



TECHNICAL SPECIFICATION

SMALL RADIUS SPIRAL FREEZER BELT

Compact spiral configurations
Dimensions in mm and in

PROVEN · STABLE · VERIFIED



A manufacturer supporting your belt specification

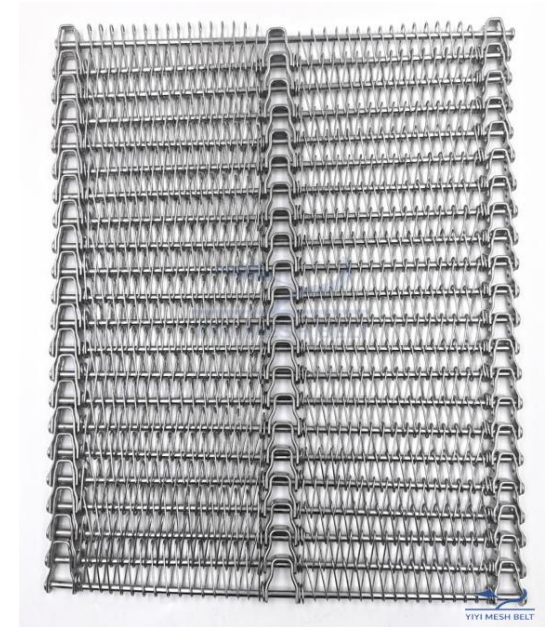
Ningjin Yiyi Mesh Belt Co., Ltd.

YIYI MESH BELT manufactures metal conveyor belts and related conveyor components in Ningjin, Shandong, China.

Manufacturing experience since 1998.
Current company established in 2008.

OEM equipment builders, professional distributors and replacement-belt buyers can submit drawings and application details for engineering review.

Custom projects: drawing approval, trial production and final inspection before shipment.



Typical applications

Typical uses in compact spiral systems. Configuration is confirmed on the approved equipment drawing.

01

COMPACT SPIRAL CONVEYING

For compact spiral conveyor systems. Inner and outer rod pitch, belt width and turn ratio are confirmed with the equipment geometry.

02

SMALL-RADIUS FREEZING

For freezing applications in small-radius spiral systems. Material and edge construction are selected for the freezer design.

03

COOLING

For product cooling in compact spiral systems. Belt configuration follows the approved equipment drawing.

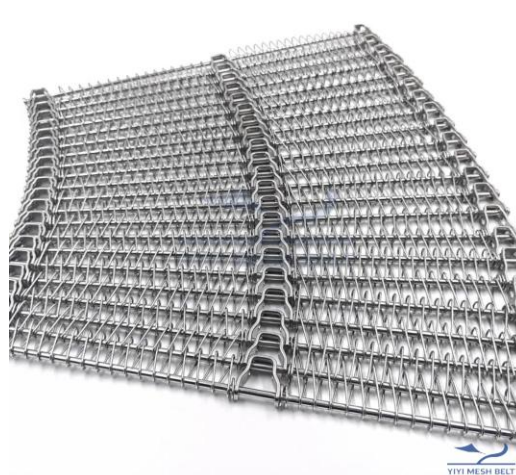
Suitability depends on the belt specification, material, operating conditions and equipment design.

Small-radius configuration



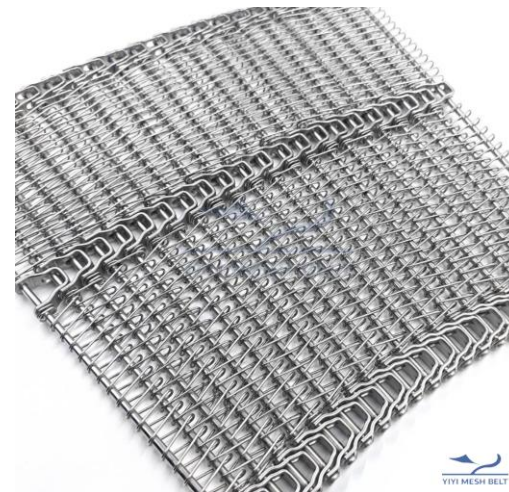
COMPACT TURN

Turn-ratio coefficient 1.1



MATERIAL OPTIONS

SUS 304 / SUS 316



CUSTOM BUILD

300–1200 mm
11.81–47.24 in belt width

Dimensional options

Parameter	Metric (mm)	Inch (in)
Spiral pitch	5–23	0.197–0.906
Rod pitch: inner / outer	19.05 / 27.4 27.4 / 38.1	0.750 / 1.079 1.079 / 1.500
Rod diameter	5	0.197
Spiral wire diameter	1.2 / 1.4 / 1.5 1.6 / 1.7 / 1.8	0.047 / 0.055 / 0.059 0.063 / 0.067 / 0.071
Belt width	300–1200	11.81–47.24
Belt length	To approved drawing	To approved drawing

Listed options require project selection. Custom dimensions follow the approved drawing.

1 in = 25.4 mm. Inch equivalents are rounded references, not manufacturing tolerances.

Materials and configuration options

Parameter	Selection
Product family	Small Radius Spiral Freezer Belt
Material	SUS 304 / SUS 316
Reference turn ratio	1.1, subject to the approved equipment geometry
Surface treatment	Pickling / electropolishing
Edge construction	Button welded / flat-hat welded / rod welded
Pitch combinations	Inner and middle pitches are equal in the illustrated configurations

Select materials, geometry and components together for the application and approved drawing.

Rod pitch configuration A



INNER PITCH
19.05 mm / 0.750 in



MIDDLE PITCH
19.05 mm / 0.750 in



OUTER PITCH
27.4 mm / 1.079 in

Rod pitch configuration B



INNER PITCH
27.4 mm / 1.079 in



MIDDLE PITCH
27.4 mm / 1.079 in



OUTER PITCH
38.1 mm / 1.500 in

Configuration A with 660 mm / 25.98 in belt width



1.1

660 mm
25.98 in

REFERENCE
TURN RATIO / WIDTH

Reference turn ratio: 1.1. Final belt and equipment geometry follow the approved drawing.

Configuration B with 1067 mm / 42.01 in belt width



1.1

1067 mm
42.01 in

REFERENCE
TURN RATIO / WIDTH

Reference turn ratio: 1.1. Final belt and equipment geometry follow the approved drawing.

Edge construction options



BUTTON WELDED

Compact retained rod end



FLAT-HAT WELDED

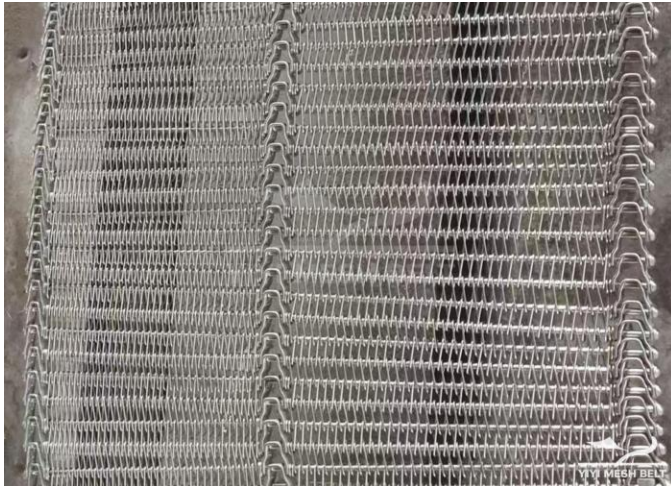
Low-profile finished end



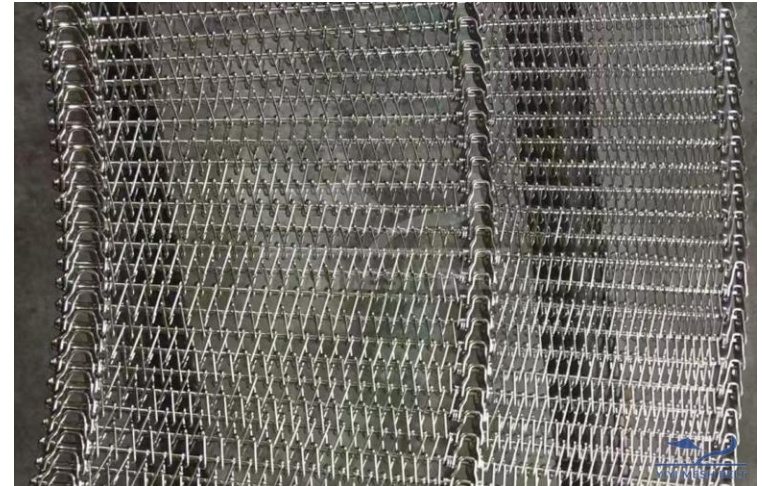
ROD WELDED

Direct welded retention

Surface treatment options



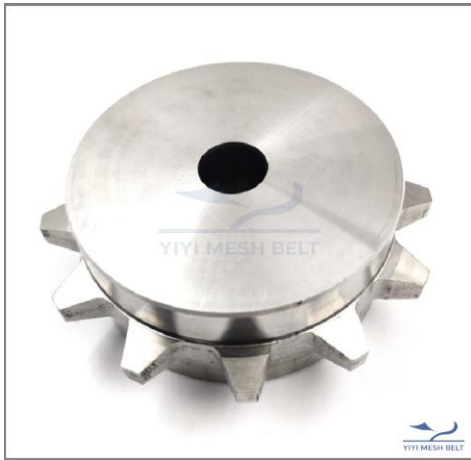
PICKLING



ELECTROLYTIC POLISHING

Select the required surface treatment for the material and application.

Stainless-steel sprockets: SUS 304 / SUS 316



MACHINED PROFILE



BORE / KEYWAY TO CONFIRM



TEETH TO CONFIRM

Confirm belt pitch, tooth count, bore, keyway and mounting dimensions (mm / in).
Match the sprocket profile and material to the approved equipment drawing.

Polymer sprockets: Nylon / UHMWPE / POM



NYLON



UHMWPE



POM

Confirm belt pitch, tooth count, bore, keyway and mounting dimensions (mm / in).
Match the sprocket profile and material to the approved equipment drawing.



PROVEN · STABLE · VERIFIED

Metal Conveyor Belt Manufacturer

for OEMs & Professional Distributors

Email: info@yiyimeshbelt.com

Phone / WhatsApp: +86 134 5177 3742

Website: www.yiyimeshbelt.com
www.yiyimeshbelts.com

Company: Ningjin Yiyi Mesh Belt Co., Ltd.

Send Your Drawing for Specification Review

- Belt dimensions (mm / in)
- Equipment and application
- Operating conditions
- Drive and shaft details
- Existing belt photos / sample

Request an Engineering Review

© 2026 Ningjin Yiyi Mesh Belt Co., Ltd. All rights reserved.

YIYI Mesh Belt's original technical content, photographs and videos in this document and on www.yiyimeshbelt.com and www.yiyimeshbelts.com may not be reproduced or reused without prior written permission. Third-party materials remain the property of their respective owners.