



FORSTEEP: SIDEWALL CONVEYOR BELT

(STEEP ANGLE & VERTICAL CONVEYING)

When designing a conveyor system; ensuring efficiency of carrying bulk materials is critical. In addition, the nature of terrain and space constraints within a particular site can make regular conveyor systems impossible to run. Forech's unique Sidewall Belts allow end users to carry bulk materials at high inclines and angles up to 90 degrees. This allows material to be carried where space requirements are critical; as well as increase overall belt efficiency and throughput.

PRODUCT FEATURES

- High Inclination Capability
- Space-Saving Design
- Hot Vulcanised Bonding

APPLICATIONS



Steel sector



Fertilizers



Ship Loading and Unloading, Ship to Ship Loading



Sand Preparation in Foundry Plants

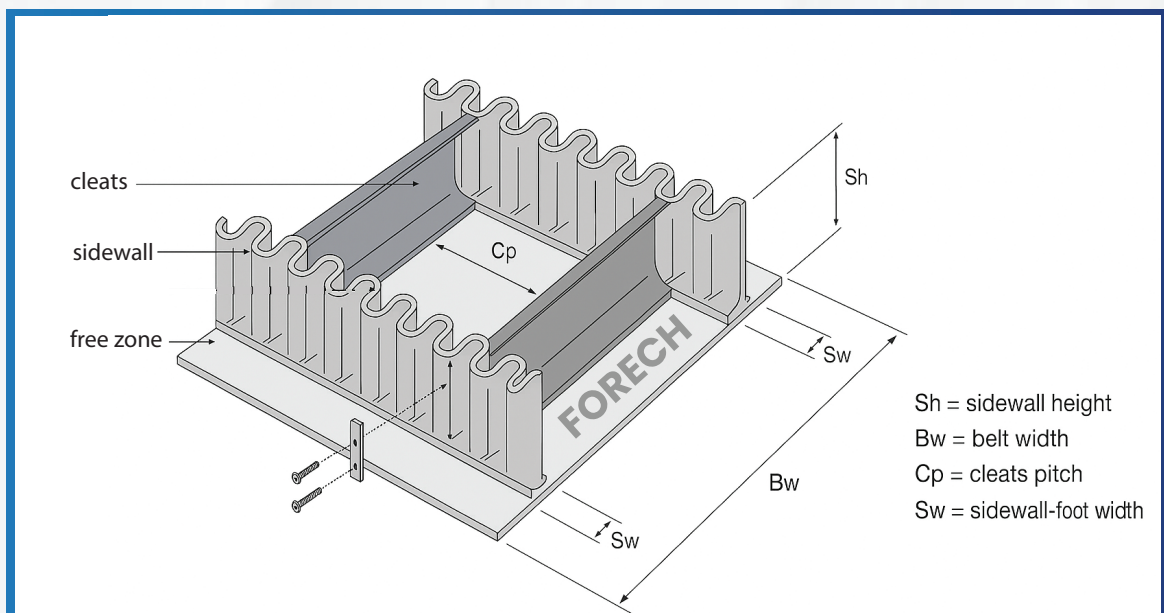


Slope Conveying in open-pit mining



Steep angle carrying in road construction machines

TYPICAL CROSS SECTION OF SIDEWALL BELT

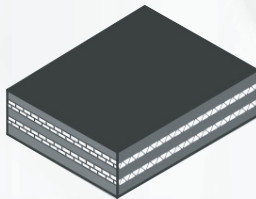


BELT CONSTRUCTIONS

STANDARD BASE BELT

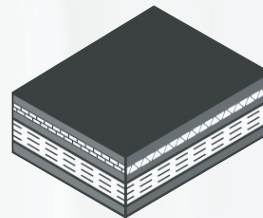
TYPE FXE

Light duty applications with non re-inforced sidewalls and cleats



TYPE FXE-T

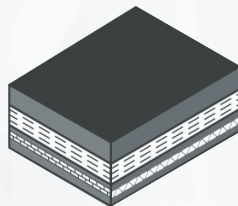
The type FXE-T has one cross rigid member in the top cover of the belt with standard 3/5 ply carcass. Also available with steel cross stabilized breaker.



TYPE FXE-B

The type FXE-B has one cross rigid member in the bottom cover of the belt with standard 3/5 ply carcass.

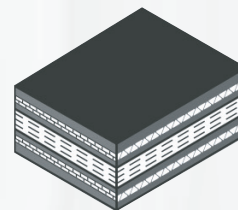
Also available with steel cross stabilized breaker.



TYPE FXE-TB

The type FXE-TB has one cross rigid member each in the top and the bottom cover of the belt with standard 3/5 ply carcass.

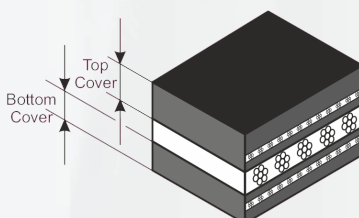
Also available with steel cross stabilized breaker.



TYPE FST-SBTB

The type FST-SBTB has steel cord members each in the top and bottom cover of the belt with steel cord carcass.

Recommended for heavy duty applications only requiring belt tensions of above 1000 Kn/m.



SIDEWALL

CROSS - RIGID FABRICS

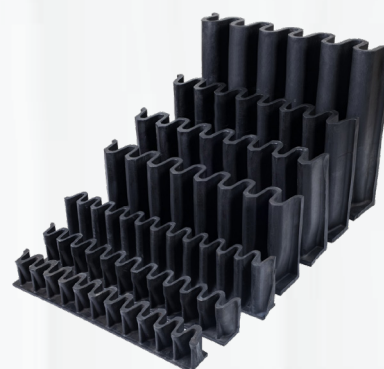
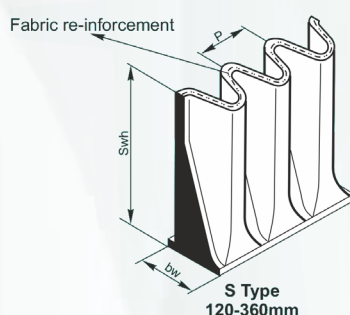
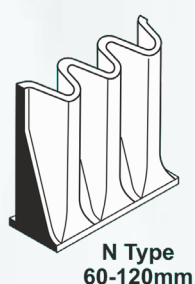
One of the key advantages of Forech's High Angle belting is the use of cross-rigid fabric. These specially tailored belts can be deflected from the horizontal to a perpendicular incline and back again without any bowing or sagging in the belt.

This is achieved through custom-made fabric constructions, a special belt composition and our in-house production procedure. This ensures that our High Angle Belts have both a long life and can withstand operating pressures

COVER QUALITIES

Available cover grades in Forech Sidewall Belts :

Index	Description
M24	STANDARD ABRASION RESISTANT QUALITY
HR	HEAT RESISTANT T1 AND T2 QUALITY
FRAS	FIRE RESISTANT AND ANTI STATIC QUALITY

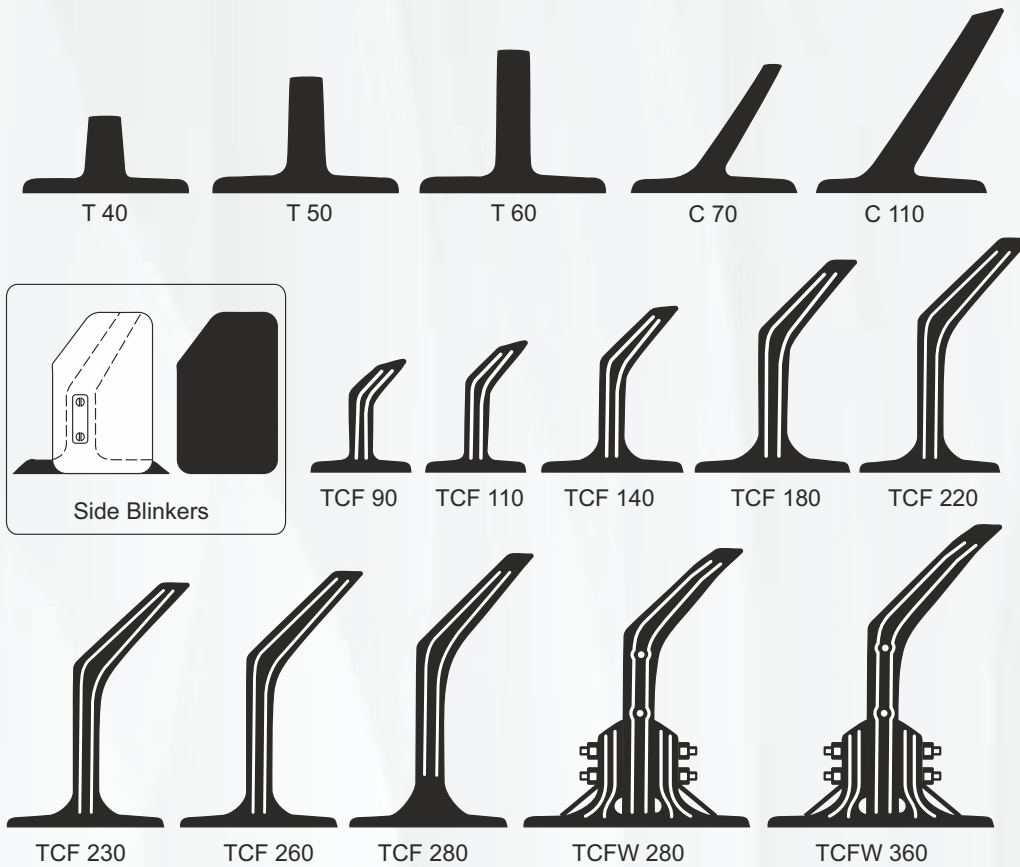


STANDARD RANGE OF SIDEWALLS

Sidewall Type	Height (mm)	Base Width (mm)	Pitch (mm)	Weight/mtr (Kgs)
N (Non-Fabric Reinforced)	N 60	50	40	1.60
	N 80	50	40	1.80
	N 100	50	40	2.10
	N 120	50	40	2.30
S (Fabric Reinforced)	S 120	50	40	2.4
	S 160	78	63	4.5
	S 200	78	63	5.5
	S 240	78	63	6.8
	S 160	75	60	4.7
	S 200	75	60	5.7
	S 240	75	60	6.6
	S 250	75	60	7.1
	S 280	75	60	7.8
	S 300	75	60	8.2
S 400	100	100	80	18.5

- Sidewalls that are not shown as fabric re-inforced can be manufactured with fabric re-inforcement on request.
- All components of sidewall belts such as Base belts, Sidewalls and Cleats are also available separately.

STANDARD RANGE OF CLEATS



STANDARD RANGE OF CLEATS

GP/M-24/SAR

Type	Height (mm)	Base Width (mm)	Weight/mtr (Kgs)
T 40	40	70	0.90
T 50	50	70	1.00
T 60	60	100	1.30
C 70	70	110	2.50
C 110	110	110	3.20
TC 90	90	100	2.60
TC 110	110	110	3.50
TC 140	140	150	5.00
TC 180	180	150	6.50
TC 220	220	150	8.00
TC 230	230	150	10.00
TC 260	260	160	11.90
TC 280	280	173	14.00
TCWD 280	280	270	21.50
TCWD 360	360	270	23.00

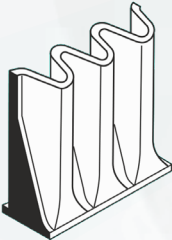

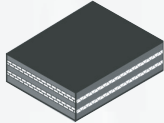
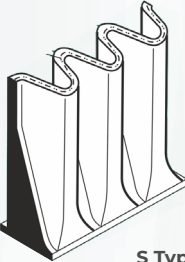

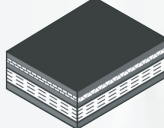

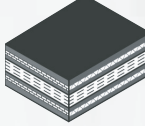
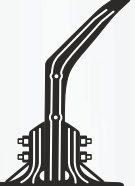
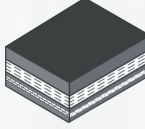
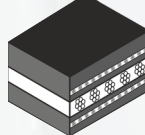
- TC type cleats are with fabric re-inforcement
- All components of sidewall belts such as Base belts, Sidewalls and Cleats are also available separately.a

SIDEWALL TROUBLE SHOOTING

Listed are many of the common problems that end users have relating to sidewall belt conveyors. This list covers most but not all problems that you could face with sidewall belt conveyors. Many of the problems listed below can be avoided by a planned, preventive maintenance program as well as the use of simple precautionary measures. This will ensure optimal performance and reduced downtime for your belt.

S.No.	CAUSES	CURES
1	Belt Bowed	Avoid telescoping belt rolls while storing them, and avoid storing in damp locations. A new belt should straighten out when installed, or it must be replaced.
2	Belt improperly spliced	If improperly spliced, remove belt splice and make a new splice. Set up a regular inspection schedule.
3	Belt speed too fast	Reduce belt speed.
4	Belt strained on one side	Allow time for a new belt to settle in. If the belt does not settle in properly or is not new, remove strained section and splice in a new piece.
5	Breaker strip missing or inadequate	Install a fresh belt with proper breaker strip.
6	Take up tension too high	Recalculate tension and adjust the take up accordingly. Reduce take up tension to point of slip, and then tighten slightly.
7	Counterweight too light	Recalculate the counterweight required and adjust accordingly.
8	Damage by abrasives, acid, chemicals, heat, mildew, oil	Use belt with cover designed for specific condition. For abrasive materials working their way into cuts, make spot repairs with repair patches. Don't over lubricate idlers.
9	Drive underbelted	Recalculate maximum belt tensions and select correct belt.
10	Edge worn or broken	Remove badly worn out section and splice in a new section.
11	Excessive impact of material on belt	Use correctly designed chutes and baffles. Install loading idlers. Where possible, load fines first.
12	Excessive tension	Recalculate and adjust tension.
13	Frozen idlers	Free idlers, lubricate them and improve maintainence.
14	Idlers or pulleys out of square with center line of conveyor	Realign, and if possible install limit switches for greater safety.
15	Idlers improperly placed	Relocate idlers or insert additional idlers to support the belt.
16	Improper loading, spillage	Feed should be in direction of belt travel and at belt speed, centered on the belt. Control flow with feeders, chutes, skirtboards.
17	Improper storage of handling	Ensure that belts are stored properly prior to installation.
18	Insufficient traction between belt and pulley	Lag drive pulley. In wet conditions, use grooved lagging. Install correct cleaning devices for safety.
19	Material between belt and pulley	Use skirtboards properly. Remove accumulation and improve system maintenance.
20	Material build-up	Remove accumulation. Install cleaning devices
21	Pulley lagging worn	Replace worn pulley lagging. Use grooved lagging for wet conditions.
22	Pulleys too small	Use larger diameter pulleys.
23	Relative loading velocity too high or too low	Adjust chutes or correct belt speed.
24	Side loading	Load in direction of belt travel, in center of the conveyor.
25	Skirts improperly place	Install skirtboards so they don't rub against the belt.

ENQUIRY SHEET FOR REPLACEMENT BELTS

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<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
	N Type	<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
	S Type	<input type="checkbox"/>		<input type="checkbox"/>	

Company Name and Address	
Project Name and Country	
Contact Number	
Fax	
Email	
Date	

Base Belt Tensile Strength (N/mm)	
Belt Length (Endless / Open)	
Belt Width (mm)	
Free Lateral Space (mm)	
Net Belt Width (mm)	
Sidewall Height (mm)	
Cleat Height & Pitch (mm)	

Tick (√), whichever is applicable	
Standard , abrasion resistant	<input type="checkbox"/>
Mild oil, grease, and resin resistant	<input type="checkbox"/>
Heat-resistant	<input type="checkbox"/>
Flame-resistant (ISO340/ En20340)	<input type="checkbox"/>
Flame-resistant (US-MSHA)	<input type="checkbox"/>
Self-extinguishing (surface applic.)	<input type="checkbox"/>