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STAINLESS STEEL WIRE MESH CONVEYOR BELTS

Our wire mesh belts are made of high-quality stainless steel, produced exclusively within the European Union and fully compliant with EU Regulation EC 1935/2004 regarding materials intended for direct contact with food

Used for conveying and processing medium-lightweight products, our belts are manufactured from shaped stainless steel wires interlocked together, offering a series of **exclusive advantages**:

- Extremely wide open area – up to 85% – allowing maximum airflow (hot or cold), efficient drainage of liquids or viscous materials, and minimal contact surface with the product
- Easy and accurate cleaning and sanitization, thanks to the limited contact and surface area
- Material: High-resistance AISI 302 stainless steel (Werkstoff 1.4310), certified for direct food contact
- Minimal product transfer diameters, down to 12 mm, with belt pitches around 4 mm and wire diameters from 1 to 1.2 mm



FEATURES:

- Optional belt surfaces with raised points or projections to keep even unstable products in place
- Belt dimensions custom-made to client specifications
- Standard belt pitch ranges from 4 mm to 12.7 mm; available up to 20 mm upon request
- Stainless steel wire diameter ranges from 1 mm to 2.8 mm
- The meshes are cross-woven multiple times; the number of interlocks, combined with wire diameter and pitch, determines the actual strength

Note: The number of interlocks must always be odd (1, 3, 5...) to ensure proper belt joining

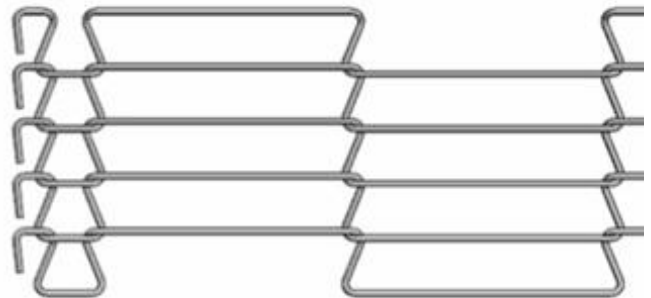
END LOOP TYPES:

Type 1: Single loop at the ends (standard)

Type 2: Double loop at the end



TYPE 1



TYPE 2



DATA REQUIRED FOR QUOTATION:

Belt type: Type 1 (single loop) or Type 2 (double loop)

P = Belt pitch (mm) – when measuring an existing belt, calculate the average over at least 10 consecutive pitches

M = Mesh size (mm)

f = Wire diameter (mm)

N x M = Number of meshes across the belt width

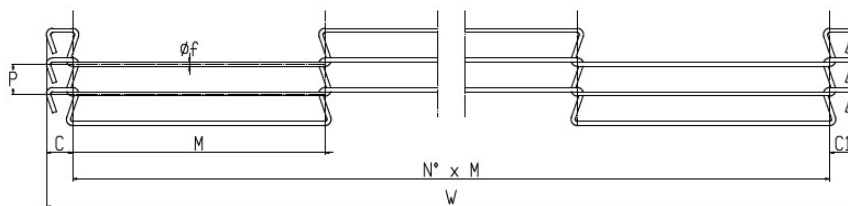
W = Total belt width, including loops (mm)

L = Total required belt length (mm)

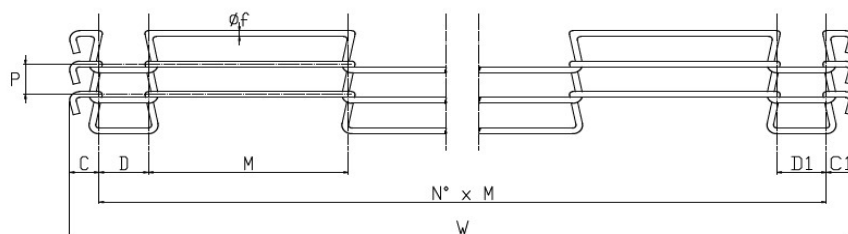
C, C1 = External loop dimensions (mm)

D, D1 = Internal loop dimensions (Type 2 only) (mm)

TYPE 1

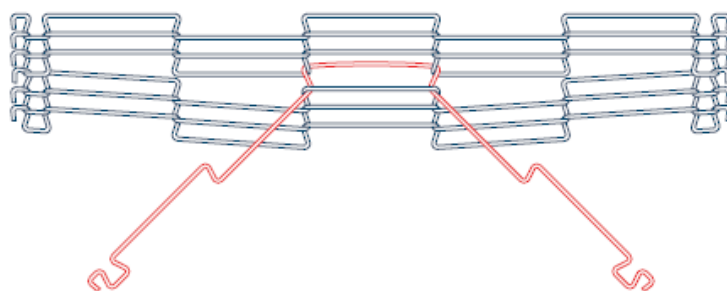


TYPE 2



BELT JOINING USING SMALL TUBES

For belts narrower than approx. 300–400 mm, it is possible to join the ends by inserting a shaped wire through the open loops, starting from the center outward using pointed pliers, as shown below



For belts wider than approx. 400 mm, we recommend using our joining tubes:

Cut the wire approximately one-third between two interlocks

Insert and secure the tube by crimping both ends with pliers

Each wire corresponds to a tube of matching internal diameter, minimizing bulk

Note: Do not cut every mesh; leave at least one mesh between cuts. Sprockets should ideally be positioned away from the joining tubes



SPROCKETS AND RETURN WHEELS:

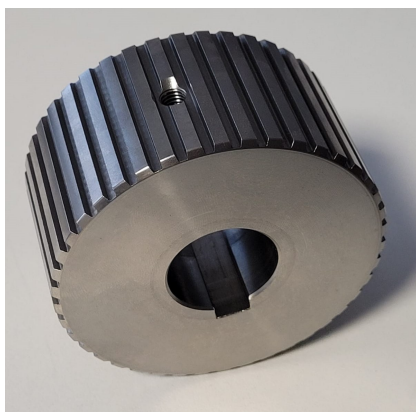
Belt movement is driven by sprockets, ensuring consistent tracking under all operating conditions.

Available in plastic or stainless steel, depending on application and temperature requirements



Standard thickness: 15 mm (other sizes and bore types available)

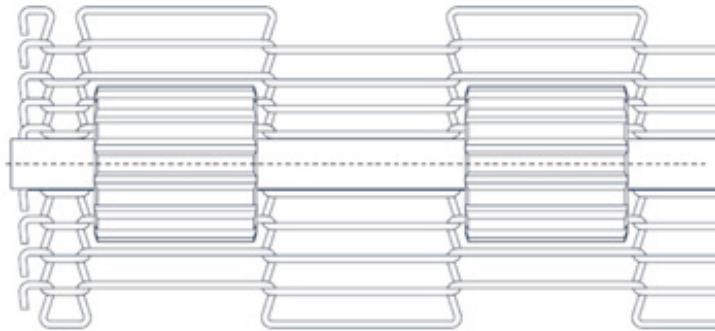
Materials: White POM (FDA compliant, -40°C to +85°C), AISI 304 stainless steel, C40 steel, or aluminum



Pitch mm	Max. wire diameter mm	teeth nr (Z)	Pitch Diameter mm	External diameter mm
4	1	32	40,76	45,00
5	1,2	26	41,40	45,50
6	1,4	24	45,86	50,50
7	1,6	25	55,73	60,50
8	1,8	22	56,05	60,50
9	2	23	65,92	70,00
10	2	21	66,88	71,00
11	2	19	66,56	71,00
12	2,35	18	68,79	73,00
12,7	2,35	17	68,76	73,00

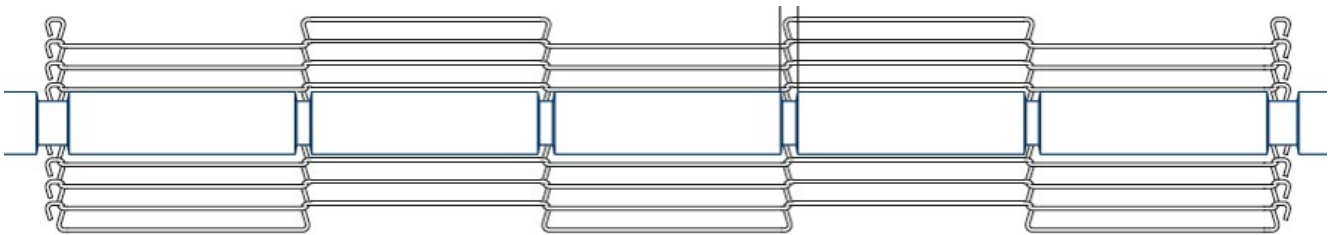
DRIVE SHAFT:

Sprockets should preferably be fixed at every two wire spacing, avoiding tube joints



IDLE SHAFT (for nosebar transfer)

Use individual idle rollers placed under each row of the belt, or a machined shaft with grooves to accommodate wire interlocks protruding from the belt's sliding side



The grooves to be machined on the shaft should follow the recommended dimensions based on the wire diameter, and their number and position must correspond to the number and arrangement of the wire interweavings in the belt



Groove width

> 5 x Ø filo (mm)

Groove depth on the radius based on wire diameter

- > filo Ø da 0.9 mm a 1.25 mm = 3.5 mm
- > filo Ø 1.4 mm = 4.0 mm
- > filo Ø 1.6 mm = 4.5 mm
- > filo Ø da 1.8 a 2.35 mm = 6.5mm
- > filo Ø 2.8 mm = 12 mm



TYPICAL PROCESS APPLICATIONS:

- Cooling / Freezing / Deep-freezing
- Heating / Drying
- Drainage of liquids, oils, and residues
- Frying / Cooking / Grilling / Breading
- Infeed/outfeed of ovens
- Pasteurization / Sterilization
- Coating, decorating, filling, glazing, granulating
- Sieving / product separation based on mesh size
- Chocolate, confectionery, and pastry production
- Bakery and pizza lines
- Meat, deli, poultry, and fish processing
- Vegetable processing
- Fresh and frozen fruit, berry processing

INDISPENSABLE WHERE THE FOLLOWING ARE REQUIRED:

- Large open surface area
- Minimal product contact
- Small transfer diameters for delicate or small-sized products
- Fast and effective cleaning and sanitization
- Resistance to common detergents
- Compatibility with both hot and cold environments
- Positive drive with sprockets for reliable motion in all conditions

***For any technical and commercial information,
please contact us***



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