Base Oil Manufacturing Technology

Base Oil is the name given to lubrication grade oils initially produced from refining crude oil (mineral base oil) or through chemical synthesis (synthetic base oil). Early processes such as acid treating and solvent extraction removed some or most of the worst molecules from the feedstock of base oil to improve the quality of base oils. Later catalytic ration processes like hydrotreating, hydrocracking, catalytic dewaxing, and wax hydroisomerization transformed feed molecules into molecules with improved base oil qualities. Especially, modern wax hydroisomerization enables the manufacturing of base oils with white oil grade.