



FLAT SPIRAL CONVEYOR BELT

SMALL APERTURES WITH A FLAT BELT SURFACE

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FLAT SPIRAL CONVEYOR BELTS

Flat Spiral belting is often found in baking and washing applications where small apertures are required alongside a flat conveying surface. Flat Spiral is also a preferred choice for end-users who have previously experienced tracking problems with other spiral woven meshes, as the alternating coil pattern helps reduce any tendency for the belt to veer to one side.

ADVANTAGES

Flat Spiral is constructed from alternating left- and right-hand spiral coils, which are woven together and joined by interconnecting cross rods.

Flat Spiral's alternating mesh design helps reduce tracking problems caused by the belt veering to one side. The small apertures present in the belt's construction provides end-users with a flat conveying surface suitable for products prone to slipping through more open mesh designs.

The belt can be supplied with a welded, laddered or hook edge and is used in a friction driven conveyor layouts. Flat Spiral can also be supplied with chain edges when a positive drive configuration is required. Flat Spiral is most commonly supplied in Grade 304 Stainless Steel; however, other materials are available on request.







FLAT SPIRAL CONVEYOR BELTS

TYPICAL APPLICATIONS

- TransportCooking
- Heating
- Drying
- Drainage
- Baking

- Washing
- Annealing
- Curing
- Forming
- Elevating
- De-Elevating





FLAT SPIRAL CONVEYOR BELTS

BELT DATA

BELT MESH TYPES





cross wire.

Coil Wire Depth

Flat Coil Wire Alternatives

Standard Flat Spiral (FS)

In general, the standard style above is available with coil wires manufactured using a flattened wire. These styles are most useful to gain more surface area when handling small base area products. When identifying the coil wire it is important to confirm the cross-section dimensions.

The assembly consists of alternating left- and right-hand coils with each coil interconnecting with the next by means of a straight

BELT EDGE AVAILABILITY

- Laddered Edge (LD) mesh only
- Hook Edge (H) mesh only
- Welded Edge (W) mesh only

CHAIN EDGE DRIVE MESH

Along with the above mesh edge finishes these meshes can be driven by side chains using cross rods which are located through the mesh coils and then through chains at the edges of the mesh. The types of cross rod finish at the exterior of the side chain are as follows:

- Welded washer
- Cotter pin & washer

Various other styles of chain edge finish include:

- a. Cross rod welded flush to the hollow pin of the side chain. This is not a preferred standard but may be necessary where width between conveyor side frames & other structural parts create a limitation where "welded washer" or "washer & cotter pin" cannot be used.
- b. Cross rod welded flush through drilled hole on inner plates of roller conveyor chain.

In general, the chain edge driven belts are available with 2 styles of edge chain:

- Transmission Chain has a small roller.
- Conveyor Roller Chain -has a large roller.

For more information about edge availability, see our website or contact our Technical Sales Engineers

METHODS OF DRIVE

- Friction Driven
- Chain Edge Driven

For more information about methods of drive, see our website or contact our Technical Sales Engineers.

Material	Maximum Wire Operating Temperature °C
Carbon Steel (40/45)	550
Galvanised Mild Steel	400
Chrome Molybdenum (3% Chrome)	700
304 Stainless Steel (1.4301)	750
321 Stainless Steel (1.4541)	750
316 Stainless Steel (1.4401)	800
316L Stainless Steel (1.4404)	800
314 Stainless Steel (1.4841)	1120 (Avoid use at 800-900°C)
37/18 Nickel Chrome (1.4864)	1120
80/20 Nickel Chrome (2.4869)	1150
Inconel 600 (2.4816)	1150
Inconel 601 (2.4851)	1150

MATERIALS AVAILABLE (MESH ONLY)

Before making a selection for high temperature applications consult with our Technical Sales Engineers for the most suitable wire grade for the application as wire strength reduces at elevated temperatures.



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Our policy is one of continuous improvement and we reserve the right to change specifications at any time and without notice, or modify these to suit manufacturing processes.

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