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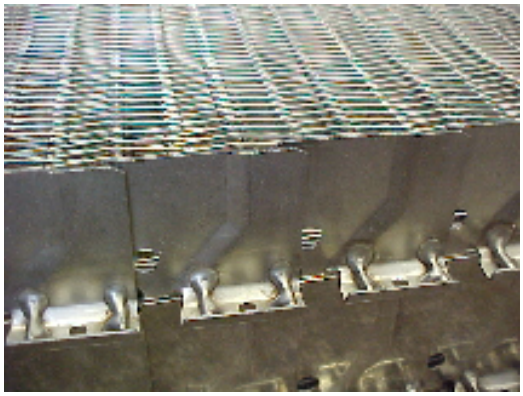
PRODUCT TECHNICAL BULLETIN

ExactaStack



DESCRIPTION

ExactaStack is a stainless steel, self-stacking belt designed to be a drop-in replacement belt for popular standard–duty stacker systems. It is available in all standard widths and tier heights. It works with OEM drive systems and can be spliced directly to OEM belts, allowing replacement of small sections of damaged belt or the entire belt with no modification to the system.

SPECIFICATIONS

- **Material**
  Stainless steel links, rods, and mesh.
- **Rod Size**
  5mm (.196")
- **Pitch**
  Longitudinal pitch is 59.9mm (2.36") per link. The intermediate rod is spaced at 30mm (1.18").
- **Tier Height**
  Nominal tier heights of 60mm (2.36"), 80mm (3.15"), 90mm (3.54"), 100mm (3.94"), 120mm (4.72"), 150mm (5.90"), 180mm (7.09"), and 220mm (8.66") are available.
- **Belt Width**
  Belt is offered in widths to fit pre-engineered systems. Available widths are: 420mm (16.54"), 510mm (20.08"), 580mm (22.83"), 640mm (25.20"), 660mm (25.98"), 760mm (29.92").
- **Conveying Surface**
  Useable width is approximately 45mm (1.77") less than belt width. Wire mesh is standard, available in 6mm (.24"), 9mm (.35"), 13mm (.51"), or 20mm (.79") lateral pitch, right-hand wind, Ø1.6mm (.062") wire. Plastic mesh with nominal 13mm (.5") openings is also available.

SPECIFICATIONS (cont'd)

- **Open Area**
  6mm Mesh: 35% straight, 21% turn
  9mm Mesh: 51% straight, 40% turn
  13mm Mesh: 61% straight, 52% turn
  20mm Mesh: 69% straight, 62% turn
  Plastic Mesh: 67% straight, 59% turn
- **Turn Capability**
  Belt turns in one direction only, by means of collapsing inside edge links. Standard outside links are non-collapsing. Either right hand (CW) or left hand (CCW) turn direction must be specified.
- **Turn Ratio**
  Turn ratio (turn radius ÷ belt width) is 1.7.
- **Belt Weight**
  Select the belt width, link height, and mesh pitch to find the belt weight in the table below.

		Belt Weight (lbs/ft)							Belt Weight (lbs/ft)					
Belt	Link	Mesh Pitch					Belt	Link	Mesh Pitch				
Width	Height	6mm	9mm	13mm	20mm	Plastic	Width	Height	6mm	9mm	13mm	20mm	Plastic
420mm	60mm	4.64	4.04	3.64	3.39	4.25	640mm	60mm	6.47	5.53	4.92	4.49	5.78
	80mm	5.03	4.42	4.03	3.78	4.64		80mm	6.86	5.92	5.30	4.88	6.17
	90mm	5.22	4.62	4.22	3.97	4.83		90mm	7.05	6.11	5.50	5.07	6.36
	100mm	5.41	4.81	4.42	4.16	5.03		100mm	7.25	6.30	5.69	5.26	6.55
	120mm	5.80	5.19	4.80	4.55	5.41		120mm	7.63	6.69	6.07	5.65	6.94
	150mm	6.38	5.77	5.38	5.13	5.99		150mm	8.21	7.27	6.65	6.23	7.52
	180mm	6.96	6.35	5.96	5.71	6.57		180mm	8.79	7.85	7.23	6.81	8.10
	220mm	7.73	7.12	6.73	6.48	7.34		220mm	9.56	8.62	8.00	7.58	8.87
510mm	60mm	5.43	4.67	4.20	3.82	4.88	660mm	60mm	6.69	5.66	5.05	4.59	5.92
	80mm	5.82	5.06	4.59	4.21	5.27		80mm	7.07	6.04	5.43	4.98	6.31
	90mm	6.01	5.25	4.78	4.40	5.46		90mm	7.26	6.24	5.63	5.17	6.50
	100mm	6.20	5.44	4.97	4.60	5.65		100mm	7.46	6.43	5.82	5.36	6.69
	120mm	6.59	5.83	5.36	4.98	6.04		120mm	7.84	6.82	6.21	5.75	7.08
	150mm	7.17	6.41	5.94	5.56	6.62		150mm	8.42	7.39	6.78	6.33	7.66
	180mm	7.75	6.99	6.52	6.14	7.20		180mm	9.00	7.97	7.36	6.91	8.24
	220mm	8.52	7.76	7.29	6.91	7.97		220mm	9.77	8.75	8.14	7.68	9.01
580mm	60mm	5.97	5.12	4.59	4.19	5.37	760mm	60mm	7.48	6.33	5.64	5.09	6.61
	80mm	6.36	5.50	4.98	4.58	5.75		80mm	7.87	6.72	6.02	5.47	7.00
	90mm	6.55	5.69	5.17	4.77	5.94		90mm	8.06	6.91	6.22	5.67	7.19
	100mm	6.74	5.89	5.36	4.96	6.14		100mm	8.25	7.10	6.41	5.86	7.39
	120mm	7.13	6.27	5.75	5.35	6.52		120mm	8.64	7.49	6.80	6.25	7.77
	150mm	7.71	6.85	6.33	5.93	7.10		150mm	9.22	8.07	7.38	6.83	8.35
	180mm	8.29	7.43	6.91	6.51	7.68		180mm	9.80	8.65	7.95	7.40	8.93
	220mm	9.06	8.20	7.68	7.28	8.45		220mm	10.57	9.42	8.73	8.18	9.70

OPERATING RATINGS

- **Allowable Tension**
  Belt strength is not rated. Belts are designed for replacement use in zero-tension self-stacking systems, where tensions do not typically exceed 100 lbs (45.4kg). Belts will carry the maximum load specified by the system manufacturer for an equivalent belt.
- **Belt Speed**
  Maximum recommended speed is 100 ft/min (30 m/min).
- **Temperature Rating**
  -50°F (-45°C) to 400°F (204°C) with steel mesh, -50°F (-45°C) to 180°F (82°C) with plastic mesh.

For applications that do not comply with these rating limits, please consult Ashworth engineering.

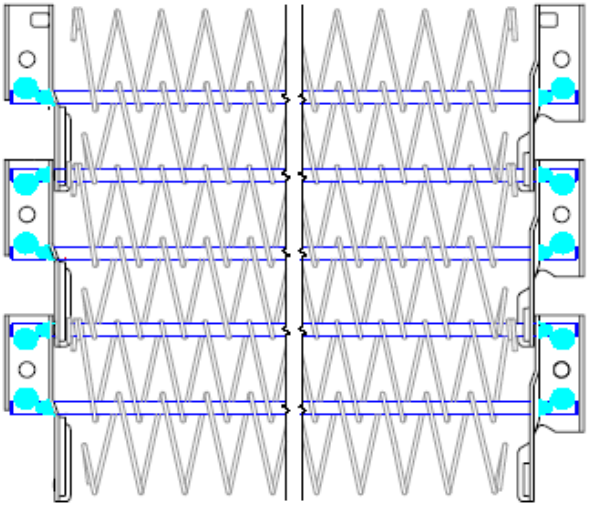
BELT OPTIONS

- **Wire Mesh Overlays**
  Mesh is specified using the standard designation for existing systems, X-Y-Z, as shown below.

X = Belt Width	Y = Pitch	Z = Wire Dia.
42 = 420 mm	**6** mm	**1.6** mm
51 = 510 mm	**9** mm	**1.8** mm (optional)
58 = 580 mm	**13** mm	
64 = 640 mm	**20** mm	
66 = 660 mm		
76 = 760 mm		

Standard mesh overlay for ExactaStack is a right-hand wind, unilateral weave (see illustration below) comprised of two mating spirals. The first terminates with round pigtails on the leading side of the spiral. The second terminates with oval pigtails on the trailing side of the spiral and has one less loop across the width of the belt such that the oval pigtails are nested within the round pigtails on the adjacent spiral. The pigtails of both spirals are installed on the connecting rod joining the links. A washer is installed between the link and the spirals on the collapsing side only.

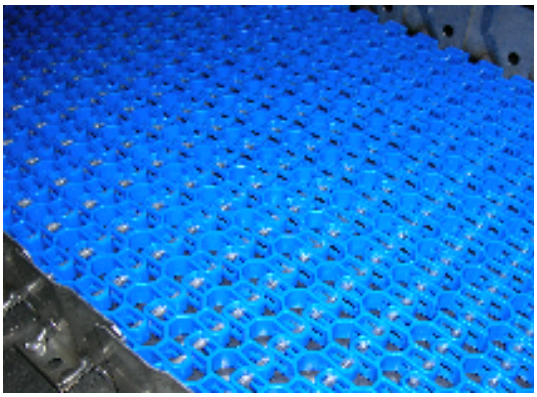
BELT OPTIONS (cont'd)



- **Special Wire Mesh Overlays**
  Optional special mesh is configured with round pigtails on the leading side of all spirals on the outside (non-collapsing) edge of the belt. This mesh is not available on belts with collapsing links on both sides (for low tension conveyor take-up).

- **Non-standard Wire Mesh Overlays**
  Typically, special mesh configurations can be made to match existing belts with non-standard mesh overlay. Please consult Ashworth engineering.

- **Special Plastic Overlay**
  Plastic mesh with nominal 13mm (.5") openings is available. Maximum operating temperature is 180°F. Plastic mesh is not suitable for applications where caustic cleaners are used. Please consult Ashworth engineering.



BELT OPERATION

General Guidelines To Reduce Belt Tension and Wear:

- Clean and lubricate guides and supports.
- Replace plastic wear coverings on guides and supports when worn.
- Clean ice and product debris from the belt, sprockets, and idlers to prevent belt damage.
- Observe the effect of temperature on the coefficient of friction between the supports and the belt. Products may leave a slick residue at room temperature that can become viscous or sticky as the temperature decreases. At freezing temperatures the debris may become slick again or leave a rough surface depending upon its consistency.
- Remove extra weight from the take-up loop.
- Align sprockets properly and insure that they do not migrate on the shaft.
- Do not overload the belt.
- Decrease belt speed.

Lubrication

Lubrication is not required under normal operating conditions. However, lubrication will enhance belt performance, particularly at higher belt speeds or when conveying heavy product loads. Make sure any lubricant used is compatible with your belt material and product. SPIRALUBE Belt Oil from Ashworth Factory Service is recommended.

Application Method

- Brush, fed from a drip reservoir, applied onto the belt's underside in the return path so that the belt coats the loaded path rails with the lubricant.
- Install and activate lubricator for either a predetermined application interval or when drive motor amperage indicates excessive belt tension.

Reference: Product Technical Bulletin "Conveyor Design Guidelines".