GEAR OILS

Gear Oils
Special Oil ART-220, -320, -460, -680
TS U 23.2-36451680-166:2011

Structure

Made on the basis of solvent-refined mineral petroleum oil. Contain additives to improve lubrication, anti-wear, anti-corrosion and anti-oxidation properties.

Application area

Gear oils **Special Oil ART** series is designed for all types of gears, worm and helical gears lubrication of various industrial equipment: metal and woodworking machines, hammers, presses, casting and molding machines, winches, rolling mills, overhead cranes, conveyors, elevators, lifts, rotary kilns, calenders, paper manufacturing equipment, coal combines, textile and spinning machines and other equipment that cannot use oils without additives because of high loads.

Key performance properties

- typical fretting wear resistance (*reducing of the gear teeth wear, operating costs reducing, machines performance and life cycle increasing*);
- improved resistance to high-temperature decomposition *(increasing the lubricant service cycle with lower costs, reducing planned downtime and maintenance reduction due to minimal sludge and deposits*);
- steel surfaces' protection from corrosion;

Physical and chemical properties

Properties	**Special Oil ART**				**Test Method**
The oil comply with the international classifications : ISO VG **DIN 51517.3**	**220 CLP**	**320 CLP**	**460 CLP**	**680 CLP**	
1. Kinematic viscosity, mm^2/sec, not less than: at (+40)°C	200-240	300-340	430-490	650-710	GOST 33
2. Viscosity index, not less than	100	100	100	100	GOST 25371
3. Acid number, mg KOH per 1 g of oil, not more than	0,05	0,05	0,05	0,05	GOST 5985
4. Water mass fraction	traces				GOST 2477
5. Mechanical impurities mass fraction	0,015	0,015	0,02	0,02	GOST 6370
6. Coking tendency, %, not more than	0,8	1,0	1,0	1,0	GOST 19932
7. Open cup flash point, °C, not lower than	230	240	240	250	GOST 4333
8. Pour point, °C, not higher than	-18	-15	-15	-12	GOST 20287
9.Sulfur mass fraction, %, not more than	0,5	0,5	0,5	0,5	GOST 1437-75
9. Density at +20°C, kg/m^3, not more than	910	910	915	920	GOST 3900
10. Oxidation stability, not more than -viscosity change at 40°C, % -acid number change, mg KOH/g	3 0,15	3 0,15	3 0,15	3 0,15	GOST 981
11. Metal corrosion in the oil	Pass				GOST 2917
12. Color on colorimeter CNT with mixing 15/85, units CNT, ot more than	4,0	5,0	5,0	6,0	GOST 20284
13. Tribological properties: - fretting wear, N, not less than - wear scar diameter, mm, not more than	490 0,5	490 0,5	490 0,5	490 0,5	GOST 9490

Guaranteed storage: 3 years after manufacturing.