# Scan-Pac Mfg.

## Product Data Sheet

## Brake Lining Material: RF12

**PRODUCT DESCRIPTION:** **RF12** is an extremely low coefficient of friction material featuring a very high graphite content.

**APPLICATION:** **RF12's** primary application is as a snubber block on shovel and dragline sets. It is sometimes used as a low friction material on tensioning devices with cast iron mating surfaces.

### PHYSICAL PROPERTIES

| | |
|---|---|
| Tolerance and Size Data | |
| Blocks – Thickness 1/8" to 2 1/2" - To 3/8" | +.000/-.020" |
| - Over 3/8" | +.000/-.030" |
| - Width - To 6" | +/-1/32" |
| - 6" to 8" | +1/32"/-1/16" |
| - Over 8" | +1/32/-1/8" |
| Flat Sheet Size and Thickness - 20" X 20" | up to 1 1/2" |
| - 12 3/4" X 15" | up to 2 1/2" |
| To 3/8" Thick | +.000/-.020" |
| Over 3/8" Thk. | +.000/-.030" |
| Facing – Thickness - To 3/8" | +.000/-.020" |
| - Over 3/8" | +.000/-.030" |
| OD - To 12" | +/-1/32" |
| - Over 12" | +/-1/16" |
| ID - To 12" | +1/16"/-.000 |
| - Over 12" | +1/8"/-.000 |

### MECHANICAL PROPERTIES

| | |
|---|---|
| Specific Gravity (SAE J380) | 2.00-2.25 |
| Gogan Hardness (SAE J379A) | 15-35 |
| Tensile Strength, psi (ASTM D638) | 2500psi min. |
| Modulus of Rupture (ASTM-D790) | 3200psi min. |

## FRICTION PROPERTIES RF12

| | |
|---|---|
| Coefficient of Friction (SAE J661) | |
| Normal | .34 |
| Hot | .34 |
| See Note 1 | |
| Wear Rate, by weight (SAE J661) | .010 max. |
| | |
| Recommended Operating Limits | |
| Max. Rubbing Speed | 7500 fpm |
| See Note 2 | |
| Max. Drum Temp. | 600°F |
| °F for Constant Operation | |
| See Note 2 | |
| Max. Pressure | 150psi |
| See Note 2 | |

**Note 1.** – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

**Note 2.** – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.

### SAE J661a Test Curves