



## 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.**

# «In our foodstuff processing plant we leave nothing to chance! We rely on ROSTA!»

**frigemo**

**frigemo Produktion Mellingen AG**

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**Hans Winzenried**

Technical Director

Food processing group

Potato-, vegetable-, pasta-specialities and fresh salads

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frigemo Produktions AG bought its plant «out of the catalogue» from well-known machine manufacturers in Germany, Holland and Italy. All these processing machines ran well right from the start, but they were not always exactly tailored to frigemo's requirements. A vibration calibrator, for example, transmitted too much residual energy into the building mass, the support springs on a German made dewatering screen broke every few weeks and the fibre leaf springs on a Dutch salad shaker became tired within a month. No serious damage, since all spares were always at hand, but plant down times cost a lot of money and the scheduled delivery of the goods is threatened by every repair.



says Mr Hans Winzenried, Technical Director of frigemo Produktions AG in CH-5507 Mellingen, Switzerland.

frigemo Produktions AG is a leading Swiss company specializing in the processing of potatoes, vegetables, fresh salads and pasta. Contracts with the big supermarkets and restaurant chains in Switzerland demand prompt daily delivery of the fresh goods – usually before dawn. Mr Hans Winzenried must be able to rely on his large fleet of machines, screens, sifters and dewatering troughs. Otherwise, the goods could not be dispatched in good time.



Rocker arm type AR-38



Key feeding device, originally mounted on 3M fibre leaf springs, now equipped with ROSTA rocker arms type AR-38

**frigemo**



«We don't want to have our profit lowered by the payment of conventional fines!» said Mr Winzenried, «so we install ROSTA oscillating mountings wherever possible in our screens, also as a retrofit: they remain in service for the life of the machine.» – **«Why don't all screen manufacturers install ROSTA oscillating mountings right from the start in their machines? That would save us technical directors a lot of trouble and loss!»**

Several well-known manufacturers of calibrating and dewatering screens for the foodstuff industry have been routinely installing ROSTA oscillating mountings for a long time in their machines. The Dutch manufacturers, above all, have learned to value the advantages of the ROSTA oscillating mountings Type AB, not least because they are available in stainless steel (AISI 304).

North American customers demand execution of all structural components on foodstuff processing plant in stainless steel, even if the component does not come into direct contact with the food.

ROSTA components owe their successful introduction to the manufacturers of foodstuff processing machines mainly to the end consumer customers such as frigemo Produktions AG. **End consumers for whom the continual replacement of coils and leaf springs was too costly and time consuming!** For the upcoming renewal of machine fleets, they demanded as a precondition the delivery of the next screen with ROSTA oscillating mountings as standard equipment.

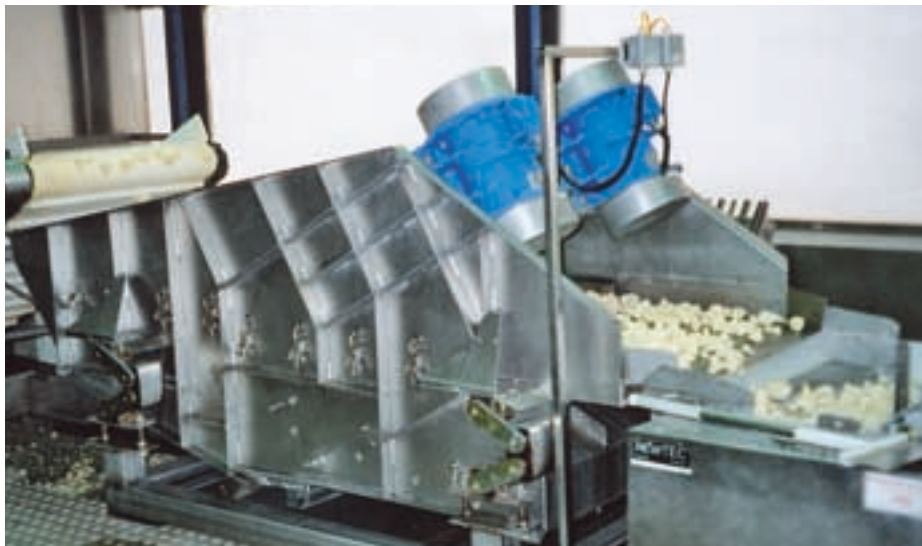
Editor:  
Bernhard Fasler, ROSTA AG



*Lubbot-Wacker feeding and dewatering screen, originally equipped with coil spring mounts, retrofitted on ROSTA AB-45 oscillating mountings.*



*JÖST vegetable dewatering screen, originally coil spring suspension replaced by ROSTA AB-38 mounts*



*Superior sorting screen originally installed on 4 Air-Ball-mounts, retrofitted on 4 ROSTA AB-45 elements (zinc-plated).*



*Elastic suspension of hot steam pipes on anti-vibration mountings type V-38 (compensation of heat-induced expansion).*





## Exhibition participation of ROSTA in spring 2002

<b>Technikshow</b>	MECANELEM, F-Paris as from 19 <sup>th</sup> until 22 <sup>nd</sup> March 2002 ROSTA AG exhibits: Hall 6, Booth B 059	<b>INTERMACH</b>	INTERMACH, TH-Bangkok as from 8 <sup>th</sup> until 12 <sup>th</sup> May 2002 Booth: Virtus Company Ltd., Thonburi, TH-10600 Bangkok
	Technikshow, NL – Utrecht as from 9 <sup>th</sup> until 13 <sup>th</sup> April 2002 Booth: A & A techniek BV, NL-3433 NP Nieuwegein		SIAMS, CH-Moutier as from 21 <sup>st</sup> until 25 <sup>th</sup> May 2002 ROSTA AG exhibits: Hall 2, Booth E-18
	Powder & Bulk Solids Exhibition 2002, US-Chicago as from 7 <sup>th</sup> until 9 <sup>th</sup> May 2002 Booth: ROSTA LLC., US-Downers Grove, Illinois 60515	<b>NITRA</b>	NITRA, SK - Slovakia as from 28 <sup>th</sup> until 31 <sup>st</sup> May 2002 Booth: Rupert Int. s.r.o., CZ-253 01 Hostivice

## Experience tensioning force and tensioning path!

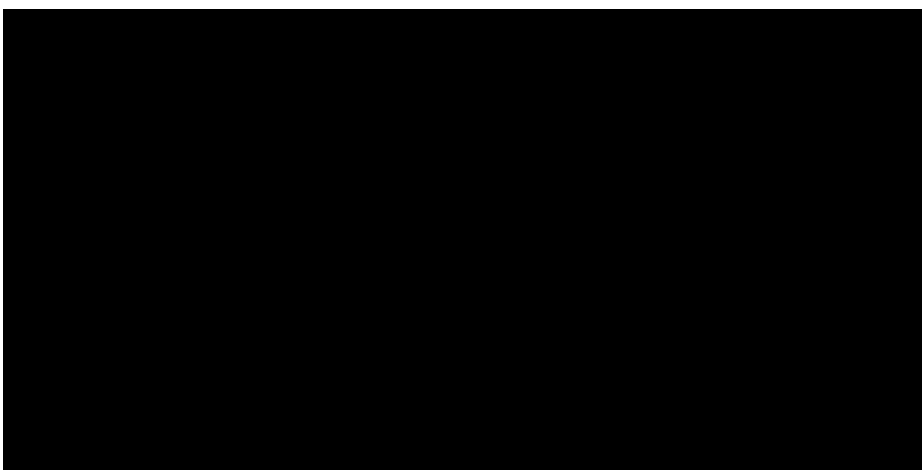


It is a well-known fact that only around 10% of information read remains in the memory of the reader. Some 25% of visually experienced, authentic impressions remain in the memory and this can even be increased to 50% if the visual impression is also obtained in the right environment. If the observer can also feel this function with his own hands, there is a 75% chance that it will be recalled when necessary – this is exactly what we wish to achieve with our animated displays.

Following the vibrating staircase for simulating almost painful shocks and the efficiency of vibration dampers, visitors to the exhibitions this year can experience the high tensioning force and enormous

compensation path of our chain and belt tensioners. By operating the chain tensioning lever compensation for the elongation takes place with an almost linear, damped force of our automatic tensioning elements; and this function will therefore remain in the memory of visitors!

Represented by:



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