

### IPOL QUENCHING OILS

Heat treatment of ferrous materials helps improve their properties. This is achieved by heating these materials to their critical temperatures and suddenly cooling them by quenching in fluids e.g. water, oil etc. The use of water because of its higher thermal conductivity usually results in surface cracks and therefore mineral oils with their lower cooling rates are preferred. The use of mineral oil also prevents rusting of metal parts giving better dimensional accuracy. Quenching oils are marketed in various grades to cover a wide range of quenching requirements.

**IPOL QUENCHING OIL 32 X** is a general purpose quenching oil having low volatility and inherent oxidation stability.

**IPOL QUENCHIG OIL 32 XC** is accelerated quenching oil with special polar additives to give higher hardness during prolonged service.

**IPOL QUENCHING OIL 32 XL** is having low volatility and inherent thermal stability. It meets IS 2664/93 medium requirements and has offered a quenching time of 19.8 Secs. in one of the results reported by IIP Dehradun.

**IPOL QUENCHING OIL 100 XX** is high viscosity quenching oil suitable for systems without cooling facilities.

**IPOL QUENCHING OIL 150 XXX** is a marquench meeting IS: 4543-1980 (reaffirmed in 1987)

**IPOL QUENCHING OIL 320 XXX** is high viscosity quenching oil with a high flash point suitable for quenching articles in a quenching tank without circulation system. This product can also be used for tempering purposes.

## Product Data

**IPOL QUENCHING OILS** offer the below mentioned **B E N E F I T S** :-

1. They have low volatility and therefore requires less make-up
2. The right viscosity is selected to give minimum distortion to the quenched material
3. They have high thermal stability, which helps in increasing oil change periods.

### TYPICAL INSPECTIONS OF IPOL QUENCHING OILS:

Characteristics	Test Method	32 X	32XC	32XL	100 XX	150 XXX	320 XXX
Appearance	Visual	Yellow	Bright & Clear				
Density @15°C	D-1292	0.880	0.880	0.90	0.890	0.892	0.895
Flash Point COC°C	D-92	200	195	200	220	246	250
Viscosity cSt @40°C	D-445	32	32	30	150	167*	350**
Viscosity Index	ASDM 39 B	90	90	90	90	98	90
Conradson Carbon	IS 1448 P: 122	0.08	0.2	0.08	0.31	0.25	0.38

\*Viscosity cSt @100°C is 16

\*\* Viscosity cSt @100°C is 24.6

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