

Attachments for material-handling technology



LIEBHERR

Attachments tools Everything from one source

Liebherr attachments for hydraulic excavators were developed as problem solutions for the most widely differing operational situations. The well-matched range offers a large number of different attachments, such as grapples, quick-change systems, and special attachments for very different applications. Equipped with highly effective design formats suited for the individual area of use, Liebherr attachments achieve maximum productivity with long service life.

Top performance

Liebherr attachments are particularly high-performing excavating components, representing the very latest state of the art. These attachments were developed and designed especially for the Liebherr for hydraulic excavator, thereby providing users with an optimum high performance total system. Liebherr attachments come with service and customer care all from one source.

Reliability

Liebherr attachments are developed and manufactured in-house, with the careful choice of materials, special heat treatment, and demanding manufacturing methods combined to achieve their characteristic robustness and long service life. The compelling result: maximum reliability, even under the hardest operating conditions.

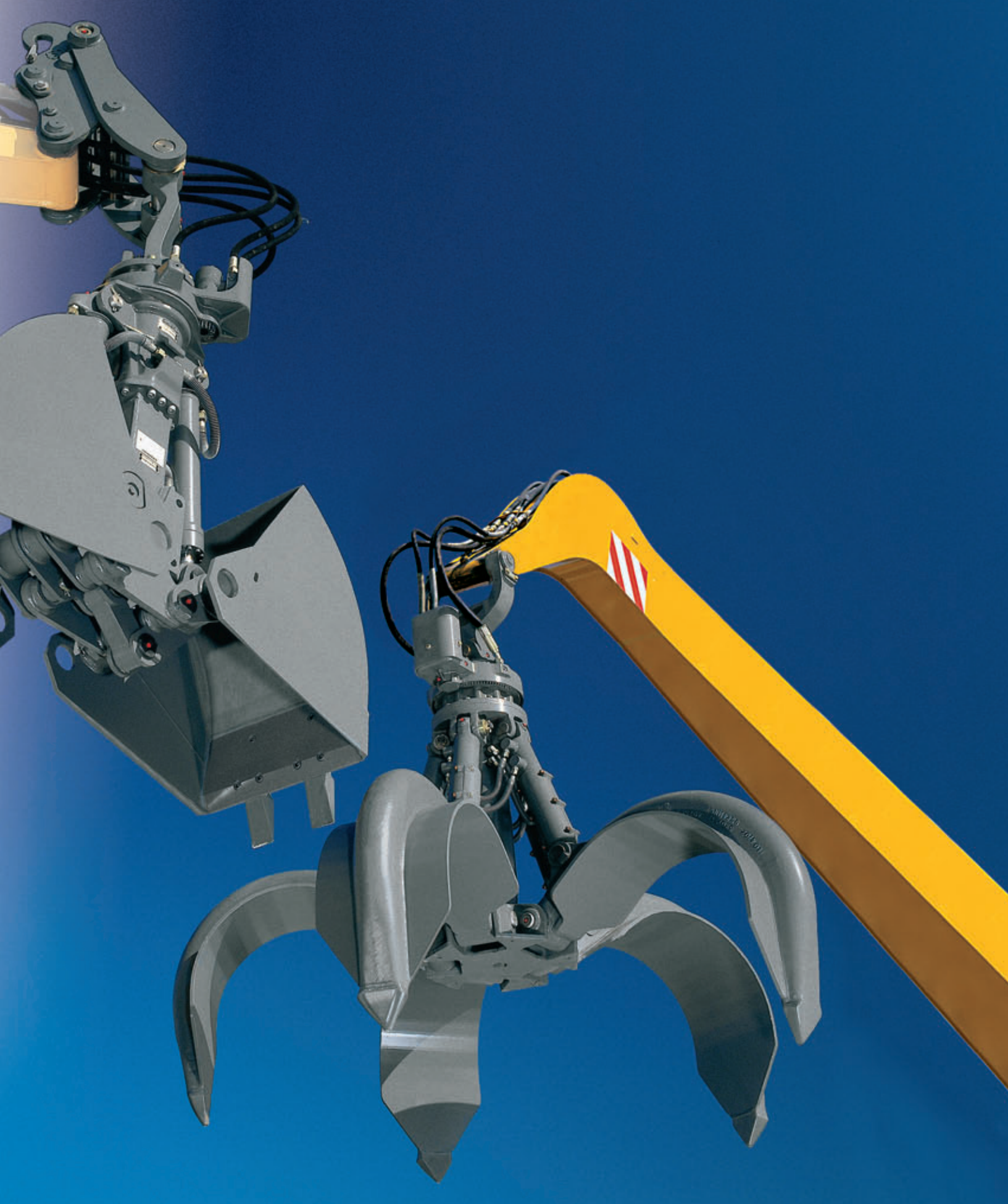
Easy to use

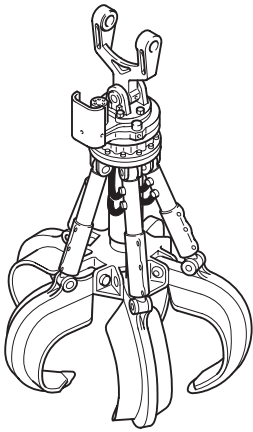
The careful combination of form, content, and supply creates the ideal attachment for every application concerned. The LIKUFIX quick-change system allows the tools to be changed over safely and reliably in a matter of seconds, at the push of a button in the cab.

Economical performance

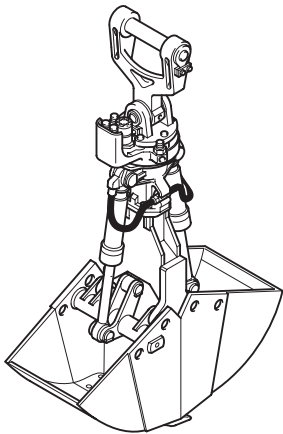
Liebherr attachments also offer maximum economy. The hydraulic quick-change system in conjunction with the specific purpose attachments boosts productivity in all areas of material handling technology. The immediate availability of parts that are subject to wear right round the clock, and their easy replacement, saves time and money too. Thanks to the modular design, the alternating systems and attachments are ideally prepared for the tasks of the future as well.







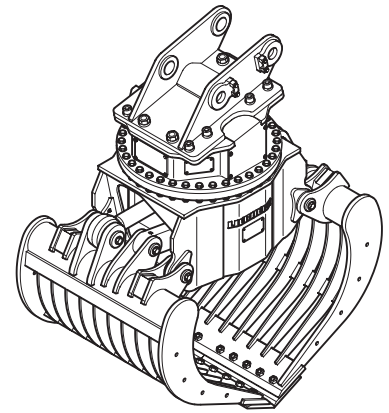
Multi-tine grapple



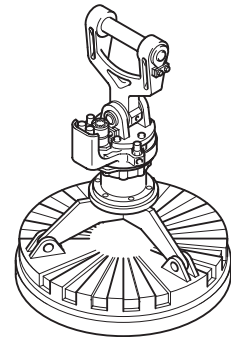
Clamshell bucket

Attachments

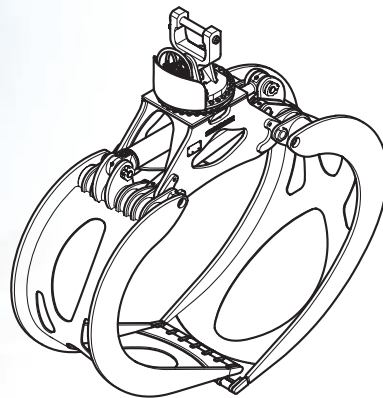
Whatever the application and the material in question, the quality and effectiveness of each individual excavating operation is determined by the careful choice of the most suitable tool. This is why Liebherr has developed a large number of attachments which are tailored in their shape, material and technical fittings to tackle specific situations in the best possible way. The wealth of experience gained from everyday operations and continuous product care mean that attachments from Liebherr always represent the very latest state of the art.



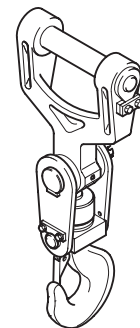
Sorting grapple



Magnet



Wood grapple



Load hook



Hydraulic grapples – an overview

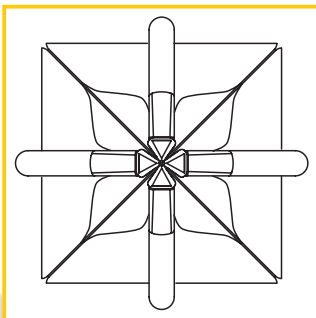
Multi-tine grapples

Handling technology on an industrial scale calls for special multi-tine grapples for the most widely differing applications. Depending on requirements, Liebherr can provide four-tine or five-tine grapples in open, half-open, and closed tine formats. Thanks to the modular design, the grapple suspension and mechanical systems, shell carrier and grapple tines can be separately fitted, providing the greatest possible flexibility.

Clamshell buckets

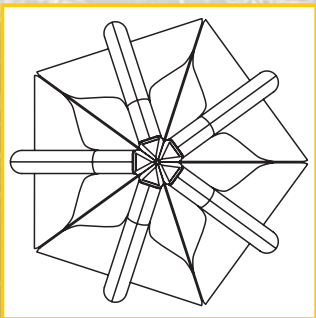
The purpose of the clamshell bucket is to load and unload troughs, wagons, or ship holds. An extremely wide variety of bulk goods can be moved reliably and conveniently into appropriate containers using Liebherr clamshell buckets. The clamshells are designed with a high closing power and can be optionally fitted with an ejector.

Multi-tine grapple

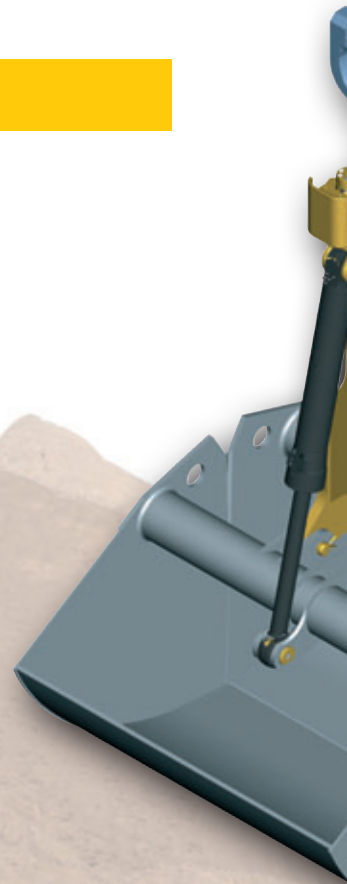


View from above of a four-tine grapple, closed tine format

View from above of a five-tine grapple, closed tine format



Clamshell bucket



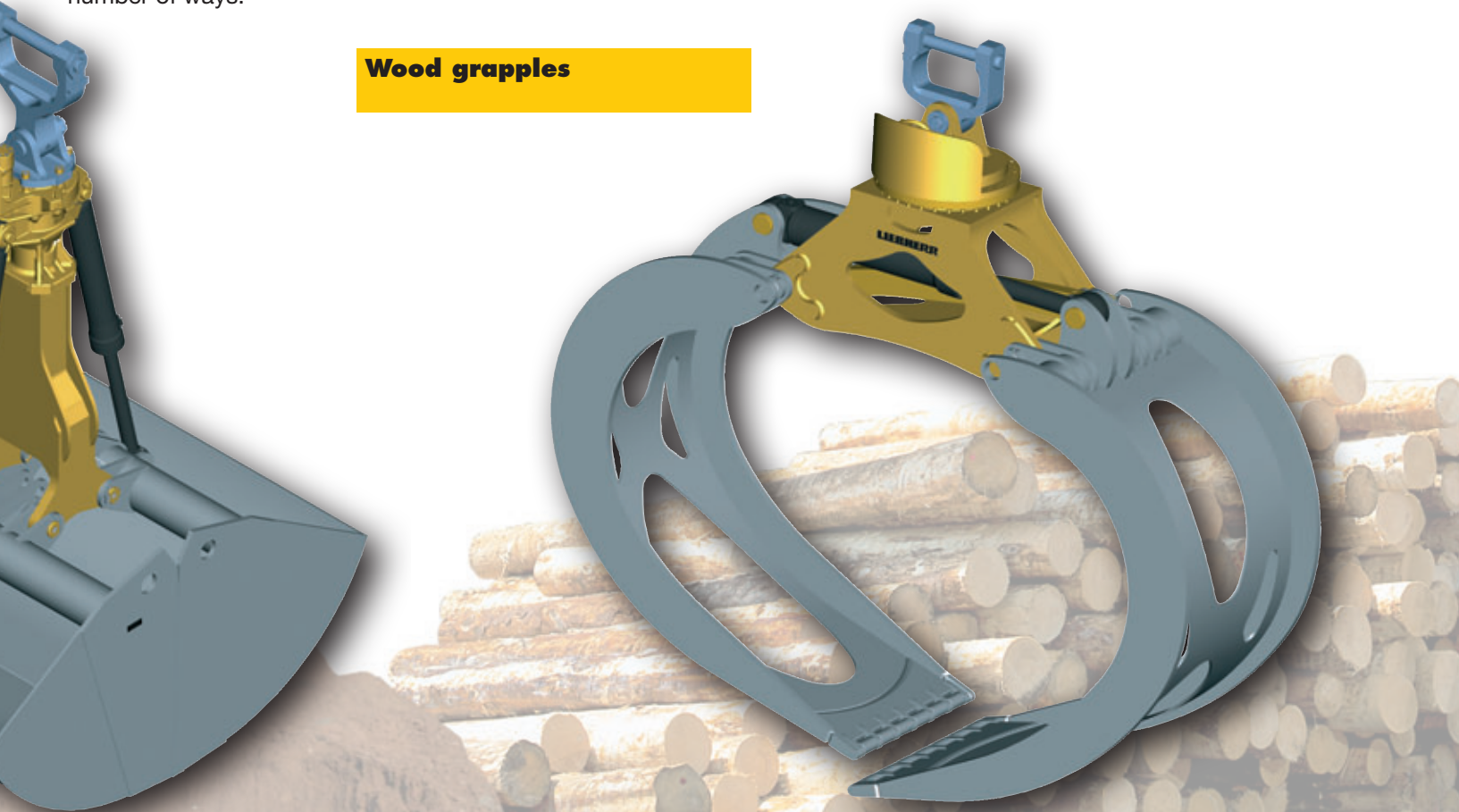
Multi-tine grapples

Type	Excavator class in lb	Liebherr machine
GM55	41,890 - 46,295	316 <small>Litronic</small>
GM64	44,095 - 66,140	904 <small>Litronic</small> -924 <small>Litronic</small>
GM65	44,095 - 66,140	904 <small>Litronic</small> -924 <small>Litronic</small>
GM69	44,095 - 103,615	924 <small>Litronic</small> -944 <small>Litronic</small>
GM70C	44,095 - 103,615	924 <small>Litronic</small> -944 <small>Litronic</small>
GM72C-4	125,665 - 156,530	944 <small>Litronic</small> -954 <small>Litronic</small>
GM72C-5	125,665 - 156,530	944 <small>Litronic</small> -954 <small>Litronic</small>
GM75B	156,530 - 242,510	954 <small>Litronic</small> -974 <small>Litronic</small>
GM85	180,780 - 264,555	974 <small>Litronic</small> -984 <small>Litronic</small>

Wood grapples

Liebherr wood grapples are carefully designed and vertically adjusted to make them ideally suited for unloading wagons. The widest possible range of claw dimensions mean transport to or transfer between wood yards and loading points is safe and fast. The claws are specially designed so that the most varied quantities and types of wood can be picked up rapidly and transported in any number of ways.

Wood grapples



Clamshell bucket

Type	Excavator class in lb	Liebherr machine
GM10B	44,095 - 66,135	316 Litronic-924 Litronic
GM20B	44,095 - 103,615	924 Litronic-944 Litronic
GM22B	125,665 - 156,525	944 Litronic-954 Litronic
GM25B	156,530 - 242,505	964 Litronic-974 Litronic
GM35	187,395 - 264,555	974 Litronic-984 Litronic

Wood grapples

Type	Excavator class in lb	Liebherr machine
GM10B	44,095 - 66,135	904 Litronic-924 Litronic
GM20B	44,095 - 103,615	924 Litronic-944 Litronic
GMH50	66,140 - 156,525	934 Litronic-954 Litronic
GM22BH	125,665 - 156,525	944 Litronic-954 Litronic
GM25BH	156,530 - 242,505	954 Litronic-974 Litronic

Multi-tine grapples

The tried-and-trusted multi-tine grapples are essential tools for every Liebherr hydraulic excavator. Thanks to their carefully designed geometry, Liebherr multi-tine grapples are ideally matched to Liebherr machines – resulting in excellent loading behaviour and high productivity.

Multi-tine grapples

Content from 0.40 m³ to 4.5 m³

Four or five tines

Open/half-closed/closed tines

Tines in special designs

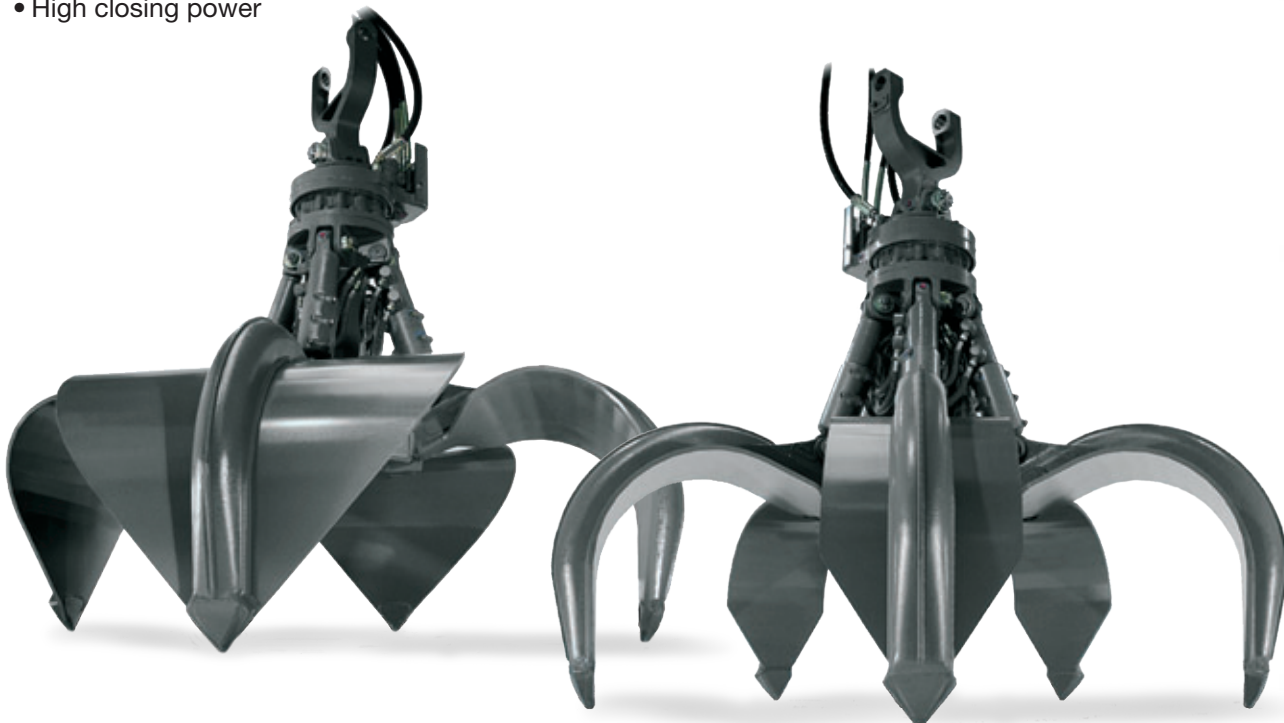
- Open forms:
Large unit items, scrap, automobiles, etc.
- Half-closed tine forms:
Universally applicable
- Closed forms:
Bulk-goods loading, small scrap

Features

- Reinforcement with wear-resistant material
- Robust processing
- 360° endless rotation
- Optimum maintenance and servicing characteristics
- Grapples can be extended in modular format

Benefits

- Multi-tine grapples are perfectly matched to the type of excavator
- Versatile in application
- High closing power



Closed tines

Half-closed tines





Clamshell buckets

The clamshell bucket is the ideal attachment for the mass handling of bulk materials, such as ore, coal, sand, gravel, grain, etc. Thanks to its optimum shaping, the clamshell bucket ensures excellent penetration, maximum filling performance and rapid emptying capabilities.

Clamshell buckets

Content up to 6.0 m³

Element widths up to 2000 mm

Job reports

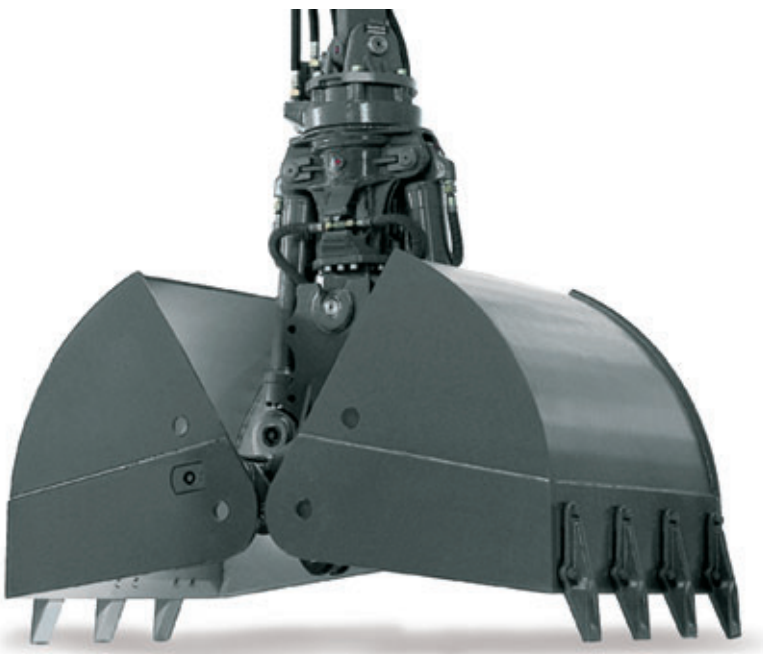
- Bulk-goods material handling

Features

- Designed and manufactured to Liebherr quality standards
- 360° endless rotation

Benefits

- Own weight is low, resulting in increased material holding capacity
- Good penetration
- High level of grapple filling



Clamshell bucket with teeth





Grapples for wood handling

The wood grapple is a hydraulic attachment for hydraulic excavators, used for picking up and transporting logs and round wood. It is used mainly in open country or on timber yards. The wood grapple has a large opening width and is specially designed so that large quantities of logs and round wood can be transported, as well as individual tree trunks.

Wood grapple

Surface areas up to 3.6 m²

Job reports

- Handling of logs and round wood
- Loading and offloading of trucks, railway wagons, and ships
- Loading and emptying of transverse conveyors
- Operations in sorting plants

Features

- Robust, service-friendly rotary drive
- Long mechanical service life
- High closing force
- 360° endless rotation

Benefits

- The claw for virtually every application
- Optional wagon unloading design
- Allows for rapid load cycles
- Precise and safe placement of logs and round woods
- Optimum filling and clamping performance



Wood grapple





Liebherr demolition and sorting grapples

Sorting grapples were developed especially with the requirements of demolition and recycling in mind. Clamshell buckets are used for sorting, loading and demolition itself. Equipped with an endless slewing device, they are extremely effective, universally applicable attachments.

Sorting grapple

- Content up to 1.3 m³

Job reports

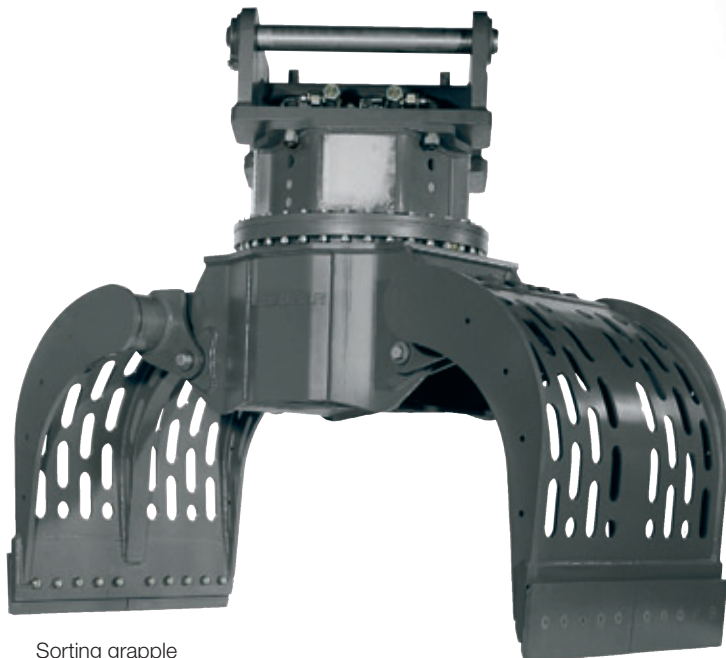
- Sorting operations in recycling plants
- Demolition work
- Quarry and waterway construction work

Features

- Solid Liebherr components
- Optimum own weight
- Easy maintenance and service-friendly
- Sealed bearing points
- Optimum lubrication system
- Endless hydraulic slewing device

Benefits

- High closing force
- Lightweight construction
- Highly sensitive in sorting work
- Different tine shapes for individual applications



Sorting grapple





Tool-Control and Likufix

What is Tool Control ?

Tool Control is an additional electro-hydraulic function which makes working with hydraulic attachment very convenient. Up to ten combinations of oil flows and pressures can be programmed with the name of the tool and selected directly from the display. With the help of Tool Control, the operator can select the parameters for the hydraulic tool he wishes to use with a simple press of a button – no elaborate readjustment needed when it comes to a tool change.

What is LIKUFIX?

Likufix is a hydraulic quick-change system combined with an automatic hydraulic coupling device designed for quick, reliable changing of mechanical and hydraulic attachments, directly from the cab. Likufix is the ideal supplement to Tool Control. The combination of Likufix and Tool Control makes it possible to change hydraulic attachments easily – without even leaving the cab.

The technical advantages:

- Fully automatic play compensation
- Tight connection between the hydraulic circuits thanks to the hydro-mechanical compensation system
- More than 25 years experience in fully-automatic coupling systems
- Reliable system with long service life

The convenience advantage:

- Reliable hydraulic connection free of oil leaks
- Low operating and maintenance costs
- Add-on parts can be changed from the cab

The economic advantage:

- Easy equipping of existing hydraulic excavators
- Hydraulic add-on parts changed in a matter of seconds – meaning better machine utilisation with different applications on the same unit
- Major time savings in comparison with hydraulic-hose changes
- Low operating and maintenance costs with maximum productivity
- Carefully selected use of the add-on parts for long tool service life



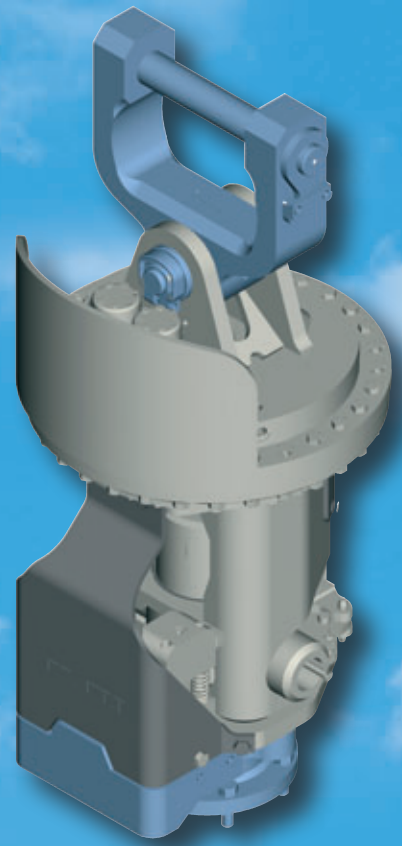
Moving to the unit



Coupling into the unit



Connected to the unit, mechanically and hydraulically



MH40 / MH110

Fully automatic quick change system. For mechanical and hydraulic connections. Suitable for hanging tools like multitine grapples, load magnets, etc.

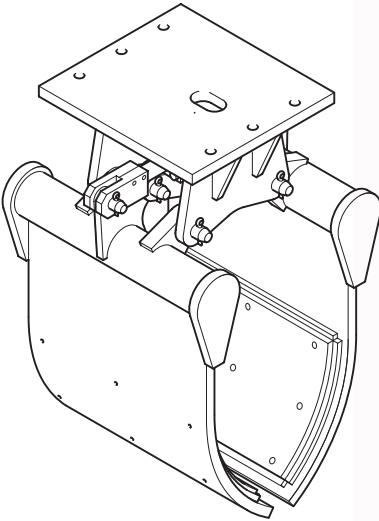


Liebherr Tool-Control

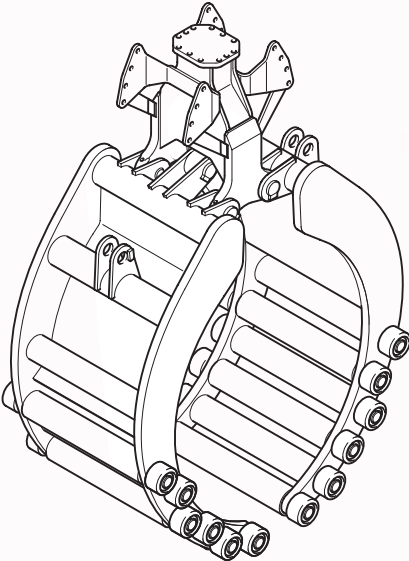
Special attachments

Liebherr manufactures the most widely differing attachments, specially tailored to specific situations. Thanks to the special tools, applications which might on their own appear impossible can be carried out rapidly and profitably. Our on-site designers have many years of experience and Liebherr know-how in special attachments to

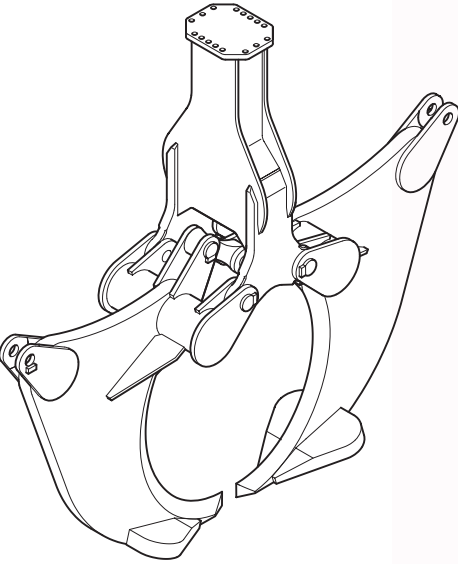
draw on. The tools manufactured in-house at Liebherr also ensure that both machine and attachment are optimally matched to one another, and that excellent operating results are achieved.



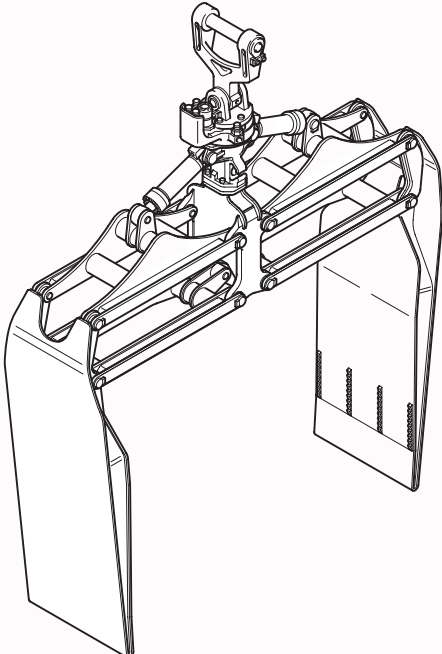
Gripping claw



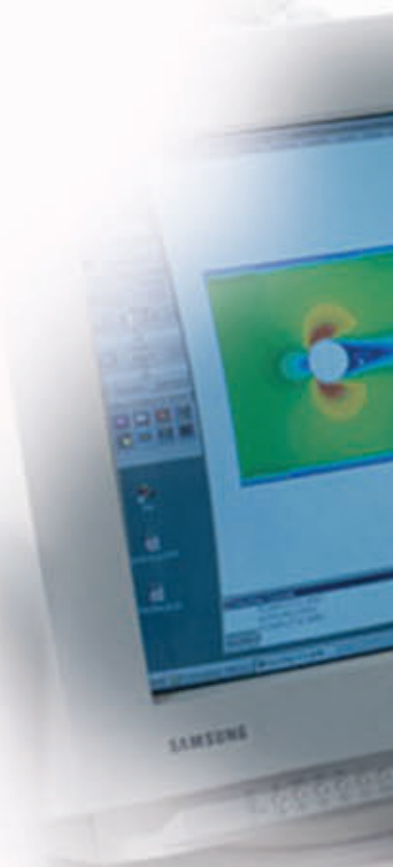
Recycling claw

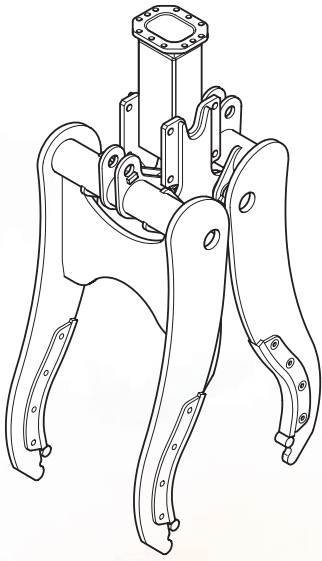


Wood splitting claw

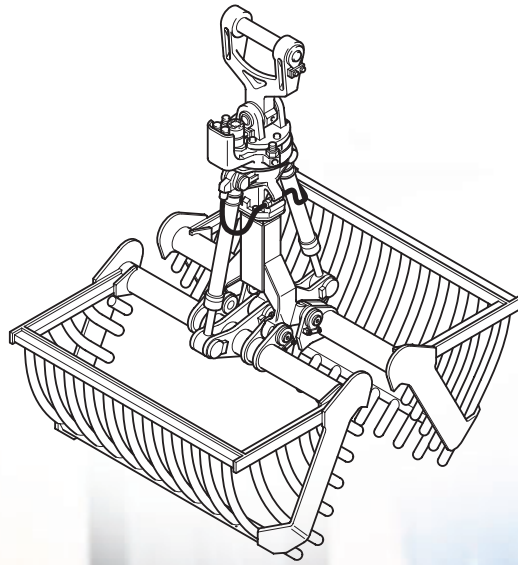


Parallel claw





Wheel-set claw



Beet grapples



Hydraulic excavators - grapples

4-tine grapples	Contents	A	B	C	D	E	Weight lb 1 / 2 / 3
	yd ³	inch	inch	inch	σ inch	σ inch	
GM64	0.5	65.8	77.1	67.1	78.7	49.8	1,860 / 2,320 / 2,330
	0.8	67.2	82.7	80.3	90.9	54.7	2,490 / 2,940 / 3,350
GM69	1.0	74.4	94.6	89.7	100.0	63.0	2,960 / 3,380 / 4,190
	1.4	74.1	94.6	90.2	102.2	69.6	3,080 / 3,620 / 4,540
GM 72C-4	1.6	91.5	114.0	104.3	116.1	76.8	4,410 / 5,070 / 5,730
	1.8	92.7	116.9	109.4	122.0	80.3	4,520 / 5,180 / 5,840
	2.1	93.5	118.5	112.2	124.0	81.1	4,630 / 5,290 / 5,950
	2.4	95.5	120.7	116.3	128.1	89.4	4,740 / 5,400 / 6,060
GM 74B	2.6	112.2	139.4	126.0	136.6	90.9	6,390 / 7,720 / 8,380

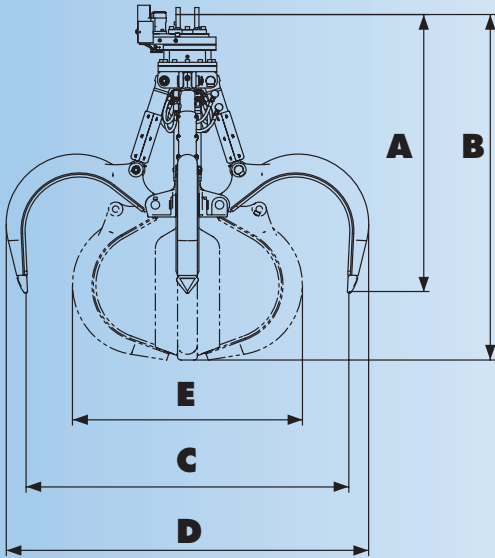
5-tine grapples	Contents	A	B	C	D	E	Weight lb 1 / 2 / 3
	yd ³	inch	inch	σ inch	σ inch	σ inch	
GM55	0.5	61.4	71.4	66.8	79.5	52.2	2,330 / 2,490 / 2,600
	0.7	64.2	76.2	74.4	79.5	52.4	- / 2,340 / 2,650
GM65	0.5	65.8	77.1	67.1	78.7	49.8	2,540 / 2,830 / 2,920
	0.8	70.4	84.5	80.3	90.9	55.1	2,720 / 3,120 / 3,350
GM70C	1.0	75.4	94.7	89.7	100.1	63.6	3,270 / 3,750 / 4,300
	1.4	74.2	94.7	90.2	102.2	69.7	3,500 / 4,110 / 4,390
*	2.6	80.2	108.5	114.5	127.3	80.6	- / - / 5,170
GM 72C-5	1.6	91.5	114.0	104.3	116.1	76.8	5,290 / 6,170 / 6,390
	1.8	92.7	116.9	109.4	122.0	80.3	5,400 / 6,280 / 6,500
	2.1	93.5	118.5	112.2	124.0	81.1	5,510 / 6,390 / 6,720
	2.4	95.5	120.7	116.3	128.3	89.4	5,620 / 6,500 / 6,720
GM 75B	2.6	112.2	139.4	126.0	136.6	90.9	7,500 / 9,040 / 9,920
	3.3	113.6	142.5	131.9	142.9	88.4	7,830 / 9,370 / 10,250
	3.9	115.4	147.5	140.9	152.0	99.2	8,160 / 9,700 / 10,580
GM 85	4.1	119.1	140.4	129.9	145.7	105.7	- / 12,130 / -
	4.6	120.5	142.9	135.0	153.0	109.4	- / 12,570 / -
	5.2	123.0	147.8	144.1	165.9	112.2	- / 12,790 / 14,770
GM95	5.9	139.4	184.3	156.7	177.2	121.3	16,540 / - / -

* For lightweight scrap

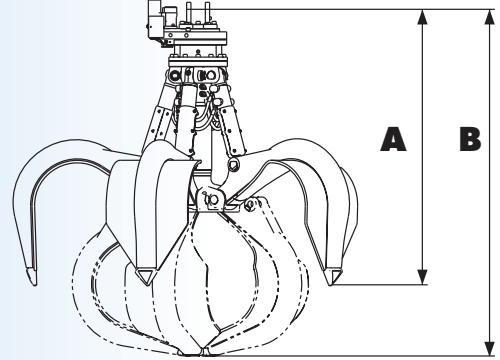
A: Height of grapple, open, B: Height of grapple, closed, C: Opening, D: Span width of grapple, open, E: Span width of grapple, closed
1. open shells, 2. half-open shells 3. closed shells

e overview

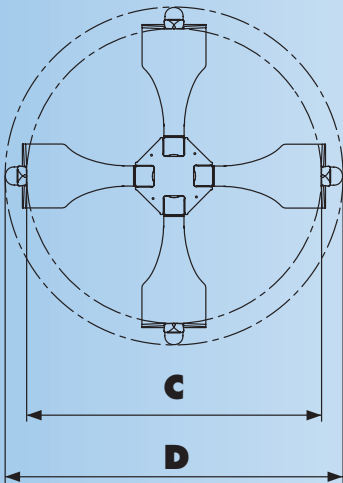
Four tine grapple, lateral view



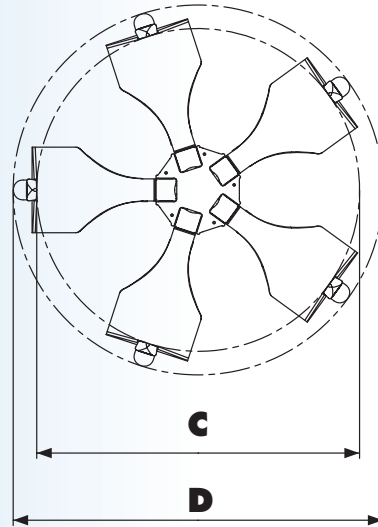
Five tine grapple, lateral view



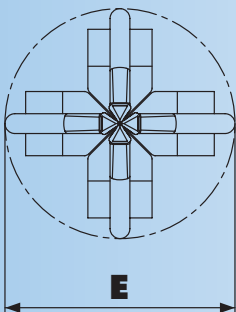
Four tine grapple, bottom view, open



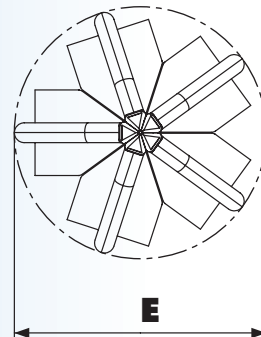
Five tine grapple, bottom view, open



Four tine grapple, bottom view, closed



Five tine grapple, bottom view, closed



Hydraulic excavators - grapples

Clamshell bucket		Contents yd ³	A inch	B inch	C inch	D inch	E inch	Weight lb	
GM10B	Digging shell	0.2	12.6	64.8	60.6	77.6	56.7	1,690	
		0.3	15.7	64.8	60.6	77.6	56.7	1,780	
		0.3	17.7	64.8	60.6	77.6	56.7	1,810	
		0.5	23.6	64.8	60.6	77.6	56.7	1,900	
		0.6	31.5	64.8	60.6	77.6	56.7	2,020	
		0.8	39.4	64.8	60.6	77.6	56.7	2,140	
		0.9	35.4	64.8	60.6	77.6	56.7	2,640	
GM10B	Clamshell	1.3	39.4	78.0	56.9	83.7	72.0	2,290	
		1.7	51.2	78.0	56.9	83.7	72.0	2,470	
		2.0	59.1	78.0	56.9	83.7	72.0	2,610	
		2.4	70.9	78.0	56.9	83.7	72.0	3,140	
GM20B	Digging shell	0.6	23.6	77.0	75.6	95.3	65.0	2,560	
		0.8	31.5	77.0	75.6	95.3	65.0	2,670	
		1.0	39.4	77.0	75.6	95.3	65.0	2,840	
		1.2	47.2	77.0	75.6	95.3	65.0	2,980	
	GM20B	Clamshell	1.7	39.4	88.6	71.9	100.8	82.3	2,990
			2.0	47.2	88.6	71.9	100.8	82.3	3,120
			2.6	63.0	88.6	71.9	100.8	82.3	3,410
3.3			78.7	87.1	75.0	100.7	82.3	4,010	
GM 22B	Digging shell	1.8	45.3	100.6	114.6	119.5	88.2	4,630	
		2.1	51.2	100.6	114.6	119.5	88.2	4,960	
	GM 22B	Clamshell	2.1	51.2	92.7	88.8	114.0	88.0	4,960
			2.4	59.1	92.7	88.8	114.0	88.0	5,070
			2.6	59.1	94.7	89.0	115.0	91.3	5,180
			2.9	59.1	99.0	89.4	117.1	94.9	5,290
			3.3	78.7	92.7	88.8	114.0	88.0	5,620
			3.9	78.7	104.1	90.0	119.3	98.8	6,720
			4.6	78.7	110.4	90.7	122.4	104.5	6,950
			GM 25B	Digging shell	2.4	51.2	112.6	110.6	131.3
2.6	59.1	112.6			110.6	131.3	93.7	6,610	
3.0	66.9	110.8			107.9	130.3	94.7	7,170	
GM 25B	Clamshell	3.0		66.9	102.4	98.0	125.8	94.7	7,060
		3.7		66.9	113.2	99.2	91.7	98.4	7,170
		3.9		78.7	105.9	98.2	126.4	102.0	7,390
		4.6		70.9	118.1	100.0	133.7	102.4	7,280
		5.2		78.7	115.9	99.4	131.3	112.6	7,830
		5.9		86.6	117.5	99.6	132.9	114.0	8,270
		GM 35		Clamshell	3.9	70.9	115.4	101.6	132.9
4.6	78.7		120.1		102.4	96.2	110.2	10,470	
6.4	74.8		132.3		103.9	142.3	128.1	13,230	
7.5	86.6		132.3		103.9	142.3	128.1	12,460	

The list does not represent the complete grapple range. Additional dimensions on request.

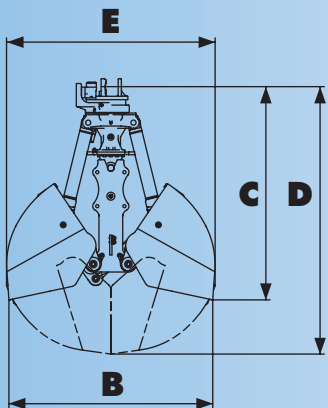
A: Width, B: Opening, C: Height of grapple, open, D: Height of grapple, closed, E: Span width of grapple, closed

e overview

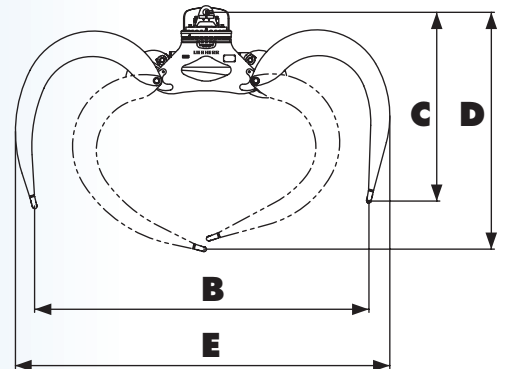
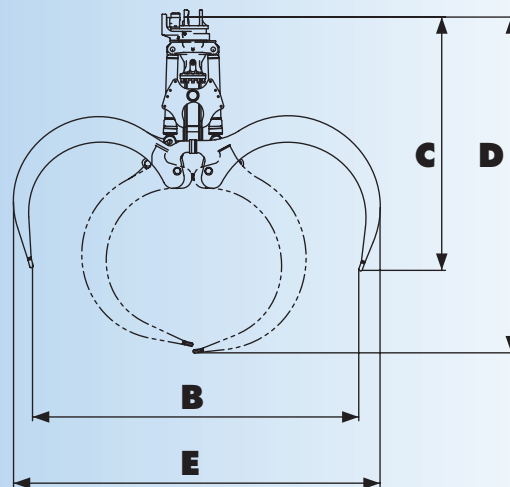
Wood grapple claw	Surface area ft ²	A inch	B inch	C inch	D inch	E inch	Weight lb
GM10B	8.6	31.9	87.3	68.3	93.6	97.0	2,800
	10.8	31.9	94.9	70.0	97.3	105.0	2,900
	14.0	31.9	105.8	72.3	103.2	116.5	3,060
	16.1	31.9	110.5	73.3	105.8	121.4	3,180
GM20B	10.8	31.9	95.1	89.2	150.4	107.0	3,480
	14.0	31.9	103.9	91.6	116.1	115.9	3,690
	16.1	31.9	107.8	92.6	118.3	119.8	3,800
	18.3	31.9	111.5	93.7	120.5	125.2	3,920
	20.5	31.9	123.1	96.9	124.2	136.7	4,210
	22.6	31.9	128.9	98.7	130.3	142.1	4,300
	26.9	31.9	133.6	99.5	134.1	150.5	4,390
	30.1	31.9	140.2	101.3	137.8	158.6	4,550
GMH50	26.9	34.3	142.1	83.9	102.4	157.2	4,760
	30.1	39.4	147.1	87.5	105.6	168.9	5,290
	34.4	39.4	150.1	89.1	107.6	169.3	5,410
	38.8	39.4	133.5	93.5	113.9	178.3	5,670
GM 22BH	10.8	35.4	92.3	105.5	128.0	103.1	4,180
	14.5	35.4	104.5	108.7	134.8	116.3	4,350
	18.3	35.4	114.0	111.0	140.0	127.0	4,660
	21.5	35.4	127.4	111.2	144.7	140.2	4,750
	30.1	35.4	167.9	117.1	160.0	164.6	6,860
GM 25BH	18.3	39.4	117.1	121.5	150.2	129.9	7,390

A: Claw width, B: Opening, C: Height, open, D: Height tip to tip, E: Span width of grapple, open

Clamshell bucket



Wood grapple claw



The Liebherr Group of Companies

Wide product range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional customer benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

State-of-the-art technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment and mining trucks.

Worldwide and independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 100 companies with over 32,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.us



Printed in Germany by DWS BK-RP LHB-10472063-3-03.10

Illustrations and data may differ from standard equipment.

Subject to change without notice.

Liebherr-Hydraulikbagger GmbH

Liebherrstraße 12, D-88457 Kirchdorf/Iller

☎ +49 7354 80-0, Fax +49 7354 80-72 94

www.liebherr.com, E-Mail: info.lhb@liebherr.com

Liebherr-France SAS

2, avenue Joseph Rey, B.P. 90287, F-68005 Colmar Cedex

☎ +33 389 21 30 30, Fax +33 389 21 37 93

www.liebherr.com, E-Mail: info.lfr@liebherr.com