POLYSUR® FERRO STEEL CORD BELT FOR BUCKET ELEVATORS

The POLYSUR® FERRO belt for bucket elevators is a steel carcass rubber covered elevator belt constructed with special quality, low elongation yet high elasticity steel cords in the length and cross rigid cables in the width.
Their construction and characteristics differ from those of traditional steel cable belts.
They are destined for heavy duty industrial applications with long centre distances, requiring stable running and reliable belts with high safety factor.

POLYSUR® FERRO Elevator Belts consist of a steel carcass in a solid rubber mass that cannot delaminate. The built-in elasticity allows running over slightly crowned pulleys while the cross rigid weft construction results in excellent straight tracking characteristics.

The POLYSUR® FERRO Elevator Belt programme offers a choice of very high abrasion resistant rubber covers or excellent high-heat resistant qualities.

Qualities

POLYSUR® FERRO belts are available in four different qualities:
(1) Type T60, a highly abrasion resistant quality on SBR basis
(2) Type T100, a heat resistant quality on modified SBR basis
(3) Type T130, a high-heat resistant quality on EPDM basis
(4) Type CR, an oil resistant quality on Neoprene basis .

Cover thickness on pulley face and bucket face as per customer specification or standard arrangement.

Type T100 and T130 are destined for use in ambient temperatures of respectively 100˚ C and 130˚ C maximum with short duration peak temperatures of respectively 110˚ C and 150˚ C.

Type T130 is successfully in use in various plants handling product with temperatures up to 165˚C. Although the belt life in such operational conditions is shorter than achieved at the recommended maximum temperature of 130˚C, the life in these conditions is still very acceptable and the belts give a satisfactory economic life.
The deciding factor is the reigning ambient temperature inside the elevator casing.

Manufacturing norms

All belt types are manufactured in accordance with DIN 22102 and ISO norms.

Fields of application
- cement factories
- fly ash elevators in power plants
- fertiliser plants
- foundries
- concrete mixing plants
- glass factories
- grain elevators in port silos

Belt qualities

Type T60	highly abrasion resistant max. ambient temp. 60˚C cover hardness 60˚ A shore
Type T100	highly abrasion resistant max. ambient temp. up to 100˚C continuous , short peaks 110˚C cover hardness 64˚ A shore
Type T130	good abrasion resistant max. ambient temp. up to 130˚C continuous, short peaks 150˚C cover hardness 66˚ A shore
Type CR	oil and fat resistant anti-static ISO 284 flame retardent ISO 340 cover hardness 70˚ A shore

For high temperature applications consult our technical department.

E-PF-REV1-1104

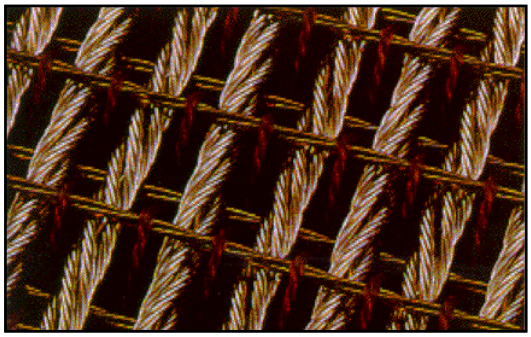
The Steel Carcass Construction

POLYSUR® FERRO Elevator Belts are constructed with specially designed straight warp "open type" steel cords with built-in elasticity, E-cords, in the warp direction onto which rigidity improving weft cords are tied using a special weaving technique.

This special structure means that neither the warp nor the weft cables are deformed in any way, but they lay perfectly straight all over the belt length, resulting in maximum strength performance and high resistance to damage.

The open steel E-cords allow maximum rubber penetration, minimising corrosion penetration in case of belt damage and resulting in very high rubber to steel adhesion.

The rubber penetration deep into the warp cables functions as lubricant for the twined steel wires forming the cords increasing the elasticity of the E-cords.



Polysur® Ferro Steel Carcass

Low elongation

POLYSUR® FERRO elevator belts display only 0.3% permanent elongation at maximum recommended working load (safety factor 10), ensuring constant belt tension, even at long centre distances.

As a unique feature the steel carcass displays an elastic elongation of 0.15%, increasing shock resistance and allowing the belts to run over slightly crowned pulleys, thus further greatly improving the straight tracking ability of this belt quality. The elastic elongation is the variation in belt length when subjected to a load variation between 20% and 100% of the maximimum recommended load at 10-fold safety factor.
In contrast to POLYSUR® FERRO belts most conventional steel cable belts lack elasticity and as a consequence have to run over truly flat, cylindrical pulleys increasing the risk of belts off-tracking.

Standard belt constructions

Strength/construction	Belt thickness
SW 630 3+3 mm	11 mm
SW 800 3+3 mm	12 mm
SW1000 3+3 mm	12 mm
SW1250 4+4 mm	15 mm
SW1400 4+4 mm	15 mm
SW1600 4+4 mm	15 mm
SW1800 4+4 mm	15 mm
SW2000 4+4 mm	15 mm

Recommended minimum covers.
Other combinations to order.

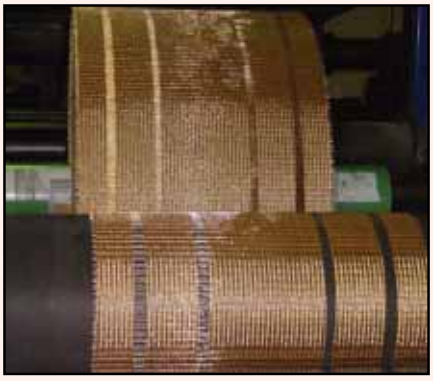
Belt Carcass Construction

Type	Warp cords diam.	Pitch
SW 630	2.00 mm	4.63 mm
SW 800	2.85 mm	6.67 mm
SW 1000	2.85 mm	5.38 mm
SW 1250	3.90 mm	7.04 mm
SW 1400	3.90 mm	6.25 mm
SW 1600	3.90 mm	5.00 mm
SW 1800	3.90 mm	5.50 mm
SW 2000	3.90 mm	4.65 mm

Weft cords

standard diameter	1.29 mm
pitch	6.67 mm

alternating on each belt face.



Carcass of Polysur® Ferro belt with cable free zones during production

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The Elasticity of the E-cords

The elasticity of the E-cords is not to be confused with the elongation. E-cords offer the following advantages over conventional steel cords:

- improved compression behaviour
- improved shock resistance
- favourable permanent elongation max 0.3%
- excellent rubber penetration
- extremely high pull out forces.

The result is a belt suitable for running over slightly crowned pulleys greatly improving belt tracking and avoiding belt wandering which is often the reason for elevators shutting down.

In comparision conventional steel cable belts **must** run over flat pulleys.

The rigid weft cords act as a barrier to ripping and tearing and increase the bolt holding ability for bucket bolts and produce a good cross rigid belt allowing perfect tracking.

Please consult our technical department for pulley crown recommendations.

High Safety Factor for Bucket Attachments

POLYSUR® FERRO Elevator Belts are reinforced with a steel cable carcass with warp cables of 2.85 mm or 3.90 mm diameter at variable pitch, depending on belt strength class, and weft cables of 1.29 mm diameter at fixed pitch of 6.67 mm alternating on both faces of the warp cables.

This dense warp and weft construction provides extra safety for the attachment of the bucket bolts and endlessing clamp bolts and gives high longitudinal rip resistance.

Cable free zones

Cable free zones for drilling bucket bolt holes are available per customer specification as an option without extra charge.
See below " bucket bolt holes".

Min. Pulley Diam. / Approx. weight

Type	mm	kg/m²
SW 630	400	16,00
SW 800	500	18,00
SW 1000	500	18,75
SW 1250	630	21,00
SW 1400	630	24,50
SW 1600	630	25,00
SW 1800	630	25,50
SW 2000	800	26,00

Data valid for standard belt constructions (see above).
For each additional mm cover thickness ad 1.25 kg/m2.

Dimensional limitations

minimum width	300 mm
maximum width	1400 mm
minimum length	50 m
max. roll weight	4000 kgs

Tolerances acc. to DIN Standard.

Roll shipping dimensions

Belt thickness:	Belt length m:			
	75	100	125	150
12 mm	1.09	1.25	1.40	1.55
13 mm	1.13	1.30	1.45	1.59
15 mm	1.21	1.40	1.56	1.70

Roll diameter in meters
for standard belt thicknesses.

Carcass of Polysur® Ferro belt with cable free zones during production

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Bucket bolt holes

POLYSUR® FERRO belts can be supplied complete with bolt holes as per customer specification.
Bolt holes can be manufactured in various ways:

a) by drilling, this results in “pilot holes”, ragged holes in which frayed cable ends are visible.
These holes are only destined for use in combination with our DIN 15237 bolts size M10 or M12 with hexagonical slot in the head. Such bolts can be run into the pilot holes with a handheld electric drill equiped with a suitable bit.

b) by cutting, resulting in clean holes suitable for larger bolts as from 14 mm onwards.

Note: it is more time consuming to drill or cut holes in belts with full warp and weft cables than in belts with cable free zones. However the full cable construction offers more bolt holding strength.

Cable free zones are optionally available as per customer specification without extra charge.

Special cutting tools are available to cut the holes required for fitting the MB2 clamp fastener.

Ordering Belt Length

it is recommended to order a POLYSUR® FERRO Elevator Belts minimum 2 m longer than the actual belt working length, to allow for additional length required to fit the clamp fasteners and to allow fitting the plate and cross beam assembly required to pull the belt into the elevator casing.

Belt jointing

POLYSUR® FERRO belts can be made endless by:

- mechanical clamps
- vulcanisation by skilled belt fitters only using the appropriate materials and following specific procedures.

For jointing procedures and fitting procedures, please see our instructions and consult our technical department.

We offer a suitable clamp MB2, however also clamps already in use on similar steel cable belts may be suitable.

Fitting tool and M12 allen key bolt

Electric fitting tool

Ragged pilot hole for allen key bolt

Clean cut hole

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HANDLING POLYSUR® FERRO BELTING

POLYSUR® FERRO elevator belts are supplied rolled up on wooden or plastic cores and secured by synthetic or metal banding.

Transporting

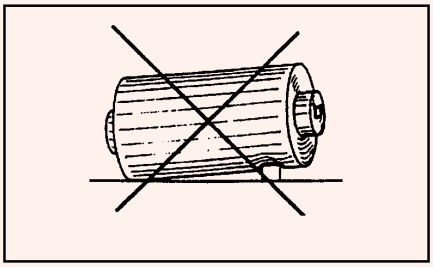
- Loading, unloading, moving the belt coil has to be done with great care.
- Do not throw or crash or bump the belt coil.
  Do not place the belt coil on uneven or rough surface.
- Do not roll the belt coil.
  If rolling is unavoidable, roll in the winding direction only and roll on smooth even surface.
- If the rolling direction has to be altered, the belt coil has to be turned, first place fibreboard sheeting, or heavy plastic sheeting under the coil so that damage is avoided.

Lifting

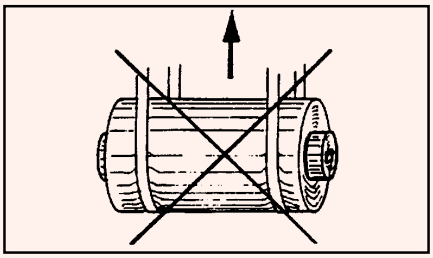
lift the coil only using a suitable shaft through the coil centre hole and always use a cross-tie and slings to lift the belt. Do not hoist the coil with diagonally placed slings or cables across the crane hook, the cables may damage the belt coil upper edges.

Storage

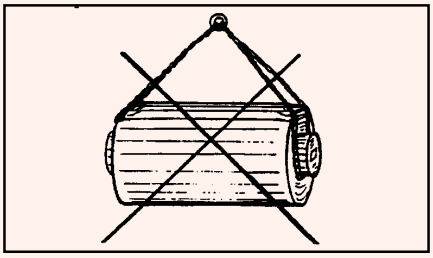
- Store POLYSUR FERRO belt on jacks with a suitable shaft through the hole of the centre core.
- Store in dry environment away from sunlight, UV-lighting, ozone, heat sources, oil, grease, acids and solvents.
- If the belt coil is stored for a longer period, turn the coil on the jacks every 2-3 months by 90 degrees.



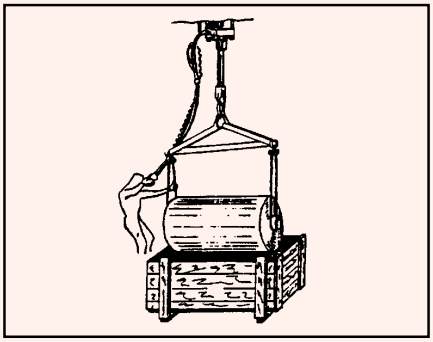
Avoid damage



Wrong



Wrong



Correct

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FITTING POLYSUR® FERRO ELEVATOR BELTS

These instructions are intended to assist our customers with the correct fitting of POLYSUR® FERRO elevator belts.
It is strongly recommended to follow safety instructions mentioned in this document, however fitting and erection work undertaken by customers is so done at their own risk and not covered by our warranty or insurance.
Failure to observe these instructions may impair the operational safety of the conveyor system and may result in damage.
Skilled belt fitters should prepare the belt ends to fit clamp MB2, as it involves some specific preparations to the belt ends.
The clamp is tested and approved, but if customer or a third party fabricates the joint, we cannot offer warranty for malfunctions or failures of the clamp connection.

The belt fitting procedure is as follows:
1 inspect received belt coil for any damages
2 put belt on axle on jacks
3 determine belt running direction and pulley face and drag belt into elevator
4 secure belt ends over head pulley
5 the belt clamp
6 cutting off belt ends
7 mounting the belt clamp
8 test run the belt
9 fit buckets
10 inspect, test run assembly and commission the belt

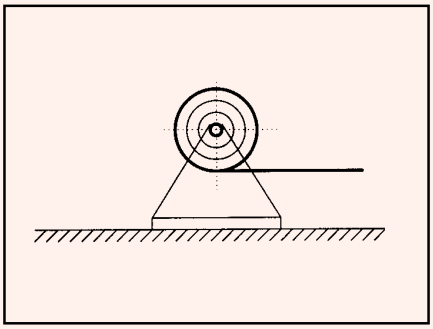
Polysur® Ferro belt packed

1 Inspect received belt coil for any damages

Remove packing and visually inspect the belt coil. Damages due to transport and handling must be repaired either before fitting the belt or after.

2 Put belt on axle on jacks

Select a suitable axle thickness conforming to the roll weight. Check correct height of jacks conforming to roll diameter.
The belt is best uncoiled from underneath rather than over the top. The first uncoiling direction offers less risk of the coil being dragged off the jacks.



Correct set-up for storage and uncoiling

Make sure the belt is fed into the elevator in the correct running direction and make sure the pulley side is running over the pulley face.
The belts are marked with a running direction arrow and an indication of Pulley Face and Bucket Face.

3 Dragging belt into the elevator

It is recommended that the elevator is checked for electrical safety and cannot be accidentally switched on during fitting of the belt or while assembling the clamp joint or while fitting buckets.

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It is recommended to fit traction eyes and cross beams to both belt ends as aids for dragging the belt into the elevator and for securing the belt into a fixed position. Either fit the plate assembly trough the bucket bolt holes or through newly made holes in the very belt end. Take care not to drill bolt holes in the spot where the clamp fastener MB2 has to be placed. Before the belt is pulled in, the tail pulley in the elevator boot will have to be lifted as high as possible and must be fixed in that position.

Before the belt is pulled in the elevator, the quality and condition of the rubber lagging on the drive pulley, as well as the condition of the tail pulley will have to be inspected and approved. In case of older elevators, check that the pulley crown is still correct and in the case of flat pulleys, check that the pulley face has not worn hollow.

Please consult our technical department for recommendations of the height of the pulley crown.
Make sure that all equipment used is capable of handling the belt weight.

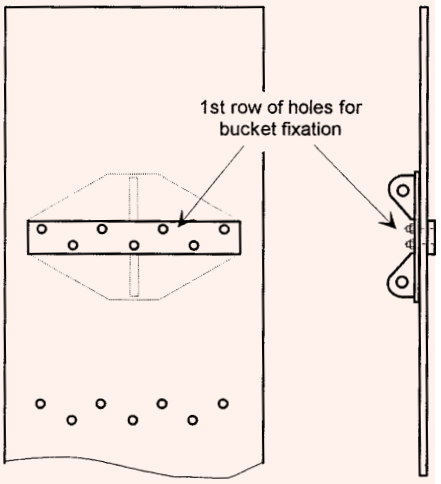


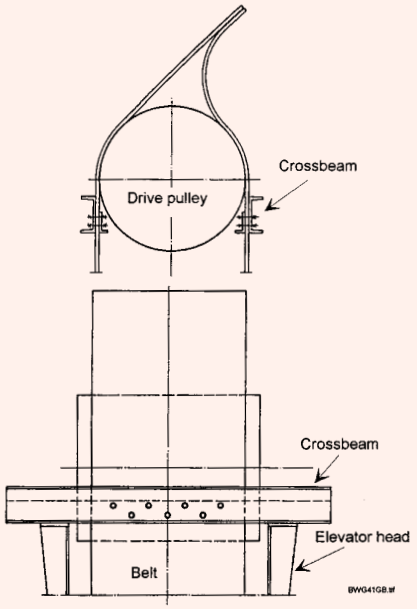
Plate assembly through bucket bolt holes recommended to drag belt into elevator casing

4 Secure belt ends over head pulley

Before starting work on the clamp fastener assembly, check and make certain that the belt is positioned centrally on the tail pulley and on the drive pulley.
The top of the head pulley is the recommended place for the clamp assembly work.

The best place to make the joint is at the top pulley, if the head of the elevator can be lifted and a work floor large enough to do the job is present.

First pull one end of the belt into the elevator casing until it lays on the top pulley, secure that belt end with the traction eyes and cross beams to the superstructure of the casing, and then uncoil the rest of the belt, fold it back and pull this end up into the other elevator leg and secure the traction eyes and cross beams after tensioning the belt as much as possible.



Do not step onto the folded belt end, do not place a weight on the folded belt pieces, avoid sharply bending the belt as not to do damage to the steel cable carcass. Do not wrap slings or ropes around the belt to pull it forward this may damage the cross cables.
The procedure of feeding the belt into the elevator casing may well depend on the availibity of access doors. It may be required to make openings in the elevator casing to allow access in the proper place.

5 The belt clamps

The belt clamp connection is a subassembly which quality is of crucial importance for the operational safety of the belt elevator.

The MB2 Heavy Duty Clamp is a mechanical clamping device with a three-piece construction with vice grip action between serrated joints.

The clamp system is suitable both for belts with and without cable free zones, as the bolt holes in the clamp parts are drilled to order and to suit the specific belt design.
In the case of the belt being supplied with cable free zones, the clamp bolt hole centre pitches are drilled conform the cable free zone centre pitches.

Each clamp may be supplied in two or more sections across belt width, depending on belt width and pulley crown, to facilitate the fitting.

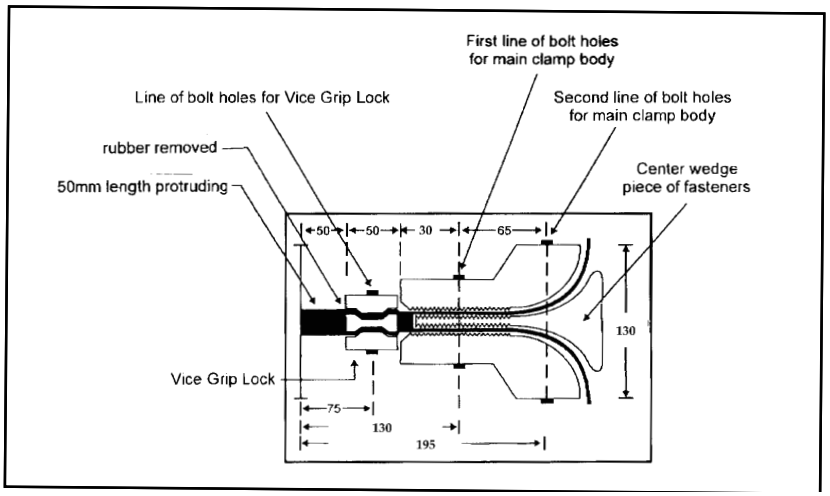
Each splicing set consists of an upper and lower outer serrated jaw with a central serrated wedge and has an additional steel vice grip lock securing the belt steel cords in the front of the main aluminium clamp body. The MB 2 fastener allows operationally safe use up to 2000 N/mm belt tensile strength (at maximum recommended operational load).
Clamps are supplied with M16x120 mm Class 8.8 bolts and lock nuts to secure clamping action. Bolt pitch varies from 80-100 mm.

The MB2 Heavy Duty fastener has an additional "vice grip lock" that will grip the steel carcass. Fitting this part will require removal of the rubber covers from the belt's carcass on both faces on both belt ends over 50 mm length (on 75 mm measurement centre line).

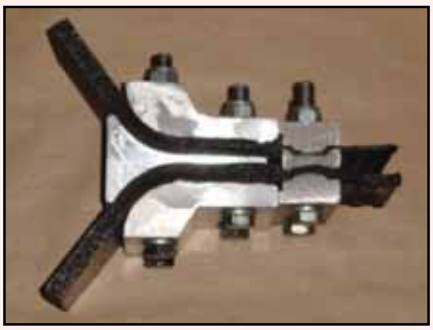
MB2 fasteners are made of special aluminium and are non-corroding in normal conditions, rustproof and non-sparking. The vice part is made of steel.

Positioning of fasteners: Belt fasteners should not protrude from the belt sides. They are supplied either matching the belt width or slightly shorter than belt width.

Clamps bolt hole arrangements are designed individually to order depending on belt construction.



Type MB2 clamp



Type MB2 clamp

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Extra belt length required for clamps.
Determine the nett belt length as if the belt was endless. (2x axle centre distance + half circumference of drive and tail pulleys. Some elevators also have a snub pulley above the tail pulley, determine the additionally required length).

Once the exact belt length has been calculated and measured off, add minimum 390 mm (2x195 mm) to the belt length to accommodate additional length for fasteners.

It is recommended to order at least 2 metres more belting material than indicated above.

It is recommended not to cut off excess belt length immediately, but if necessary just enough to allow easier handling of the belt ends during preparation for positioning the fasteners clamps.

Short ends are more difficult to handle, specially with thick high tensile belts, than longer ends. The excess lengths can be cut off after completion of the clamp assembly.

6 Cutting off belt ends

Cut both belt ends off at exactly 90° angle using an electric reciprocating saw cutter (fitted with Bosch blade number T118 AF). When the belt is thicker than 12 mm a narrow strip of cover rubber is cut off across belt width prior to cutting off thereby reducing the total thickness.

After the joint has been completed and the excess belt length can be cut off, it is recommended to leave at least 50 mm belt protruding in front of the finished clamps, however note that the clamp/belt assembly may not protrude forward further than the projection of the buckets. Any excess belt length protruding from the finished clamps should remain within the projection of the elevator buckets

Draw three straight lines at 90° angles with the belt centre line across belt width at 75 mm, 130 mm and 195 mm from both belt ends to accommodate the three sets of bolt holes that secure the belt clamp parts. The 195 mm measurement is for the first set of bolt holes and the 130 mm measurement is for the second set of bolt holes, both located in the clamp's main body part (see sketch) and the 75 mm measurement is the line onto which the bolts of the additional steel vice grip lock are placed. This will allow for a 50 mm belt length protruding at the front end of the assembled clamp fastener.
The above additional lengths to nett belt lengths allow 50 mm of belt at each belt end to protrude in front of the assembled clamp fastener. See drawings.
When fitting extra thick belts it may be required to increase the minimum additional lengths in order to be able to better bend the belts and make it easier to assemble the clamps. However every additional length must be compensated by lowering the tail pulley after the clamp has been completed.

Therefore, before cutting off the excess belt length, test the ability to bend the belt ends forward and the ability to lay them together sufficiently comfortable to allow the clamp fitting procedure to be carried out.

Starting from the 75 mm measurement line, measure off a parallel line 25 mm on each side of this line creating a 50 mm wide channel. Cut off the rubber covers, preferably using an electrical rubbercut, on both belt faces and at each belt end in this 50 mm wide channel until the cables become visible. The cover strip can also be ground off. Cables should not be completely bared of rubber. Do not grind the rubber off too much, avoid damaging the cables. Then remove the weft cables carefully (these are the cables in the width of the belt).

These weft cables are lying on top and underneath the warp (length) cables and are positioned at 6.67 mm pitch.

Weft and warp cables are locked together by a polyester thread, which can be slit together with the binding rubber by using a sharp knife. Preferably use a knife shaped like a pointing trowel or a RC-400 rubbercut electrical groover as used to re-cut grooves in car tires. Grinding is possible but high speeds produce unpleasant vapours and may cut too deeply into the belt body damaging the cables. This must be avoided.

Do not damage the warp (length) cables! Leave a thin rubber layer visible on the warp (length) cables and avoid red or copper coloured spots on the cables. Do not take too much rubber off and take care that the warp (length) cables are still bonded together by a layer of rubber.

This procedure is to be repeated on each belt end on two belt faces, thus four times a 50 mm wide groove.

Both belt ends are then placed back-to-back and an earlier made template (made of carton, steel sheet or ply wood) is used to determine the hole positions matching the holes in the clamps, ensuring that the fasteners shall be inset from the belt edges to a minimum of 5 mm on each side, or lay equal to the belt edges (check clamp width and compare to belt width, belt width may show variation according to DIN 22102).
The template should be made with care and should be placed with great care on the belt and the hole positions drawn in.
It is of the utmost importance that the hole positions are marked correctly.

In case the belt is too thick to be bend back-to-back the template can be used individually on each belt end, ensuring exact positioning. Next drill 16 mm holes in the belt using a new drill for steel or use the supplied cutting tool, on the 195 mm and 130 mm measurement lines. Drill slowly and cool the drill if required. Drilling holes in belts without cable free zones, will damage some cables. This cannot be avoided.

RC-400 rubbercut electric groover

Rubbercut assembly for removal of cover rubber

Do also drill holes on the 75 mm measurement line.

7 Mounting the belt clamp

The main clamp parts can now be placed. Observe the correct positioning of the three sections. Starting in the centre of the belt, screw bolts through fastener/belt assembly by fitting the bolt head into an electric drill with an M16 socket to guide the bolts into the belt. Do not use too much force. First fit two bolts on the 193 mm line into each clamp section and belt and secure these with locknuts, but do not tighten these.

These two bolts will hold the clamp sections in the right position. Secondly fit two other bolts in the front of the clamp on the 130 mm line. Again use a M16 socket on a drill to guide the bolts through the belt. Depending on the belt width you will have to repeat this as often as clamp sections are needed.

It is important to ensure frequently that the clamp parts are correctly lined up and stay in that position in 90° angle to the belt sides.

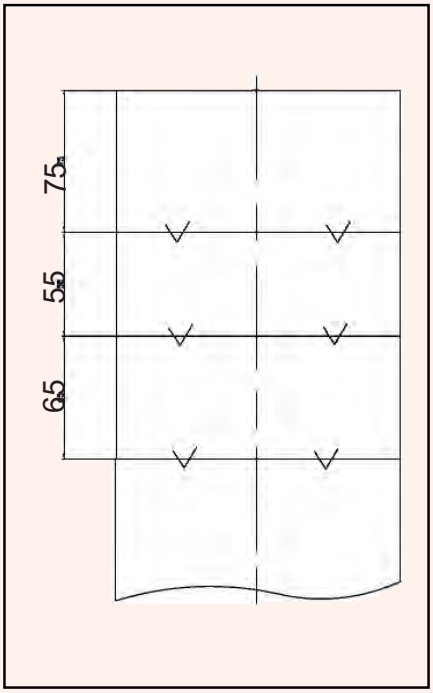
As soon as the three parts of the main clamp body are fitted, the steel Vice Grip Lock has to be fitted very close and tight onto the main body of the clamp into the 50 mm channel from which cover rubber and weft cords have been removed on each face and each end of the belt. Drill holes with a 15 or 16 mm drill.
When fitting the three parts of the Vice Grip Lock make certain that the warp cables are laying flat and evenly, but are definitely not crossing each other. They should be held together by a layer of rubber in between the individual cables.

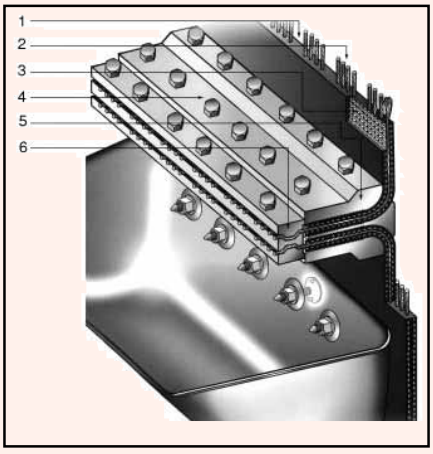
Ensure that the class 8.8 bolts are correctly torqued to 250 Nm using a torque wrench.

During the whole operation, ensure that belt ends do not move sideways out of position.
Before tightening the nuts and bolts ensure that the two belt ends are still correctly lined up.

Do not tighten bolts at once, slowly increase pressure on the bolts one by one in steps to ensure even grip and avoid squeezing the belt out locally. All bolts in the clamps should be tightened with a torque of 250 Nm.
Increase the amount of torque gradually. Do not torque one bolt full every time and start with the next. Operate like fitting a cylinder head. Divide the tensioning gradually over all bolts.

After having checked the clamp and everything is okay, carefully release the tension in the belt and take off the holding plates in which the belt hangs. Tension the belt at the bottom of the elevator (in some cases these tensioners will be at the top). The belt has only max. 0.3% elongation.





1 spacing for bucket bolts
2 steel cable
3 textile cord breaker
4 high tensile bolt
5 heavy duty belt clamp
6 additional "vice grip lock"

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It is recommended to re-torque the clamp assembly after initial maximum 3 days running, again after 14 days, and further every 30 days .

It should be ascertained that no personnel are inside the elevator trunking, or working on the elevator and a safe distance to all moving parts should be guaranteed.

8 Test run the belt

Bucket fitting can start after the clamp assembling operation is finished and the belt has made a trial run to ensure that it tracks correctly.

9 Fitting buckets to the belt

A certain deviation of true running is acceptable, depending on belt width. See DIN 22102.
Make certain that measures have been taken to prevent unintentional, unauthorised or automatic start-up of the elevator during bucket fitting operations.
When the elevator belt has to be run for bucket fitting operations, this should be done solely on the auxiliary slow drive.

In order to keep both belt ends (upgoing and downgoing) in balance, fitting buckets should be carefully spread out over the belt length at correct intervals depending on individual bucket weight and numbers. Check instructions with the bucket manufacturer.

If after finishing the clamp assembly any bolts holes remained vacant because there is no space for the last bucket to be fitted, it is strongly recommend to close such holes off by inserting bucket bolts, two or threelarge flat washers and two nuts. Holes left vacant could fill up with product that could do damage, mechanical or chemical, to the belts cables.

fitting buckets to the belt

If there are any questions please consult us before taking action.

10 Inspect, test run assembly and commission the belt

Before the belt is put into operation, check that all buckets have been correctly fitted, run the belt for one hour and re-torque the bolts in the endlessing clamps as well as the bucket fitting bolts.
Check the straight running of the belt and adjust the pulley position immediately but slowly, if the belt off-tracks.
If the belt does not track correctly, check that the tail pulley has been sufficiently tensioned by slowly increasing the tension.

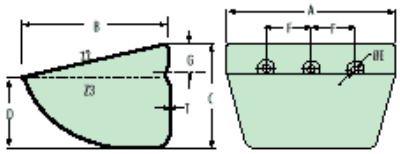
Re-torque clamp bolts after 12 hours running.
Re-torque bucket bolts after 3 days running, after 14 days, after 3 months, after that every 3 months.
Periodical check-up:

Check clamp and belt condition after every 30 days operation.
Replace broken or lost bolts and damaged buckets.

STARCO JUMBO

ELEVATOR BUCKET

belt speed 1,3-3,5 m/s



Starco Jumbo is a pressed seamless steel bucket designed for heavy applications and suitable to replace welded buckets in cement and clinker elevators.

type SJ in steel

Bucket	A	B	C	D	T	Weight	Capacity		Recessed holes			
size	mm	mm	mm	mm	mm	kg	dm^3 Z2	dm^3 Z3	no	E	F	G
SJ330-250/3	340	260	190	130	3.0	4.5	9.6	7.2	3	11	80	55
SJ370-250/3	380	260	190	130	3.0	5.1	10.8	8.3	4	11	80	55
SJ470-250/3	480	260	190	130	3.0	6.5	14.0	10.5	5	11	80	55
SJ330-250/4	340	260	190	130	4.0	6.0	9.6	7.2	3	11	80	55
SJ370-250/4	380	260	190	130	4.0	6.72	10.8	8.3	4	11	80	55
SJ470-250/4	480	260	190	130	4.0	8.6	14.0	10.5	5	11	80	55

MATERIAL

- Heavy gauge sheet steel

FEATURES

- SJ buckets are designed for heavy applications and suitable to replace heavy welded buckets used in cement and clinker elevators. SJ buckets combine a lighter weight with equal strength at lower cost price
- Designed for use with EP or Polysur Ferro and steelcord belts. With plain holes also suitable for chain elevators.
- Designed for wide range of products as cement, clinker, salt, fertilizer, minerals, grain, etc.
- Designed for capacities up to 1000 m^3/h

BENEFITS

- Higher belt speed than traditional cement elevators
- Allows lighter belt types.

SERVICE

- engineering service: we provide capacity calculations and designs for upgrading existing or new elevators.
- worldwide export experience

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