



Below is a specification summary on the cutting belts that Ttarp uses for the Ttarp Automatic Press. The hydraulic press forces the ram with the steel rule die against four stop blocks to control the depth of cut into the belt. Each hit is on a new belt surface as the servo indexes the belt after each hit. Knife edge damage is eliminated and die life is increased by 10X vs. cutting against metal. Sharp rule provides cleaner edges and less need for tonnage.

The material riding on the cutting belt is not stretched-distorted. The cut pieces are easy to pick as they do not have to be notched as they are carried out on the belt. The Ttarp Automatic press has infeed and outfeed, independent, driven nip rollers synchronized with the cutting belt to aid in feeding of rolls and sheets, stabilizing material during the cutting process, and removing finished parts.

1. Poly-Coated, .02" thickness, is the lowest cost and the least dense. This has a polyethylene coating on both sides. Foam and lighter density materials should be cut on this belt. It has a belt thickness tolerance of +/- .004". Sold in 3000 linear foot rolls.

Stock roll widths [in]: 20, 28, 30, 35, 37, 38

2. Ttarp Hard Tan, .02" thickness, is an uncoated dense belt. Almost anything can be cut on it including difficult foams, rubber, plastic, carpet etc. It is hard and will have approximately 3X the life cycle vs. poly-coated. Thickness tolerance is +/- .004". It has no coatings so is good for heat sealing. Sold in 1000 linear foot rolls.

Lab Tests to simulate hardness include the Mullen Burst (Tappi T 807) and Ring Crush (Tappi T 818) tests:

Poly-Coated: Mullen Burst = 187 outside, 205 inside Ring crush = 208 outside, 161 inside
Ttarp "Hard Tan": Mullen burst = 485 out, 488 in Ring crush = 314 out, 337 in

Stock Rolls widths [in]: 29, 30, 31, and 37"

3. Mylar Type A, .014" thickness, is uncoated and the densest cutting belt. This is ideal when an application includes kiss cutting. It has tight thickness tolerances of +/- .0005" and is harder than PSA liners. It is very hard so good for cutting difficult woven materials such as canvas, felt, stringy insulation materials like thinsulate, etc. It can be good for heat sealing with an upper heat platen due to structural integrity at high temperatures. Sold in 200 linear foot rolls.

Stock roll widths [in]: 12, 15, 18, 20, 24, 28, 30, 31, 35, 36, 37, and 60

4. Urethane belt, often .125" thick, is the most expensive belt (lasts longer). Used with both knife and serrated edge rule. Due to it's relative softness and thickness tolerances, it is not

consistent enough for high quality – volume kiss cutting. On the Ttarp Automatic press, an optional upgrade is required to increase the size of drive servo motor, upgrade to the drive roller, upgrade to the belt tracker, upgrade to the belt tensioner, etc. The weight of the cutting belt is 4X the other belts driving the size increases mentioned above. This belt is typically welded on site by an outside service at the belt joint versus the use of simple shipping tape for the other Ttarp supplied belts.