



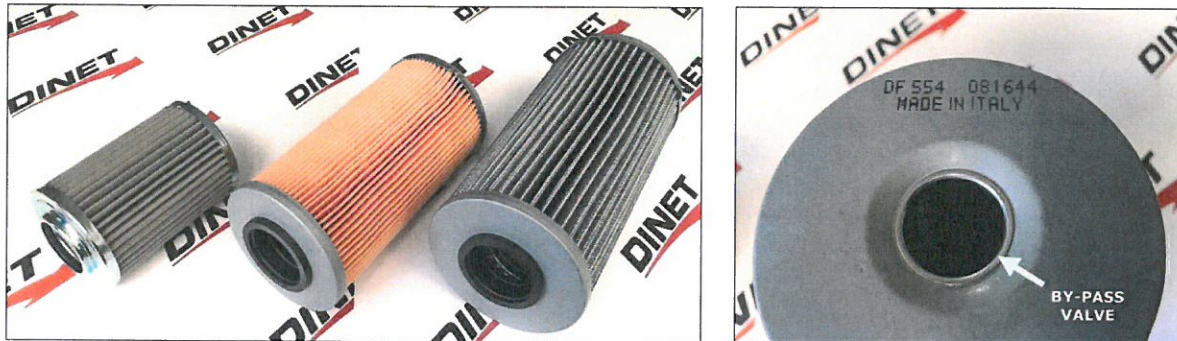
## NOTICE TO OUR CUSTOMERS

# DINET OIL FILTERS for Voith and ZF gearbox

The Oil Filter is a vital component for the correct operation of the gearbox and for the duration of all its internal components.

For this reason, we want to inform our customers that the quality of the oil filters produced by Dinet for Voith and ZF gearbox has been further improved.

**The Oil Filters supplied by Dinet are manufactured in Italy.**



The function of the filter is to purify the oil of the gearbox by retaining the residuals produced by the wear of the internal components during their operation.

A "clean" oil lengthens the life of the gearbox, while a "dirty" oil drastically reduces its durability.

A good quality filter uses filter materials (paper, microfiber) with the ability to retain impurities of very small size (a few microns). A poor quality filter, however, retains only the larger particles, leaving the smaller ones to pass.

The manufacturers prescribe well defined time intervals for the replacement of filters because, while retaining impurities, the filters become progressively clogged. A quality filter maintains its filtering capacity throughout the time interval prescribed by the manufacturers. On the contrary, a poor quality filter stops filtering long before the expected time for its replacement, in other words it has a much shorter life. This is mainly due, in addition to the quality of the filtering material, to the calibration of the by-pass valve on the filter.

The by-pass valve is a kind of safety valve, normally closed, consisting of a spring plate that opens when the filter is clogged excessively. Without this valve the pressure that is created due to the clogging could lead to the explosion of the filter. The standard intervals for replacing the filters are defined by the manufacturers in order to avoid that, due to the clogging of the filter, the safety valve will open before the moment of its replacement.

With open valve, in fact, the oil would pass through the valve and no longer through the filter and therefore the impurities would no longer be retained by the filter.

The new generation filters are reinforced with a wire mesh to increase their pressure resistance; on these filters the by-pass valves are calibrated to higher clogging pressures and the standard replacement intervals prescribed by the manufacturers are longer.

**We want to make our customers aware that most of the low-cost filters on the market are poor quality filters. The filter materials used retain less particles and are less resistant to clogging pressure. For this reason, the by-pass valves are calibrated at very low pressures and then open a long time before the time prescribed by the manufacturers, leaving in fact the gearbox WITHOUT a filtering organ from that moment until the filter is replaced.**