

LIKUFIX

Attachment Solutions.



LIEBHERR

Increase Productivity with LIKUFIX



LIKUFIX is a hydraulic quick-change system, combined with an automatic hydraulic coupling system.

LIKUFIX is Liebherr's solution for not only making a quick change between attachments, but also making all hydraulic connections, with no need for the operator to ever leave the cab.

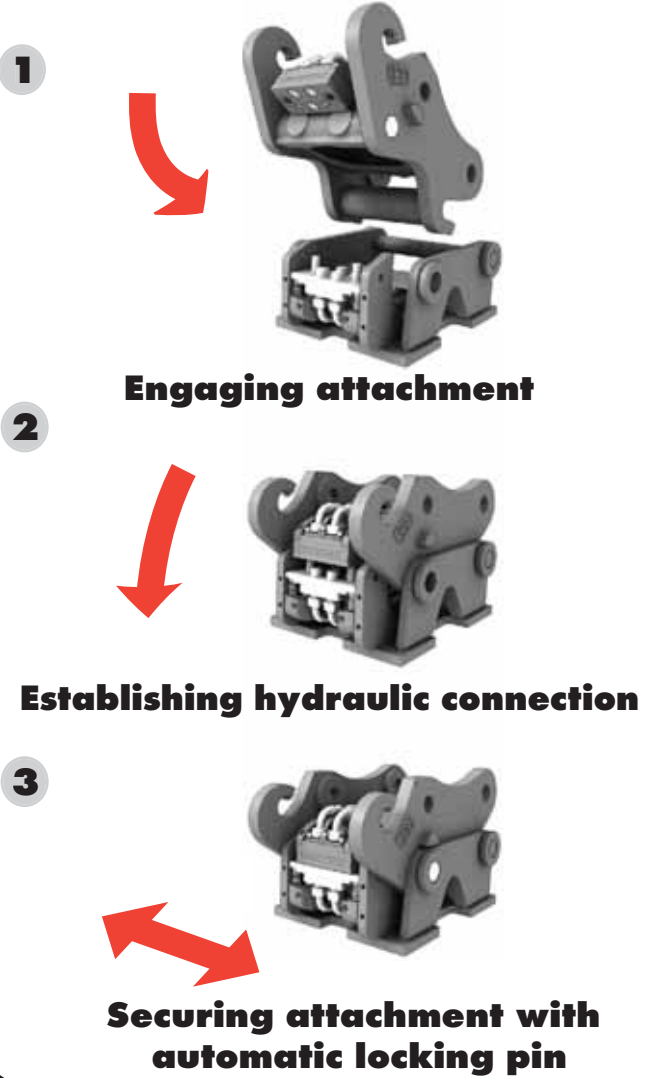
Everything is controlled with a simple press of a button by the operator while he sits in the cab. The whole process of detaching and connecting to a new hydraulic tool only takes seconds. All hydraulic connections are made automatically and utilize a hydro-mechanical seal to prevent leaks.

LIKUFIX is designed for Liebherr excavators with operating weights between 26,000 and 88,000 lbs using mechanical and hydraulic attachments with Liebherr quick coupler adapters (sizes 33 thru 77).

Advantages

- Quick exchange of hydraulic and mechanical tools.
- There is no need to remove bolts, nuts or pins.
- No strenuous pulling or installing of pins or wedges.
- Safe quick exchange of different tools from inside the cab.
- Backhoe bucket can be rotated 180 degrees to be used in front dump fashion.
- Cab is equipped with warning light and alarm that activates when using the quick coupler.
- Locking pin for the quick coupler is visible from cab.
- Liebherr Quick Change Adapter fits all new liebherr buckets and most old buckets. Competitive attachments and buckets can be adapted as well.

Coupling Procedure



Increased lift capacity

1,874 lb

+1,874 lb



All Liebherr Quick Change Adapters include two safety lift hooks or two lift eyes to attach loads to. Once the bucket is removed, lift capacities increase by the weight of the bucket (up to the maximum attachment radius).

Job Report

Industrial Application

A 934 B HD

Versatility provided by the LIKUFIX system
General Iron Industries Chicago, Illinois



Situation

General Iron Industries Inc. is a privately owned company which specializes in the recycling of scrap metal. It was founded almost a hundred years ago in Lincoln Park in Chicago, IL by Mr. Rosenmutter, and is now managed by Mark, Marilyn, and their sons Adam & Howard Labkon, the third and fourth generations of the family-run business. General Iron Industries strives to find new technologies that enable them to process scrap more efficiently.

? Task

Material frequently arrives to the yard mixed with several types of non-ferrous materials. In order to recycle the metal, operators need to sort the loads. They use a magnet to separate the steel and then use a grapple to sort the various types of non-ferrous material. Non-ferrous material often needs to be sheared into smaller pieces before being fed into the baler.

Most scrap yards use dedicated material handlers for each of these functions. General Iron would have to utilize at least two machines for every load that arrives in their yard to accomplish the basic sorting.

Adam Labkon commented that "we didn't want to buy three machines to sit around. We needed a better solution to accomplish the process efficiently."

! Solution

General Iron recently purchased a Liebherr A934B HD Material Handler equipped with LIKUFIX. LIKUFIX is an automatic hydraulic coupling system that allows the operator to quickly change tools without leaving the cab. All hydraulic connections are made automatically and utilize a hydro-mechanical seal to prevent leaks.

According to Adam Labkon, "The new machine offers a good solution for us. We can change the tools as needed, we can change from the grapple to the magnet or to the shear in about one minute depending on what we need. We even send the machine to our adjacent yard to unload railcars. We are also using it to clean and unload the railroad car with the rotating grapple."

He went on to comment, "When one of our other machines needs service we can just switch the tool on the Liebherr machine to replace the other machine while it is in service. We initially bought it to unload the trucks but now we use it for much more than that. It has exceeded our expectations."



! Performance

The LIKUFIX feature on the A934B HD offers General Iron Industries the perfect solution. It has the versatility to handle mixed loads, allows for less capital investment in machinery, and can be used to replace other machines while they are being serviced.

Technical Data

A 934 B HD Litronic Material Handler
Operating weight _____ 78,300 - 82,690 lb
Engine _____ Liebherr D 924 TI-E
Engine output ____ 197 HP (145kW) at 2000 RPM
Boom _____ 24'11"
Stick _____ 8'10"

Attachments

LaBounty RDG 60 Grapple
Capacity _____ .75 yd³
LaBounty MSD 2000R-SL Shear
Jaw Opening _____ 28in / 711mm



Job Report

Construction Application

R 914 B

The R914 uses LIKUFIX to quickly switch attachments and connect hydraulics.



Situation

Burgemeister-Bell, Inc., a family owned company currently run by Arthur Bell, III, President and Francis (Junior) Bauerlien, General Superintendent, is located in Owings Mills, Maryland. Burgemeister-Bell specializes in mechanical contracting, specifically plumbing and utility work.

Task

Burgemeister-Bell was awarded, as low bidder, the Baltimore County job to install a sewer system, a job that requires 5,000 feet of 24" sewer line. This task requires the use of several different attachments and at least two different machines to dig the hole, lay the pipe, and compact the soil. Working on narrow roads and manually switching between attachments and connecting the hydraulics is a time-consuming, inefficient process.

Solution

Junior was introduced to the LIKUFIX at Liebherr's booth during Bauma 2004 and immediately saw the advantage of this quick-coupling tool. In Dec. 2005, Junior became the first customer in the US to own and operate a Liebherr machine with the LIKUFIX attachment, saying, "Using the LIKUFIX for this job application just makes sense."

The LIKUFIX is a hydraulic quick change system combined with an automatic hydraulic coupling system, enabling the operator to change all of the hydraulic equipment from inside the cab within seconds. "I primarily use the clam-shell attachment, but I also need to switch to other attachments to finish the job. Before I needed two machines. Now on grinder pump jobs, I can just drop the clam and pick up the tank," Junior said.

Performance

The LIKUFIX allows the operator to easily switch among the roller, bucket, vibratory plate and clamshell. While Junior previously used two machines for the job, he is now able to use only one, freeing other machines for separate jobs. Junior's wife, Diane, the main operator, said, "I had to work on a site recently without my LIKUFIX machine and it just felt as if I were missing one of my tools. It's great to be back using my LIKUFIX."



The machine operates 40 hours a week and has not had a single problem with the hydraulic connections or the operation. Junior said, "You just make sure the pins are clean for a good hook-up. The hydraulics are great, I've had no problems with the LIKUFIX. It's really doing a good job."

Technical Data

R 914 B with Likufix

Operating Weig_____55,335 lbs
Engine_____Liebherr D 924 TI-E
Engine Output_____152HP
Bucket Capacity_____0.23 - 1.07 yd³



The Liebherr Quick Change System at a glance.

		Liebherr Quick Change Adapters						
		22	33	48	66	77	92	105
Liebherr Quick Change Adapters	SWA mechanical							
	SWA hydraulic							
	LIKUFIX							

Liebherr Hydraulic Excavator Models	900 C Litronic							
	904 Litronic							
	914 B Litronic							
	924 B Litronic							
	934 B Litronic							
	944 B Litronic							
	954 C Litronic							
	964 B Litronic							
	974 B Litronic							
	984 C Litronic							