

Impact and Glide bars



The discharge point on a bulk material handling system is one of the most critical parts. The drop height, the way of loading, particle size and the belt speed are factors that can damage the rubber conveyor belt and the rollers.

When using conventional roller under the discharge point the conveyor belt can be squeezed the rollers by the pressure of the impact. This leads to elliptical openings between the side skirting rubber and the conveyor belt, causing inevitable spillage of the transported material.

This cleaning of spillage results in a lot of extra costs in time and manpower. Next to that the wear of the rollers, bent or broken side supports of the troughing idler assembly, a misaligned conveyor belt and wasted material, can even cause more costs. All these factors lead to costly damages to the conveyor belt. These problems can mainly be solved by application of discharge point support items such as impact bars and glide bars, which absorbs the energy that occurs at the point where the material is falling onto the conveyor belt. Impact bars and glide bars consist of three different components which after vulcanization form a homogeneous unit:

- special rubber compound for energy absorption,
- top layer of polyethylene provides strong and low-friction cover,
- aluminium profile on the bottom of the impact bar makes this product easy to install.

These materials have good resistance to oil, grease and most industrial chemicals. The materials are heat-resistant up to a temperature of about 80 ° Celsius.



These impact bars are available in 2 heights, e.g. 50 mm and 75 mm, as well as in 2 lengths e.g. 1.200 mm and 1.500 mm. The rule of thumb is that the type TG 50 is used in medium-duty conveyor belt installations (up until \pm 600 tons per hour) and the type TG 75 is used for heavy-duty application.

Impact bars are mounted as a replacement for the rollers in a special troughing frame, which is specially build for this purpose (or instead of a frame a steel "adapter" that can be mounted in an existing troughing station). The number of impact bars, which have a width of 100 mm, depends on the belt width and shape of the troughing station.

One should take into account the following items;

- An intermediary troughing station needs to be placed before and after (or even in between) the impact bars. The maximal length in one stretch is 3000 mm (2 x 1500 mm). When a longer stretch is required a troughing idler assembly needs to be placed in between.
- An impact bar is installed with 3 squareheaded bolts (M16 x 60). This requires 3 carrier frames, with a distance in between of \pm 350 mm.
- The rollers before and after the impact bars need to be positioned 10 to 30 mm higher. We advise to fully equip these rollers with rubber impact rings, and to apply a reinforced axis construction.

Beltwidth	3-part through no. of impact bars			2-part through no. of impact bars	
	left	middle	right	left	right
650	2	2	2	3	3
800	2	3	2	4	4
1000	3	3	3	5	5
1200	3	4	3	6	6
1400	4	5	4	7	7
1600	5	5	5	8	8

Glide bars type: GB 150 / GB 200 / GB 250

These glide bars are especially designed to be deployed as impact bar for the transport of light material "light duty" and there where a dust-free and spillage safe side sealing is extremely important.

The glide bars replace in the latter case all the lateral troughing idler parts (side rollers) The type of number corresponds with the width of the bar. The length of the bar is 1.200 mm. The number of bars depend on the belt width (e.g. length of the side rollers). In case of a roll length longer than 250 mm, the length can be made up of 2 or more bars.

Example: Belt width 1.200 mm, 3-part troughing shape: rol length 465 mm = 1 x GB 200 and 1 x GB 250; free space in between the bars = 15 mm.

