom angle (degrees)	158	162	162
Pivoting range (degrees)	+/- 310	endless	+/- 310
Hook speed (m/min)	50	50	50
Range for crane operation at 250 kg (m)	21,1	23,1 (23,5)	23,1 (23,5)
Range for crane operation at 500 kg (m)	13,9	16,6	16,6
Range for crane operation at 800 kg (m)	9,5	12,9	12,9
Range for crane operation at 1 t (m)	8,1	10,0	10,0
Range for crane operation at 1,5 t (m)	3,6	7,5	7,5
Range for crane operation at 2 t (m)	-	5,4	5,4
Range for platform operation at 250 kg (m)	-	15,8	15,8
Range for platform operation at 100 kg (m)	-	18,8	18,8
Working height in platform operation max. (m)	-	29,0	29,2

Subject to technical changes. Measurements can fluctuate slightly.

Extensive information is available on the internet at www.boecker.de or in our technical datasheets for the respective product.

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