



Novelty: Conveyor belt scraper suspension with ROSTA Type DR 38 x 80 element

Most scraper segments for so-called primary or drum scrapers on conveyor belts are screwed next to one another vertically with pipe sections or are pinned onto pipe sections using cams (see Fig. 1, **Martin** primary scraper). These scraper segments must lie against the drum head with a defined pressure in order to be able to clean efficiently, and this pressure should also compensate for the continuous material wear of the scraper segments, so that the device remains maintenance-free. Up to now, this kind of primary or drum scrapers have been pre-tensioned by means of rubber bushes, flexible shaft couplings or flat coil springs (watchmaker's springs). The rubber bushes and shaft couplings offer a relatively small tensioning motion, and, as a result, have to be re-tensioned periodically. The flat coil springs provide no absorption, which, with very strongly adhesive transport material, leads to the vibration of the scraper segments and thereby to unsatisfactory cleaning. In addition, the steel springs are susceptible to fracture in the winter months.



Figure 1, **Martin** primary or drum scraper

ROSTA has conceived a new elastic support for primary or drum scrapers that is very efficient and functions in a simple manner (see Fig. 2). The rubber torsion elements that are screwed onto both sides of the frame of the conveyor belt system using mounting flanges can be pre-tensioned exactly to the desired working pressure by means of a threaded rod. Thanks to the two torsion angle indicators on the ROSTA elements, the spring force of the two side supports can be set-up to be identical, which leads to a regulated cleaning pressure over the complete width of the of the drum head.



Figure 2, elastic support for primary or drum scrapers

The square inner profiles (38/38 mm) of the ROSTA rubber suspension units protrude by 235 mm on the inside of the mounting flanges on each side. These profile ends are inserted into the square profile of the primary or drum scraper pipe on both sides, and are secured against movement (drifting to the side) using a set-screw. The rubber suspension units are arranged in such a way that they can be attached on both the left and the right side of the belt system (see Drawing SK 4910 on page 2).

