

## Gradall Forklift Attachments

Gradall Forklift Attachments - The Gradall excavator was the idea of two brothers Ray and Koop Ferwerda. The excavator was established in the 1940's through WWII, when there was a scarcity of workers. Partners in a Cleveland, Ohio construction business known as Ferwerda-Werba-Ferwerda, the brothers faced a huge predicament when so many men left the labor force and joined the military, depleting available workers for the delicate grading and finishing work on highway projects. The Ferwerda brothers chose to make an equipment that will save their business by making the slope grading job more efficient, less manual and easier.

The very first excavator prototype consisted of a device with two industrial beams on a rotating platform fixed to a second-hand truck. There was a telescopic cylinder that was utilized to move the beams back and forth. This enabled the fixed blade at the far end of the beams to push or pull the dirt. Shortly improving the first design, the brothers made a triangular boom so as to add more strength. In addition, they added a tilt cylinder that let the boom turn 45 degrees in either direction. A cylinder was placed at the back of the boom, powering a long push rod to allow the machine to be outfitted with either a blade or a bucket attachment.

Gradall introduced in the year 1992, with the introduction of the new XL Series hydraulics, the most ground-breaking adjustment in their equipment ever since their creation. This new system of top-of-the-line hydraulics allowed the Gradall excavator to deliver high productivity and comparable power to the more traditional excavators. The XL Series ended the initial Gradall equipment power drawn from low pressure hydraulics and gear pumps. These conventional systems effectively handled finishing work and grading but had a hard time competing for high productivity work.

The new XL Series Gradall excavators proved a significant increase in their digging and lifting ability. These versions were manufactured along with a piston pump, high-pressure hydraulics system that showed immense improvements in boom and bucket breakout forces. The XL Series hydraulics system was likewise developed with a load-sensing capability. Traditional excavators utilize an operator to choose a working-mode; where the Gradall system could automatically adjust the hydraulic power intended for the job at hand. This makes the operator's general work easier and even conserves fuel simultaneously.

When their XL Series hydraulics came onto the market, Gradall was essentially thrust into the highly competitive market of machines designed to deal with pavement removal, excavation, demolition and several industrial work. Marketability was further improved with their telescoping boom because of its exclusive ability to better position attachments and to work in low overhead areas.