



TPU BELTS

THERMOPLASTIC POLYURETHANE

FOOD BELT INSTALLATION OPTIONS

WELDING

Thermally welding two prepared ends together allows for a seamless finish that minimizes the potential for bacteria growth. Several welding techniques are available.

PLATEN WELD – FINGER PUNCH

Typically uses a punched 3/4" by 3.14" (20 mm by 80 mm) finger configuration welded in a platen press.

Advantages

- Greatest tensile strength

Disadvantages

- Possible width shrinkage and edge lift in the weld area



Platen Weld Finger Punch

PLATEN WELD – SPLIT TOOTH

Advantages

- Easy field preparation
- Greater tensile strength than with a between the teeth weld

Disadvantages

- Possible width shrinkage and edge lift in the weld area



Platen Weld Split Tooth

BUTT WELD – BETWEEN THE TEETH

Advantages

- Short weld cycle
- No shrinkage or edge lift

Disadvantages

- Lowest tensile strength of the three weld choices



Butt Weld Between the Teeth

MECHANICAL FASTENING

POSILACE™ FASTENING PIN

Meets low to medium load requirements without field welding to achieve a maximum allowable tension of 26 lbs/in (0.46 kg/mm). Belt ends are prepared at the factory and the belt is joined by a single pin inserted after the belt is placed in position on the equipment.

This “living” fastening solution allows for removal and replacement of the belt as often as desired – without ever having to weld.

From wire hooks to metal staples, standard conveyor fasteners are available for those situations when quick assembly/disassembly is required. Belt ends must be cut properly prior to installing mechanical fasteners to ensure proper pulley mesh.

SYNCHRO-CLEAN PC10 FASTENING OPTIONS

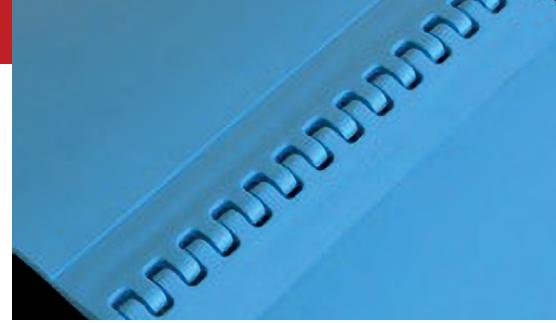
SPECIFICATIONS	STANDARD		METAL DETECTABLE	
	METRIC	IMPERIAL	METRIC	IMPERIAL
FASTENING OPTIONS				
Max. Allowable Tension (1)	N/cm	lbs/inch	N/cm	lbs/inch
Platen Weld (Finger 30 mm x 70 mm)	61	35	54	31
Platen Weld (Split Tooth)	54	31	54	31
Butt Weld	54	31	54	31
PosiLace	46	26	N/A	N/A
Flexco® UX1SS Clipper® Wire Hooks	54	31	54	31
Flexco APF150 Alligator® Plastic Rivet	N/A	N/A	N/A	N/A
Flexco APF100 Alligator Plastic Rivet	44	25	N/A	N/A
Flexco RS125 Alligator Ready Set™ Staple	N/A	N/A	N/A	N/A
Flexco RS62 Alligator Ready Set Staple	46	26	46	26

(1) Max allowable set as the lower of 25% yield strength or 2% stretch of weld or splice

SYNCHRO-CLEAN PC20 FASTENING OPTIONS

SPECIFICATIONS	STANDARD		HI TORQUE		METAL DETECTABLE	
	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL
FASTENING OPTIONS						
Max. Allowable Tension (1)	N/cm	lbs/inch	N/cm	lbs/inch	N/cm	lbs/inch
Platen Weld (Finger 30 mm x 70 mm)	88	50	112	64	74	42
Platen Weld (Split Tooth)	70	40	70	40	60	34
Butt Weld	54	31	54	31	54	31
PosiLace	46	26	46	26	N/A	N/A
Flexco UX1SS Clipper Wire Hooks	54	31	72	41	54	31
Flexco APF150 Alligator Plastic Rivet	44	25	44	25	N/A	N/A
Flexco APF100 Alligator Plastic Rivet	N/A	N/A	N/A	N/A	44	25
Flexco RS125 Alligator Ready Set Staple	46	26	46	26	46	26
Flexco RS62 Alligator Ready Set Staple	N/A	N/A	N/A	N/A	N/A	N/A

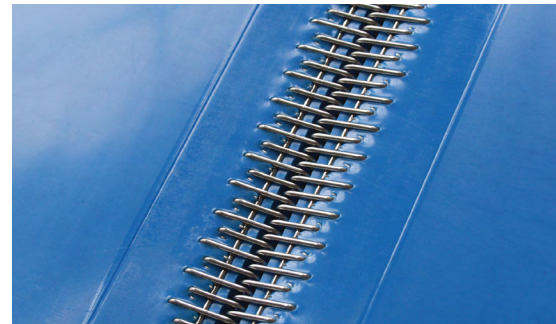
(1) Max allowable set as the lower of 25% yield strength or 2% stretch of weld or splice



PosiLace Field Weldable Extension



Flexco Alligator Ready Set Staple



Flexco UX1SS Clipper Wire Hooks



Flexco Alligator Plastic Rivet

SYNCHRO-CLEAN FC9 + FC12 FASTENING OPTIONS

SPECIFICATIONS	FC9		FC12			
	STANDARD		STANDARD		METAL DETECTABLE	
	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL
FASTENING OPTIONS						
Max. Allowable Tension (1)	N/cm	lbs/inch	N/cm	lbs/inch	N/cm	lbs/inch
Platen Weld (Finger 20 mm x 70 mm)	53	30	85	48	65	37
Flexco UX1SS Clipper Wire Hooks	58	33	104	59	54	31
Flexco APF100 Alligator Plastic Rivet	48	27	N/A	N/A	N/A	N/A
Flexco APF150 Alligator Plastic Rivet	N/A	N/A	60	34	N/A	N/A
Flexco RS62 Alligator Ready Set Staple	54	31	N/A	N/A	N/A	N/A
Flexco RS125 Alligator Ready Set Staple	N/A	N/A	90	51	54	31

(1) Max allowable set as the lower of 25% yield strength or 2% stretch of weld or splice

SYNCHRO-CLEAN CC40 + CC40D FASTENING OPTIONS

FASTENING OPTIONS SINGLE TRACK	lbs/inch	STANDARD				METAL DETECTABLE			
		6-9"	>9-12"	>12-17"	>17-36"	6-9"	>9-12"	>12-17"	>17-36"
Max. Allowable Tension (N/cm width) (lbs/inch width) ⁽¹⁾									
Platen Weld (Finger 30mm x 70 mm)	239	275	317	344	191	220	254	275	
Butt Weld	203	233	269	292	186	214	247	268	
Flexco UX1SS Clipper Wire Hooks	239	275	317	344	186	214	247	268	
Flexco APF150 Alligator Plastic Rivet	139	160	184	199	N/A	N/A	N/A	N/A	
Flexco RS125 Alligator Ready Set Staple	290	334	385	417	156	180	208	226	
PosiLace	155	179	206	223	N/A	N/A	N/A	N/A	

FASTENING OPTIONS SINGLE TRACK	N/cm	STANDARD				METAL DETECTABLE			
		152-229	>229-305	>305-432	>432-914	152-229	>229-305	>305-432	>432-914
Max. Allowable Tension (N/cm width) (lbs/inch width) ⁽¹⁾									
Platen Weld (Finger 30mm x 70 mm)	418	482	555	602	334	385	445	482	
Butt Weld	355	408	471	511	326	375	433	469	
Flexco UX1SS Clipper Wire Hooks	418	482	555	602	326	375	433	469	
Flexco APF150 Alligator Plastic Rivet	243	279	322	349	N/A	N/A	N/A	N/A	
Flexco RS125 Alligator Ready Set Staple	508	584	674	730	273	315	364	396	
PosiLace	272	313	361	391	N/A	N/A	N/A	N/A	

(1) Max allowable set as the lower of 25% yield strength or 2% stretch of weld or splice

FASTENING OPTIONS DUAL TRACK	lbs/inch	STANDARD			METAL DETECTABLE		
		>30-39"	>39-42"	>42-48"	>30-39"	>39-42"	>42-48"
Max. Allowable Tension (N/cm width) (lbs/inch width) ⁽¹⁾							
Butt Weld	724	766	793	658	697	721	
Flexco UX1SS Clipper Wire Hooks	724	766	793	658	697	721	
Flexco APF150 Alligator Plastic Rivet	419	443	458	N/A	N/A	N/A	
Flexco RS125 Alligator Ready Set Staple	878	929	961	474	502	519	
PosiLace	471	498	N/A	N/A	N/A	N/A	

FASTENING OPTIONS DUAL TRACK	N/cm	STANDARD			METAL DETECTABLE		
		>762-991	>991-1067	>1067-1219	>762-991	>991-1067	>1067-1219
Max. Allowable Tension (N/cm width) (lbs/inch width) ⁽¹⁾							
Butt Weld	1268	1341	1389	1152	1221	1263	
Flexco UX1SS Clipper Wire Hooks	1268	1341	1389	1152	1221	1263	
Flexco APF150 Alligator Plastic Rivet	734	776	802	N/A	N/A	N/A	
Flexco RS125 Alligator Ready Set Staple	1538	1627	1683	830	879	909	
PosiLace	825	872	N/A	N/A	N/A	N/A	

NORTH AMERICA
Gates TPU
9 Northwestern Drive
Salem, NH 03079
Tel. +1(800) 394-4844
Email: contact@gates.com

EMEA
Gates TPU GmbH
Wermervon Siemens Strasse 2
64319 Pfungstadt, Germany
Tel. +49 (0) 6157-9727-0
Email: sales-pfungstadt@gates.com

