Hydraulic Hammer adaption to excavators



Are you looking to purchase an excavator and a hydraulic hammer? In most cases you will not be able to find the hydraulic breaker and the excavator from the same supplier. Then you will try to find an excavator and a suitable hammer from different suppliers. How can you proceed to get a working machine configuration?

The key problem is: To get full performance a hydraulic hammer needs a certain volume of oil i.e. 450 liters per minute. Along with the volume you need a certain oil pressure in the hydraulic circuit. If volume and pressure are too low your hammer won't work with the appropriate performance. If the pressure is too high you may suffer from extended fuel consumption and a raised temperature in your hydraulic system as the hammer will shortcut a part of the pressure through an internal pressure relief valve to protect it from destroying.

What does that mean eventually? It is in any case required to have the excavator and the hammer in the same place and it is recommended having a qualified hydraulic engineer adapting the hammer to the machine. Primary this will cause a higher effort in logistics and engineering labor. But at the long end this is the only way to avoid losing a lot of money with a bad hammer performance or higher fuel consumption.

Some older hammers (i.e. Montabert series) require a pressure-free oil return line to tank. Even the wrong coupling sockets can have a big influence to hammer power. Important for hammer use is having an appropriate oil cooling system for the hydraulic oil. If you intend to work in a warmer environment it might be necessary to add an additional oil cooler to avoid machine stops due overheated hydraulic system.

Our recommendation: Select the excavator wherever you find a suitable machine. Transport machine to a hydraulic hammer supplier with qualified technicians for adapting the hammer to machine. Don't purchase a hammer that has not been tested with the machine.

In many cities the work with noise emitting machines is already restricted. It might be required to use a hydraulic hammer with a noise reduction.

For larger hydraulic breakers it might make sense using an automatic greaser to make sure the chisel is well greased all time.

Adapting a hammer to an excavator with a quick coupler makes sense as long you use a vibration and wear resistant coupler. Some couplers such as the Verachtert brand have a good name for it.

The most common brands for hammers are Atlas Copco, Caterpillar, Euroram, Furukawa, JCB, Krupp, Montabert, NPK, and Rammer. There are more suppliers in the market but finally the internal of most hammers comes from not more than 4 international factories.