

The Components of Your Success

Hydraulic cylinders for use in mobile scrap shears



Liebherr cylinders are distinguished by their high degree of stability, robustness and load bearing capacity.

Project scope

Liebherr Components has developed and produced hydraulic cylinders perfectly suited to the new generation of scrap shears from Genesis GmbH. Genesis is one of the leading manufacturers of scrap and demolition shears, based in Memmingen (Germany).

The mobile scrap shears of the Genesis GXT series are characterised by their compact design, making them ideal for use in smaller carrier machines. Despite their compact dimensions the shears show a high cutting performance. These characteristics owe much to the hydraulic cylinders, tailored to the new shear concept.

Customer benefits

Optimally tailored to the new shear series design, Liebherr has developed:

- A range of cylinders that can accommodate the high cycle speeds in operation
- Special cylinder construction with no welding seams
- A resistant hoop stress system for rod and piston

LIEBHERR

Application and product

Technical data



Hydraulic cylinders

Model	Differential cylinders
Operating pressure	Up to 380 bar
Rod diameter	150 - 330 mm
Piston diameter	230 - 510 mm
Installation length	1,073 - 2,464 mm
Stroke	559 - 966 mm

Project status

Six months after the project start in 2014, the first prototype was deployed and tested in a set of GXT-generation shears. Since 2015, a total of twelve cylinder types, based on the tried-and-tested design principle, have been successfully deployed in each model of the GXT series.

Now, the scope of delivery even extends beyond Memmingen, with Liebherr Components today also providing the parent company, Genesis Attachments LLC in Wisconsin (USA), with the newly-designed hydraulic cylinders. Security of supply is guaranteed by means of a local consignment warehouse.



Testimonial

” For the latest development of the GXT series, all components and suppliers were rigorously scrutinised. Liebherr-Components Kirchdorf GmbH won us over with their decades-long know-how in the field of construction machinery, their high-quality manufacturing process and their service provision. Liebherr’s expertise extends not only to design and development but also to production.”



Roman Pohl, Director of Operations at Genesis GmbH