

# WIRE MESH Conveyor belts



METAL CONVEYOR BELTS

# TWENTEBELT WIRE MESH BELTS



## (%) TWENTEBELT

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## **TWENTEBELT WIRE MESH BELTS** IDEAL METAL CONVEYOR BELTS FOR LIGHT TRANSFERS

Wire mesh belts have extra large openings and are very well suited to coating processes such as chocolate covering, egg glazing, breading and other applications in which the product should have as little contact with the conveyor belt as possible. This means it is especially suitable for light products. Wire mesh belts turn on a very small radius, which enables excellent product transfer. Wire mesh belts are flexible in terms of use and specifications. Twentebelt also offers wire mesh belts for usage in conveyor curves.

FOCUS ON FOOD SAFETY - FDA, GMP, 1935/2004/EC Wire mesh belts from Twentebelt 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 wire mesh belts are fit for use in the most demanding food processing applications.



Wire mesh belt used to transport dough for pretzel sticks.

Twentebelt started developing wire mesh belts over 25 years ago. Nowadays Twentebelt belongs to the leading suppliers in Europe, serving a loyal group of OEM's, resellers and end-users.

Wire mesh belts are ideal for light transfers and improve efficiency for a wide range of active food contact applications such as:



Wire mesh belt used to transport salmon.

1	Drying		Cooling
	Baking	-	Heating
	Draining		Coating

Glazing

Wire mesh belts are suitable for many more processes in various industries.

#### FIT-FOR-PURPOSE BELT CONFIGURATIONS

Twentebelt wire mesh belts are available in a large variety of pitch, wire diameters, mesh width and side finishing creating a wide range of fit-for-purpose wire mesh belts.



## CONSTRUCTION

Wire mesh belts from Twentebelt are constructed out of high quality uniform wires that are weaved together to create the wire mesh belt surface.

Wire mesh belts from Twentebelt are manufactured with equipment specially designed by Twentebelt. Depending on the specifications, wire mesh belts can be manufactured from the following materials:

Other materials are available on request.

## SIDE FINISHING



### LOW BELT WEIGHT - ENERGY EFFICIENT BELTS

Twentebelt wire mesh belts have a very low belt weight. This means reduced energy consumption in operating the belt and reduced heat absorption in heating applications.

## EASY TO CLEAN

The large open mesh area and no hidden crevices make Twentebelt wire mesh belts easy to clean, which reduces the costs in maintaining the wire mesh belt.



AISI 302	-	Spring steel (bright)
AISI 316		Music wire



Wire mesh belt with a double bent Z side. (GR-ZK)

## OPTIONS

Wire mesh belts can be equipped with integrated flights or tips, or levels for fixed product spacing.



Wire mesh belt equipped with flights.

Wire mesh belt equipped with levels.

Below are some examples of flights and levels that can be equipped with Twentebelt wire mesh belts.



Other options for the flights are possible. Please contact Twentebelt to discuss the possibilities.

## SPECIFICATIONS

EXPLANATION OF TWENTEBELTS SPECIFICATION METHOD For example: GR-SK 8 - 5 x 76,8 - 8 - 10 -1,6

GR-SK	>	Wire mesh belt with standard S side	8
8	>	Final loop	1
5 x 76,8	>	Number of meshes x the mesh width	1,

The exact pitch is measured over 11 rods in tensioned condition.







- > Pitch
- > Wire diameter

## DIMENSIONS

#### POSSIBLE CONFIGURATIONS

The table below presents the possible configurations of wire mesh belts. Your desired combination of pitch and wire diameter should fall into the dark blue cells of the table. Of course, deviating specifications are possible. In collaboration with our customers we will always be able to offer an adequate solution.

### STANDARD RANGE

	Pitch: 3,5 - 28 mm								Wire diameter: 0,9 - 2,8 mm									Mesh width: 40 - 150 mm						
		Pitch	(mr	n)				1/4"							3/8"			1/2"						
		3,5	4	4,4	5	5,5	9	6,35	6,5	7	7,5	00	8,5	6	9,525	10	12	12,7	17	20,32		Minimal S-side (mm)	Minimal mesh width (mm)	Belt type
wire diameter (mm)	0,90																					4	40	SK / ZK
בנם	1,00																					4	40	SK / ZK
5	1,20																					5	45	SK / ZK
	1,25																					5	45	SK / ZK
	1,40																					6	50	SK
	1,60																					8	50	SK
	1,80																					8	50	SK
	2,00																					8	50	SK
	2,35																					10	65	SK
	2,80																					12,5	80	SK

Deviating specifications are available on request, please contact Twentebelt to discuss the possibilities.

## WIRE MESH BELT CERTIFICATE

Twentebelt wire mesh belts are shipped with a certificate that can be used for your repeat order.

Note that the belt width of 400 mm can be calculated by summing up the final edges  $(2 \times 8 \text{ mm} = 16 \text{ mm})$  and the total mesh width (5 x 76,8 mm = 384 mm).

In case of a GR-ZK you should also take into account the width of the two gear wheel edges.



## DRIVE

Wire mesh belts are driven by toothed sprockets or discs made out of plastic or stainless steel. A wire mesh belt should never be driven from the carrying side as this makes the belt jump the teeth. The width of the sprockets is the mesh width minus 10 mm. The required sprockets and discs are available at Twentebelt.



## DRIVEN SECTIONS

Sprockets are positioned at the uneven sections of the belt. For instance under section 1, 3, 5 etc.

## MAKING A WIRE MESH BELT ENDLESS BY CONNECTING INDIVIDUAL SEGMENTS

ST	EP 1		
	Connect the individual s	egments to the belt.	
FIN	ISHED!		
Υοι	r Twentebelt wire mesh	belt is ready for use.	
<b>π</b> ι ·	t method of connecting i	s usually applied for wire	
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## EXAMPLES: DRIVING A WIRE MESH BELT

Below are a few examples of how a wire mesh belt can be driven.



Twentebelt can provide advice on how to construct your conveyor. Please contact Twentebelt to discuss the possibilities.



## MAKING A WIRE MESH BELT ENDLESS BY WEAVING IN A ROD

#### STEP 1

 Separate a wire rod from the belt and position the belt ends parallel to each other.



## STEP 2

 Connect both belt ends by weaving in the wire rod, starting from the middle section.



#### STEP 3

 Continue connecting by joining all sections from the middle to both sides and straightening the wire rod if necessary.



### STEP 4

 Finish by connecting the edges on both sides of the belt.



#### FINISHED!

Your Twentebelt wire mesh belt is ready for use.



## MAKING A WIRE MESH BELT ENDLESS BY UTILIZING CONNECTION TUBES

## STEP 1

- Separate a wire rod from the belt.
- Split this wire rod as illustrated.

Please note: Do not position the tubes in the driven sections of the belt.

#### STEP 2

- Connect the edges on both sides of the belt.
- Insert all individual parts of the rod.
- Complete the connection by joining all sections with the separated rod and straightening it if necessary.

#### STEP 3

- Place the tubes on to the wire ends.
- Fix the tubes on the rod by squeezing the ends with the use of pliers.

#### FINISHED!

Your Twentebelt wire mesh belt is ready for use.

## **ABOUT TWENTEBELT**

Twentebelt of the Netherlands has been specialised in metal conveyor belts for over 100 years. Twentebelt develops, produces, supplies and maintains a wide range of metal belts of different types and alloys. With our products and supporting activities we can meet the various requirements of application in a.o. the food-, chemical-, pharmaceutical and packaging industries. Practically every belt is produced and adjusted to the specific applications of our customers. In the field of eyelink belts Twentebelt has become the worldwide market leader.



Do you require different or special conveyor belt that is not listed? Please contact us to discuss the possibilities.

STRONGLY (5) CONNECTED

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