

Technical Data Sheet:

Pro-Roll™ Food Grade Grease is specifically formulated utilizing an overbased calcium sulfonate thickener along with other permitted ingredients such as anti-oxidants, and extreme pressure and anti-wear additives to improve pellet mill roll shell performance. **Pro-Roll™** outperforms other industrial food grade greases such as Schaeffer 195 Supertac FG H-1 in areas such as drop point, kinematic viscosity, 4-Ball EP Load, and water washout. **Pro-Roll™** also performs highly on worked penetration. **Pro-Roll™** is NSF H1 approved which allows for incidental food contact. Jacobs is the only company that will guarantee to supply you grease with the same or better performance results today and in a year from now, we will not change formulation for lower cost or supply chain reasons.

Grease Comparative Specifications			
Grease Type	Jacobs Pro-Roll	Schaeffer 195 Supertac FG H-1	Testing Standard
Product Number	125146		
Color	White		
Texture	Smooth, Tacky		
Thickener, % type	Overbased Calcium Sulfonate	Aluminum Complex	
NLGI Grade	2	2	
Worked Penetration	265-295	265-295	ASTM D 217
Change in Pen after 100,000 strokes	<20		
Roll Stability, % change	<3%	9.3%	ASTM D 445
Drop Point, °F	550+	510	ASTM D 2265
Viscosity @ 40°C, cSt	228+	95-150	ASTM D 445
Viscosity @ 100°C, cSt	19.6	10.0-13.0	ASTM D 445
Viscosity Index	98	108	ASTM D 2270
4-Ball EP Load, Kg	620	400	ASTM D 2596
Timken OK load, lbs	60	45	ASTM D 2509
Water washout @ 175°F, % wt	2	7.7	ASTM D 1264
Copper Corrosion	Pass	Pass	ASTM D 4048
Rust Test	Pass	Pass	ASTM D 1743

Work penetration measures grease consistency. The grease consistency refers to the resistance to deformation by an applied force. Drop point refers to heat resistance of grease, it sets the upper temperature limit where grease retains its structure. When grease temperature increases, the grease liquefies and dripping may occur. Provided above is a technical data sheet that illustrates how Pro-Roll performs when compared to your current grease.

Pro-Roll Benefits:

- Less run out: saves money
- Lower bearing temperatures improves bearing life
- Superior rust resistance

Pro-Roll leaves the bearings coated in grease. These bearings can be re-used!



Preventive Maintenance	Daily
Lubrication	
Inspect grease system	X
Lubricate rollers if manually	Every 4 hours
Purging	
Purging Frequency	8

Testing Standard	Comments
Thickener	Sponge like that holds base oil and additives together
Work Penetration	Grease consistency measurement. 265-295 is for common grease. The higher the value the softer the grease consistency
Drop Point, °F	Upper temperature limit where grease retains its structure before liquefying. The higher the value the better.
Kinematic Viscosity @40°C & 100°C cSt	Indication to how resistant the grease is to flow and shear under an applied force at a given temperature.
Viscosity Index	Kinematic viscosity variation. Higher values indicate less change on viscosity which in return is a better grease.
4-Ball EP Load, Kg	Indication to how resistant to spalling. The higher the value the better as there is more load caring capacity.
Timken Ok load, lbs	Similar to 4-Ball EP Load, higher values means more load caring capacity.
Water Washout @ 175°F, % wt	Percentage of grease leaving due to steam and product moisture. It is best to have low percentages as less washout is occurring which means longer lasting seal.

Case Study:

A case study was conducted under the assumption that lower quality grease have a higher percentage of water washout. This means higher amount of grease will be used to keep roll shell assemblies well lubricated.

High Quality Grease: \$700/120lb keg = \$5.83/lb	Consume less grease per day	30lb/day*\$5.83/lb*365day/year = \$63,838/year
Low Quality Grease: \$560/120lb keg = \$4.67/lb	Consume more grease per day	40lb/day*\$4.67/lb*365day/year = \$68,182/year

