



### POWER QUENCH SUPER 20 SUPERIOR HEAT TREATMENT OIL

**POWER QUENCH SUPER 20** is a low viscosity accelerated quenching oils. & product is blended from selected Low sulphur base stocks having excellent oxidation and thermal stability & Low volatility. The high quenching rate of the oil is imparted by using a special additive pack in the product.

**PERFORMANCE STANDARDS:** BIS: 2664-1980

#### APPLICATION:

- **Power Quench Super 20** is fortified with special additive, which imparts accelerated quenching characteristic to the oil and make it suitable for quenching of high-speed tools, ball bearing, Rollers & Pins, Nuts & Bolts, Coil Springs & Crown Wheel & Pinions
- **Power Quench Super 20** is used in many critical applications where precision and uniformity of heat treatment are important

#### PERFORMANCE BENEFITS:

FEATURES	BENEFITS
High and uniform/constant rate of cooling	Improved as quenched hardness. Deeper & More uniform hardening , High Tensile Strength in Carburized steel, improved toughness in carbon steel
Suitable viscosity at operating temperature	Ensures proper Quenching and reduces carry over losses & ease of cleaning at post quenching operation
Low volatility at operating temperature	Minimizes the loss due to evaporation
Slow cooling / Low rate of heat transfer in the final stage	Minimises the cracking & distortion of quenched part
High Thermal & Oxidation Stability	Reduces the Sludge formation , minimizes the oil thickening resulting in extended oil life

Disclaimer: APAR makes no warranties, representation or conditions of any kind expressed or implied for use with respect to these products. Final determination of suitability of the products for the application contemplated by the user is solely their responsibility.



### Test Characteristics of Apar Power Quench Super -20

Properties	ASTM Test Methods	Specification	Typical Values
Appearance	Visual	Dark Liquid	Dark Liquid
Colour	D-1500	D 8.0	D 8.0
Density @29.5 Deg C	D-1298	To Report	0.832
Viscosity @ 40 Deg C, cSt	D-445	17.00 – 20.00 cSt	19.0
Viscosity Index	D-2270	+ 95 Min	120
TAN mg KOH/gm	D-664	0.2 Max	0.1
Flash Point Deg C (COC)	D-92	180(Min)	190
Pour Point Deg C	D-97	- 6 max	Below – 15
Moisture ppm	D-1744	100 Max	40

### IVF QUENCHOMETER COOLING CURVE DATA OF APAR POWER QUENCH SUPER-20

Sr No	PARAMETER	UNIT	ASTM METHOD	TYPICAL VALUE
1	Maximum Cooling Rate	Deg C/ Sec	D-6200	108.0
2	Temperature at Maximum Cooling rate	Deg C	D -6200	623.5
3	Cooling Rate @ 300 Deg C	DegC/Sec	D-6200	5.57
4	Time to reach 600 Deg C	Sec	D-6200	6.05
5	Time to reach 400 Deg C	Sec	D-6200	9.53
6	Time to reach 200 Deg C	Sec	D-6200	41.25

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