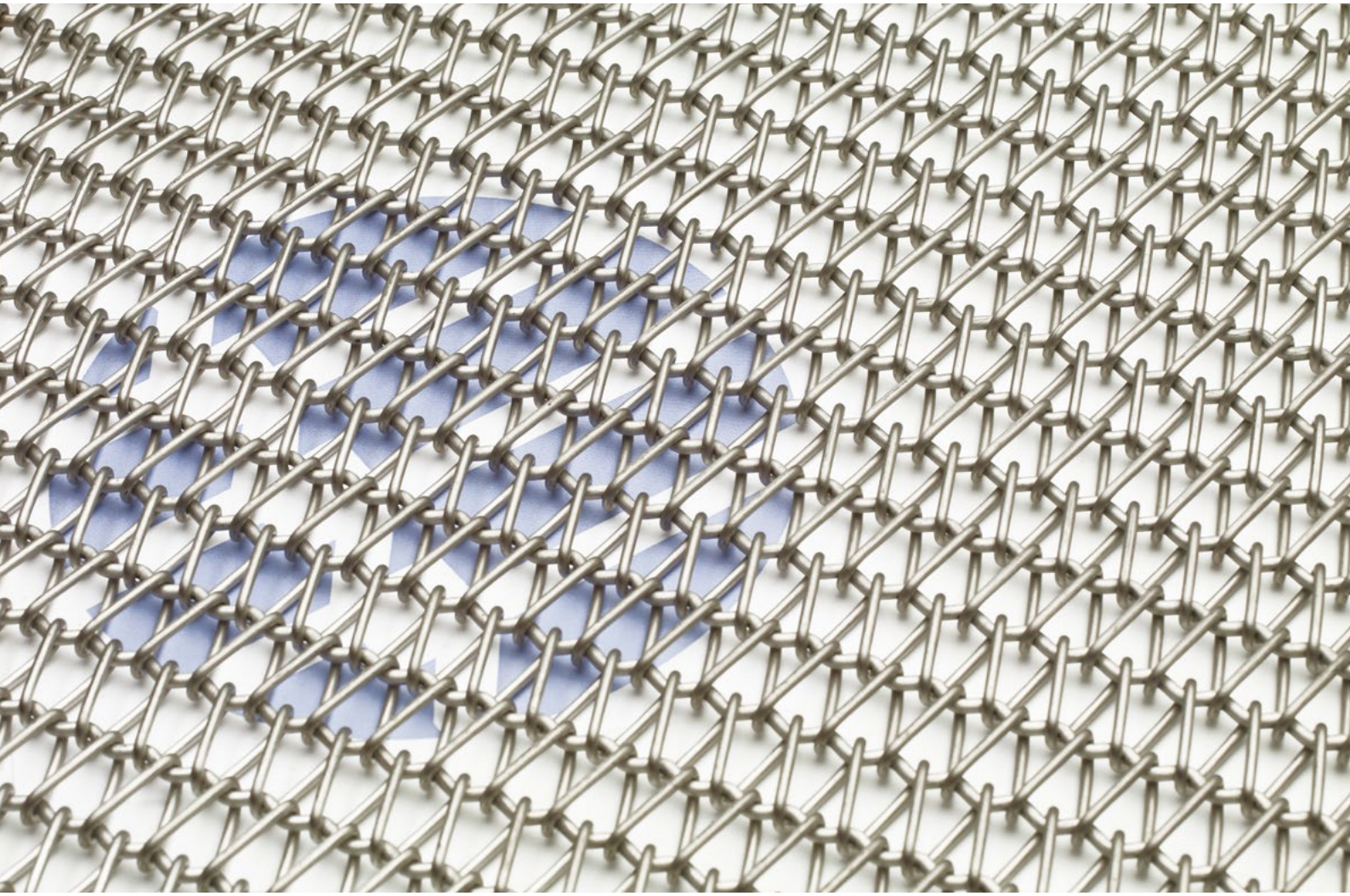
wirebelt®

THE TRUSTED METAL CONVEYOR BELT MANUFACTURER™



BALANCED SPIRAL WOVEN CONVEYOR BELTS

KEEP YOUR PROCESS ON THE MOVE

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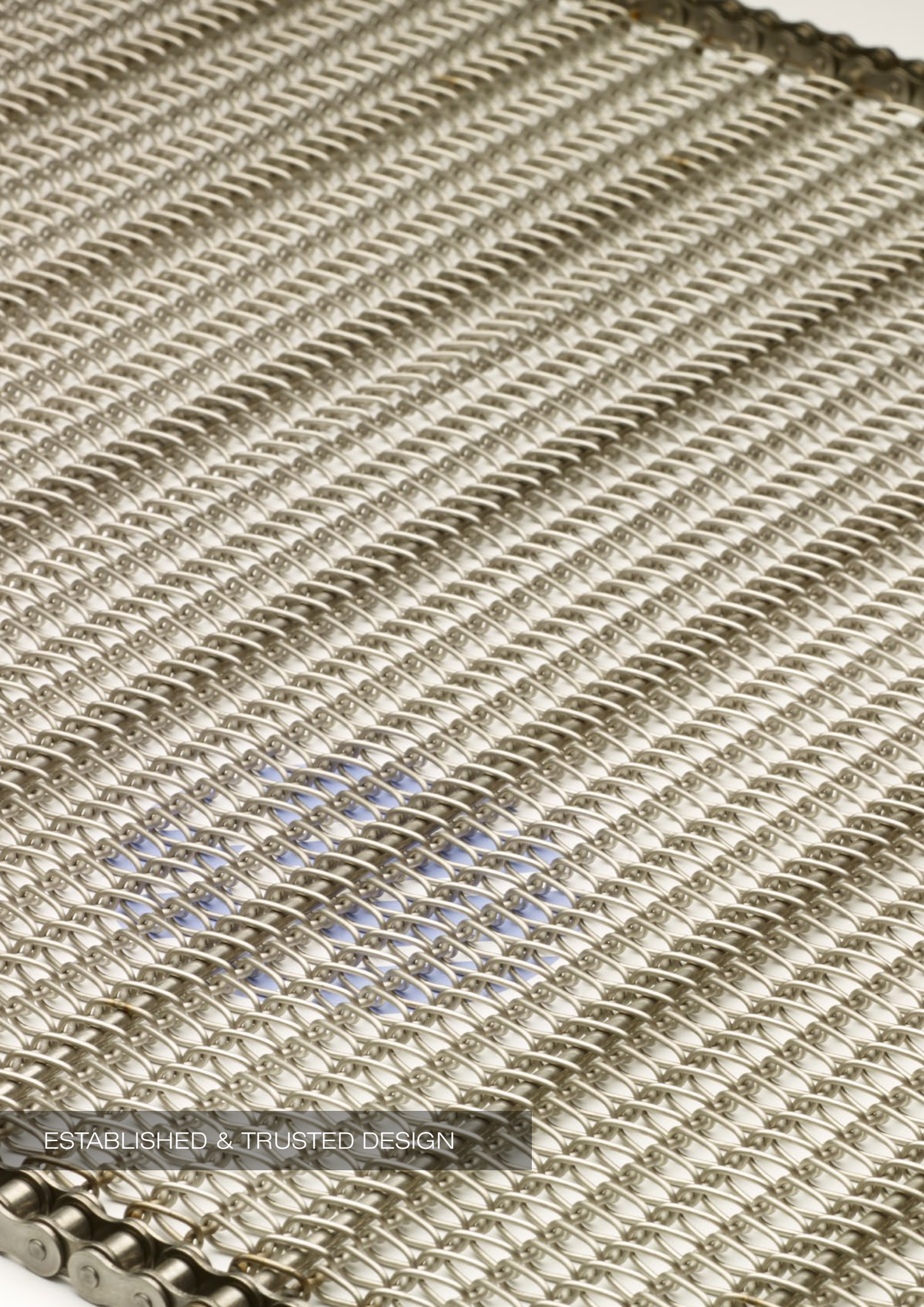


ESTABLISHED & TRUSTED DESIGN

BALANCED SPIRAL WOVEN CONVEYOR BELTS

Wire Belt's Balanced Spiral belting is an extremely popular mesh design, found in almost every manufacturing industry with a wide-ranging number of possible applications.

Balanced Spiral mesh features a simple yet effective design, constructed from alternating left- and right-hand spiral coils. These coils are held in place by interconnecting crimp rods which run through the width of the belt. The edges of the belt can be supplied either welded or with a knuckled selvedge.

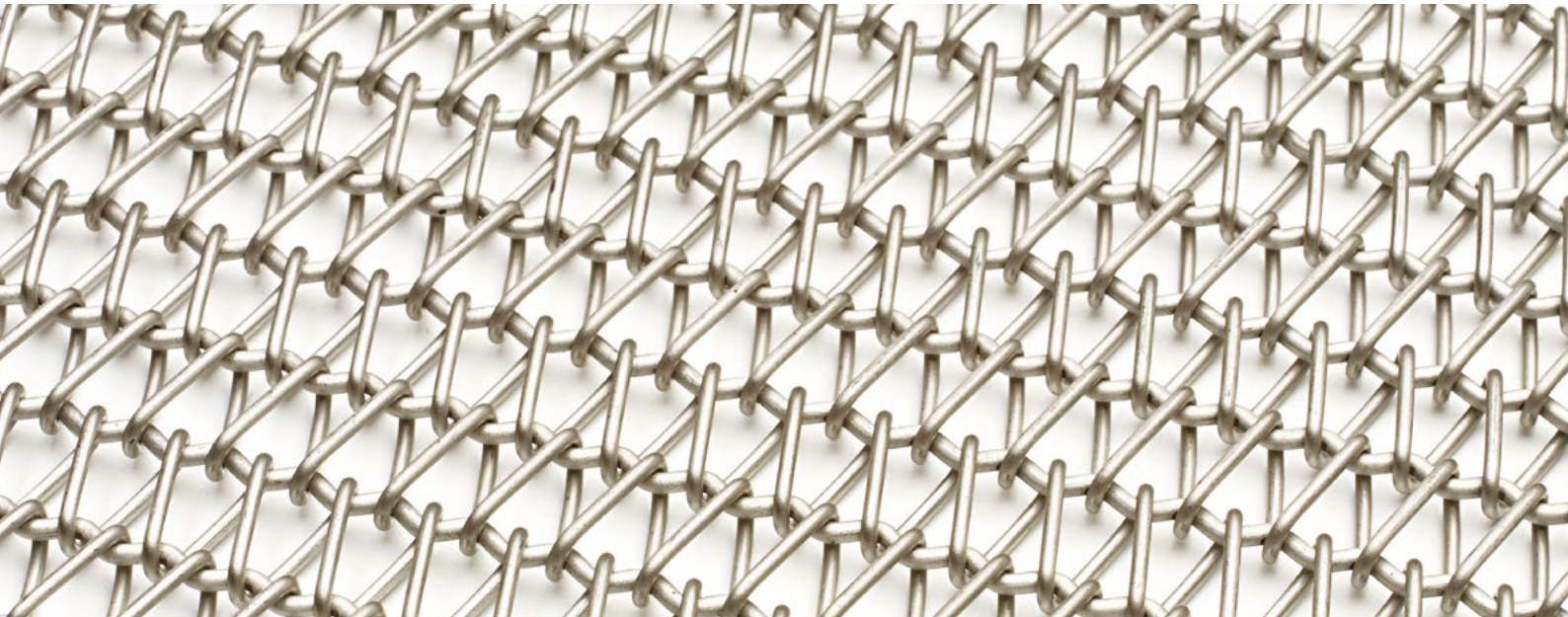
Balanced Spiral gains its excellent tracking properties by employing an alternating pattern which prevents the belt from pulling to one side. Lateral movement within the belt is reduced by the use of specially crimped rods which hold each spiral coil in place.

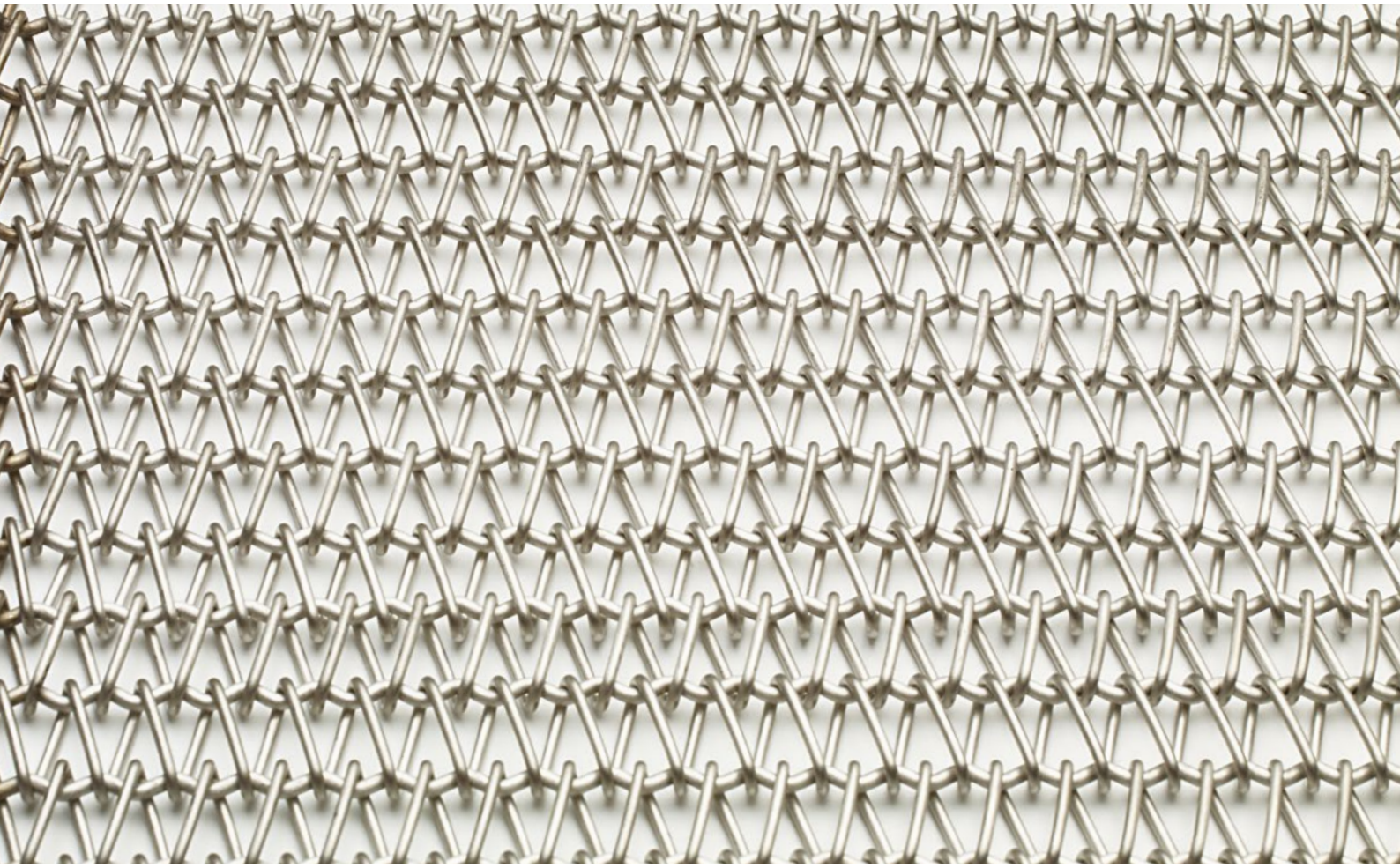
Balanced Spiral is most commonly supplied as friction-drive belt; however certain meshes can be supplied as Positive-Drive, allowing sprockets to engage with the belts mesh. Alternatively, we can supply Balanced Spiral with chain edges for high load applications.

Cross-Flights and Side Plates are available for inclined applications or product separation requirements. Wire Belt Company also supplies Double Balanced Spiral belting, for applications with particularly high load and/or for products which require a narrower aperture than is possible with standard balanced spiral belts.

ADVANTAGES

- Straight running operation
- Excellent strength to weight ratio
- Wide variety of mesh specifications to suit individual applications
- Exceptional tracking properties
- Available with different mesh edge options/finishes
- Side chain options available





BALANCED SPIRAL WOVEN CONVEYOR BELTS

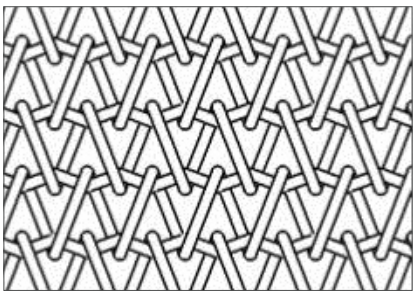
TYPICAL APPLICATIONS

- Cooking
- Heating
- Cooling
- Coating
- Drainage
- Baking
- Industrial Curtains
- Annealing
- Curing
- Shrink-Wrapping
- Lifting Slings
- Elevating
- Cladding

Other Specialised Belt Style Applications:

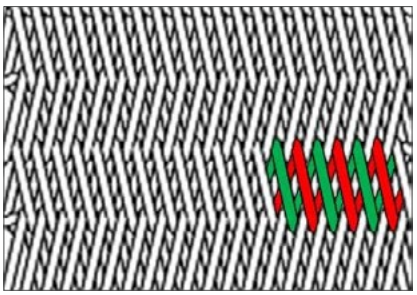
- Lehr Belts for Glass Annealing
- Swarf Filter Belts
- Loose link and Ferrule chain edge for Cryogenic Freezers

BELT MESH TYPES



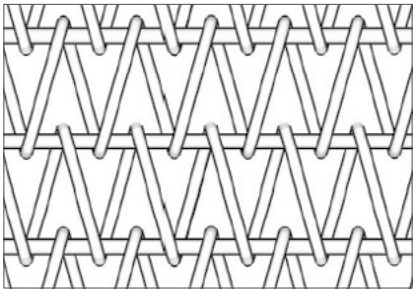
STANDARD BALANCED SPIRAL (BS)

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



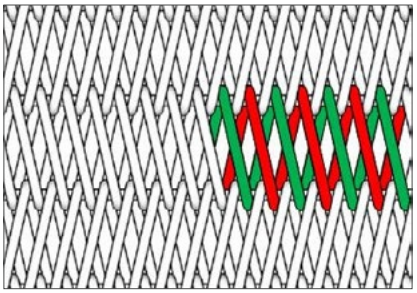
DOUBLE BALANCED SPIRAL (DBS)

The double balanced assembly is similar to standard balanced spiral 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. This style allows for closer pitching of coils across the width for small product handling.



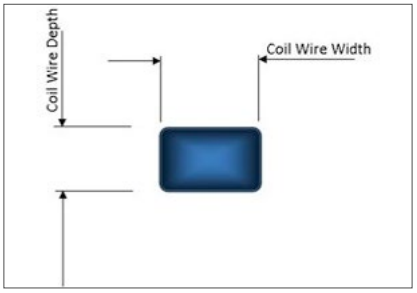
IMPROVED BALANCED SPIRAL (IBS)

The structure of this belt is similar to “Standard Balanced Spiral” but uses a straight cross wire with single interconnecting coils in a repeat pattern of left hand/right hand down the length. This assembly allows for a closer pitching of single coils across the width for small product handling.



IMPROVED DOUBLE BALANCED SPIRAL (IDBS)

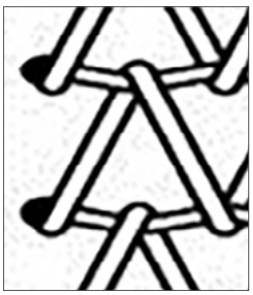
The structure of this belt is similar to “Double Balanced Spiral” but uses a straight cross wire with double intermeshing coils of each handing interconnecting by means of the straight cross wire in a repeat pattern of left hand/right hand coils down the length. This assembly allows for a closer pitching of coils across the width for small product handling.



FLAT WIRE ALTERNATIVES

In general, all of the above styles are available with coil wires manufactured using a flattened wire. When identifying the coil wire it is important to confirm the cross-section dimensions.

EDGE AVAILABILITY



WELDED EDGE (W) – MESH ONLY

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 (LD) – MESH ONLY

The laddered edge is often used where welds are not desirable for the application. It is also an option in applications where welding facilities are not available. The belt edge is also smooth and allows more belt edge flexibility. It is also more efficient in high temperature applications as the laddered edge is not under operational strain in use and therefore less prone to fracture. Generally, this edge finish is only available for meshes with a relatively large crimp wire pitch down the length.

HOOK EDGE (U) – MESH ONLY

The hook edge is often used where welds are not desirable for the application. It is also an option in applications where welding facilities are not available. The belt edge is also smooth and allows more belt edge flexibility. Generally, this edge finish is only available for meshes with a relatively large crimp wire pitch down the length.

CHAIN EDGE DRIVEN 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

Other styles of chain edge finish are available, see our website or contact our Technical Sales Team for more information.

METHODS OF DRIVE

- Friction Driven
- Positive Drive
- Chain Edge Driven

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

AVAILABLE BELT SPECIFICATIONS

As standard belts are friction drive, however, please see table of positive drive specifications below.

POSITIVE DRIVE BELT SPECIFICATIONS							
Mesh Type	Specification Coding	Nominal Belt Thickness (mm)	Lateral Pitch of Coil wire (mm)	Coil Wire Dia. (mm)	Crimped Cross Wire Pitch down length (mm)	Crimped Cross Wire Dia (mm)	Approximate Open Area (%)
BSW-PD	18-16-16-16	7.7	16.94	1.63	19.05	1.63	73.10
BSW-PD	18-14-16-14	8.9	16.94	2.03	19.05	2.03	66.60
BSW-PD	30-17-24-17	7.3	10.16	1.42	12.7	1.42	62.40
BSW-PD	30-16-24-16	6.7	10.16	1.63	12.7	1.63	57.20
BSW-PD	42-18-36-18	6.0	7.26	1.22	8.47	1.22	54.40
BSW-PD	42-17-36-17	6.0	7.26	1.42	8.47	1.42	47.30
BSW-PD	42-16-36-16	6.4	7.26	1.63	8.47	1.63	40.30
BSW-PD	48-17-48-17	6.1	6.35	1.42	6.35	1.42	37.80
BSW-PD	48-16-48-16	6.4	6.35	1.63	6.35	1.63	29.80
BSW-PD	60-20-48-18	4.0	5.08	0.91	6.35	1.22	48.30
BSW-PD	60-18-48-18	5.2	5.08	1.22	6.35	1.22	37.40
BSW-PD	60-18-60-18	5.6	5.08	1.22	5.08	1.22	33.80

All specifications are supplied with welded edge only.

MATERIALS AVAILABLE (MESH ONLY)

Belts are supplied as stainless steel, carbon steel, or galvanised mild steel as standard. If other material is required contact our Technical Sales Engineers for more information or consult our website.

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Distributed by:

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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