M-D Pneumatics® Synthetic Oil

For Positive Displacement Blowers & Boosters

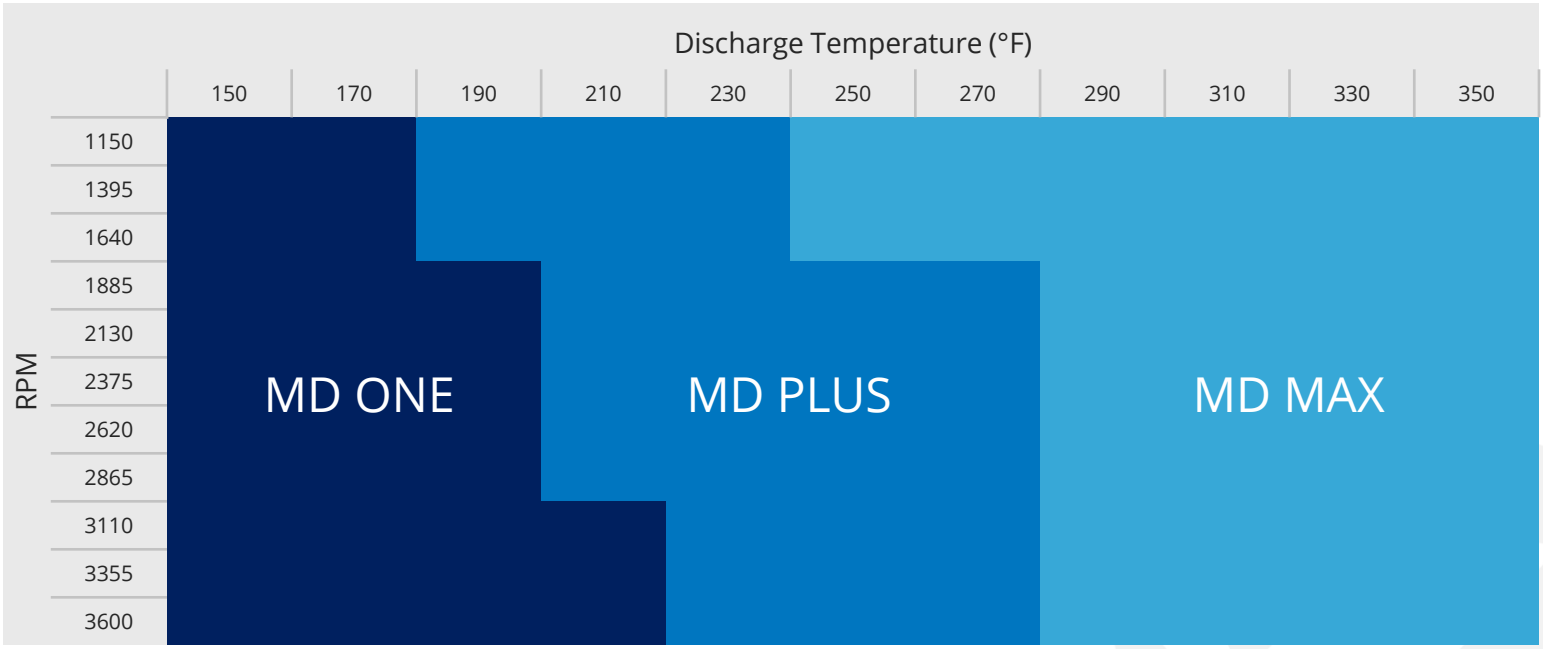
MD synthetic oil is the line of OEM lubricants recommended by M-D Pneumatics for use with their positive displacement blowers and Kinney boosters.

MD oil is a full synthetic lubricant blended from synthetic hydrocarbon polyalphaolefin (PAO) to ensure maximum performance and oil life. This base oil provides a greater thermal oxidative stability and high viscosity index for greater film strength at high temperatures and decreased viscosity at low temperatures for minimal friction and better lubrication.

- PAO synthetic base fluid allows oil to demulsify water in high humidity and water conditions.
- Better rust and corrosion protection for increased equipment life and the highest 1A rating for copper corrosion under ASTM D130.
- Formulation of anti-wear and anti-foaming additives are specifically designed to prolong the life of positive displacement blowers and boosters.
- Low coefficient of dynamic friction substantially reduces power consumption by minimizing gear and bearing friction.
- MD full synthetic lubricants can last up to 5 times longer than mineral oil and twice as long as semi-synthetics, meaning fewer oil change intervals, reduced down time and greater cost savings.

MD ONE	Designed for standard service in any environment or application.
MD PLUS	Provides better thermal and oxidation stability at higher temperatures.
MD MAX	Provides the highest protection against maximum operating temperatures for blower and booster applications.

RECOMMENDED OIL BY OPERATING CONDITIONS



MAINTENANCE INTERVALS

New blowers typically ship dry from the factory and require an initial oil fill prior to startup. Oil should then be changed after the initial 100 hours of operation. Refer to your blower manual for specific manufacturer recommendations.

Normal life expectancy of synthetic oil is approximately 6000 hours with an oil temperature of 180°F (82°C). M-D Pneumatics claims these MD lubricants have a life expectancy of 8000 hours with an oil temperature of 220°F (104°C).

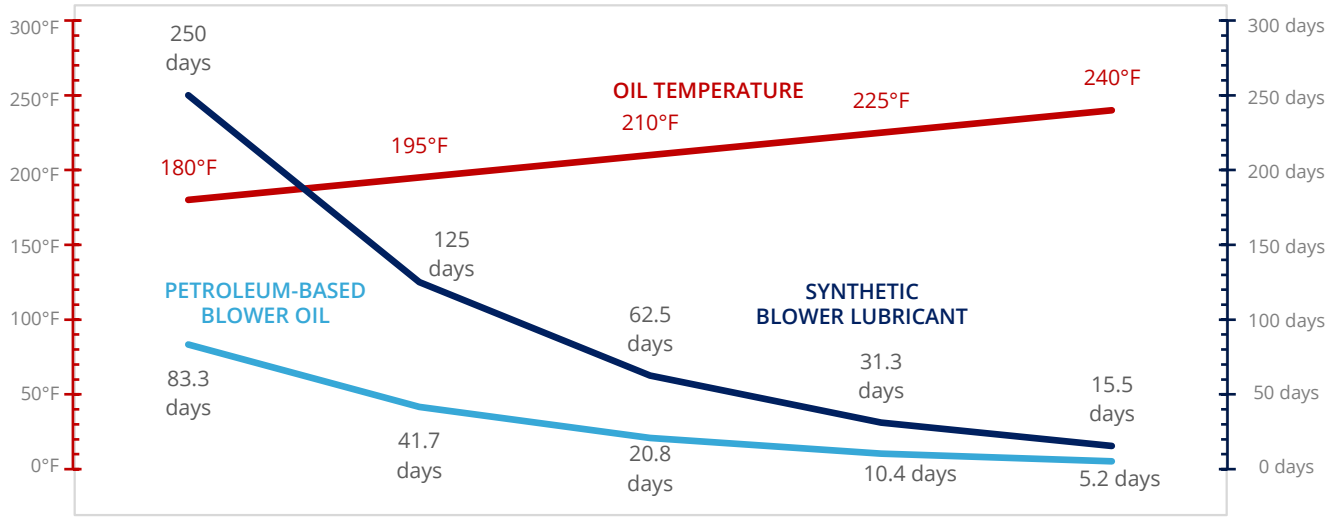
As the oil temperature increases by increments of 15°F (8°C), the life is reduced by half. For example, an oil temperature of 195°F (90.5°C) will produce a life expectancy reduced by half or 3000 hours oil service life.

The oil temperature may be estimated by multiplying the discharge temperature of the air or gas stream by 0.8. As an example, if the discharge air temperature of the blower is 200°F, it is estimated that the oil temperature is 160°F.

PARTS	MD ONE	MD PLUS	MD MAX
Quart	33327 16444-MD1-Q	33328 16444-MD2-Q	33329 16444-MD3-Q
Gallon	33327.B 16444-MD1-G	33328.B 16444-MD2-G	33329.B 16444-MD3-G
5-Gallon Pail	33327.C 16444-MD1-5G	33328.C 16444-MD2-5G	33329.C 16444-MD3-5G
55-Gallon Drum	33327.D 16444-MD1-B	33328.D 16444-MD2-B	33329.D 16444-MD3-B

PROPERTIES			
Viscosity Index	150	154	157
cSt @ 40° C	99.1	231.7	340.9
cSt @ 100° C	14.4	27.6	37.2
Flash Point °F	510	480	491
Pour Point °F	-44	-49	-54

OIL TEMPERATURE VS OIL LIFE



These guidelines are based on typical performance. Contact pdblowers if you have questions about your specific application.

FOOD GRADE OIL

MD oil is also available in a food grade formulation approved by the CFIA and USDA that meets H1 requirements (FDA 21 CFR 178.3570) for lubricants with incidental food contact. MD FG is also Halal Certified by the Islamic Food and Nutrition Council of America.

PROPERTIES	
Viscosity Index	150
cSt @ 40° C	99.1
cSt @ 100° C	14.4
Flash Point °F	510
Pour Point °F	-44

PART NUMBERS	
Quart	33330 16444-MD1-Q-FG
Gallon	33330.B 16444-MD1-G-FG
5-Gallon Pail	33330.C 16444-MD1-5G-FG
55-Gallon Drum	33330.D 16444-MD1-B-FG