

TuffCote/Durathane®

What is it?

TuffCote/Durathane® is a two component, 100% solid, no VOC (Volatile Organic Compound), UV controlled, modified elastomer. TuffCote/Durathane® offers superior performance in rapid cold mold casting, conveyor roller lagging, and as a protective coating system. TuffCote/Durathane® offers excellent adhesion to properly prepared steel, aluminum and stainless. TuffCote/Durathane® is fast curing and greatly reduces moisture sensitivity. This unique polyurethane elastomer system displays excellent UV characteristics and is suitable for either interior or exterior use. The system is found in two durometers, 75 (blue) and 85 (black).



TuffCote/Durathane® exceeds the abrasion resistance of carboxilated/rubber lagging and its chemical and UV



resistance is far superior. TuffCote/Durathane® exhibits vastly reduced belt slippage compared to any other roller coverings. TuffCote/Durathane® exhibits radically improved particle and die transfer characteristics to belts as compared to other roller coverings.

The TuffCote/Durathane® elastomer application is controlled via a CNC machine. Many profiles can be accommodated to customize the application. TuffCote/ Durathane® is easily machined. Tolerances of +/- .005

can be accomplished with any profile done in typical CNC machining.

Application is done without any custom tooling or tooling changes. We can accommodate lower quantity production and quick turn-arounds without problem.

Benefits



- This is a continuous rather than a batch process this lowers the production cost and lead time.
- Unlike traditional urethane processes the TuffCote/Durathane® material does not require molds.
- Our TuffCote/Durathane® process is form following so we can coat irregular shapes with less waste thereby reducing costs.
- TuffCote/Durathane® is ideally suited to tapered conveyor rollers.
- TuffCote/Durathane® offers greater abrasion resistance than rubber

coatings, far superior chemical resistance, is no hydroscopic and eliminates the dye and particle transfer problems that rubber encounters with extruded belts causing tracking problems.

• Although TuffCote/Durathane® is far superior to rubber we can offer it at a price that is competitive with either SBR or Carboxilated Nitrile.

• We have been producing TuffCote/Durathane® lagged pulleys for over seven years without any wear or performance issues.

Typical Physical Properties (1:1 by Volume): 85 Durometer

Tensile Strength, PSI	ASTM D412	2683
Elongation, %	ASTM D412	625
100% Modulus	ASTM D412	675
200%	ASTM D412	938
300%	ASTM D412	1198
Die "C" Tear Strength, PLI	ASTM D624	419
Hardness, Shore A	ASTM D2240	88
Taber Abrasion, MG Loss	ASTM D3489	
H-22 Wheel G/5000 Cycles		1.08
Resilience By Vertical Rebound	ASTM D2632	48%
Compressoin Set, Test Method B	ASTM D395	83%
Split Tear	ASTM D3489	140 PLI

Chemical Resistance: ASTM D3912 Mod. 3-Day Immersion

Chemical	Result (25° C)
Brake Fluid (DOT3)	RC
Clorox® (10%)/Water	C, Dis
Diesel Fuel	R
Gasoline	R
Hydraulic Fluid (oil)	R, Dis
NaCl/Water (10%)	R
Potassium Hydroxide (10%)	R
Sodium Hydroxide (10%)	R
Sodium Bicarbonate	R
Sugar/Water (10%)	R
Sulfuric Acid (10%)	R, Dis
Sulfuric Acid (> 22%)	NR
Vinegar (5%)/Water	R
Water	R
Xylene	С

R = Recommend = Little or no Visible Damage RC = Recommend Conditional = Some Effect - Swelling, Discoloration C = Conditional = Cracking - Wash down within one hour of spillage to avoid effects NR = Not Recommended Dis = Discoloration Only