

## Attachments for Gradall Forklifts

Gradall Forklift Attachments - The Gradall excavator was the creation of two brothers Koop and ray Ferwerda. The excavator was created In the 1940's all through World War II, when there was a shortage of workers. Partners in a Cleveland, Ohio construction business referred to as Ferwerda-Werba-Ferwerda, the brothers faced a huge predicament when so many men left the labor force and joined the military, depleting existing laborers for the delicate grading and finishing work on highway projects. The Ferwerda brothers opted to make an equipment that will save their company by making the slope grading work more efficient, less manual and easier.

Their initial design model was a device with two beams set on a rotating platform which was affixed atop a second-hand truck. A telescopic cylinder moved the beams forward and backward which enabled the fixed blade at the end of the beams to pull or push dirt. Soon enhancing the first design, the brothers built a triangular boom in order to add more strength. What's more, they added a tilt cylinder which 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 enable the equipment to be outfitted with either a blade or a bucket attachment.

The year 1992 marked a crucial year for Gradall with their introduction of XL Series hydraulics, the most remarkable change in the company's excavators since their creation. These top-of-the-line hydraulics systems allowed Gradall excavators to provide comparable power and high productivity on a realistic level to conventional excavators. The XL Series ended the initial Gradall equipment power drawn from gear pumps and low pressure hydraulics. These traditional systems successfully handled grading and finishing work but had a difficult time competing for high productivity work.

Gradall's new XL Series excavators showed more ability to lift and dig materials. With this series, the models were made with a piston pump, high-pressure system of hydraulics which showed marked improvement in boom and bucket breakout forces. The XL Series hydraulics system was even developed together with a load-sensing capability. Conventional excavators use an operator to be able to pick a working-mode; where the Gradall system could automatically adjust the hydraulic power meant for the work at hand. This makes the operator's whole job easier and likewise conserves fuel simultaneously.

Once their XL Series hydraulics became available, Gradall was essentially thrust into the highly competitive market of equipment meant to deal with demolition, pavement removal, excavating as well as various industrial work. Marketability was further improved with their telescoping boom because of its exclusive ability to work in low overhead areas and to better position attachments.