

SS-100, PS-100, FO-100

VACUUM PUMP OILS

The difference between a successful application and an unsuccessful one is often determined by the quality of the oil used in the pump.

All Becker U-Series pumps are designed to operate with an SAE 30 wt. (ISO 100) non-detergent oil. There is, however, a vast difference in the quality of oils available on the marketplace. This difference is a result of the refining of the oil, and the additives that are mixed with the oil to meet the requirements of the process or machinery in which the oil is to be used.

Vacuum pumps, by their nature, can remove some of these additives through distillation, leaving behind a sludge that can harm the pump. It is, therefore, important that we use an oil that has a minimum of additives, and one that has been refined to a greater degree than "motor oil".

Becker Vacuum Pump Oils offer a higher level of quality than most readily available oils. Our standard oil—the one we recommend for normal applications—is the **SS-100**. This is a highly refined, thermally treated, de-waxed, semi-synthetic blend that has exceptional stability against oxidation and sludging. It has a very low vapor pressure, and an excellent viscosity index.

Our **PS-100** is our premium oil, and the oil we recommend for the majority of severe applications. This is a full synthetic, P-A-O (polyalphaolefin) blend

that gives outstanding performance in a wide range of operating conditions: from very cold temperatures to very hot temperatures. It is formulated with rust and oxidation inhibitors, and has a very low vapor pressure. This oil has excellent resistance to chemical degradation, and often permits longer intervals between oil changes*

Occasionally, pumps operate well beyond the

recommended oil change intervals, resulting in a buildup of carbon deposits and sludge. When this happens it is often necessary to flush the pump out with solvents designed to dissolve the deposits. Becker **FO-100** Vacuum Pump Flushing Oil is expressly designed for this purpose, while providing essential lubrication to permit the operation of the pump while the vacuum pump is still on process. Use of the

FO-100 flushing oil often removes the requirement for total pump disassembly and cleaning, except in more severe cases.

We are so confident in the quality of our oils, we proudly grant a full *1 year* extension of the warranty period of our pumps and central systems when Becker Vacuum Pump Oil, SS-100 or PS-100, is used throughout the full warranty period.

All three oils are available in 1 quart bottles, 1 gallon bottles, and 5 gallon pails. The SS-100 and PS-100 oils are also available in 55 gallon drums.



Becker Vacuum Pump Oils

* Actual oil change interval to be determined by oil testing and analysis.



SS-100 Semi-Synthetic Vacuum Pump Oil

<u>Viscosity</u>	<u>Cst</u>
@100°F	120.8
@210°F	12.5
@40°C	108
@100°C	12.0

Viscosity Index	100
Flash Point	510°F (266°C)
Pour Point	10°F (-12°C)
Specific Gravity	0.864
Vapor Press.@100°F	3.2 x 10 ⁻⁵
Vapor Press.@200°F	1.3 x 10 ⁻⁴

SS-100-Q:	Quart Bottle
SS-100-G:	Gallon Bottle
SS-100-P:	5 Gallon Pail
SS-100-D:	55 Gallon Drum



PS-100 Premium Synthetic Vacuum Pump Oil

<u>Viscosity</u>	<u>Cst</u>
@100°F	119.2
@210°F	13.76
@40°C	106.8
@100°C	13.4

Viscosity Index	123
Flash Point	510°F (266°C)
Pour Point	-55°F (-48°C)
Specific Gravity	0.85
Vapor Press.@100°F	8.4 x 10 ⁻¹²
Vapor Press.@200°F	1.0 x 10 ⁻⁶

PS-100-Q:	Quart Bottle
PS-100-G:	Gallon Bottle
PS-100-P:	5 Gallon Pail
PS-100-D:	55 Gallon Drum



FO-100 Vacuum Pump Flushing Oil

<u>Viscosity</u>	<u>Cst</u>
@100°F	92.39
@210°F	8.41
@40°C	81.26
@100°C	8.18

Viscosity Index	54
Flash Point	490°F (254°C)
Fire Point	530°F (276°C)
Specific Gravity	0.95

FO-100-Q:	Quart Bottle
FO-100-G:	Gallon Bottle
FO-100-P:	5 Gallon Pail