

## From "Stepchild" to Bestseller!

### ... the ROSTA oscillating mounts type ABI manufactured from AISI 304 stainless steel

As early as 1994, following an increasing number of requests from manufacturers of food processing machines, ROSTA brought a comprehensive range of INOX oscillating mounts onto the market for rocker arms, connecting rods and drive heads for slider-crank driven vibrating conveyor; as well as the ABI series for the suspension of freely-oscillating screening and sorting machines.

The not-inconsiderable additional cost for this stainless steel version initially dissuaded many manufacturers from installing these stainless steel oscillating supports. "These components do not come into direct contact with food being conveyed – the less expensive, lacquered standard version will also do the job!", was the general opinion of mechanical engineers.

However, as operators tend to clean all their machines one or more times a day with superheated steam and Shavel additives, every non-stainless metal component becomes unsightly within months – which does not please the food inspectors, whether the part comes into contact with the food or not.



Salad dewatering screen on ABI 15 mounts



Soya shoot shaker on ABI 15 mounts

One of the first customers to convert to the stainless steel versions from ROSTA for all their oscillating machines was Kronen GmbH & Co. KG Nahrungsmitteltechnik in D-Willstätt-Eckartsweier. Several hundred ABI 15 oscillating mounts were installed annually as suspensions of drainage screens for lettuce, Soya shoots, beans and spinach.

These long-life suspensions . . .

- **have a good appearance**
- **are insensitive to corrosion**
- **are unbreakable**
- **offer the highest level of isolation towards the subframe**

. . . and, with this quantity discount, are only slightly more expensive than the standard lacquered parts!

ROSTA ABI suspensions are available for load capacities of 250, 500, 1200, 1800, 3600 and 8000 N per element.



ROSTA-oscillating mount type ABI 30 made out of stainless steel AISI 304/ DIN 1.4308

## New and proven ROSTA elements in an agricultural machine

The Chr. Willemsen GmbH company from D-Stadtlohn was founded in 1978 and successfully developed an own-design for agriculture: a self-propelled corn mill. With the FF9W/K model, a mill has been built that sets new standards in the areas of performance (up to 150 tons of maize per hour), convenience and maintenance. The design engineer, Mr. Trahe, has shown himself to be open to new and innovative products and through the consistent use of ROSTA rubber suspension units, has increased the operating convenience of the mill and/or has been able to reduce the maintenance work, whereby the safety aspects are fully maintained.



Corn milling machine "Willemssen FF9W/K"

Below the ROSTA elements and their utilisation in the mill are listed:

### ESL 18 anti-vibration mounting

The telescopic cabin of the FF9W/K is mounted on ESL anti-vibration mounts that are low-oscillation and secure against break-out. The special ROSTA principle offers an almost 100% insulation against structurally-borne noise. The result of this is, that the development of noise in the cabin is drastically reduced.



Operators cabin mounted on ESL 18

### ST 38 connecting rod suspension

In the MAN diesel motor (588 kW), the water cooler is mounted elastically and thus free of vibration on to the chassis using ST 38 elements. Additional it is mechanically secured against break-out by the ROSTA elements.

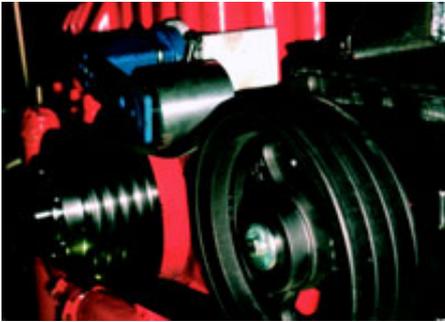


Fixation of water cooler with ST 38



Mister Trahe, design engineer  
company Willemsen





ROSTA belt tensioner type RSE 27

### RSE 27 belt tensioner

The motor drives an hydraulic pump via V-belts. At a specific speed and thereby power of the pump, an elongation of the V-belts takes place. The ROSTA belt tensioner automatically compensates any elongation of the V-belts.



Fast pre-tensioning device

### NEW!

#### Fast pre-tensioning unit for the SE 27

As long V-belts in the above application become longer than the ROSTA tensioning element is able to compensate with its initial pre-tension, a further re-tensioning

must be carried out. Restricted installation conditions and the presence of hoses and so on make this work much more difficult. In addition, there is the danger of injury due to the hot parts of the engine. The new, fast-tensioning unit for tensioners, with which the tensioning element can easily be re-positioned, even with critical installation conditions, reduces the re-tensioning time from 30 minutes to 3 minute!



ROSTA belt tensioner type RSE 18

### RSE 18 belt tensioner

In the SCANIA DC 14 motor, which is installed in the smaller milling machine, problems arose with the Poly-V belt drive of the lighting alternator, as the belt elongated at high speeds and did not transmit sufficient power. The elastic ROSTA belt tensioner tensions and stabilises the run of the Poly-V belt.



Tensioning of the chain drive system with SE-B 18 tensioner

### SE-B 18 "Boomerang" tensioner

Originally, the long chain that was responsible for driving the feeding screws in the mill had to be rigidly tensioned and re-tensioned by a complicated manual procedure. The ROSTA SE-B tensioner, which, in comparison to the SE tensioner, can compensate up to three times the chain elongation, takes over the elastic and automatic re-tensioning of long chains in this case.

Author:

Michael Backhaus  
ROSTA GmbH, Germany



**The afore mentioned tensioner applications are referring to the reinforced type SE-R models.**

## ROSTA Belt Tensioner

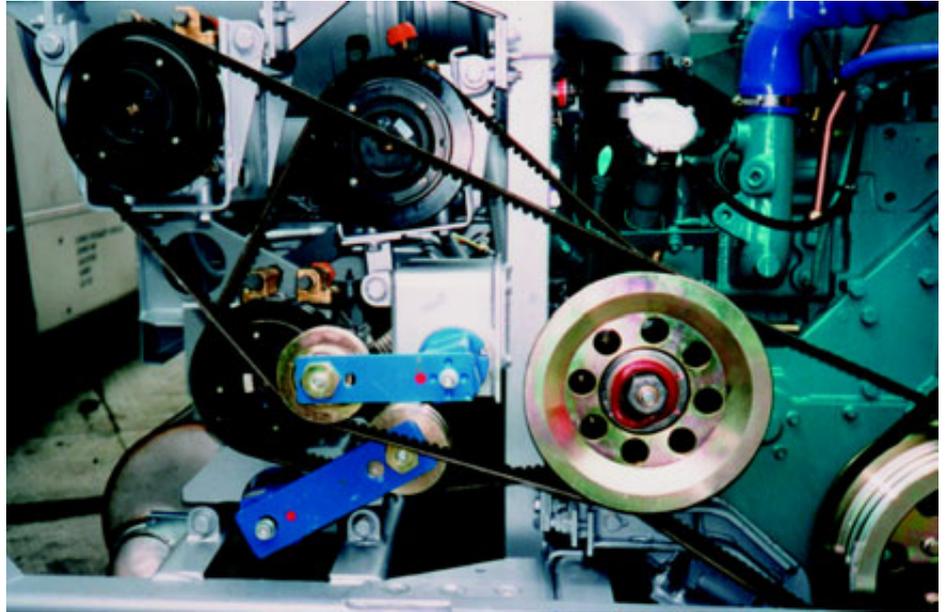


Typical London double-decker bus

ROSTA belt tensioners, in order to keep the air conditioning, hydraulics and motor cooling all up-to-scratch in London's double-decker buses!

The DENNIS Bus Corp. in Guilford/Surrey (UK) builds the traditional "Trident" double-decker buses, whose high, red silhouette is an indispensable part of the London townscape. For more than seventy years, these red "double-deckers" have mastered a large part of the urban passenger traffic in the metropolis, and hardly a single tourist has missed out on experiencing a "double-deck-ride" before returning home. For many years, these buses from Dennis have also been part of a tradition and, at the same time, an important means of transport, in Sydney, Hong-Kong and Singapore.

The technology of the buses has, however, changed considerably in the last seventy years. The 70 or 100 hp

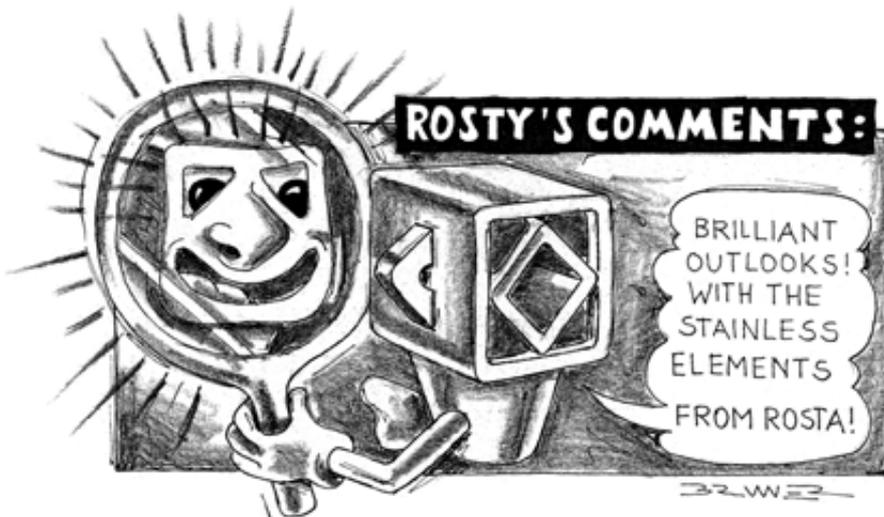


ROSTA belt tensioners type SE-W18 and 27 on Cummins diesel engine

Leyland diesel engines have been replaced over the course of time by turbo-diesel motors from Cummins, which deliver 240 hp. The passenger cabin is fully air-conditioned, and, for some years now, the driver has at last enjoyed the benefit of servo-assisted steering! The two ROSTA Type SE-W 18 and SE-W 27 tensioning elements shown on the above picture make an important contribution to the safety and comfort of the buses. They tension the belt drives between the diesel crankshaft, the cooling water pump, the hydraulic pump and the two cooling compressors, so that the engine

cooling, power steering and air conditioning system can work without loss thanks to the slip-free power transmission. On the other hand, belt re-tensioning maintenance intervals are not anymore required.

Represented by:



**Publisher:**  
**ROSTA AG, Hauptstrasse 58**  
**CH-5502 Hunzenschwil**  
**Phone: +41 (0)62 897 24 21**  
**Telefax: +41 (0)62 897 15 10**  
**E-Mail: [info@rosta.ch](mailto:info@rosta.ch)**  
**Internet: <http://www.rosta.ch>**

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