

HF-Technical Improvement Program

TIP	Designation	Position in Machine	Control	Control	Control	Control
			P1+2 RA	P1+2 S+M	PCR/LTR RA	PCR/LTR S+M
01.001	Laser adjustment: LAP system	Machine	x	x	x	x
01.002	New Sick safety scanner system	Machine	x	x	x	x
01.003	New foot switches system	Machine	x	x	x	x
01.004	BST upgrade(complete machine - 4 cameras)	Machine	x		x	x
20.001	Permanent magnets under cutting belt	Belt Server	x	x	x	x
20.002	Detector for non-application of breaker material	Belt Server	x	x	x	x
20.003	Lenght measurement photoeye	Belt Server	x		x	
20.004	E+L camera system upgrade center control	Belt Server	x			
20.005	BST camera system upgrade center control	Belt Server	x		x	
20.006	Pneumaticly driven multi-disc roll	Pre Cut Tread Server			x	x
20.007	Front and back side splice heating	Pre Cut Tread Server	x	x	x	x
20.008	Lateral side guidance on both sides	Pre Cut Tread Server	x	x	x	x
23.001	Spindle and handwheel angle adjustment for belt	cutter Belt Server	x	x	x	x
23.002	Belt cutter pizza knife floating version	Belt Server	x	x	x	x
23.003	Hook knife for belt cutter	Belt Server	x		x	x
23.004	Servo drive for belt cutter movement	Belt Server	x		x	
33.001	Multi-disc roll for stitcher system	Transfer Ring	x		x	x
33.002	Optimized belt drive for pusher device	Transfer Ring			x	x
33.003	Automatic lubrication system	Transfer Ring			x	x
33.004	Bead setting device driven by electrical actuator	Transfer Ring			x	x
40.001	UltraSonic PA knife for ply cutter	Ply Server	x	x	x	x
40.002	Multi-disc roll and hollow piston cylinder	Ply Server	x	x		
40.004	More precise multidisc roll position adjustments	Ply Server	x	x	x	x
40.005	Different surface type of foam (sponge) rolls	Ply Server	x	x	x	x



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40.006	BST Pro camera system	Ply Server	x		x	
40.007	Light curtain for BP and PA material flow	Ply Server	x		x	
40.008	Permanent BP heating for hook knife	Ply Server	x		x	x
40.009	E+L camera System	Ply Server	x		x	
40.010	New Branson converter for US knife	Ply Server	x	x	x	x
40.011	Leak detection by flow rate sensor	Ply Server	x	x	x	x
40.012	Second SW cutter unit	Ply Server	x		x	
46.001	Servo drive for ply server conveyor					
	Forward and reverse movement	Ply Server	x		x	
54.001	Separate rockerarm drive in let-off	Let-off	x		x	
56.001	BP hook knife motion servo controlled	Ply Server	x		x	
56.002	Precise guiding for BP cutting device	Ply Server	x	x	x	x
62.001	Optimized design of roller guides in applying device	Reel Tread Server	x		x	x
62.002	Optimized heating holder design	Reel Tread Server	x		x	x
62.003	Additional covering of reel tread heating	Reel Tread Server	x		x	x
62.004	Servo driven forward + rearward movement	Reel Tread Server	x		x	
71.001	Modification of knife in JLB head	JLB	x	x	x	x
71.002	Controlled tension of JLB by pressure measuring device	JLB	x		x	x
71.003	Head guiding device for different width of JLB	JLB	x	x	x	x
71.004	Optimized design of return stop	JLB	x	x	x	x
79.001	Material jam detector on JLB drive roll	JLB	x		x	x
79.002	Second JLB let-off system and conveyor	JLB	x		x	
79.003	Optimized dancer return roll design	JLB	x	x	x	x
81.001	Forward + reverse movement by ball screw drive	Shoulder Roll Unit	x	x	x	x

