

### 2.6 - Rollers with rings

In the majority of belt conveyors, over and above the normal steel roller, it is necessary to position impact rollers or return rollers with spaced rings and sometimes also self cleaning return rollers.



#### Impact rollers

The shock absorbing rollers, more often known as “impact rollers” consist of a base steel roller design, on which are fitted rings, designed to resist and absorb the pressures given by the impact of materials onto the belt.

These rollers are positioned in the carrying section of the belt, corresponding to the point of loading where the material falls onto it.



**Return rollers with spaced rings**

Rollers with spaced rings are used to sustain and support the belt during its return section, where the conveyed material tends to stick to the belt or wherever there is a wear problem or tracking problem of the belt itself.

**The rubber rings may function in the temperature range between -20°C and +80°C.**

When a return roller with spaced rings is not sufficient to resolve the problem, it is recommended to mount self cleaning rollers, with rings in helical rubber form or with a spiral metal cage, taking into account in the roller positioning that the dislodged material should travel outwards to the belt edge and not towards its centre.



**Cleaning return roller**

Time after time, conveyed material adheres to the belt surface. If the material is abrasive, it may wear out the roller shell of the normal steel return rollers; if it is viscous, it adheres to the roller itself, promoting dangerous build up of scale and causing vibration.

A large material deposit may also influence the tracking off of the belt in the return section.

