

Product catalogue

Roshan Industries has manufactured custom-built wire mesh and metallic conveyor belts since 1974. All belts are made to the customer's specification.

Product range

Belt	Category	Typical applications
Z-47 Articulated Wire Belt	Oven belts	Biscuit baking ovens, Cookie and cracker baking, Drying lines needing a flat, open surface
Balanced Weave Belt	Wire mesh belts	Food processing, Glass and ceramic tile processing, Metal working and heat treatment
Rod Reinforced Belt	Wire mesh belts	Furnace and heat-treatment conveyors, Heavy-load process conveying, Drying ovens
Closed Pitch Belt (CB-5)	Wire mesh belts	Drying of light food articles, Processes needing high air circulation
Gratex Belt	Wire mesh belts	Small parts conveying, Heavy-load conveyors, Hardening and washing of small components
Laminated Belt (R-Omniflex)	Special application belts	Tunnel freezers, Drying, Accumulation and handling
Honeycomb Belt	Special application belts	Chocolate enrobing, Oil quenching
Enrober Belt	Special application belts	Chocolate enrobing, Oil quenching
Chain Edge Belt	Chain-driven belts	Quenching and frying, Inclined conveyors, Greasy or oily products
Biscuit Cooling Conveyor Belt	Oven belts	Biscuit cooling conveyors, Post-oven product transfer

Materials and maximum operating temperature

Designation	Cr %	Ni %	C %	Si %	Mn %	Other	Max temp.
AISI 430	14.00–18.00	–	0.12 max	1.00 max	1.00 max	–	710 °C
AISI 316	16.00–18.00	10.00–14.00	0.08 max	1.00 max	2.00 max	Mo 2.00–3.00	800 °C
AISI 316L	16.00–18.00	10.00–14.00	0.03 max	1.00 max	2.00 max	Mo 2.00–3.00	800 °C
AISI 321	17.00–19.00	9.00–12.00	0.08 max	1.00 max	2.00 max	Ti 5×C min	800 °C
AISI 310	24.00–26.00	19.00–22.00	0.25 max	1.50 max	2.00 max	–	1020 °C
AISI 310S	24.00–26.00	19.00–22.00	0.08 max	1.50 max	2.00 max	–	1020 °C
Inconel 600	14.00–17.00	72.00 min	0.15 max	0.50 max	1.00 max	Cu 0.50 max	1150 °C
Nickel-chrome	19.00–21.00	77.00–79.00	–	0.75–1.50	2.50 max	–	1150 °C

Z-47 Articulated Wire Belt

Flat, flexible articulated wire band for continuous biscuit baking ovens — the belt Roshan Industries is best known for.

The Z-47 articulated wire band is the belt most widely used by biscuit manufacturers for baking. Wire coils are articulated into one another and the weave is then flattened under a press, giving a perfectly flat carrying surface.

Because the band is open, hot air circulates freely around the product for rapid, even drying and baking. The articulated construction gives the band strong longitudinal flexibility, so it follows the surface of drums and rollers, while the sides are reinforced without creating uneven thickness.

Construction

Mild steel or stainless steel wire coils are articulated into one another, then laminated (flattened) under a press to produce a flat, uniform belt surface. The edges are strengthened while the band keeps its full flexibility.

Key data

Item	Detail
Materials	Mild steel (high-tensile hard-drawn wire), Stainless steel, Other materials on request
Wire	17 gauge (1.40 mm), 18 gauge (1.20 mm), 20 gauge (0.90 mm)
Temperature	Up to 600 °C (mild steel, 18 SWG)
Edges	Welded edge, Bent edge
Applications	Biscuit baking ovens, Cookie and cracker baking, Drying lines needing a flat, open surface

Typical Z-47 data – mild steel, 18 SWG

Property	Value
Wire	Mild steel (120) 18 SWG H.H. wire
Temperature	Up to 600 °C
Weight	680 g per sq. ft
Gauge diameter	1.20 mm
Initial area	1.23 mm ²
Ultimate load	2 kg per sq. ft

Hard-drawn wire used as per international standard.

Wire chemistry and tensile strength

U.T.S.	C %	Mn %	Si %	S %	P %
75.19 kgf/mm ²	0.69	0.69	0.21	0.22	0.16

Request a quotation: <https://roshanind.com/request-a-quote/?product=z47-articulated-wire-belt>

Balanced Weave Belt

The most widely used process-industry belt: straight-running, high tensile strength and economical.

Balanced weave belts are the most commonly used belts across process industries — food processing, glass, ceramic and metal working. Left-hand and right-hand spirals are linked together with a crimped cross rod.

Because the stresses on both sides are evenly balanced, the belt runs smooth and straight with minimal expansion along its length or width and very little tendency to creep to either side of the drive pulley.

Construction

Alternating left-hand and right-hand spirals joined by crimped cross rods. The balanced construction keeps the belt tracking straight.

Key data

Item	Detail
Materials	Mild steel, Stainless steel (AISI 304, 316, 316L, 321), Heat-resisting grades (AISI 310, 310S), Inconel 600 and nickel-chrome on request
Wire	0.71 mm to 4.02 mm depending on type
Temperature	Depends on alloy — up to 1150 °C with high-nickel alloys (see materials guide)
Edges	Welded edge, Bent edge, Chain edge
Applications	Food processing, Glass and ceramic tile processing, Metal working and heat treatment, Drying and cooling lines

R-3 Type – Light conventional link belts

Specification	Mesh pitch	Wire dia.	Approx. weight (kg/m ²)
R-3: (2)-36-86-16	1.60	1.60 mm	22.00
R-3: (2)-48-94-16	1.60	1.60 mm	23.30
R-3: (2)-69-114-18	1.20	1.20 mm	16.30
R-3: (3)-28-71-14	2.00	2.00 mm	24.50
R-3: (4)-26-80-14-16	2.00	1.62 mm	19.50

Bracketed figure denotes the number of rods per set of coil.

R-4 Type – Light loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-4: 96-84-22	8"	0.71 mm	0.71 mm	5.20
R-4: 96-84-20	8"	0.91 mm	0.91 mm	6.45
R-4: 84-84-20	7"	0.91 mm	0.91 mm	5.40
R-4: 84-84-20	7"	1.20 mm	1.20 mm	12.20
R-4: 72-72-20	6"	0.91 mm	0.91 mm	6.00

R-5 Type – Light loads

Specification	Mesh pitch	Wire dia.	Spiral wire dia.	Approx. weight (kg/m ²)
R-5: 60-48-16	5"	1.60 mm	1.60 mm	13.50
R-5: 60-55-16	5"	1.60 mm	1.60 mm	14.65
R-5: 60-42-16	5"	1.60 mm	1.60 mm	12.30
R-5: 60-38-16	5"	2.00 mm	2.00 mm	20.20
R-5: 60-48-16	5"	2.00 mm	1.60 mm	17.40

R-6 Type – Light loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-6: 48-52-18	4"	1.20 mm	1.20 mm	6.20
R-6: 48-52-16	4"	1.60 mm	1.60 mm	8.10
R-6: 48-52-16	4"	1.60 mm	1.60 mm	11.20
R-6: 48-38-14	4"	2.00 mm	2.00 mm	18.30
R-6: 48-26-14-12	4"	2.00 mm	2.60 mm	16.10

R-16 Type – Medium loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-16: 36-22-12	3"	2.60 mm	2.60 mm	20.80
R-16: 36-22-12-10	3"	2.60 mm	3.25 mm	21.50
R-16: 36-24-14	3"	2.00 mm	2.00 mm	10.90
R-16: 36-20-14-12	3"	2.00 mm	2.00 mm	12.95
R-16: 36-32-16	3"	1.60 mm	1.60 mm	7.30

R-17 Type – Medium loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-17: 30-28-14	3/8"	2.00 mm	2.00 mm	9.80
R-17: 30-30-14-10	3/8"	2.00 mm	3.25 mm	9.50
R-17: 30-30-12	3/8"	2.60 mm	2.60 mm	20.65
R-17: 30-30-12	3/8"	2.60 mm	3.25 mm	9.70
R-17: 30-30-10	3/8"	3.25 mm	3.25 mm	23.70

R-18 Type – Medium loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-18: 18-12-08	3/4"	4.02 mm	4.00 mm	22.80
R-18: 18-10-10	3/4"	3.25 mm	3.25 mm	13.70
R-18: 18-17-10	3/4"	3.25 mm	2.60 mm	18.00
R-18: 18-16-10	3/4"	2.60 mm	2.60 mm	9.80
R-18: 18-15-14	3/4"	2.00 mm	2.00 mm	4.85

R-19 Type – Heavy-duty loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-19: 24-20-10	1.2"	3.25 mm	3.25 mm	22.80
R-19: 24-20-12-10	1.2"	2.60 mm	2.60 mm	13.70
R-19: 24-22-12	1.2"	2.60 mm	2.60 mm	18.00
R-19: 24-27-12	1.2"	2.60 mm	2.60 mm	9.80
R-19: 24-21-14	1.2"	2.00 mm	2.00 mm	4.85

How to read the code

Letter	Meaning
A	Number of spirals per foot of belt width
B	Number of cross rods per foot of belt length
C	Spiral wire diameter (gauge)
D	Cross-rod diameter

Belt specification R-X : A-B-C-D. R-X is the belt type.

Request a quotation: <https://roshanind.com/request-a-quote/?product=balanced-weave-belt>

Rod Reinforced Belt

Elongated spirals reinforced with straight cross rods for strength at high temperature with little stretch.

Rod reinforced belts are made from relatively elongated spirals woven together and reinforced by inserting a straight cross rod between them.

This construction withstands high tensile loads at elevated temperatures with very little elongation, lengthwise or widthwise — making it a strong choice for furnaces and heavy-duty heat processing.

Construction

Elongated spirals woven together, with a straight cross rod inserted between each pair for reinforcement.

Key data

Item	Detail
Materials	Mild steel, Stainless steel grades, Heat-resisting alloys on request
Wire	1.20 mm to 4.00 mm depending on type
Temperature	Suited to elevated temperatures — rating depends on alloy
Edges	Welded edge, Bent edge, Chain edge
Applications	Furnace and heat-treatment conveyors, Heavy-load process conveying, Drying ovens

R-9 Type – Heavy loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-9: 11-12-8	1"	4.00 mm	4.00 mm	15.20
R-9: 11-8-12	1"	2.60 mm	2.64 mm	14.60
R-9: 12-12-8	1"	4.00 mm	4.00 mm	17.20
R-9: 12-12-10	1"	2.60 mm	3.25 mm	6.45
R-9: 12-14-10	7/8"	3.25 mm	3.25 mm	12.30

R-10 Type – Medium loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-10: 15-17-8	3/4"	4.00 mm	4.00 mm	24.50
R-10: 15-13-10	3/4"	3.25 mm	3.25 mm	15.60
R-10: 15-13-11	3/4"	2.95 mm	2.95 mm	12.60
R-10: 15-13-12	3/4"	2.60 mm	2.60 mm	9.80
R-10: 15-13-14	3/4"	2.00 mm	2.00 mm	9.60

R-11 Type – Light loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-11: 21-24-10	1/2"	3.25 mm	3.25 mm	26.20
R-11: 23-22-12	1/2"	2.60 mm	2.60 mm	15.00
R-11: 24-36-12	3/8"	2.60 mm	2.60 mm	28.80
R-11: 26-28-12	3/8"	2.60 mm	2.60 mm	16.60
R-11: 28-30-14	3/8"	2.00 mm	2.00 mm	10.80

R-12 Type – Small loads

Specification	Mesh pitch	Spiral wire dia.	Wire dia.	Approx. weight (kg/m ²)
R-12: 29-28-16	3/8"	1.62 mm	1.62 mm	7.10
R-12: 39-50-16	1.4"	1.62 mm	1.62 mm	11.00
R-12: 47-47-18	1.4"	1.20 mm	1.20 mm	6.55
R-12: 51-74-16	1.4"	1.62 mm	1.62 mm	17.00
R-12: 60-75-18	1/8"	1.20 mm	1.20 mm	10.80

How to read the code

Letter	Meaning
A	Number of spirals per foot of belt width
B	Number of cross rods per foot of belt length
C	Spiral wire diameter (gauge)
D	Cross-rod diameter

Belt specification R-X : A-B-C-D. R-X is the belt type.

Request a quotation: <https://roshanind.com/request-a-quote/?product=rod-reinforced-belt>

Closed Pitch Belt (CB-5)

Interlaced spiral coils forming a continuous belt with high air circulation for drying light products.

The closed pitch link weave consists of either left- or right-hand spiral coils interlaced together to form a continuous belt.

These belts are generally used for drying light food articles and similar products where high air circulation is needed.

Construction

Single-hand spiral coils interlaced into each other to form a continuous mesh.

Key data

Item	Detail
Materials	Mild steel, Stainless steel, Other materials on request
Wire	Made to requirement
Temperature	Depends on selected alloy
Edges	Welded edge, Bent edge
Applications	Drying of light food articles, Processes needing high air circulation

Request a quotation: <https://roshanind.com/request-a-quote/?product=closed-pitch-belt>

Gratex Belt

Closely wound spirals with straight rods — a stronger semi-closed mesh for small parts and heavy loads.

Gratex belting is similar to balanced belting except that the spirals are more closely wound and joined with a straight rod connector.

The result is a stronger, semi-closed mesh that is ideal for conveyors handling small parts and heavy loads.

Construction

Closely wound spirals joined with straight rod connectors, forming a semi-closed mesh.

Key data

Item	Detail
Materials	Mild steel, Stainless steel, Other materials on request
Wire	Made to requirement
Temperature	Depends on selected alloy
Edges	Welded edge, Bent edge, Chain edge
Applications	Small parts conveying, Heavy-load conveyors, Hardening and washing of small components

Request a quotation: <https://roshanind.com/request-a-quote/?product=gratex-belt>

Laminated Belt (R-Omniflex)

Positive-drive modular eye-link belt with a large open area, from -40°C to 400°C .

The belt consists of eye links formed from wire, held at a fixed spacing by a cross wire to form a module. Modules are joined by cross rods passing through the eye links, with double bar links along both edges. Rod ends are secured with a hot upset.

The result is a positive-drive belt with no slip, a large open area and a smooth carrying surface — easy to clean and well suited to freezing, washing and baking.

Construction

Wire eye-link modules spaced by cross wires, joined with cross rods and double bar links at both edges; rod ends hot-upset.

Key data

Item	Detail
Materials	Carbon steel, Stainless steel T304, T316, Low-carbon T304L / T316L recommended for freezing environments, Other materials on request
Wire	Eye-link wire: 2 mm, 2.5 mm, 3 mm, 3.5 mm
Temperature	-40°C to 400°C
Edges	Double bar links (standard)
Applications	Tunnel freezers, Drying, Accumulation and handling, Washing and sterilising, Ovens

Defining characteristics

Characteristic	Value
Belt pitch	30 mm (1.18 in), 50 mm (1.97 in), 50.8 mm (2.0 in), 75 mm (2.95 in)
Eye-link wire diameter	2 mm (0.079 in), 2.5 mm (0.098 in), 3 mm (0.118 in), 3.5 mm (0.138 in)
Width limits	100 mm (3.94 in) to 6000 mm (236.2 in)
Variable mesh (minimum)	Wire diameter + 0.5 mm (0.020 in)
Conveying surface	Overall belt width – 7 mm (0.276 in)
Turn capability	Straight run only
Temperature range	-40°C (-40°F) to 400°C (752°F)

Request a quotation: <https://roshanind.com/request-a-quote/?product=laminated-belt>

Honeycomb Belt

Built from flat strip and rod for heavier loads than wire belts, with high flexibility.

Because the belt is made from flat strip and rod, its load-carrying capacity and flexibility are considerably better than a wire-made conveyor.

It is used for chocolate enrobing and oil quenching.

Construction

Flat metal strips formed into a honeycomb pattern and joined by cross rods.

Key data

Item	Detail
Materials	Carbon steel, Stainless steel grades to customer requirement
Wire	Strip and rod sizes made to requirement
Temperature	Depends on selected alloy
Edges	Rod ends welded
Applications	Chocolate enrobing, Oil quenching

Request a quotation: <https://roshanind.com/request-a-quote/?product=honeycomb-belt>

Enrober Belt

Large-pore wire belt that lets chocolate or oil drain freely during enrobing and quenching.

Enrober belts are widely used in the chocolate industry, where products are enrobed in chocolate, and for oil quenching. The large pores let surplus coating or oil drain away freely.

Construction

Open wire mesh with large apertures, made in stainless or mild steel wire.

Key data

Item	Detail
Materials	Stainless steel wire, Mild steel wire, To customer requirement
Wire	Made to requirement
Temperature	Depends on selected alloy
Edges	Welded edge, Bent edge
Applications	Chocolate enrobing, Oil quenching

Request a quotation: <https://roshanind.com/request-a-quote/?product=enrober-belt>

Chain Edge Belt

Mesh belt with pitched chains on both edges for positive drive, extra strength and trouble-free tracking.

Chain edge belts carry a rationally pitched chain at both sides, bolted or welded to reinforcing rods that pass through the belt.

They are used where tracking is a problem because of greasy or oily substances, or where the load must be carried against gravity on an incline. For this reason they are also called 'track-free' conveyors. When additional strength is needed and tracking must be controlled, chain-driven belts are the best choice.

Construction

Wire mesh (balanced, rod reinforced or flat wire) carried on reinforcing rods fixed to pitched side chains, bolted or welded.

Key data

Item	Detail
Materials	Mild steel, Stainless steel, Other materials on request
Wire	Made to requirement
Temperature	Depends on selected alloy
Edges	Chain edge (bolted or welded)
Applications	Quenching and frying, Inclined conveyors, Greasy or oily products, Heavy loads needing positive drive

Request a quotation: <https://roshanind.com/request-a-quote/?product=chain-edge-belt>

Biscuit Cooling Conveyor Belt

Open wire mesh belts for cooling biscuits after the oven, built to your conveyor dimensions.

After the oven, biscuits need to cool evenly before stacking and packing. An open wire mesh belt lets air pass through the product from below as well as above.

We supply cooling conveyor belts for biscuit lines in the weave, wire and material that suit your conveyor and product. Tell us your conveyor width, length and product, and our team will recommend a specification.

Construction

Selected from our wire mesh weaves (e.g. balanced weave or flat-surface mesh) to suit the cooling conveyor.

Key data

Item	Detail
Materials	Mild steel, Stainless steel, To requirement
Wire	Made to requirement
Temperature	Ambient cooling duty
Edges	Welded edge, Bent edge, Chain edge
Applications	Biscuit cooling conveyors, Post-oven product transfer

Request a quotation: <https://roshanind.com/request-a-quote/?product=biscuit-cooling-conveyor-belt>

Contact

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