

Metal conveyor belts

Campbelt S.A. has been producing metal conveyor belts for technical applications in industry and architecture since 1988.

Types of metal conveyor belts

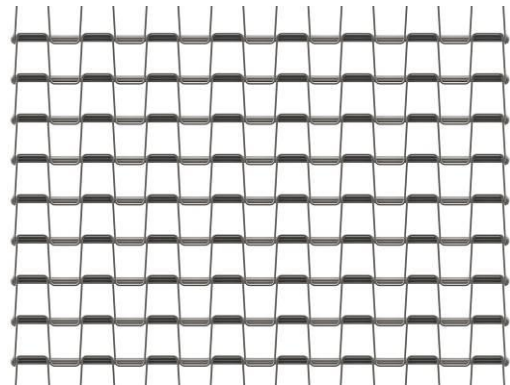
Flat metal belts (TDF)

Strips of metal strapping joined together by cross rods

Sprocket driven belt, ensuring correct guiding and consequently, reducing maintenance costs.

Easy to clean by brushing, water or steam jet, thus meeting the sanitary requirements of sectors such as the food industry.

Thanks to the structure they form, they have a high strength-to-weight ratio, making them very durable and stable.



They can be manufactured in carbon steel, galvanized steel, AISI 204, AISI 304, and AISI 316.

The normal operating temperature limits are around 250°C, with models that can successfully operate up to 500°C.

Rod network belts (TDA)

Metal belts formed by cross rods crimped in a Z-shape

These metal belts are driven by sprockets distributed across the width of the belt, ensuring excellent guidance in a wide range of load and/or speed situations.

They have a large open surface, which facilitates the passage of air, gases, or liquids.

They are easy to clean.

They are lightweight, with a very small weight per square meter.

They can be made of steel (music wire), AISI 302 and AISI 316.

They can withstand temperatures of up to 400 degrees.



Metal conveyor belts

Balanced weave belts (SO)

Metal belts with alternating right-hand and left-hand spirals connected by wavy rods

They are made of round wire spirals, slightly oval-shaped, which form a flat surface that increases the grip between the belt and the product. In cases where an extremely smooth surface is required, for marking or product stability issues, they can be manufactured with flat wire spirals, increasing the contact surface.

They require minimal maintenance.

They have good flexibility properties.

For smaller or bulk products, denser belts can be made by adding more spirals within each rod (DSO/TSO/CSO).



Spiral metal belts (CTA)

These belts are manufactured with lateral links connected by straight rods, and can incorporate both right-hand and left-hand spirals if needed

The finish on the link will depend on the type of traction the customer needs. It can be smooth; in this case, the rod is flushed and welded directly to the link (buttonless welded edge). Or with an external bump, in this case, the rod ends are upset and welded with a point to the link (welded button edge).

In terms of hygiene, the buttonless welded edge has advantages, as it is easier to clean and disinfect, presenting fewer crevices where residues can accumulate and bacteria can proliferate.



The three standard models of link pitch are 19.05mm, 25.4mm, and 27.43mm. The turning radius will be determined by this pitch.

For widths greater than 1200mm, it is recommended to include a third central link to prevent the rods from bowing.

They are made from AISI-304-L and AISI-316-L stainless steel.
These belts are often used in freezing and cooling processes.

Metal conveyor belts

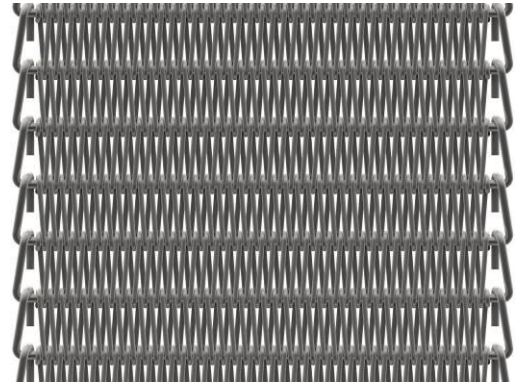
Metal belts with straight rod and clinched selvage (ER)

These are belts made up of alternating right-hand and left-hand spirals connected by straight rods and clinched selvage

These belts can be clinched at 90 degrees (ER) or 180 degrees (ER-P). In the case of the belt clinched at 90 degrees, the connecting rod is linked to the next one in a ladder-like fashion, forming smooth and uniform edges.

The links of the linkage can be welded to achieve greater strength.

The belt clinched at 180 degrees is commonly known as the Baker's Belt. This linkage ensures controlled material stretching during the heating process, making it ideal for installation in long ovens, eliminating the potential risk of wear due to friction, thus extending the belt's lifespan.



These metal belts can be manufactured in AISI 314 or AISI 330 (an alloy with 37% of nickel and 17% of chromium with remaining components in proportions similar to AISI 314).

These belts perform very well at high temperatures (up to 1150 degrees).

Metal belts with lateral chain (CTD/CTN)

Metal belts made with balanced mesh (SO) and incorporating side chains

These belts are formed by alternating right-hand and left-hand spirals, joined by straight rods, to the side chains. These chains are usually hollow shaft chains, as the rods go through each chain pitch (in CTD belts).

They can be manufactured for most standardized chain pitches: ½", ¾", 1", 1.25", 1.5", and 2".

They are made of stainless steel.



The normal operating temperature limits are around 400 °C; however, special chains can be manufactured to successfully operate at higher temperatures.

Metal conveyor belts

Compound weave belts (DSO/TSO/CSO)

Metal belts consisting of alternating right-hand and left-hand spirals interconnected by a specific number of rods at each pitch

Depending on the number of nested spiral pairs, we have different models of belts.

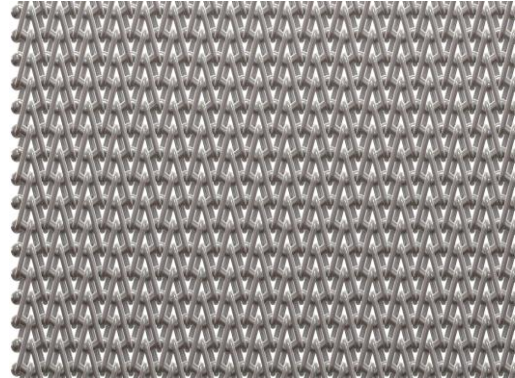
3 rods inside each spiral - DSO model

4 rods inside each spiral - TSO model

5 rods inside each spiral - CSO model

The open area or mesh opening decreases in each belt model while maintaining a high level of flexibility. This creates a very dense, smooth, and flat surface that has a natural tendency to move in a straight line, making it easy to guide.

They can be manufactured in any material according to the temperature range of the application.



Metal belts with straight rod and welded selvage (SR)

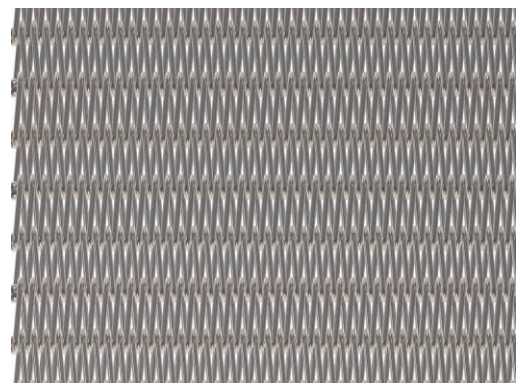
Belts composed of alternating right-hand and left-hand spirals connected by straight rods

They are metal belts that are very similar to balanced belts (SO), but with straight rods. They are manufactured with tighter spirals, which means they have a smaller spiral pitch. This makes them very strong and resistant to traction forces.

They have great flexibility for turning around cylinders. Therefore, they are very useful for transfers between installations.

If the application requires it, they can be equipped with edge guards that act as lateral containment for the product (CT-CS). Lift attachments can also be included if needed.

They can be manufactured in all materials according to the temperature range of the application.



Metal conveyor belts

Conventional Weave belts (DRW)

Belts made by threading coils in the same direction

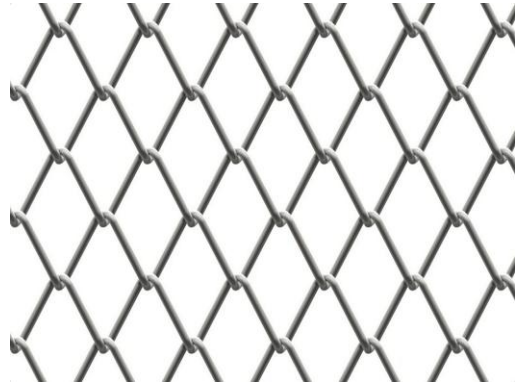
This type of belts lacks the advantages of balanced bands (SO), since all the spirals being of the same direction tend to deviate in long installations.

The characteristics of the spirals will depend on the product to be transported. Chains can also be added if required by the application.

For high-temperature applications, due to their significant tensile strength and high thermal dissipation, they can be manufactured with reinforcing rods (DRS), or even with lateral reinforcing rods (ARR).

It can be made of steel or stainless steel.

The DRW is a metal belt for ambient temperatures. However, for high-temperature applications, it can be manufactured with reinforcing rods (ARR belt).



Eye link belts (CMG)

Metal belts manufactured with stainless steel hooks joined by transverse rods

These belts are driven by direct traction. The special grooved cylinders that act as the drive and return sprockets in these installations engage precisely with the transverse rods of the belt, so there is usually no slippage.

If required by the application, they can have edge guards or lift attachments to transport rotating parts or bulk products. And also can incorporate side chains (CT-CMG, CT-CMG-VE).



Easy to clean and resistant to clogging.

They have a smooth and flat surface.

They are made of stainless steel.

They have the ability to work with temperatures up to 650 degrees.

Metal conveyor belts

Plate link metal belts (CT-LP)

Metal plates linked with side chains

The metal plates within the conveyor belt act as hinges, offering a large flat load surface and small turning radius.

Perfect alignment when installing side chains.

The plates can be machined with holes to ensure air recirculation for zig-zag type oven applications.

They are manufactured in steel and 304 stainless steel.

They can operate at temperatures up to 250 degrees.



Laminated metal belts (Z)

Mechanically rolled metal belt to achieve a flat surface

The laminated belts offer considerable advantages, especially for the baking of cookies in continuous conveyor ovens.

Their main characteristics are:

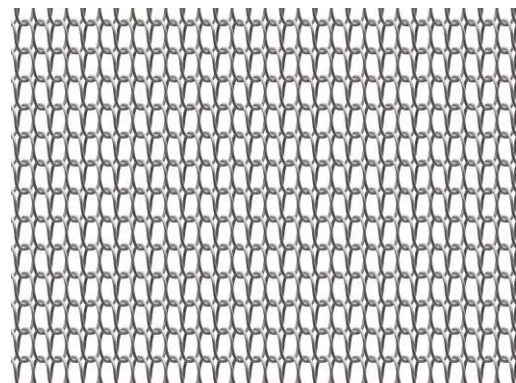
Lightweight.

Reduced thermal energy consumption.

Good air circulation through the belt.

Reduced dimensions and thin thickness

Specially designed for long life and requires minimal maintenance.



There are different standard variants of this type of belt with diameters ranging from 1 mm to 1.5 mm and pitches from 6.3 mm to 8.5 mm, varying the weight per square meter from 6.5 Kg for the lightweight version to 11.2 kg for the strongest and reinforced one.

Z-type belts is manufactured with a width of up to 1.400 mm and length that can exceed 300 meters.

It is made of steel

It has the ability to work with temperatures up to 300 degrees.

Metal conveyor belts

Architecture and much more / Metal meshes in design

Due to their versatility and the possibility of creating innovative and functional designs, metal fabrics are being used more and more frequently in architecture. more frequently in architecture.

Facades.
 False ceilings.
 Protective panels.
 Enclosures.



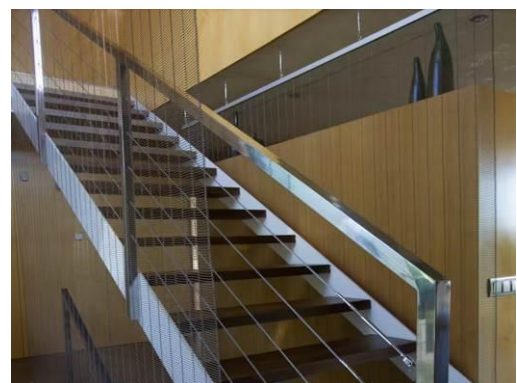
Sun shading and light control

They serve to reduce solar radiation and provide sun protection. They act as an effective and environmentally friendly barrier against moderate heat. At the same time, they let in natural light, creating a pleasant and energy-efficient indoor climate.



Protection and security

Metal grilles are also used as safety elements. They can be installed in windows, balconies, stairs or terraces to protect against accidental falls or unwanted intruders.



*At <https://campbelt.es/>
 you will find all the information you need to make measurements.
 You can download all data material.*

There are various accessories for metal conveyor belts, such as chains, side guides, flights, humps or troughs, which can be added to optimise the efficiency of our customers' production processes.

We offer just as many options when it comes to materials.

*Further information can be found at
<https://campbelt.es/>*

Wir fördern (Ihr) Gut