
Quick coupling systems

LIEBHERR

Attachments



Contents



Quick coupling systems for hydraulic excavators and material handling machines with tilt kinematics

- 4 Functional principle
- 6 Attachment change
- 8 Safety
- 10 Overview
- 12 LIKUFIX®
- 14 Fully automatic quick coupling systems LIKUFIX®
- 20 Hydraulic quick coupling systems
- 22 Mechanical quick coupling systems
- 25 Technical data, availability and machine range

Quick coupling systems for wheel loaders

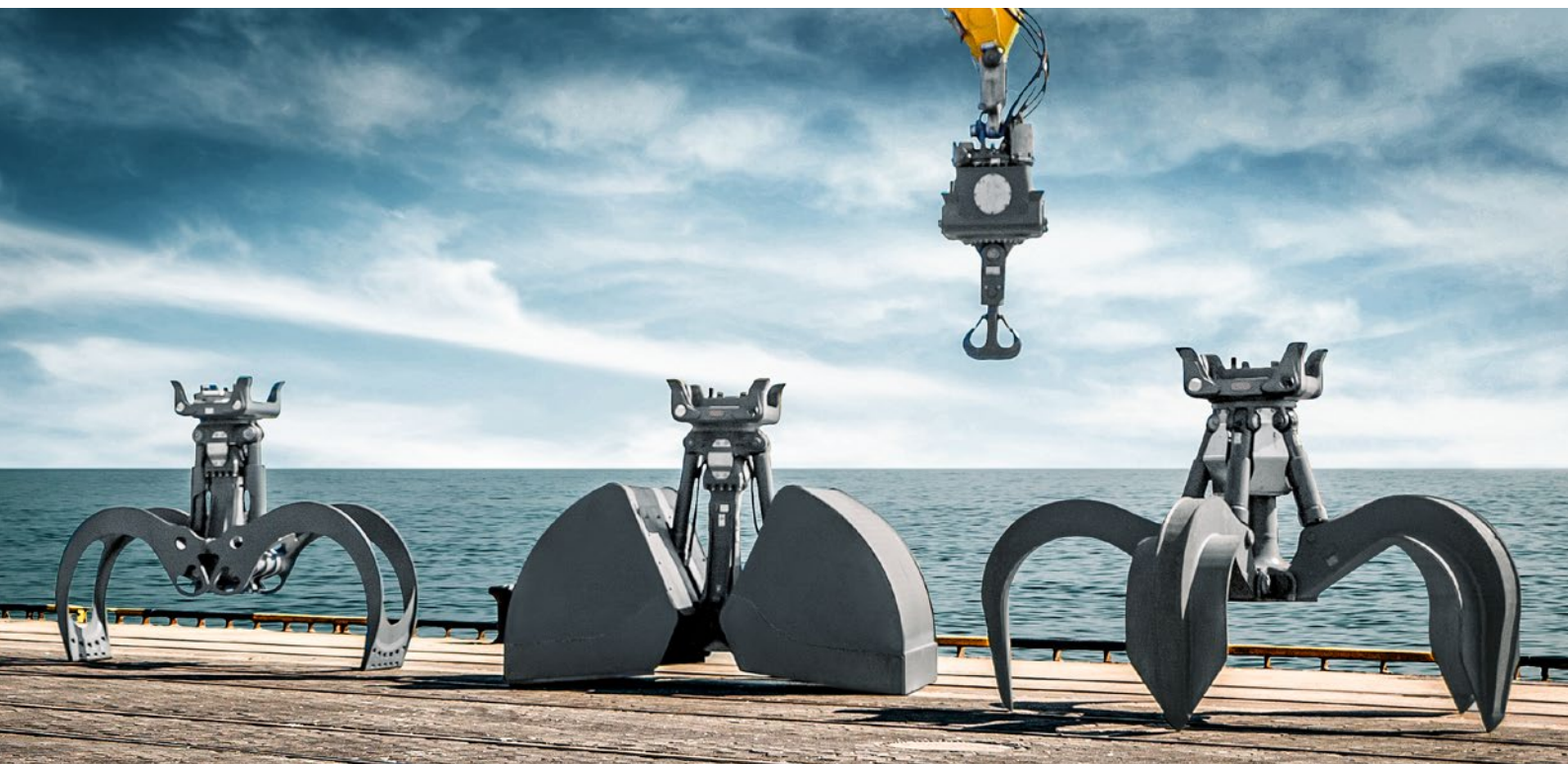
- 30 Fully automatic quick coupling system LIKUFIX®

Quick coupling systems for suspended attachments on material handling machines

- 32 Overview
- 34 Fully automatic quick coupling system LIKUFIX®
- 37 Hydraulic quick coupling system
- 38 Mechanical quick coupling system
- 39 Technical data, availability and machine range

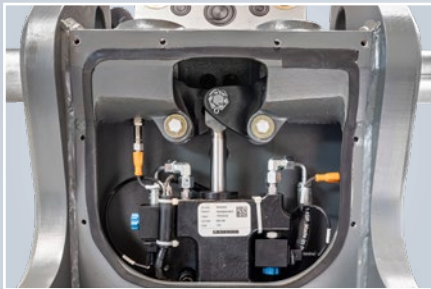


Liebherr's quick coupling systems, which have been tried and tested for decades and are constantly being further developed, guarantee maximum safety, efficiency and versatility. Almost any hydraulic or mechanical attachment can be changed conveniently, quickly and easily. Depending on the machine and application, there is a choice of either the fully automatic LIKUFIX® quick coupling system or hydraulic and mechanical quick coupling systems – whether for hydraulic excavators, wheel loaders or handling machines with tilt kinematics or equipped for suspended tools. Their high efficiency and productivity make Liebherr's quick coupling systems indispensable on any construction site or for use in recycling, scrap or goods handling.



Functional principle

The quick coupling system for hydraulic excavators and machines with tilt kinematics consists of a robust quick coupling adapter mounted on the end of the stick. This adapter can be supplemented with the LIKUFIX® coupling block for hydraulic and electric connections. This allows mechanical and hydraulic attachments and tools to be equipped with a quick coupling adapter mount.

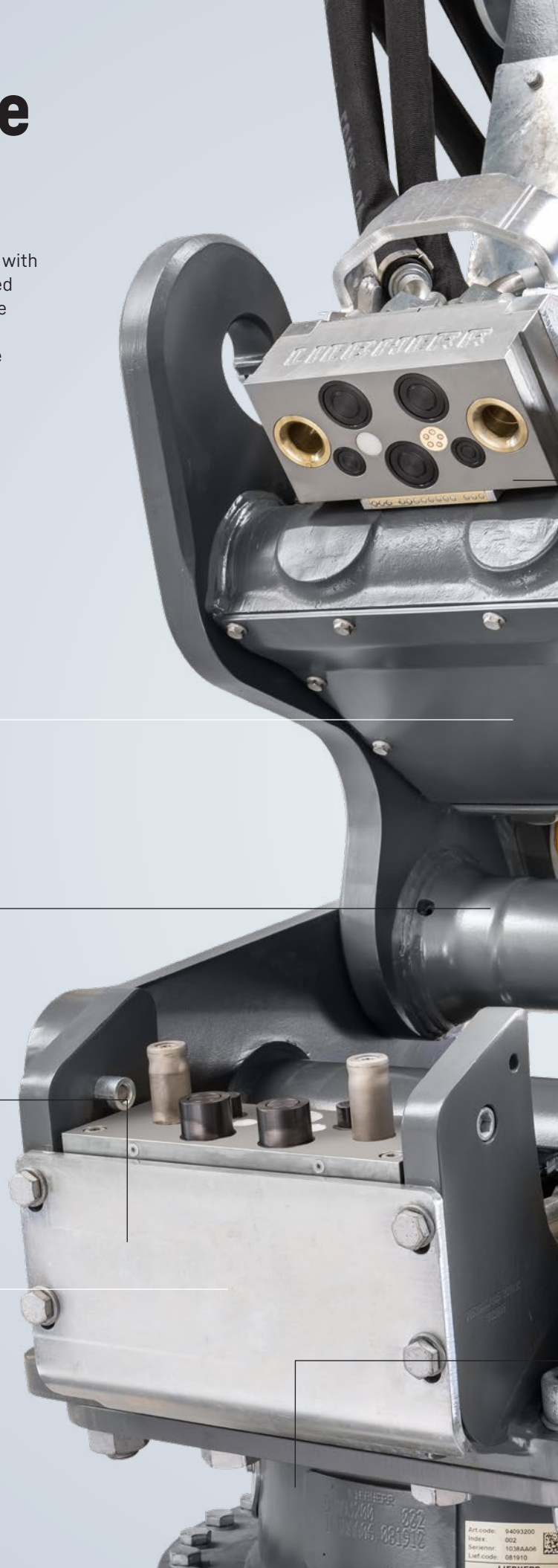
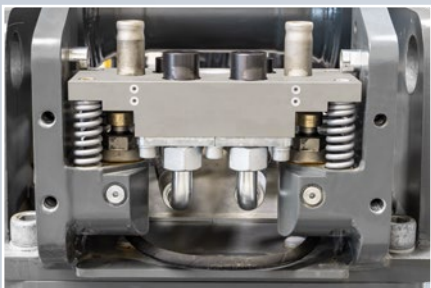


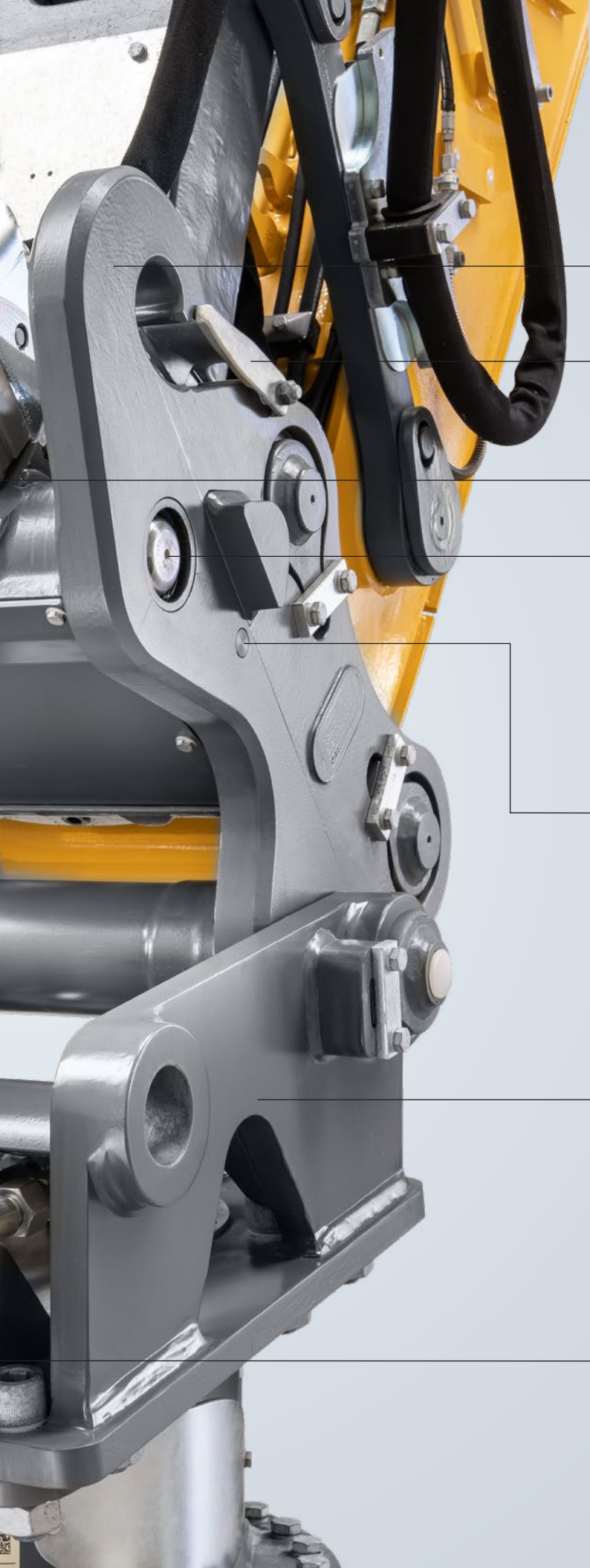
Quick coupling adapter

Robust and resistant

Coupling block

Hydromechanically mounted





Heavy-duty load lift hooks

Solid safety catches

Coupling block

Robust, secure and proven coupling block for hydraulic and electric connections

Locking pin

With electronic safety monitoring

Attachment recognition

Monitors the correct position of the attachment

Attachment mounting

Attachment

Possible for almost any attachment

Quick and easy

With the fully automatic LIKUFIX® quick coupling system, attachments – both mechanical and hydraulic – can be changed easily, quickly and conveniently from the operator's cab at the touch of a button. In just a few steps, mechanical, hydraulic and electrical connections are disconnected and reconnected in a matter of seconds.

The LIKUFIX® quick coupling system makes every construction site even more efficient and offers the operator maximum comfort when changing tools.



Tool change made easy!
Attachment change video





Approach

Move the quick coupler to the attachment mounting.



Hook in

Hook the quick coupler into the pin of the attachment mounting.

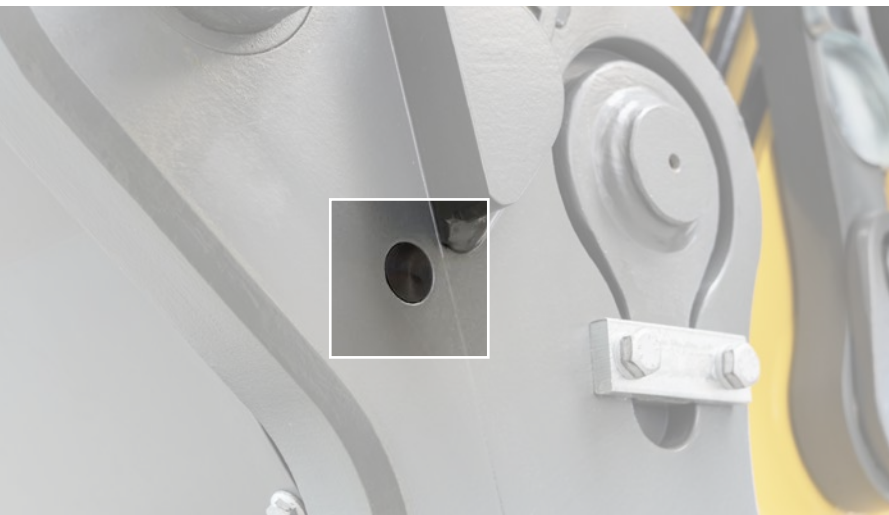


Close. Done!

Move the quick coupler completely into the mounting and lock it. Attachment is securely connected to the quick coupler mechanically and hydraulically.

Safety first

Liebherr's quick coupler system for machines with tilt kinematics guarantees not only simple and fast attachment changing, but also maximum safety thanks to numerous features. Safety is our top priority and the operator can always be sure that the attachment is properly connected to the machine.



Position monitoring

The proximity sensor monitors the correct position of the attachment in the locking position. If the pins are extended during coupling without the attachment being connected to the quick coupler, a warning tone sounds in the cab and a warning signal appears on the display.

Winner of the 2016 BG BAU EuroTest Award

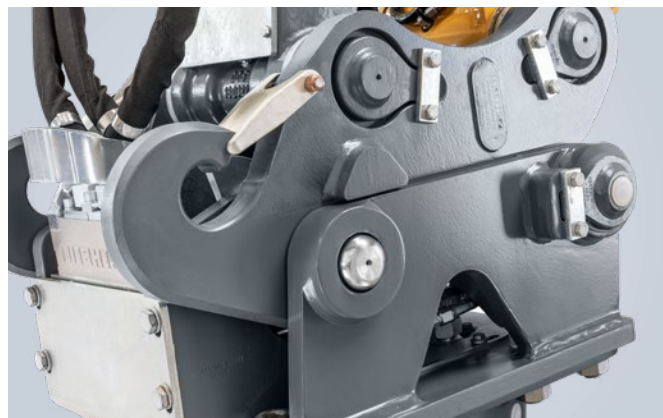


EuroTest-Preis
für herausragende Leistungen im
Arbeits- und Gesundheitsschutz



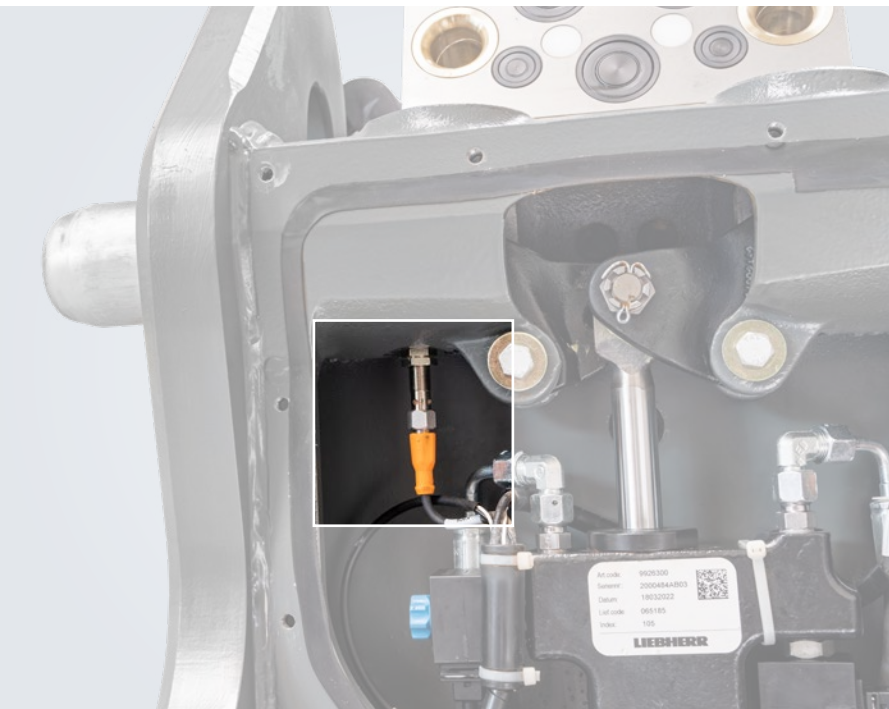
Visual inspection

The operator has a direct view of the locking pin from the cab and can thus ensure a visual locking check through eye contact.



Positive locking

The locking direction is transverse to the digging force and thus does not exert any load on the locking state during work. Nor does a pressure loss in the hydraulic lines have any effect on the locking status – thanks to the positive-locking system.



Position monitoring

An electronic sensor in the quick coupler detects the position of the locking pin and signals an optical and acoustic warning when the quick coupler is open.

This complies with the ISO 13031 standard and is the winner of the BG BAU 2016 Innovation Award.



Two-hand operation

To operate the quick coupler, the confirmation button and the mini-joystick must be pressed simultaneously. Both hands are necessary for this operation in order to exclude unintentional operation of the machine and the potential resulting hazards.




Attachment change from the cab

All operations for the attachment change can be carried out safely with a few hand movements directly in the cab. This eliminates the need for a person to be in the danger zone.

Overview of quick coupling systems

Quick coupling systems for hydraulic excavators and material handling machines with tilt kinematics

	Fully automatic quick coupling system LIKUFIX®		
			
	Quick coupling adapter (SWA) with LIKUFIX®	Quick coupling adapter (SWA) with LIKUFIX®, tilting	Quick coupling adapter (SWA) with LIKUFIX® 33-9
Opening and closing the quick coupler	hydraulic		
Connecting and disconnecting hydraulic lines	automatic		
Number of hydraulic couplings	5	5	9
Coupling lubrication line	no		yes
Tilt angle	no	LiTiU 12: 2 x 75° LiTiU 18 with SWA 33: 2 x 60° LiTiU 18 with SWA 48: 2 x 50°	no
Application	For regular attachment change		
Time required (changing a mechanical attachment)	a few seconds		
Time required (changing a hydraulic attachment)	a few seconds		
Use	Civil engineering, sewer construction, road construction, track construction as well as gardening and landscaping or tree care, scrap and recycling handling		
Advantages	Maximum efficiency, safety, comfort and increased productivity. For attachment changes of mechanical and hydraulic attachments, also with electrical connections.		

Hydraulic quick coupling system

Mechanical quick coupling system



Quick coupling adapter (SWA)
hydraulic

Quick coupling adapter (SWA)
hydraulic, tilting

Quick coupling adapter (SWA)
mechanical

SW stick
mechanically

hydraulic

manual

manual

manual

none

none

no

no

no

LiTiU 12: 2 x 75°
LiTiU 18 with SWA 33: 2 x 60°
LiTiU 18 with SWA 48: 2 x 50°

no

For frequent attachment change

For infrequent attachment change

a few seconds

approx. 5 minutes

approx. 2-10 minutes (depending on the number of lines)

approx. 2-10 minutes (depending on the number of lines)

When using mainly mechanical attachments

For heavy-duty applications such as
tunnel construction or quarrying

Track construction

Mechanical attachments can be changed quickly, safely and
more comfortably.

Robust and proven design as well as simple, mechanical technology.

Easy retrofitting of the quick coupling adapter with LIKUFIX® possible.

Cost-effective acquisition.

STRABAG uses LIKUFIX®



'For 15 years now we have had very positive experiences with the LIKUFIX system so we made a strategic decision to equip the majority of our crawler and wheeled excavators with the LIKUFIX in the future.'

Martin Philipp, STRABAG BMTI GmbH & Co. KG
Head of Investment and Procurement



STRABAG SE is an international European group, whose comprehensive range of services includes structural and civil engineering as well as road construction. In addition to deep foundation machines and tower cranes, the company also uses various machines from the earthmoving division. Due to the complex and versatile range of services at STRABAG, a frequent change of attachment is generally unavoidable especially with hydraulic excavators. Machine operators regularly change the attachment in day-to-day site work. Therefore, for productive, efficient and safe construction site operation the fully hydraulic quick coupling system LIKUFIX® from Liebherr has been used successfully for several years at STRABAG.

This concerns both Liebherr machines and machines from other manufacturers as the quick coupling systems from Liebherr can be used with machines from all manufacturers. For STRABAG it is a worthwhile additional investment as the efficiency of hydraulic excavators is boosted significantly thanks to the quick change of attachment.



Video on the use of LIKUFIX® at STRABAG



Fully automatic quick coupling system

LIKUFIX®

LIKUFIX® is the fully automatic quick coupling system from Liebherr. The combination of a Liebherr hydraulic quick coupling adapter with the LIKUFIX® hydraulic coupling block enables mechanical and hydraulic attachments to be changed quickly, conveniently and safely directly from the cab.

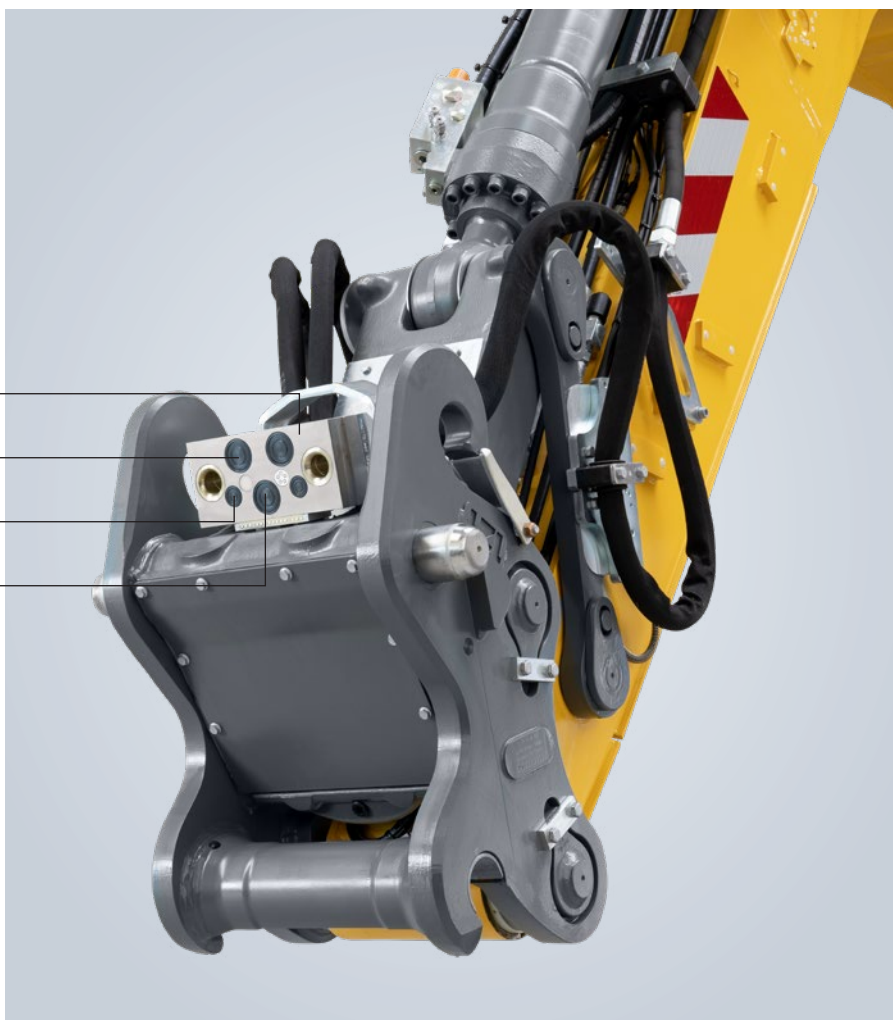
- Automatic connection and disconnection of the hydraulic lines during the coupling process
- Efficient attachment change in seconds from the cab
- Extended range of applications and thus increased machine utilisation by up to 90 %
- Maximum versatility
- Increase in productivity by up to 30 %
- Optimum oil flow through hydraulic couplings with large cross-sections for fast attachment movements and high fuel efficiency
- Hydromechanical bearing of the mould coupling block for long service life of the hydraulic couplings
- Reliable electrical connection due to CAN bus-capable special connectors
- Leakage-free hydraulic connection

LIKUFIX® coupling block

High-pressure circuit

Medium-pressure circuit

Unpressurised return

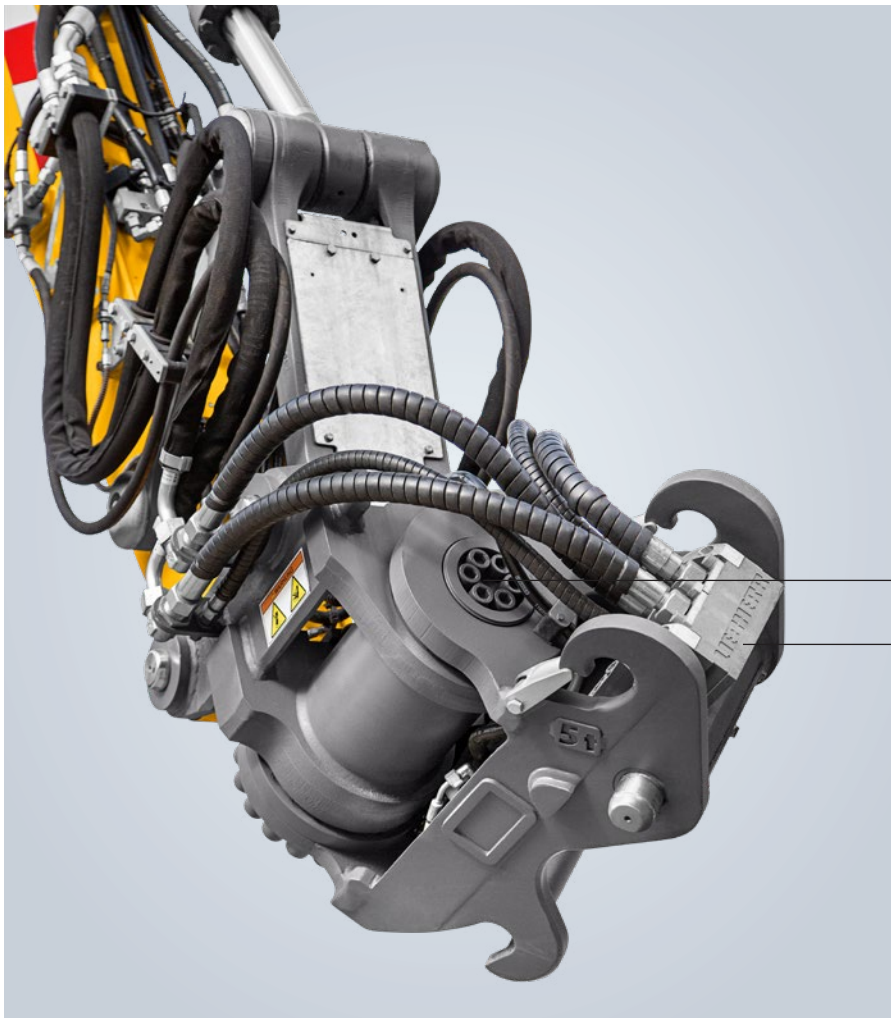


Fully automatic quick coupling system

LIKUFIX® tilting

The tilting LIKUFIX® developed by Liebherr combines all the advantages of the fully automatic quick coupling system LIKUFIX® with the integrated tilt unit LiTiU 12 and LiTiU 18. With the generated tilt angle, even hard-to-reach places can be accessed comfortably and flexibly.

- Eliminates the need for manoeuvring, increases productivity and protects the ground
- Additional tilt angle of up to 2 x 75°
- Extended range of applications
- Maximum efficiency and flexibility
- LiTiU 18 can be directly controlled via an optionally available extended hydraulic circuit. That does away with the need for switching over to the joystick control elements.



Tilt motor

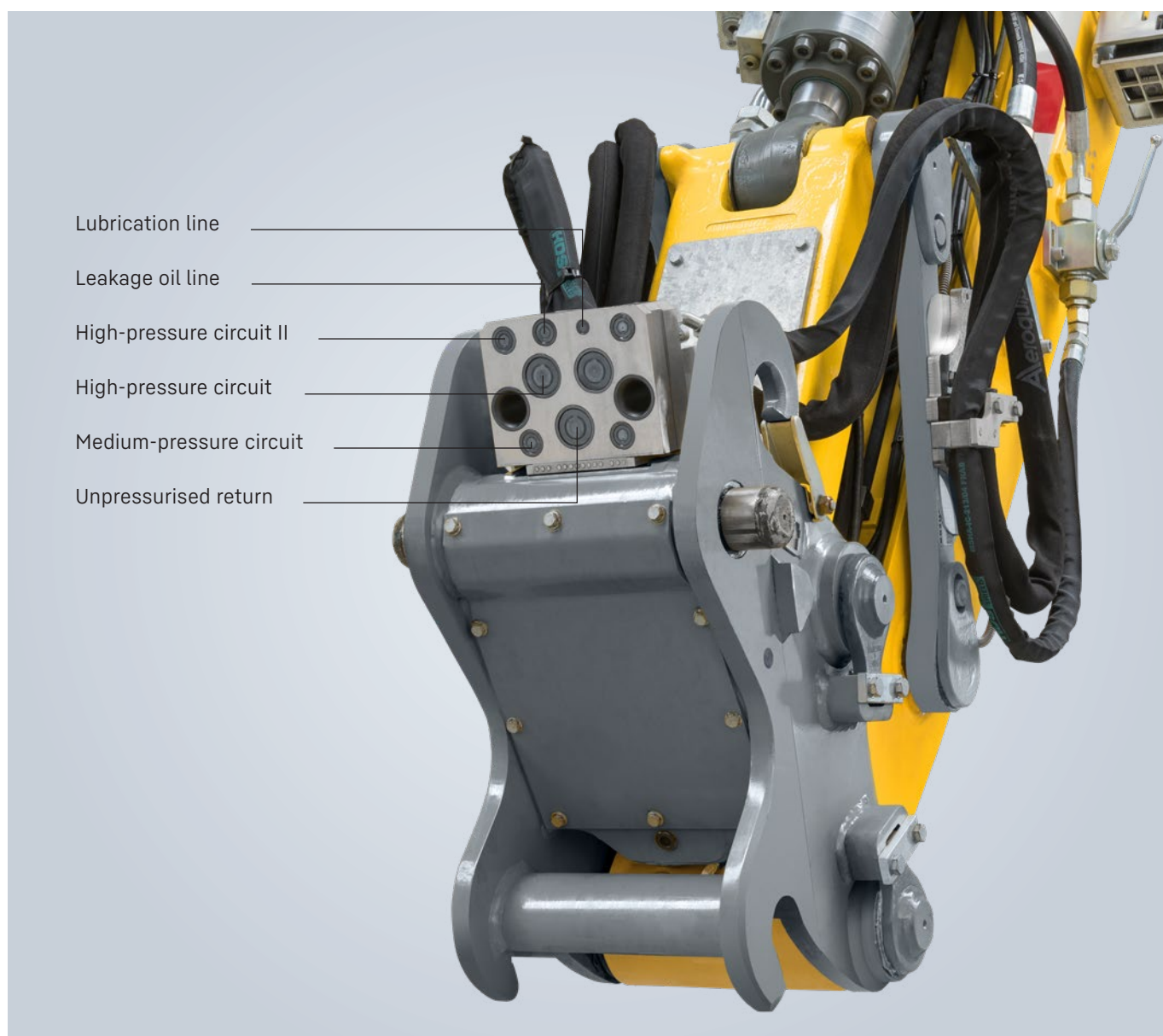
LIKUFIX® coupling block

Fully automatic quick coupling system

LIKUFIX® 33-9

LIKUFIX® 33-9 complements the fully automatic LIKUFIX® quick coupling system and all its advantages with additional couplings. This means that hydraulic attachments such as tamping equipment in track construction, mulchers with flaps or Liebherr stick extensions can also be changed quickly, easily and, above all, safely from the operator's cab.

- Full compatibility with all attachments equipped with the current LIKUFIX® quick coupling system
- Extension of the couplings to include a second high-pressure circuit as well as the leakage oil and lubrication line
- Available for all machines with an extended hydraulic circuit
- Available for quick coupler SWA 33



Fully automatic quick coupling system

Optional equipment

Tool Control

Tool Control is an additional electro-hydraulic function that simplifies work with hydraulic attachments: Up to 20 combinations of oil quantity and oil pressure can be stored with the name of the tool and selected directly via the display unit with touchscreen function. With Tool Control, the machine operator can easily select the parameters for the desired hydraulic tool at the touch of a button – without cumbersome resetting when changing tools. This function is already included as standard on most Liebherr hydraulic excavators.



Control unit for second quick coupling adapter

In order to be able to operate a hydraulic quick coupler on attachments with a second quick coupler adapter, such as a tiltrotator, stick extension or the LiTiU tilt unit on the underside of the attachment, an operating unit is required. This allows the locking mechanism to be activated, while all other functions are identical to the quick coupler on the machine side.



Protection bar

The protection bar prevents the LIKUFIX® hosing and bolting being damaged by stones or other objects resulting from demolition or other heavy duty work. The protection can be retrofitted without any problems.



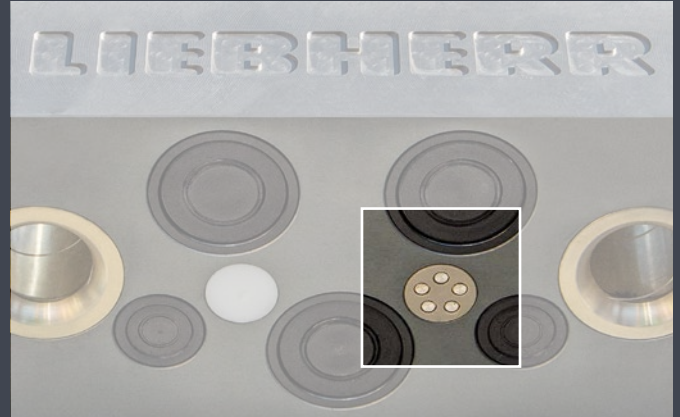
Fully automatic quick coupling system

Optional equipment

5-pin signal contact plug

Electric contacts provide signal transmission between the hydraulic excavator and the attachment tool and enable control of electric valves and sensors for a wide range of applications. The contact pins are spring-loaded and designed for tough construction site use.

The signals of a position transmitter / GPS receiver can be transmitted with the 5-pin round plug.



14-pin signal contact strip

Electric contacts provide signal transmission between the hydraulic excavator and the attachment tool and enable control of electric valves and sensors for a wide range of applications. The contact pins are spring-loaded and designed for tough construction site use.

The operation of a second quick coupling adapter or a switchable socket as well as the CAN bus control run via the 14-pin signal contact strip. Especially with the SWA 33 LIKUFIX®, the signals of a position transmitter / GPS receiver are also transmitted via this 14-pin signal contact strip.



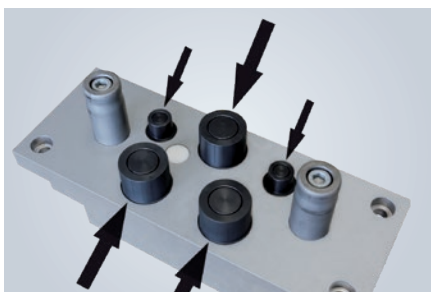
Fully automatic quick coupling system

Maintainability

Easy maintenance, long service life

Quick and easy: changing sealing washers on the attachment

The condition of the sealing washers can be checked by pressing down the sealing discs. If replacement is necessary, the sealing washer can be quickly replaced with the help of a screwdriver and a sharp tool.



1. Attachment hydraulic couplings with sealing washers.



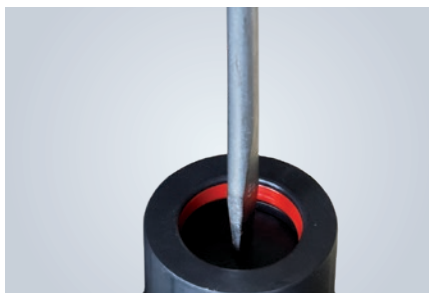
2. Press down sealing disc on the coupling plug with a screwdriver and remove the top sealing washer (red) with a sharp tool.



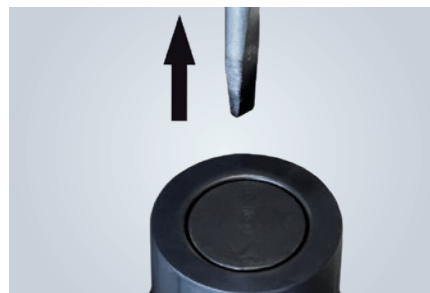
3. Press together new sealing washer and place on the sealing disc with the open end facing downwards.



4. Press sealing disc down as far as the groove, position the screwdriver in the centre of the sealing washer and remove finger.



5. Allow the sealing washer to jump into the groove.



6. Remove screwdriver.

- Quick coupler: couplings with maintenance-free metallic washers
- Hydraulic attachments: couplings with sealing washers

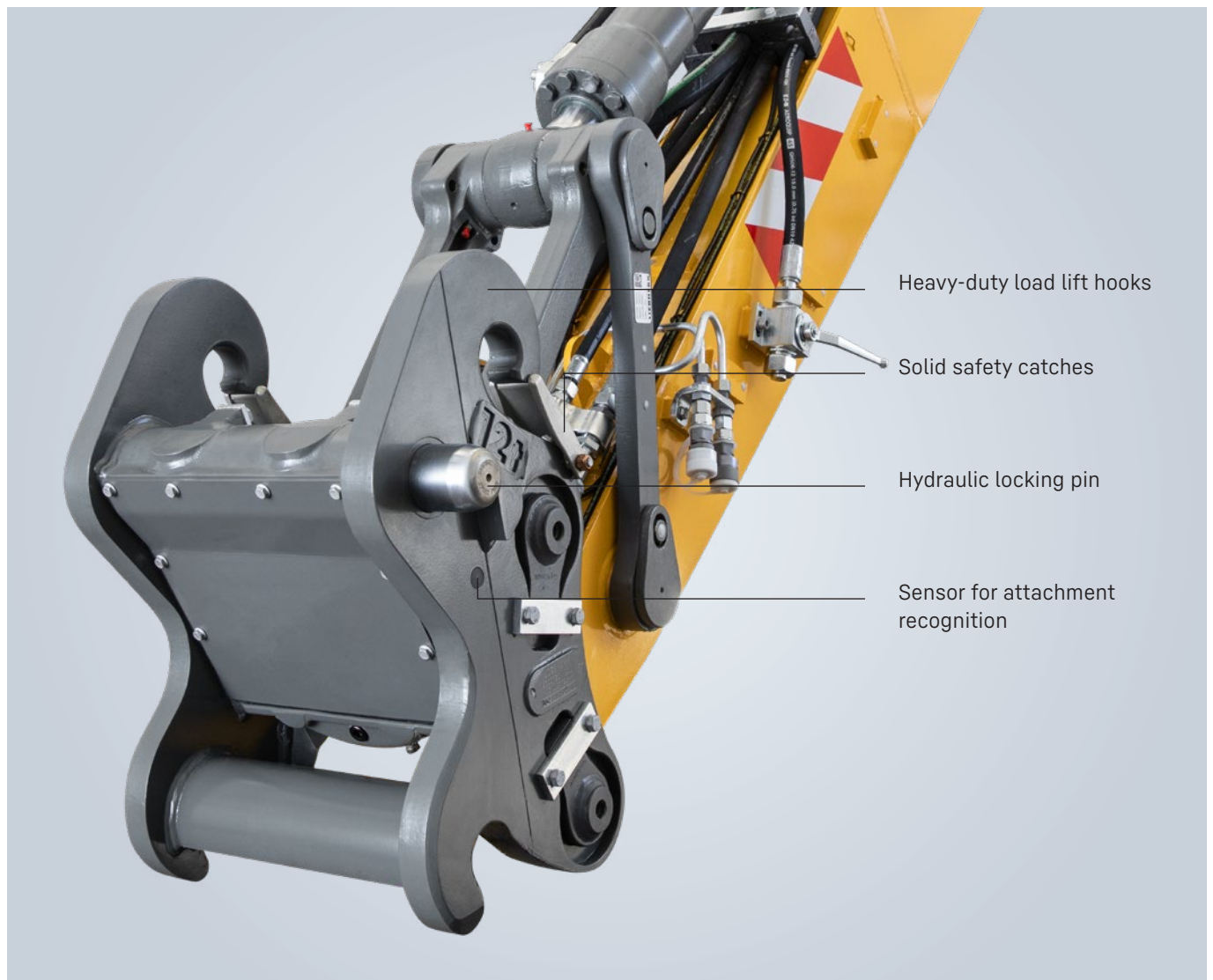
Reconditioning

Thanks to replaceable wear parts Liebherr quick couplers can be reconditioned quickly and inexpensively to restore them to their 'as new' state. Hydraulic couplings on the attachment and hydraulic excavator can be easily replaced on site by the machine operator.

Hydraulic quick coupler

Mechanical attachments can be changed quickly and safely at the push of a button from the cab using Liebherr's hydraulic quick coupler. Hydraulic lines of the hydraulic attachments are connected and disconnected manually via screwed connections.

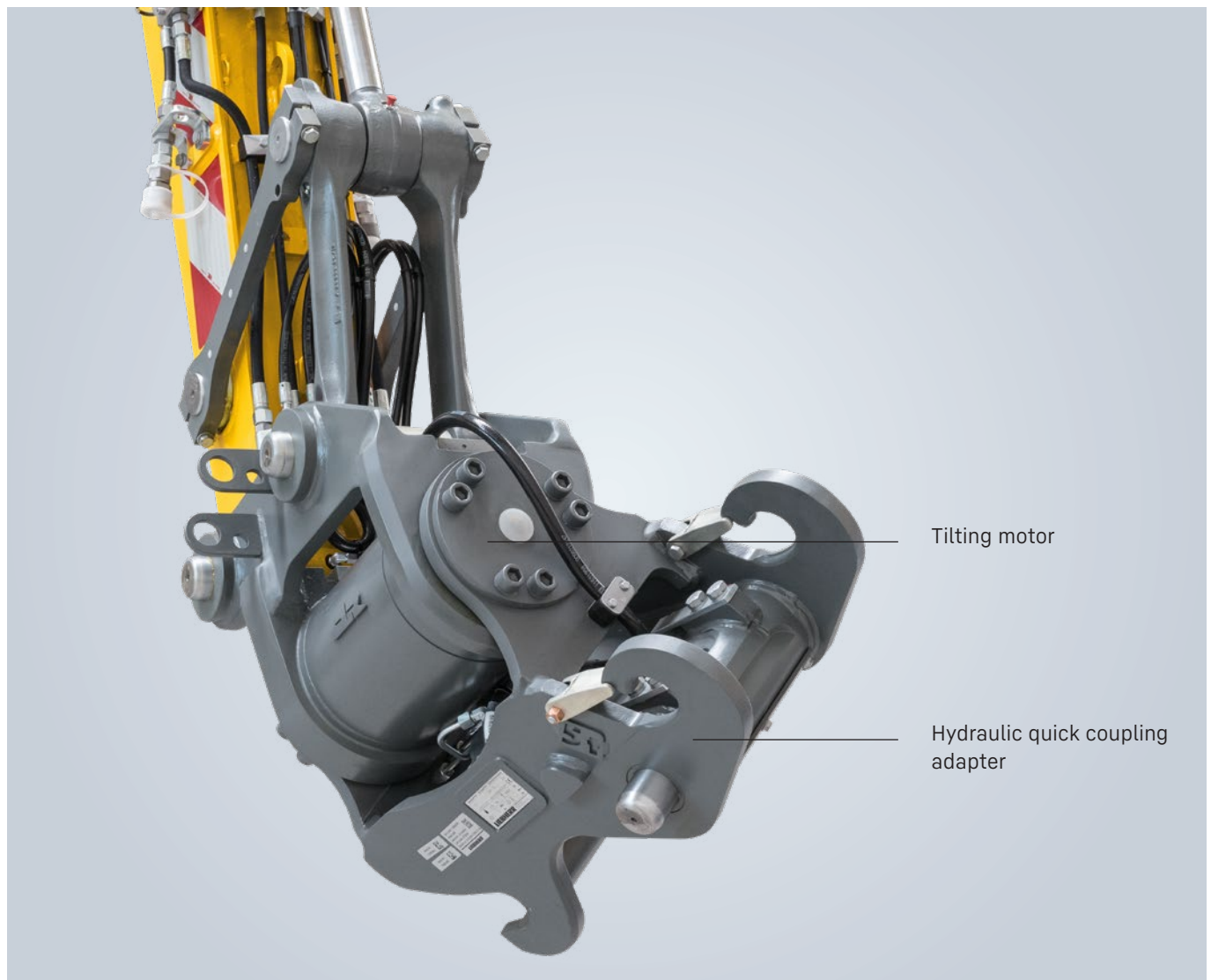
- More flexibility and increased productivity
- Quick coupling adapter made of solid, robust sheet steel
- Load lift hook on the quick coupling adapter with heavy-duty safety catches as standard for increased safety during load lifting work



Hydraulic quick coupler, tilting

By combining the hydraulic quick coupler with the tilt unit LiTiU 12 or LiTiU 18, attachments can not only be changed safely and quickly from the cab, but work requiring tilting of the attachment is also possible. The proven quick coupler with its advantages, supplemented by a protected tilting motor, increases the flexibility of the machine.

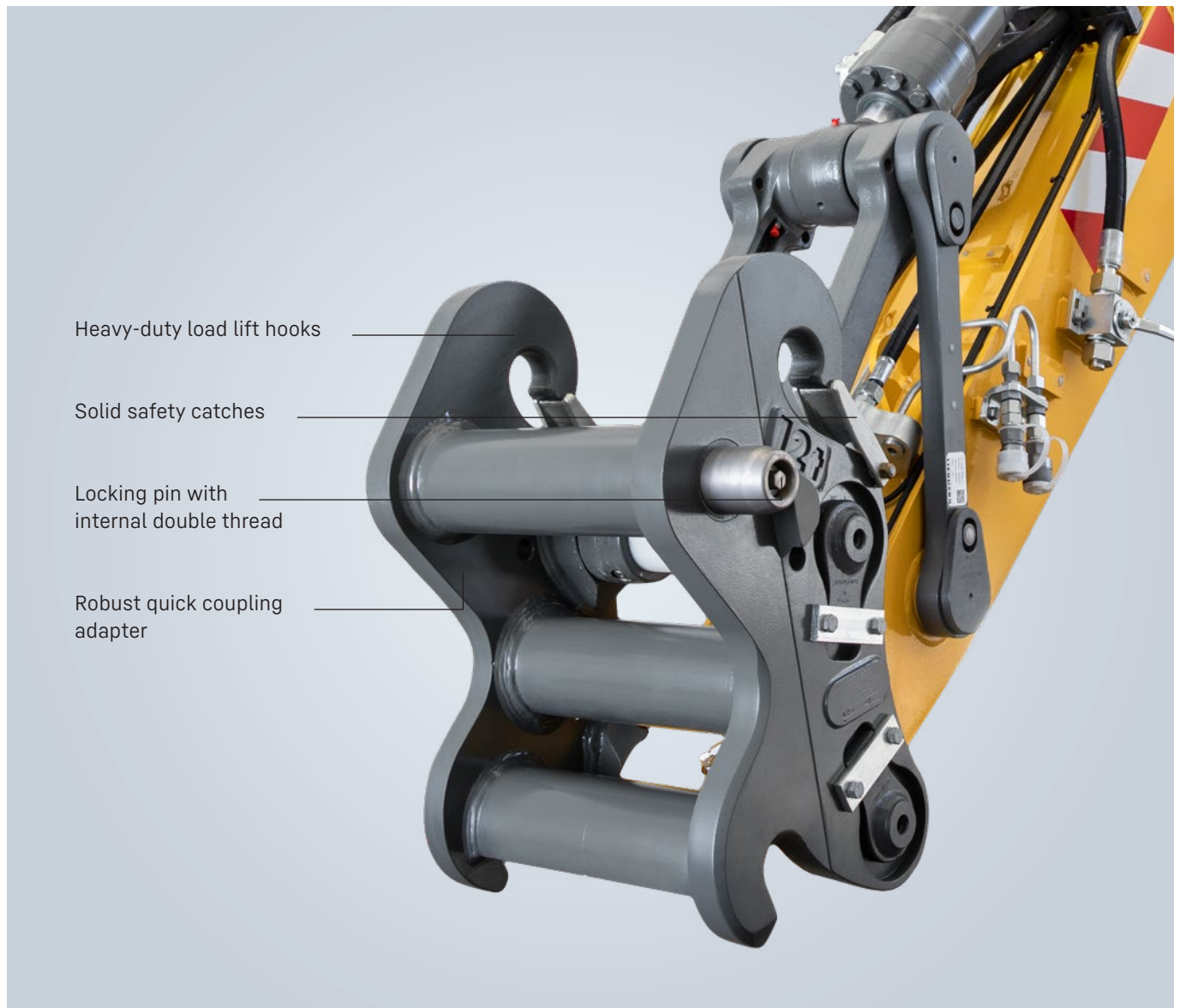
- Protected built-in tilt motor with a tilt angle of up to $2 \times 75^\circ$
- Eliminates the need for manoeuvring, increases productivity and protects the ground
- LiTiU 18 can be directly controlled via an optionally available extended hydraulic circuit. That does away with the need for switching over to the joystick control elements.
- Maximum flexibility and extended range of applications



Mechanical quick coupler

Liebherr's mechanical quick coupler is the ideal solution for all machines whose flexibility and productivity need to be increased with a small investment. The robust design, which has been tried and tested for many years, impresses with its simple, safe and reliable mechanics. After loosening the screw locking pin, the two locking pins with internal double thread are manually retracted from one side and extended again after tool attachment.

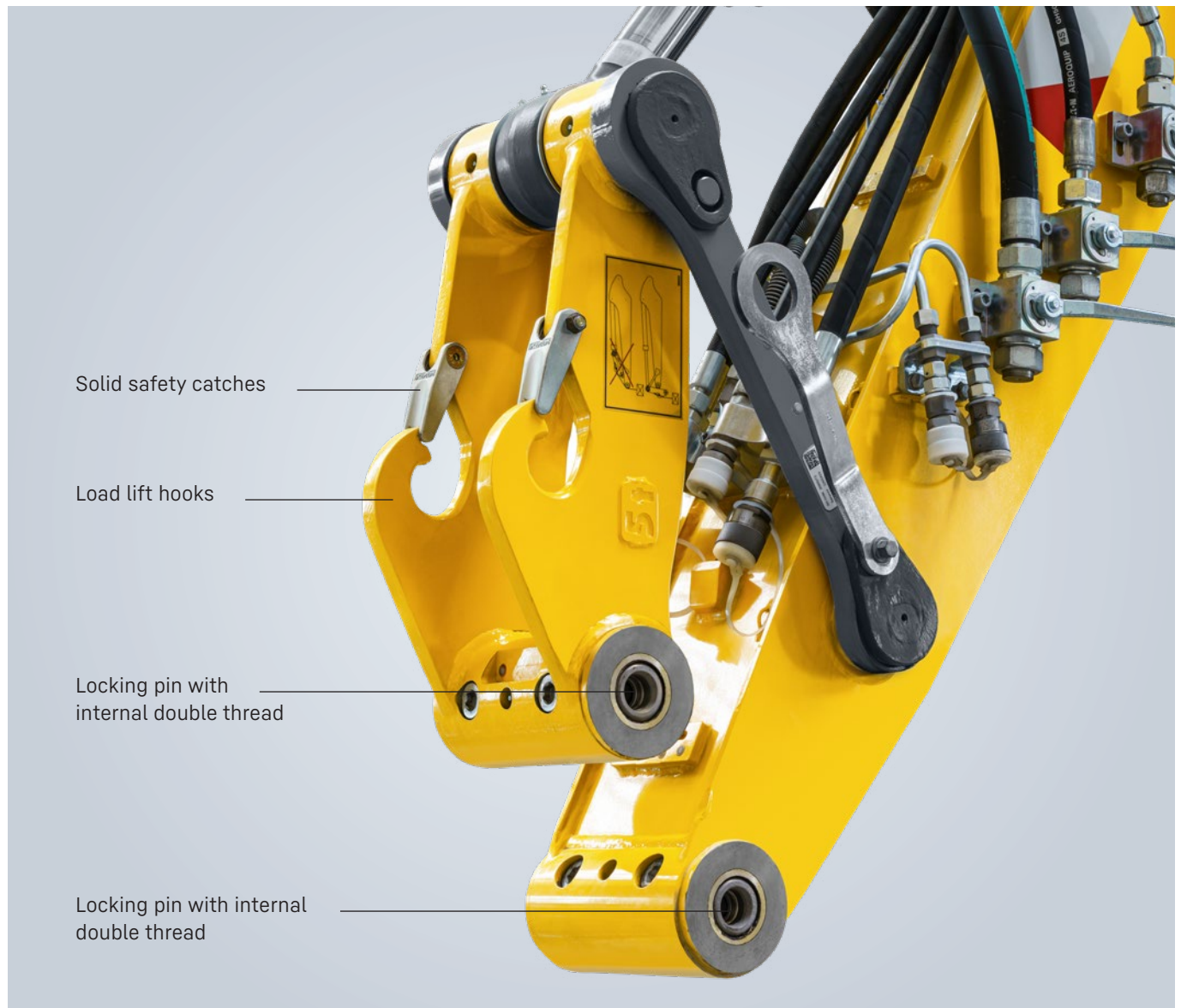
- Simple and robust design for long service life and low maintenance costs
- High level of safety due to additional screw locking pins
- Load lift hook on the quick coupling adapter with solid safety catches as standard for more safety during load lifting work



SW stick mechanically

With the mechanical quick coupling stick, the quick coupling device is integrated in the stick and in the connecting link. This means that no additional quick coupling adapter is necessary. When changing attachments, a crank is used to manually retract the screw locking pins at the end of the stick and the connecting link with an internal double thread, and to extend them again after attaching the tool.

- Optimum transmission of digging forces as with directly mounted attachment
- Optimum load capacity, as no additional quick coupling adapter is required
- Additional load lift hook on the connecting link with solid safety catches
- Simple and robust design for long service life and low maintenance costs
- Available especially for Liebherr railroad excavators

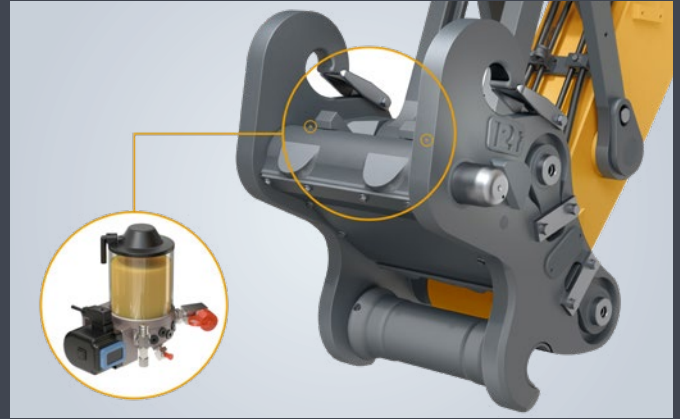


Quick coupling adapter

Optional equipment

Central lubrication system for quick coupling adapter

The central lubrication system for quick coupling adapters is an extension of the central lubrication system of the Liebherr carrier machine. The lubrication points of the quick coupling adapter are connected to the central lubrication system of the carrier machine and covered within its lubrication cycle. This prevents damage due to insufficient lubrication and, thanks to the time saved during maintenance, economic efficiency can be increased.



Quick coupling adapter

Maintainability

Half-shells made of high-quality materials in the mounting hook of the quick coupling adapter are secured by heavy-duty clamping pins. This eliminates the need for welding. In case of wear, the half-shells can be changed directly on the construction site quickly and without unnecessary heat input by welding.



You can find out more about changing the half shells here:

Technical data and availability



	SWA 22	SWA 33	SWA 48	SWA 66	SWA 77	SWA 92	SWA 105
Outer dimensions	220 mm	330 mm	480 mm	660 mm	770 mm	920 mm	1,050 mm
Weight in kg							
SWA mechanical	100	110	220	415	694	1,237	
SWA hydraulic		127	240	415	703	1,257	2,017
SWA hydraulic, tilting		LiTiU 12: 323 LiTiU 18: 353	438				
SWA hydraulic with LIKUFIX®		144	262	468	756		
SWA hydraulic with LIKUFIX®, tilting		LiTiU 12: 340 LiTiU 18: 370					
SWA hydraulic with LIKUFIX® 33-9		146					
Availability							
SWA mechanical	●	●	●	●	●		
SWA hydraulic		●	●	●	●	●	●
SWA hydraulic, tilting		●	●				
LIKUFIX®		●	●	● ¹	● ¹		
LIKUFIX®, tilting		●	●				
LIKUFIX® 33-9		●					

1) Can be equipped with 3 hydraulic circuits and hammer return line

Machine range

Hydraulic excavator from Liebherr

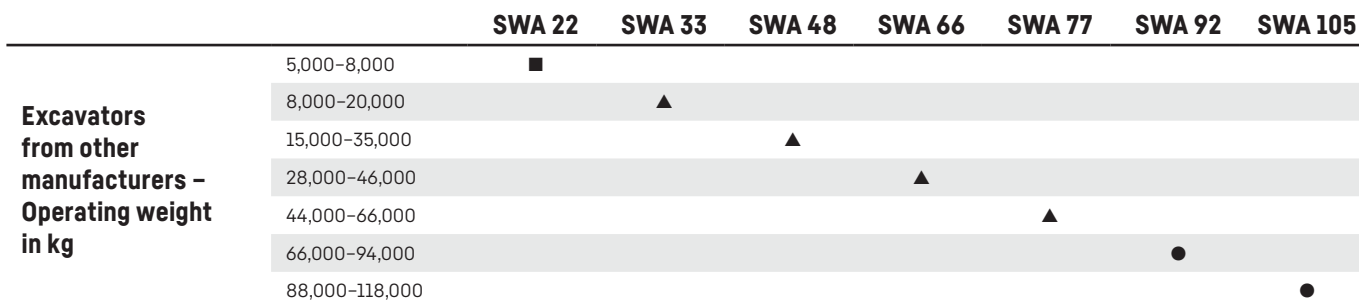
		SWA 22	SWA 33	SWA 48	SWA 66	SWA 77	SWA 92	SWA 105
Wheeled excavators from Liebherr	A 910 Compact	■	▲					
	A 912 Compact	■	▲					
	A 913 Compact		▲	▲				
	A 914 Compact		▲	▲				
	A 914		▲	▲				
	A 916 Compact		▲	▲				
	A 916		▲	▲				
	A 918 Compact		▲	▲				
	A 918		▲	▲				
	A 920		▲	▲				
	A 922 Rail		▲	▲				
	A 924			▲				
	A 924 Rail		▲	▲				
	A 924 Heavy Lift			▲	▲			
Crawler excavators from Liebherr	R 914 Compact		▲	▲				
	R 914 Rail		▲	▲				
	R 918		▲	▲				
	R 920 Compact		▲	▲				
	R 922			▲				
	R 924			▲				
	R 926 Compact		▲	▲				
	R 926			▲	▲			
	R 928			▲	▲			
	R 930			▲	▲			
	R 934			▲	▲			
	R 936 Compact			▲	▲			
	R 938			▲*	▲			
	R 945				▲	▲		
	R 956				▲*	▲		
	R 960 SME					▲		
	R 972					▲*	●	
	R 978 SME						●	
	R 992						●	
	R 998 SME						●	●

■ = Mechanical ● = Hydraulic ▲ = Mechanical / Hydraulic / LIKUFIX®

* Possible after clarification of use

Machine range

Hydraulic excavators from other manufacturers



■ = Mechanical ● = Hydraulic ▲ = Mechanical / Hydraulic / LIKUFIX®

See operating manual for exact specification

Machine range

Material handling machines from Liebherr

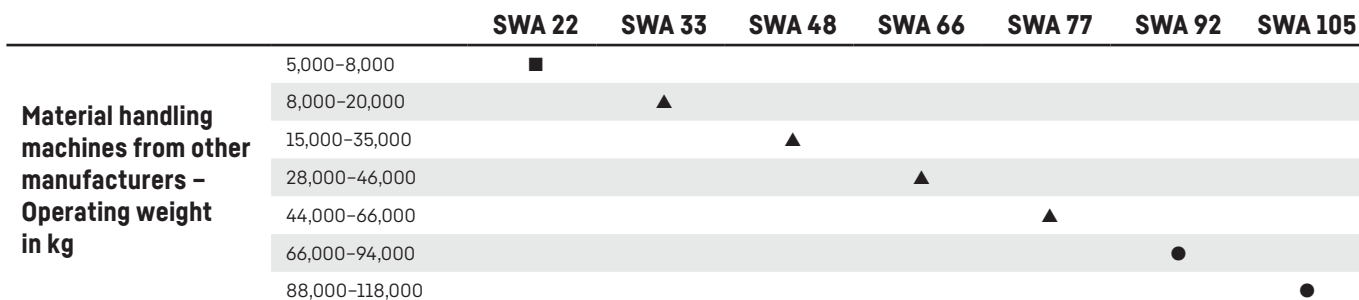
	SWA 33	SWA 48	SWA 66	SWA 77
LH 18	▲	▲		
LH 22	▲	▲		
LH 24		▲		
LH 26		▲		
LH 30		▲		
LH 35		▲		
LH 40		▲		
LH 50		▲	▲	
LH 50 HR		■	▲	
LH 60			▲	▲
LH 60 HR			▲	▲
LH 80				
LH 80 HR/G				
LH 110				
LH 110 HR/G				
LH 150				
LH 150 HR/G				

**Material handling
machines
from Liebherr**

■ = Mechanical ● = Hydraulic ▲ = Mechanical / Hydraulic / LIKUFIX®

Machine range

Material handling machines from other manufacturers



■ = Mechanical ● = Hydraulic ▲ = Mechanical / Hydraulic / LIKUFIX®

See operating manual for exact specification

Fully automatic quick coupling system

LIKUFIX® for wheel loaders

The fully automatic quick coupling system LIKUFIX® developed by Liebherr for wheel loaders consists of the automatic hydraulic coupling block and a robust quick coupling adapter. Numerous hydraulic and mechanical attachments can be changed fully automatically, safely and leak-free in seconds at the push of a button directly from the cab.

- Automatic connection and disconnection of the hydraulic lines during the coupling process
- Fast, safe and convenient tool change from the cab
- High utilisation of the wheel loader and thus increased efficiency in operation
- Maximum flexibility and extended application possibilities



Hydraulic circuit

Coupling block



The hydraulic couplings on the attachment are supported by a hydromechanical balancing system. The forces acting on the quick coupler are therefore not transmitted to the coupling system, which increases robustness. Even during long periods of use, the connections between the hydraulic circuits are absolutely tight. During the changeover process, it is ensured that hydraulic lines are not damaged. To facilitate maintenance, all moving parts are easily accessible.

LIKUFIX® is available for the following Liebherr wheel loaders:

- Compact loaders L 504 to L 508
- Stereoloaders L 507 and L 509*
- Medium-sized wheel loaders L 526 to L 546
- Wheel loaders XPower L 550 XPower to L 580 XPower

*Not available for L 509 telescopic wheel loader



LIKUFIX® for wheel loaders receives Construction Industry Reader Award

LIKUFIX® for wheel loaders is Product of the Year 2022 in the construction machinery category. Among 20 nominations, the LIKUFIX® quick hitch system was the winner in the Reader Award of the trade magazine Baugewerbe.

Baugewerbe
Fachmedium der Baubranche

Overview of quick coupling systems

Quick coupling systems for suspended attachments on material handling machines

		Fully automatic quick coupling system LIKUFIX®	
			
		MH 40C LIKUFIX®	MH 110B LIKUFIX®
Opening and closing the quick coupler			hydraulic
Connecting and disconnecting hydraulic lines			automatic
Number of hydraulic couplings			2
Application			For regular attachment change
Pin to pin height			approx. 500 mm
Additional weight (machine side)	approx. 390 kg		approx. 490 kg
Time required (changing a mechanical attachment)			a few seconds
Time required (changing a hydraulic attachment)			a few seconds
Use			Scrap and port handling
Advantages	<p>Maximum efficiency, safety, comfort and increased productivity.</p> <p>For attachment change of hanging attachments, also with electronic connections.</p>		

Hydraulic quick coupling system



SW industrial stick (hydraulic)

Mechanical quick coupling system



Industry SWA mechanical

hydraulic

manual

manual

manual

none

none

For frequent attachment change

For infrequent attachment change

0 mm

approx. 170 mm

approx. 75 kg

approx. 90 kg

a few seconds

approx. 10 minutes

approx. 20 minutes

Scrap handling and waste management

Waste management

Hanging attachments (without hydraulic lines) can be changed quickly, safely and more comfortably.

Can be combined with the multi-coupling for easy and quick replacement of hydraulic lines.

Simple, mechanical technology and cost-effective purchase.

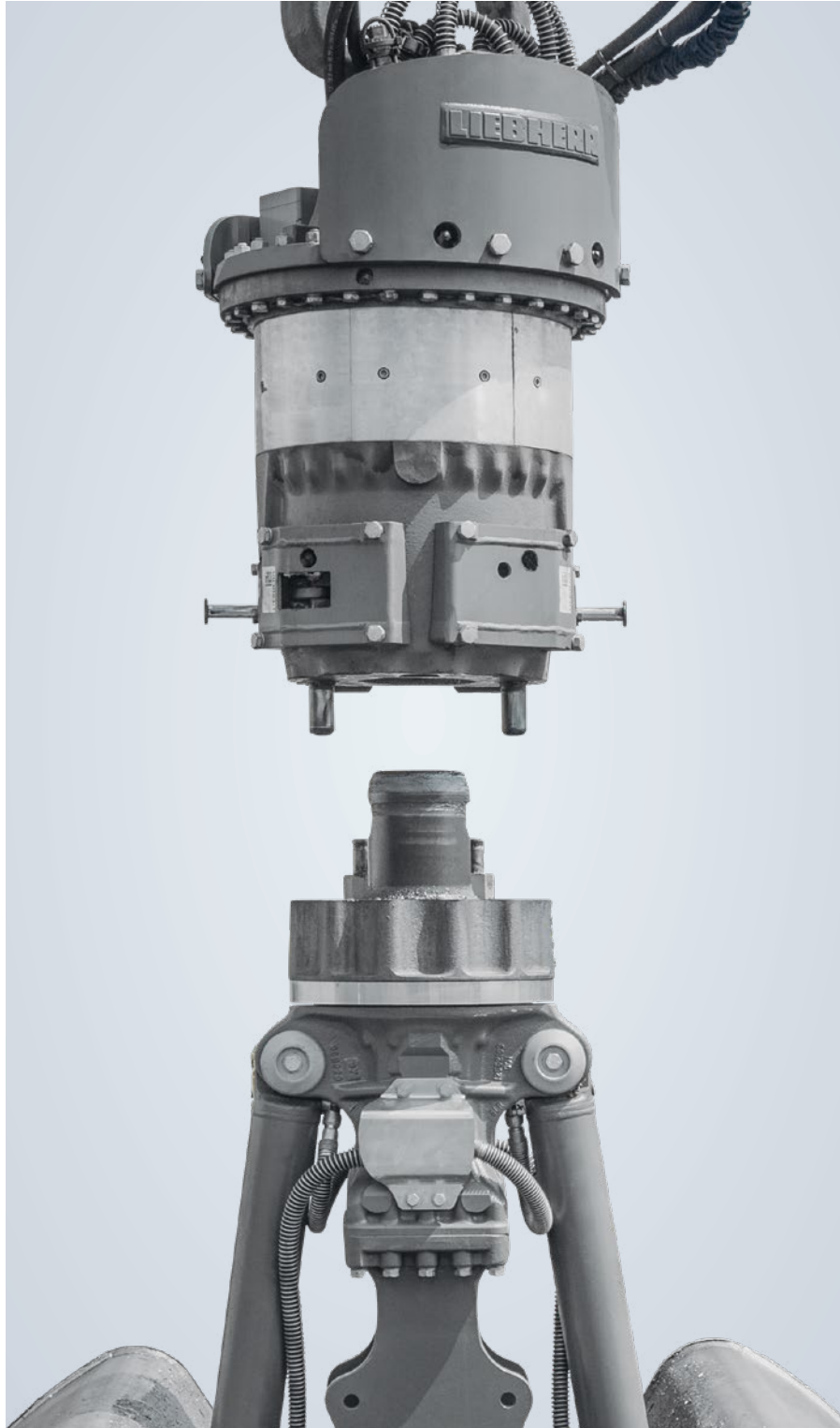
Fully automatic quick coupling system

MH 40C LIKUFIX®

Suspended quick coupling system for all mechanical, hydraulic and electric attachments on material handlers.

The machine-side upper part is equipped with an integrated rotary drive and can be used for any number of attachments with lower part (without rotary drive). This means that the suspension and the rotary drive can be saved for each additional attachment.

- Automatic connection and disconnection of the hydraulic and electric lines (up to 13 kW on the MH 40C) during the coupling process
- Efficient, safe changeover in seconds from the cab
- Very high economic efficiency, thanks to savings on the rotary actuator when using several attachments
- Maximum flexibility
- Increase in productivity by up to 30 %
- High working speed, no pressure losses and no heating of the couplings thanks to a flow rate of 300 l/min. with the MH 40C
- Spring-loaded LIKUFIX® coupling plate for long service life of the hydraulic couplings
- Easy replacement of the magnetic line thanks to easily accessible terminal box



Fully automatic quick coupling system

MH 110B LIKUFIX®

Suspended quick coupling system for all mechanical, hydraulic and electric attachments on material handlers.

The machine-side upper part is equipped with an integrated rotary actuator and can be used for any number of attachments with lower part (without rotary actuator). This means that the suspension and the rotary actuator can be saved for each additional tool.

- Automatic connection and disconnection of the hydraulic and electric lines (up to 30 kW on the MH 110B) during the coupling process
- Efficient, safe changeover in seconds from the cab
- Very high economic efficiency, thanks to savings on the rotary actuator when using several attachments
- Maximum flexibility
- Increase in productivity by up to 30 %
- High working speed, no pressure losses and no heating of the couplings thanks to a flow rate of 400 l/min. with the MH 110B (Continuous mode)
- Spring-loaded LIKUFIX® coupling plate for long service life of the hydraulic couplings
- Easy replacement of the magnetic line thanks to easily accessible terminal box



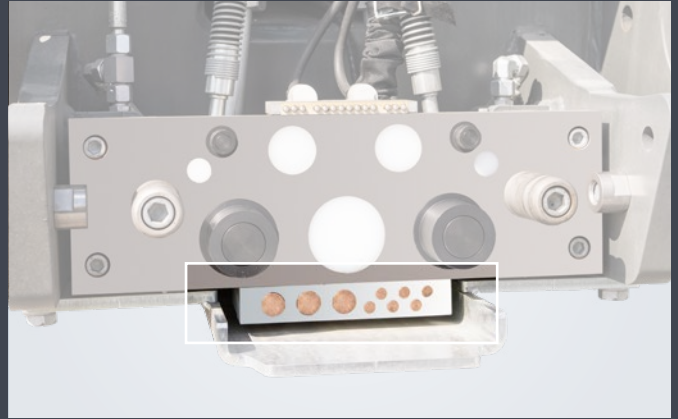
Fully automatic quick coupling system

Optional equipment

Power contacts

When operating electric attachments such as magnetic plates on handling machines, power can optionally be transmitted via the power contacts through the quick coupling systems. This eliminates the need to manually plug and unplug the electrical cables when changing attachments.

- MH 40C LIKUFIX® max. 13 kW
- MH 110B LIKUFIX® max. 30 kW
- SWA 48 LIKUFIX® max. 13 kW
- SWA 66 LIKUFIX® max. 13 kW



Deflector

The steel tube deflector protects the quick coupling system from damage during ship unloading. Available for MH 110B LIKUFIX®.

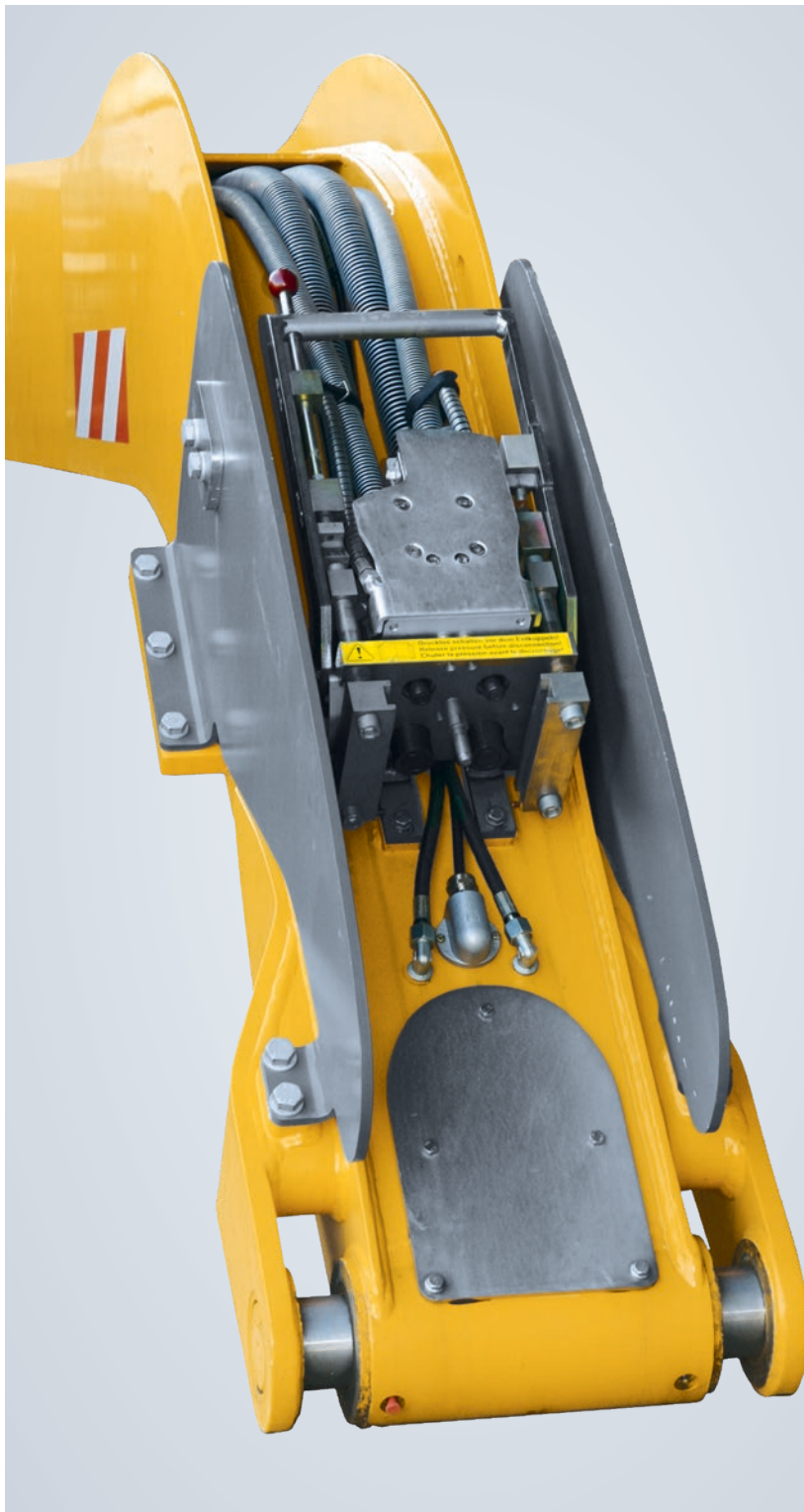


Hydraulic quick coupling system

SW industrial stick (hydraulic)

With the SW industrial stick (hydraulic), the quick coupling device is integrated in the industrial stick. The pins at the end of the stick can easily and quickly couple the tool attachment hydraulically from the cab at the push of a button. Hydraulic lines are connected and disconnected manually via screwed connections or the multi-coupling.

- Optimum payloads as no additional quick coupling adapter is necessary
- Simple and robust design for long service life and low maintenance costs
- Suitable for frequent attachment changes
- High flexibility and economic efficiency in combination with the multi-coupling



Mechanical quick coupling system

Industry SWA mechanical

When changing tools with the mechanical industrial quick coupling adapter, the tool holder is hooked into the quick coupling adapter on the machine side during tool attachment. A crank is used to manually retract the screw locking pin with internal double thread and to extend it again after tool attachment. Hydraulic lines are connected and disconnected manually via screwed connections.

- Simple and robust design for long service life and low maintenance costs
- Low purchase costs for applications with few attachment changes



Machine range

Material handling machines from Liebherr

Liebherr-Material handling machines	MH 40C LIKUFIX®	MH 110B LIKUFIX®	SW-Industriestiel (hydraulisch)	Industrie SWA mechanisch
LH 18				
LH 22				•
LH 24	•		•	•
LH 26	•		•	•
LH 30	•		•	•
LH 35	•		•	•
LH 40	•	•	•	•
LH 50	•	•	•	•
LH 50 HR	•	•	•	•
LH 60		•	•	•
LH 60 HR		•	•	
LH 80		•	•	
LH 80 HR/G		•	•	
LH 110		•	•	
LH 110 HR/G		•	•	
LH 150		•	•	
LH 150 HR/G		•		

Machine range

Material handling machines from other manufacturers

Operating weight in kg	MH 40C LIKUFIX®	MH 110B LIKUFIX®
22,000–45,000	•	
40,000–150,000		•

See operating manual for exact specification

The Liebherr Group



Global and independent: more than 70 years of success

Liebherr was founded in 1949 when, with the development of the world's first mobile tower crane, Hans Liebherr laid the foundations for a family business now employing nearly 50,000 people and comprising over 140 companies across every continent.

The parent company is Liebherr-International AG in Bulle, Switzerland, whose associates are exclusively members of the Liebherr family.

Leaders and pioneers

Liebherr is a pioneer and its forward-looking approach has seen it make important contributions to technology history over a wide variety of industries. Employees throughout the world continue to share the courage of the founder, sharing a passion to produce innovative products and a determination to provide world-leading equipment and machinery.

Diversified portfolio

The company is one of the world's biggest construction equipment manufacturers and provides high-quality, user-oriented products and services to sectors including: earthmoving, material handling, deep foundations, mining, mobile and crawler cranes, tower cranes, concrete production and distribution, maritime cranes, aerospace and transportation, gear technology and automation, refrigeration and freezing, components and hotels.

Customised care

Liebherr solutions are characterised by precision, implementation and longevity. The company is committed to technological excellence and to providing customers with solutions that match their needs exactly. That customer focus does not end with delivery of a product but continues through a comprehensive range of back-up and support services.

www.liebherr.com