





DuraSurf<sup>™</sup> STS UHMW-PE is a revolutionary product in that it possesses a Silicone Treated Surface with an adhesive backing for easy installation. The very low coefficient of friction provides a lubricated surface that is virtually maintenance free. DuraSurf<sup>™</sup> STS is an ideal solution for many applications in the package handling industry including chute linings, slider beds, slides, spirals and any areas where packages can get lodged or damaged. DuraSurf<sup>™</sup> STS reduces jamming and keeps packages moving smoothly to their ultimate destination. DuraSurf<sup>™</sup> STS is also static dissipative, preventing static shocks and potential damage to bar coding systems. DuraSurf<sup>™</sup> STS is uniquely available with an adhesive backing to provide easy installation and eliminate the need for mechanical fastening. Die cutting is also available for washers, bushings, wear pads and antifriction surfaces.

# **REDUCE ENERGY CONSUMPTION**

UHMW-PE is characteristically abras resistant and very slick, with a low coefficient of friction. The addition silicone to the UHMW-PE resin bler helps maintain abrasion resistance while improving the already low coefficient of friction. Heavy produ which normally increase belt conta and slow the system, move more f Energy requirements are reduced because the plastic allows the conv belt to function efficiently. In addition, maintenance costs (to repair/replace belts and motors) and conveyor system downtime are greatly reduced.



slider bed conveyor, DuraSurf STS<sup>™</sup> has been proven to reduce energy consumption by 15% to more than 30% while eliminating wear on the slider bed and extending the life of the belts and drives.

# **DuraSurf<sup>™</sup> STS**

# **ENHANCE PACKAGE FLOW**

sion	In package handling and fulfillment
	center operations, maintaining the
of	proper constant flow rate of materials
d	is critical. Applying UHWM-PE sheets
	to the inside of chutes and guide rails
	provides a very slick surface, allowing
ıcts,	items to move smoothly through
ct	the system.
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# **PERFORMANCE. VALUE. SERVICE**

Crown Plastics is the world leader in manufacturing thin gauge continuous roll UHMW-PE.

Our DuraSurf<sup>™</sup> line of UHMW products are an excellent solution when materials rub against each other, creating noise and wear that might compromise the function and/or life of the materials.

Crown Plastics DuraSurf<sup>™</sup> UHMW offers these advantages:

- The highest abrasion resistance of any thermoplastic polymer (5 times greater than stainless steel)
- Outstanding impact strength even at very low temperatures
- Excellent slide properties due to the low coefficient of friction
- Self-lubricating (non-caking and sticking)
- Good chemical and stress crack resistance
- Easily machined
- Sound dampening properties

DuraSurf<sup>™</sup> UHMW offers the greatest value/performance characteristics over the life/warranty of the product when compared to products of lesser quality and durability.

It is the policy of Crown Plastics Company to provide material and service that meets or exceeds Quality Standards throughout the customer chain.

# Installation Process for DuraSurf<sup>™</sup> STS

#### **1. Surface Preparation**

Proper surface preparation is imperative. Clean with an aggressive solvent-type cleaner such as MEK or acetone. Use alcohol for a secondary wipe.

## 2. Slider Bed Strips/Chute Cut Sheets

Slider Beds - Install STS in strips 2-3" apart. Mark installation points every 24 inches down the length of the slider bed.

Chute - Crown supplies pre-cut sheets based upon manufacturer's requirements.

#### 3. Installation

Slider Beds - Roll out the DuraSurf<sup>™</sup> STS material down the entire length of bed. Line up to reference marks. Remove release liner and press into place.

Chute - Starting from bottom, place sheet of DuraSurf<sup>™</sup> STS in position. Remove release liner and press into place. Overlap the sheets going up the chute.

#### 4. Roller Pressure

These are pressure sensitive adhesive systems. It is important that mechanical pressure be applied. Using a roller will double the bond strength.

Crown Plastics prides itself in delivering the highest standard of quality service through:

- Attention To Detail
- Responsiveness
- Follow Through

We manufacture UHMW-PE... but our product is SERVICE!

Crown stocks a wide variety of pressure sensitive adhesives to accommodate nearly every imaginable application. Our expertise in surface preparation guarantees outstanding bonding to different substrates.

Crown's pressure sensitive adhesive systems include rubber and acrylic adhesives for UHMW.

ADHESIVE PROPERTIES							
Adhesive Number	8345	1150	1123	1126	8346	HPA 1905	AFB 6680
Peel Adhesion-Stainless Steel U.S. Oz./In. Width Metric N/m	180° Peel 179 1961	180° Peel 61 665	180° Peel 125 1366	180° Peel 134 1471	180° Peel 120 1313	90° Peel 87 951	90° Peel 124 1361
Loop Tack-Stainless Steel U.S. Oz./In. Width Metric N/m	306 3344	80 876	117 1278	152 1663	120 1313	104 1138	- -
Static Shear-Stainless Steel Area	1" (6.5cm2)	1"(6.5cm2)	1"(6.5cm2)	1" (6.5cm2)	1"(1.6cm2)	1" (6.5cm2)	1" (6.5cm2)
Load U.S. lbs Metric kg Minutes to Failure	5.5 2.5 >10,000	5.5 2.5 >10,000	5.5 2.5 >400	5.5 2.5 >400	2.2 1.0 >150	2.2 1.0 >10,000	- - >10,000

ADHESIV	ADHESIVE DESCRIPTION		
8345	5 mil rubber based adhesive designed for applications requiring high tack and adhesion and excellent shear strength. Specially formulated with a 0.5 mil. polyester carrier to provide excellent die-cutting and adhesion to low surface energy substrates. Crown's standard adhesive. Operating Temp - 175°F (79°C) Continuous / 200°F (93°C) Intermittent		
1150	2 mil general purpose acrylic transfer with excellent temp, UV, and solvent resistance. Good adhesion to bond to a wide variety of substrates. Excellent die-cutting characteristics. Operating Temp - 225°F (107°C) Continuous / 275°F (135°C) Intermittent		
1123	3 mil high tack acrylic transfer with excellent initial tack and adhesion to a wide variety of substrates. A densified kraft release liner for superior die-cutting properties. Operating Temp - 200°F (93°C) Continuous / 250°F (121°C) Intermittent		
1126	5 mil high tack acrylic transfer with excellent initial tack and bondability to a wide variety of substrates, especially textured substrates. A heavy adhesive mass and a densified kraft release liner for superior die-cutting properties. Operating Temp - 200°F (93°C) Continuous / 250°F (121°C) Intermittent		
8346	5 mil double coated acrylic with excellent adhesion to low surface energy substrates including foams. Good shear strength and temperature range. Operating Temp - 200°F (93°C) Continuous / 250°F (121°C) Intermittent		
HPA 1905	5 mil acrylic with excellent adhesion for applications requiring good holding power under stress and load and environmental resistance. Chemical, solvent, heat, humidity, and UV resistance. Thick adhesive mass allows for improved bonding and gap fill. Operating Temp - 400°F (204°C) Continuous / 450°F (232°C) Intermittent		
AFB 6680	Double-coated 31.5 mil grey acrylic foam tape with high initial tack and excellent adhesion to high energy substrates and irregular surfaces. Good resistance to moisture, UV, and high temperatures.Operating Temp – 250°F (120°C) Continuous / 320°F (160°C) Intermittent		

All Avery adhesives have a minimum application temperature of 50°F (10°C) Storage and Shelf Life - One year when stored at 70°F (21°C) / 50% Relative Humidity out of direct sunlight. Surface Preparation - It is essential, as with all pressure sensitive tapes, that the surface to which the tape is applied be clean, dry and free of grease and oil.



### ADVANCED THERMOPLASTIC SOLUTIONS

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