



ROSTA Oscillating Mountings Type AB 50/50-2 «TWIN»



ROSTA Oscillating Mountings Type AB 50 «TWIN» were developed for the suspension of large-scale screens. Types «TWIN» 50 and 50-2 possess the same impressive characteristics as the smaller sizes of the ROSTA screen suspension series AB, but have a significantly higher loading capacity: Type AB 50 «TWIN» = 12 000 N and the version AB 50-2 «TWIN» = 20 000 N.

The screen mountings Type AB are maintenance-free, elastic mountings for the support or suspension of **free oscillating screens and conveyors** of a wide variety of types and drive systems. The oscillating mountings Type AB were originally developed for the support of lighter conveyor troughs and dewatering screens in the food industry. Thanks to their unique method of operation, however, with low natural frequency, high corrosion resistance and overload capacity on spontaneous loading, they quickly

spread in the application for heavy mineral screens in coal and ore processing.

The maximum loading capacity of 6000 N per suspension (AB 50), however, was a handicap to their successful entry into large-scale plant construction. The AB 50-2, developed in 1998 with a loading capacity of 10 000 N, was already able to attract many screen manufacturers to using the ROSTA suspension, but the support of plants of 15 or even 20 tonnes total weight still required the installation of a veritable «serpent» of AB oscillating mountings per screen support. For large-scale plants that were equipped with counterweight frames, ROSTA, still with a low mounting loadability, just did not have suitable supports for screen and counterweight.

The «TWINS», with central support and batteries of rubber suspension units on both sides, now offer loading capacities

comparable with or even higher than those of helical springs! 12 000 and 20 000 N loading capacity, respectively, per mounting now suffice even for the construction of large-scale screening plant. The impressive characteristics of the ROSTA mountings Type AB remain:

Customer benefits

- Low natural frequency (< 2.5 Hz) – very good detuning and hence very high insulation value. Important for plant on very high, relatively unstable processing decks!
- High lateral stability owing to unique construction – additional lateral guide «snubbers» are unnecessary, screen runs absolutely linearly, even in the resonance phase!
- Short run-out times (in resonance phase)
 - the natural hysteresis (energy losses) dissipates the energy remaining in the screen box completely within a few cycles
 - no necessity for brakes in the drive systems!
- Overload security on spontaneous loading, up to 3 x nominal capacity – no plant failure or shut-down under extreme conditions (e.g. recycling screens).
- High corrosion resistance – no susceptibility to rusting as with helical steel springs – no plant failure resulting from spring breakage! (ABs are also available in stainless steel).
- High damping of structure-borne noise by rubber-on-rubber suspension – significantly lower noise generation in operation – environmentally friendly suspension!
- Withstand tensile and compressive loading – the AB oscillating mountings are also highly suitable for direct suspension (overhead mounting) of delivery troughs under silos, etc. – no need for expensive support constructions.