
The present invention is an indigenously designed and developed 6 types of high performance hydraulic and lube filters for Light Combat Aircrafts. The hydraulic system of such Aircrafts operates at 280-bar pressure and provides power for quadruplex digital flight control system and aircraft utility services. The filters of the present invention have a mesh sizes in the range of 10 to 25 micron. Filters are used in pressure, return and drain lines, to ensure supply of clean oil to the system components for their reliable operations as per NAS (class-1) cleanliness level.

These filters have a higher filtration rating (β_{100}) and operate at -54 °C to 135 °C temperature conditions. Filters have been provided with unique by-pass valve & automatic shut-off valve arrangement, visual clogging indicator with manual reset and excellent resistance to flow fatigue. Filters developed are qualified for aircraft applications, in conformity with requirements of MIL-F-8815D standard.

These filters have been approved in the year 1999 for fitment in aircraft by CEMILAC and DGAQA and all the LCA-Tejas aircrafts are fitted with these filters. The filters have also been incorporated in the hydraulic systems of MBT-Arjun, Kaveri Engine and for ALH winch.

Military and Commercial Aircraft, Spaceships, Marine Ships & Submarines, Automobiles.