

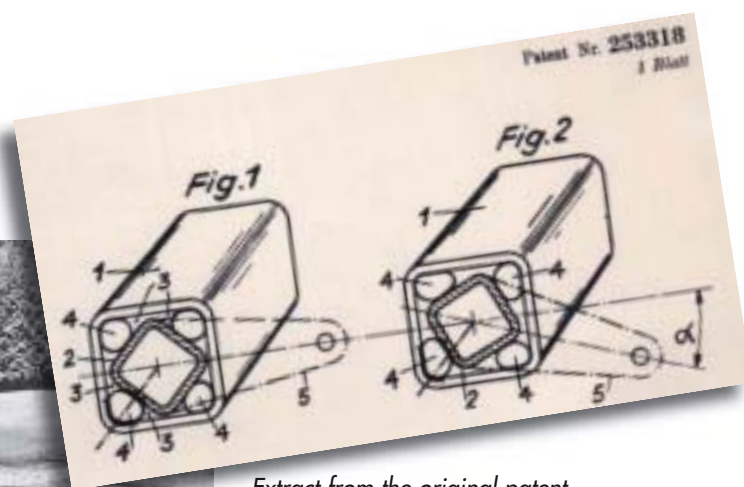
Rubber suspension units from ROSTA – over 60 years!

The ingenious idea of designing a suspension unit from two square profiles and four rubber bodies originally came from a subject teacher at the Technical High-School (Technischen Berufsschule) in CH-5600 Lenzburg. In the year 1942, he applied for a patent for his invention. Due to the absence of suitable applications and the lack of a possibility of manufacturing suspension units, the invention «slumbered» for some years. In the middle of the Forties, the teacher showed his patent and the design sketches to Ernst Rohr senior, a small manufacturer of agricultural trailers working in vicinity, and asked him to make up a few prototypes of this vehicle suspension system. Mr. Rohr from **Staufen**, the founder of **ROSTA AG**, quickly became aware that this patent not only covered a wheel suspension, but also a compact machine component that could provide elastical suspension, damping and support at the same time. He bought the marketing rights for the patent from the teacher and, for the time being, started with the manufacture of light, suspended trailer axles. These products quickly caused a sensation among the makers of bodywork and trailers throughout the whole of Switzerland.

The machine tools of the then ROSTA-WERK AG were all still operated by a central transmission shaft; many flat-belt drives led to the various turning lathes, punches and millers. In those days, excessive belt slip was just one of the problems of everyday manufacture – until the factory foreman took one half of a rubber suspension axle and a roller, and, from them, manufactured the first self-adjusting **belt tensioner**. This idea was quickly taken up by the company founder and was successfully marketed; today, ROSTA AG manufactures approximately 400,000 standardised chain and belt tensioners per year. This mass production of tensioning elements was soon followed by series of vibration-damping machine components for the suspension of screens, gyratory sifting machines and conveyor troughs, today's core business of ROSTA AG.



The man who implemented the ingenious idea: company founder Ernst Rohr senior



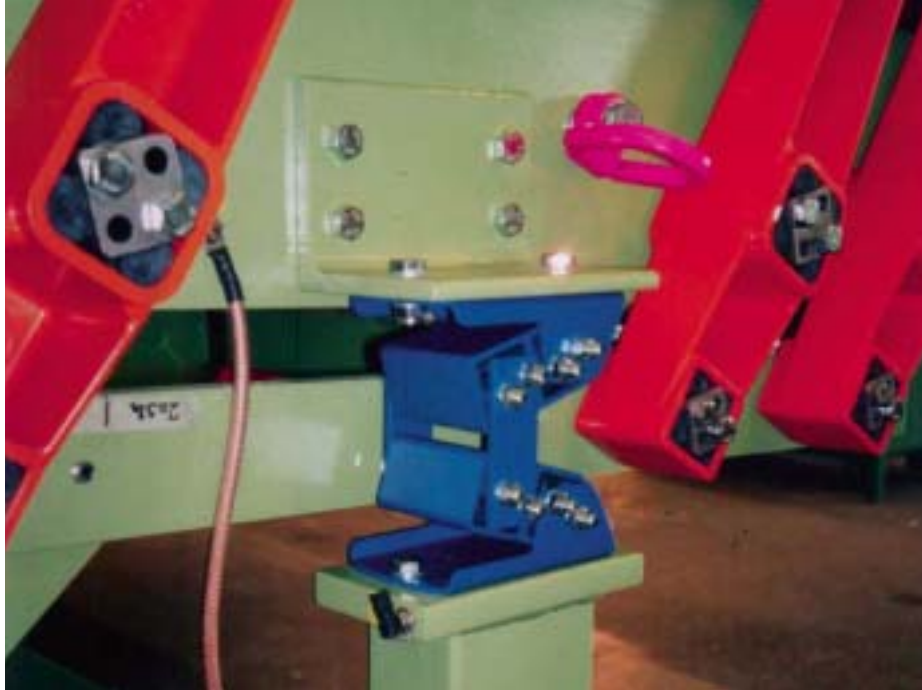
Extract from the original patent



Where it all began: the first ROSTA-WERK AG building (approx. 1953)



Let's talk about oscillating conveyor trough



Two-mass conveyor trough with double rockers, Type AD 45

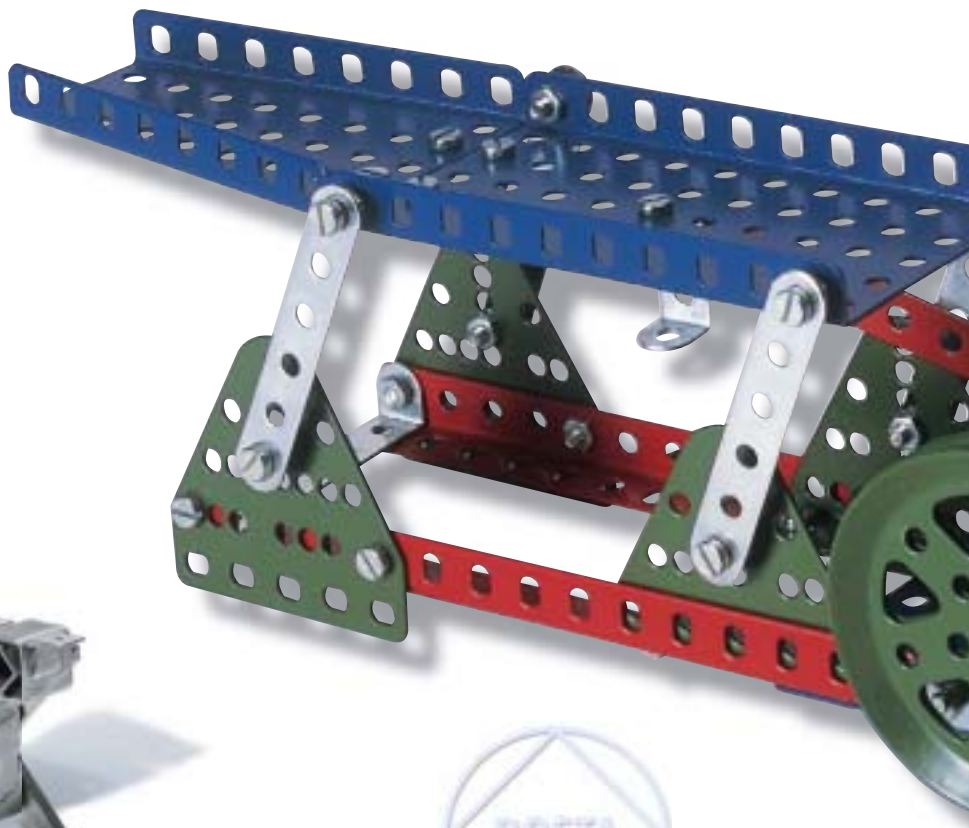
Many industry insiders in the screening and oscillating conveying machine technology have a common «Credo»: **«Every new concept brings new realisations!»**

For many years, many standard oscillating conveyor troughs with lengths of twelve metres have run without problem and provided complete satisfaction for certain manufacturers. – And then, the first installation with a length of fifteen meters using the same design lets down all the former good results with a much lower material throughput, the appearance of vibration nodes and material fatigue fractures in the trough structure.

The screening and oscillating conveyor technology is subject to very specific physical laws, which need to be mastered. And it is this very fact that makes the design of the very efficient and long-lasting machines of the modern bulk material processing interesting to technicians and «tinkerers», who, in



Gyrotory sifting machine suspension with universal joints, Type AK 100-4



Technology – a child's play with ROSTA!

In addition to screening and transportation, design installations that also rotate the product about its own axis, or that move it forwards or backwards on the screen plane, depending on specific weight. To some extent, the oscillating conveyor technology opens up undreamed-of possibilities for economical material handling for the modern processing industry.

Whatever kind of machine is being planned, it is almost impossible not to consider the use of ROSTA oscillating mountings in the construction! Tailor-made oscillating machine suspensions from ROSTA, together with our many years of know-how, which we are happy to pass on, turn avant-garde oscillating machine engineering into child's play!



Single-mass resonance trough for castings with Type AU 45 oscillating mountings and DO-A spring accumulators



