Balanced Spiral Woven Conveyor Belts

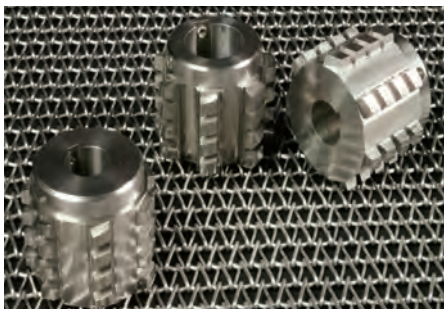
Overview

Balanced Weave Conveyor Belt is a stainless steel balanced woven belt with left and right-hand wound spirals, connected by crimped cross wires. At the sides of the belt, the cross wire is welded to the spiral wire. Balanced weave belts can be used for a virtually infinite number of applications. Ranging from super strong for conveying heavy loads over large widths or conveying very hot products to very dense weaves for small products, unsorted goods or products requiring stable support.

Balanced Spiral Woven Belts are manufactured in compliance with the latest food safety requirements for food processing equipment such as FDA, GMP and 1935/2004/EC. This ensures our customers a belt that is fit for use in the most demanding food processing applications.Spiral wirelink belts are suitable for a wide range of active food contact applications such as:Baking, Frying, Drying, Cooling, Freezing, Pasteurizing,etc.

Balanced Weave Conveyor Belt can be used in the temperature range of -50º to + 1350ºC.
The length and width of the conveyor belt can be customized according to demand.

The stainless steel Balanced Weave Conveyor Belts can additionally be equipped with edge plates and flights. The pins can be bent upwards in some belt types of the spiral wire link belts which will create a standing edge. It's typically driven by friction but can also work with custom sprockets for positive drive. The pitch and edge design of the belt can be customized based on the usage environment.

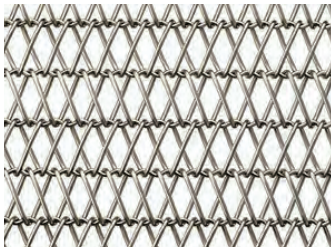




Belt Types

Balanced Spiral Woven Conveyor Belts are available in 4 types different versions. From corrugated wirelink belt that is alternatively woven left and right to create a straight run to rod reinforced belt structure that is designed for applications that involve high temperatures. PFM Screen offers the following 4 types of belt configurations:

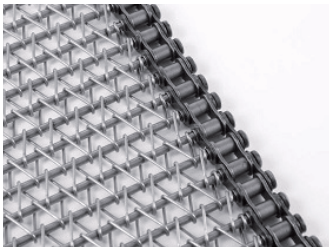
Standard Balanced Woven

The Standard Balanced Woven consists of alternatingleft and right hand coils with each coil interconnecting with the next by means of a crimped cross wire.



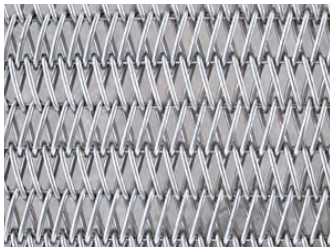
Double Balanced Woven

Double Balanced Woven is similar to standard balanced but uses coil pairs of each handing intermeshing and then link by means of the crimped cross wire with pairs of intermeshing opposite hand coils on a repeat pattern down the length.



Standard Balanced Woven With Straight Cross Wire

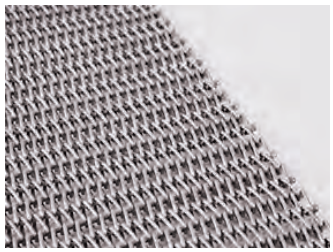
The structure of this belt is similar to “Standard Balanced” but uses a straight cross wire. This assembly allows for a closer pitching of coils across the width for small product handling.



Double Balanced Woven With Straight Cross Wire

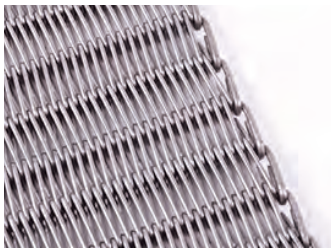
The structure of this belt is similar to “Double Balanced” but uses a straight cross wire. This assembly allows for a closer pitching of coils across the width for small product handling.

Edge Availability



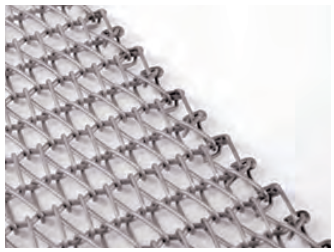
Welded Edge

This is the most common and economical edge finish. With welding together of both the coil and crimp wires there are not cut wire ends.



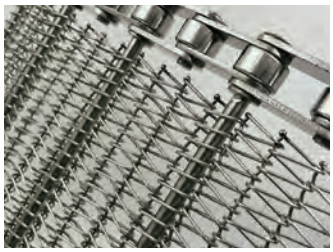
Laddered Edge

Less common than the welded edge the laddered edge is often used where welds are not desirable for the application. The belt edge is also smooth and allows more belt edge flexibility. In high temperature applications, it's more efficient because the laddered edge isn't under strain, making it less likely to fracture.



Hook Edge

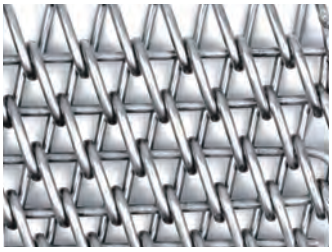
Also less common than the welded edge type the hook edge is often used where welds are not desirable for the application. The belt edge is also smooth and allows more belt edge flexibility.



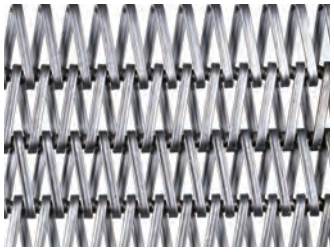
Chain Edge

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.

Wire Type



Round Spiral Wire



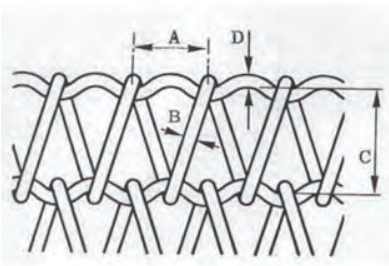
Flat Spiral Wire

Material Availability

Material	Maximum Operating Temperature °C
Carbon Steel	550
Galvanized Mild Steel	400
Chrome Molybdenum	700
304 Stainless Steel	750
321 Stainless Steel	750
316 Stainless Steel	800
316L Stainless Steel	800
314 Stainless Steel	1120
37/18 Nickel Chrome	1120
80/20 Nickel Chrome	1150
Inconel 600	1150
Inconel 601	1150

If you have other material requirements, please contact us.

Specifications



Balanced Woven Belt without Chain Edge

A: Spiral Wire Pitch (mm) B: Spiral Wire Diameter (mm)
C: Cross Rod Pitch (mm) D: Cross Wire Diameter (mm)

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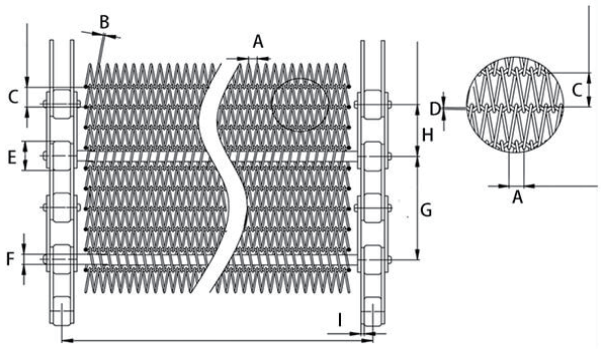

Balanced Woven Belt with Chain Edge

A: Spiral Wire Pitch (mm) B: Spiral Wire Diameter (mm) C: Cross Rod Pitch (mm) D: Cross Wire Diameter (mm)
E: Roller Diameter (mm) F: Support Rod Diameter (mm) G: Support Rod Pitch (mm) H: Chain Pitch (mm) I: Plate Thickness (mm)

Balanced Weave Conveyor Belts specifications				
Item No.	Spiral wire pitch	Cross rod pitch	Spiral wire diameter	Cross wire diameter
	mm	mm	mm	mm
BWCB-001	4	4	0.9 to 1.2	1.2 to 1.6
BWCB-002	5	6.4	0.9 to 1.2	1.2 to 1.6
BWCB-003	5	5	0.9 to 1.6	1.2 to 1.6
BWCB-004	6	6	0.9 to 1.6	1.2 to 1.6
BWCB-005	6	8	0.9 to 1.2	1.2 to 1.6
BWCB-006	6	10	0.9 to 1.6	1.2 to 1.6
BWCB-007	8	12	1.2 to 2.0	1.2 to 2.5
BWCB-008	8	13	1.2 to 2.0	1.2 to 2.5
BWCB-009	8	15	1.2 to 2.0	1.2 to 2.5
BWCB-010	11	15	1.2 to 2.0	1.2 to 2.5
BWCB-011	11	20	1.6 to 3.0	1.6 to 3.0
BWCB-012	11	25	1.6 to 3.0	1.6 to 3.0
BWCB-013	11	27	1.6 to 3.0	1.6 to 3.0
BWCB-014	15	20	1.6 to 3.0	1.6 to 3.0
BWCB-015	15	25	1.6 to 3.0	1.6 to 3.0
BWCB-016	22	23	1.6 to 3.0	1.6 to 3.0
BWCB-017	22	33	1.6 to 3.0	2.0 to 4.0
NOTE: 1. If flat wire, please give us cross section. 2. Custom specification is available if you can't find the suitable size.				

Applications

Balanced weave conveyor belts are widely used across various industries due to their flexibility, strength, and resistance to high temperatures. Common applications include:

- **Food Processing:** Used in baking, frying, cooling, and freezing processes due to their ability to handle both high and low temperatures.
- **Heat Treatment:** Ideal for processes like annealing, sintering, and hardening, where materials are exposed to extreme heat.
- **Glass and Ceramics Industry:** Used for transporting products through kilns or ovens where consistent heat is necessary.
- **Metalworking:** Suitable for quenching, tempering, and other metal treatment processes.
- **Electronics:** In soldering and drying, where precise handling of components under controlled temperatures is crucial.
- **Textile and Paper Drying:** Helps in drying applications requiring airflow and heat.
- **Packaging:** Employed in automated packaging lines for the transport of goods.

Food Processing

Heat Treatment

Glass Industry

Drying