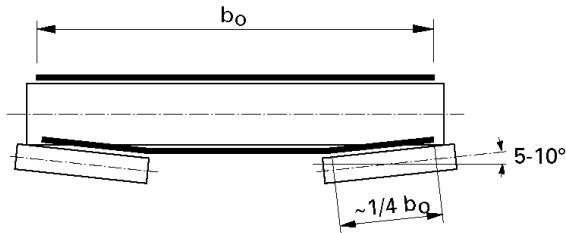
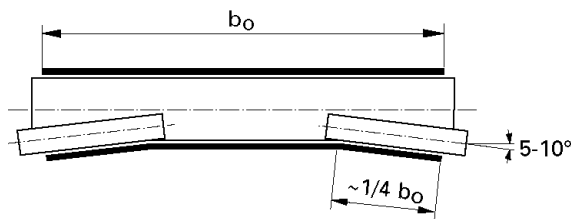


14. Inclined rollers on the return side

The tracking effect of inclined rollers in the return side is maximized if they are fitted to the running-on side in front of the tail roller for head drive and in front of the driving pulley for tail drive.



The positioning of rollers under the belt, i.e. on the conveying side of the belt produces a good tracking effect due to the high coefficient of friction, however, possible tracking marks on the belt covering must also be taken into consideration.

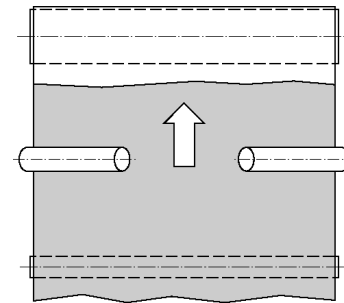


The rollers can also be positioned above the belt on its running side. This is desirable in cases where the belt has a delicate or highly structured conveying side with transverse profiles.

To achieve a satisfactory tracking effect, the belt contact of a roller should be around 1/4 of the belt width and the roller inclination should be 5° to 10°.

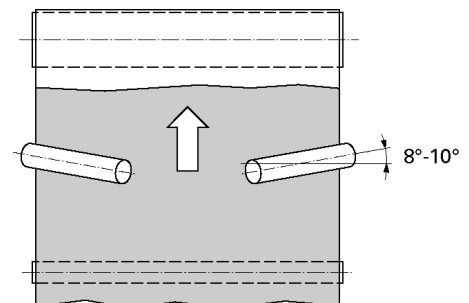
If the inclined rollers are fitted exactly at right angles to the belt running direction, the belt will automatically correct its own position should a change in run-off tendency occur.

This measure works also in reversing operation.



Belt tracking is further improved when the inclined rollers are angled forward by 8° to 10° at the belt edges in the running direction of the belt.

However, rollers angled forward can not be recommended for reversing operation!



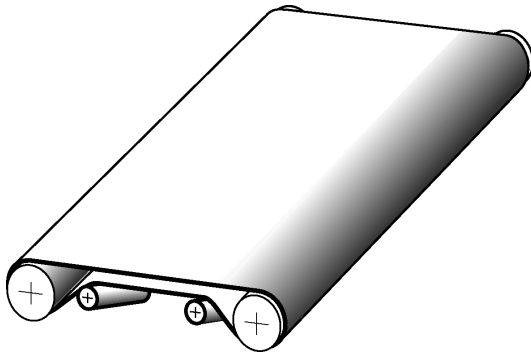
Inclined rollers on the return side have also proved successful for tracking wide, short belts (see chapter 18) and with thin belts at high speeds. In this case drive pulleys and tail rollers are to be fitted with cylindrical profiles in order to avoid folding or creasing.

18. Guiding of short, wide belts

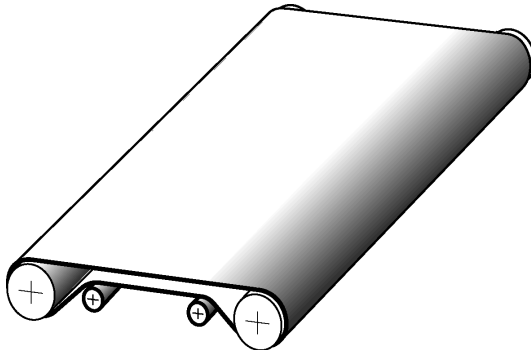
Conveyor belt installations, where the width of the belt is greater than its conveying length, are difficult to guide. Namely thin belts with little lateral stiffness, particularly at high speed, on short conveying distances have a tendency to fold and overlap when fitted with cylindrical-conical rollers.

Habasit recommends therefore that cylindrical pulleys should be fitted on short, wide installations. Other measures, however, will need to be used to guarantee effective belt guidance in these cases. The following can be recommended.

18.1 Inclined rollers on the return side



A solution recommended for guiding wide belts with short conveying distances (see chapter 14). The measure is also effective with reversing operations where the rollers fitted are at right angles to the belt running direction.



Pivoting guide/control rollers achieve good tracking results. However, they are not self-tracking and so cannot be used with reversing operations (see chapter 12).

18.3 Guiding profiles

Short, wide belts can be guided relatively effectively by using guiding profiles, but only where there is sufficient transverse rigidity and at fairly low speeds.

It is recommended that two profiles be fitted at the belt edges, so that they act as simultaneous belt stiffeners. With short wide belts, pulleys can be used to guide the profiles. In these cases the grooves in the pulleys are narrower than those in the slider bed. For more detail please refer to chapter 15.

18.4 Alternatives

In cases where the application does not absolutely ask for a wide belt, the use of **several narrow belts** is recommended.