

## PARTHAN EE RANGE HP ENERGY EFFICIENT GEAR OILS

## **SPECIAL FEATURES**

Superior quality extreme pressure type industrial lubricating oils for gears & bearings operated under very heavy & shock load conditions, particularly in the temperature range upto 107°C.

HPCL PARTHAN EE Series are energy efficient variation of the regular PARTHAN EP series to assist n reducing the energy consumption & also wear thereby resulting in considerable savings for an industrial application.

## **SPECIFICATIONS**

Meets IS 8406: 1993, USS 22, AGMA 250.04, DIN 51517 Part 3 and IPSS I-09-003-97

## **PHYSICO-CHEMICAL PROPERTIES**

|   | 220 EE                 | 320 EE                 | 460 EE                 | 680 EE                 |
|---|------------------------|------------------------|------------------------|------------------------|
| Appearance                                    | Dark                   | Dark                   | Dark                   | Dark                   |
| Density @ 29.5°C, g/cc                        | 0.896                  | 0.899                  | 0.901                  | 0.903                  |
| Flash Point, COC, °C                          | 220                    | 220                    | 230                    | 230                    |
| Corrosion Cu STRIP @100°C, 3 hrs              | 1                      | 1                      | 1                      | 1                      |
| Pour Point, °C                                | -9                     | -9                     | -6                     | -3                     |
| Emulsion @ 82°C, 30 Min 60 Min                | 40-40-0                | 40-40-0                | 40-40-0                | 40-40-0                |
| Foam Test Seq I Seq II Seq III                | 100/0<br>50/0<br>100/0 | 100/0<br>50/0<br>100/0 | 100/0<br>50/0<br>100/0 | 100/0<br>50/0<br>100/0 |
| Rust Test A / B                               | Pass                   | Pass                   | Pass                   | Pass                   |
| Viscosity ดิ 40°C, cSt                        | 210-230                | 300-340                | 440-475                | 625-700                |
| Viscosity Index                               | 90                     | 90                     | 90                     | 90                     |
| Four Ball Weld Load, kg                       | 315                    | 315                    | 315                    | 315                    |
| FZG, A/8.3/90, Pass                           | 12                     | 12                     | 12                     | 12                     |
| Demulsification Water In Oil % Free Water, ml | 1.0<br>80              | 1.0<br>80              | 1.0<br>80              | 1.0                    |
| Emulsion                                      | 1.0                    | 1.0                    | 1.0                    | 1.0                    |