

## Hydraulic Hoses

It is pertinent to mention some details concerning hydraulic hoses.

Very few people are aware hoses have a warranty period, from the date the hose was manufactured. The manufacturing date is indicated by a code, 3Q20. 3Q denotes the hose was manufactured in the third quarter, and the 20 indicates the year 2020. A hose without a date stamp should not be used. The warranty period for hydraulic hoses is five years. If hoses are not replaced by the end of the warranty period, and a hose fails and injures a person, the injured party may open a lawsuit against the company. Remember, the period the hose is in commission is taken from the date stamp on the hose, and not the date the hose was installed on the equipment. All hoses have to have the manufacturing company name appearing on the hose, plus the maximum working pressure stamped on the hose and the manufacturing countries safety code on the hose. There are manufacturers that do not have any inscription on their hoses, it is dangerous to use unmarked hoses.

A highly dangerous practice regarding hoses. If a hose has burst, some companies, to so called save on the price of a new hose, cut off the damaged section and crimp on a new fitting. This is a very dangerous practice and must not performed.

There are machine shops owners that make fittings for hoses, but are unaware of the research that has gone into the manufacturing process. These manufacturers copy steel fittings, unfortunately they are not aware of the type of material used. Consequently, when fittings are crimped onto the hoses, "hair-line cracks" from time to time appear on the steel sleeves. It goes without saying, it is a highly dangerous practice to use fittings that do not conform to the correct steel standard. All fittings must have the manufacturers name stamped on the fittings.

When hoses have to be made-up for a system, some hose suppliers use an acetylene cutting torch to remove the old sleeve, then use the old insert for the new hose, and only use a new sleeve. Once a hose fitting has been crimped, the sleeve and the insert are not to be used again. The crimping process will have deformed the steel sleeve, so the tolerances will not be up to the correct specification.

Once hoses have been made up, i.e. with the swaged fittings, hoses have to be pressure tested to twice the stated pressure on the hose, to verify the integrity between the hose and the fitting. Not as some may think to test the hose. All hoses which have been pressure tested, must be supplied with a number tag on the hose and a test certificate. The burst pressure of hydraulic hoses is generally four times the stated working pressure on the hose.

Hoses have to be cleaned and capped when delivered to the client.