

BREAKERS

Boom Mounted Hydraulic Attachments: Proper Sizing

Every effort should be made to ensure that an attachment is sized properly for both the work it will do and the carrier on which it will be mounted. Careful consideration of these factors will optimize safety, attachment life, and production rate.

The bigger the material and the longer the job, the larger an attachment needs to be, but it must not overpower the carrier on which it is mounted. A large attachment requires a large carrier and high capacity hydraulics.

On the other hand, a carrier should not be too large for the attachment. A light attachment at the end of a massive boom can easily be damaged and often bears more weight than it is designed to handle.

Gorilla Hammers supplies attachments in a wide range of sizes and capabilities. The product specifications in this manual indicate the recommended carrier weight for every attachment.

If a carrier falls within the recommended weight range, it will have the lift capacity and stability required to safely carry that attachment. Carriers that fall outside the recommended range must be carefully evaluated to ensure the maximum lift capacity is never exceeded even in the worst case situation.

SIZING ATTACHMENTS BASED ON THE MOUNTING

The way the attachment is mounted to the carrier is another factor in sizing an attachment. There are two ways this can be done.

An attachment mounted in place of a bucket is called a third-member installation. An attachment that is mounted in place of the carrier's stick is called a second-member installation.

The recommended carrier weight range for an attachment mounted as a second member is lower than for the same attachment mounted as a third member. This is because, as a second member, the attachment is mounted closer to the carrier and has less effect on the carrier's center of gravity.

In most cases, there are two or three attachments that will fit a carrier of a given weight, so choose the one that will produce the highest efficiency for the job at hand.

SIZING ATTACHMENTS BASED ON THE TYPE OF WORK

In most cases, one attachment must do a wide variety of work. Therefore, Gorilla Hammers suggests that work can be broken into three broad categories: light, medium, and severe. Material hardness, material size, production requirements, and length and duration of the project, are items that determine the type of application.

If the work involves large and hard material, high production requirements, and a project that will last for several months, we recommend using the largest attachments appropriate for the available carrier size.

Please refer to the sizing sections throughout this manual for more productivity and application information

SIZING ATTACHMENTS BASED ON HYDRAULIC SPECIFICATIONS

A carrier's hydraulic system capability must also be considered when sizing an attachment. Both pump flow and pressure must be sufficient. Some carriers come equipped with an attachment circuit that can combine the flow from two or more pumps, so that more capability can be added if necessary.

Some attachments require a second hydraulic circuit (to power a rotation motor, for example). If the required flow and pressure are not available from an existing circuit on the carrier, an auxiliary circuit may need to be installed.

At Gorilla Hammers we think it is very important to carefully choose the correct attachment for each situation.

To be effective, this process most importantly must involve our customers.

Customers have the best understanding of the extent and scope of their applications, and are ultimately responsible for the decisions that are made. Our heavy hydraulic equipment specialists are dedicated to providing expert advice and accurate information so that those decisions can be well informed.