

NEW!

Rocker arm and spring accumulator in one component

ROSTA oscillating mountings Type AU-DO: the most cost-efficient alternative to steel and fibre blades.

Standardized sprung swing arms with very high dynamic stiffness for the support of freely oscillating and crank-driven conveyor troughs and screening machines.

However, the AU-DO rocker arms were mainly developed for trough suspension in excited-chassis two-mass oscillating systems (energetic amplification). These systems are characterized by extremely low, hardly measurable residual force transmission to the oscillating machine foundations (see following illustration) and are hence ideally suited for installation on steel scaffolding and false floors in processing buildings. The chassis is excited by unbalanced motors near to resonance frequency and the spring accumulator units of the AU-DO mountings amplify the small oscillation amplitudes to significant throw amplitudes onto the screen or the conveyor trough.



Demonstration conveyor trough for the ROSTA oscillating system "Silent Flow" with chassis excitation (energetic amplification). Oscillating trough suspended on 4 AU-DO 27 rocker arms, chassis suspended on 4 AB 27; driven by 2 unbalanced motors. Machine frame is installed on 4 mounts NOX 70, M16.



Rocker arm AU-DO

These high stiffness accumulator arms are also highly suitable for the suspension of freely oscillating single-mass systems with unbalanced motor drive. With this simple oscillating system a conveyor speed of > 30 m/min can be attained and this with low drive power from two small vibration motors. Compared with the conventionally used fibre leaf springs, the installation of the ROSTA AU-DO is extremely simple and does not require exact load tuning of the rocker arms.

Finally, the universal rocker arms from ROSTA are applicable in **crank-driven oscillating conveyor systems**. Here they have the function of a trough guide and spring accumulator unit at the same time. For the above mentioned type of oscillating

machines, low-cost resonance conveyor systems may thus be built with only one component; additional spring accumulator assemblies are dispensed with entirely! The dynamically highly stiff rocker arm simultaneously transmits very high spring force to the trough or screen and holds the machine near resonance in low-stress natural frequency motion.