

RUBBER SUSPENSION TECHNOLOGY!

"Off Road" with the rehabilitation wheelchair



Figure 1

The great efficiency of today's generations of gel batteries, the ingenious electronics of joystick controls and powerful, continuously regulated electrical gear motors have made the wheelchair for physically challenged people into a truly road-worthy vehicle, and have thereby opened up a much greater radius of action for their users.

Pavement edges, unpaved roads, roots and embedded stones often limit the use of these rehabilitation vehicles in the "Off Road" area, however, as well as in local recreation areas and in forests.

The Swiss company **DEGONDA-Rehab SA** has recently launched its new "Turbo-Twist" wheelchair for unpaved roads, which safely transports its rider "up hill and down dale", while compensating all unevenness, roots and stones

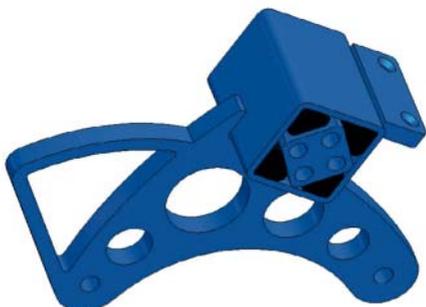


Figure 2

and gently absorbing all impacts thanks to its variety of elastic suspensions.

A total of 6 ROSTA rubber suspension elements of the DR 27 x 60 size help to maintain the equilibrium of the "Turbo Twist", and its rider over all irregular surfaces.

A very important factor in the compensation of unevenness and pavement edges is the **H-flex suspension** with two pairs of rollers (see Figs. 1 and 2), which has been patented by DEGONDA. The protruding, smaller pair of rollers "climbs" over the obstacle, and the following pair of supporting rollers swivels out via the ROSTA spring suspension and harmonically matches the running surfaces to the new level of the path.

The further functions of the ROSTA rubber suspension elements in the "Turbo-Twist" can be seen in Fig. 3 Pos. "1" shows the so-called H-flex suspension; Pos. "2" shows the elastic ROSTA suspension on both sides of the rear safety support wheel, which, through the suspensions, balances out the movements of the chair chassis when negotiating obstacles. Position "3" shows the elastic knee support on both sides of the rider, which allow some limited reciprocal movement of the leg extremities when travelling over obstructions.

All in all, the three elastic ROSTA oscillating pairs offer more safety, comfort and a great deal of (fast) driving enjoyment to the "Turbo-Twist" rider!



Figure 3

ROSTA

RUBBER SUSPENSION TECHNOLOGY!

Without additional brackets, straps and clamps . . .



Swivel mount for seat

Without additional brackets, straps and clamps we proudly present the new ROSTA component program from Type DW-A/C 15 to DW-A/C 27, containing the most popular rubber suspension unit sizes for mechanical engineering.

Up until now, brackets, straps and clamps have **made possible** the installation of the ROSTA rubber suspension elements of types DR-A/S/C and DK-A/S/C in sizes 15 to 27 into general mechanical engineering installations – but these complicated mounting, with their additional fixation devices for their spring suspension, do not conform to the modern logistical requirements on built-on elements: **“as few, slim and ready-to-mount components as possible – without any installation outlay worth mentioning”.**

The brackets and clamps for the fixation of the elastic suspensions have to be ordered separately from the rubber sus-

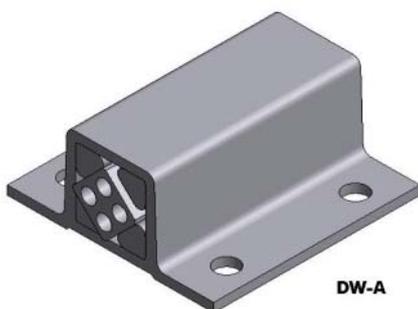


Figure 1

pension elements, and are often forgotten in parts lists or cause additional outlay in mounting and positioning. To put it simply, these well-proven rubber suspension elements are no longer absolutely “user-friendly” from the viewpoint of modern procurement!

The outer parts of the new **DW-A/C series** (see Fig. 1 and 2) are manufactured from extruded light alloy sections, with the loading capacities of Steel 37, and already have drilled mounting flanges to enable the simple fixation of ROSTA rubber suspensions in the machine by the customer.

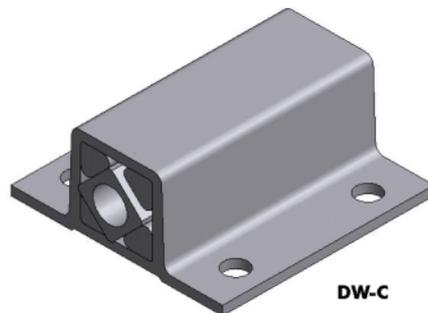


Figure 2

The procurements costs of these slim built-in components lie about 5 % higher in than those of comparable “naked” DR-A/C elements; if, however, you subtract the costs of the clamps that have been necessary until now, the suspension is approximately **15% more cost-effective**. In addition, the installation of the components also turns out to be much simpler from a logistic and installation viewpoint.

The predestined application areas for the DW range from ROSTA:

- in the office and school furniture industry as elastic seat suspensions, etc.

- in the “playground equipment” sector as base and swivel bearings, etc.
- in the veneer and chipboard industry as thrust bearings for guide rollers
- as serie or parallel connected elements as hinges for cover hoods, etc.
- as hinge bearings and stops for swivel mechanisms in door construction
- as installation – friendly spring suspensions in large production runs
- as small motor bases for friction belt drives

Ask for our detailed documentation on this new range of components!



OSCILLATING CONVEYOR TECHNOLOGY!

Quietly leading the portable screening industry with the help of ROSTA oscillating mounts type AB 50



The company **DJ Manufacturing Inc.** located in Digby, Nova Scotia (Canada), has been quietly building a reputation as a leader and innovator in the portable aggregate screener business. Patented in both Canada and the USA in 1996, the **Screen King** is designed to deliver three separate grades of aggregate product from each and every cycle. The **Screen King** can handle up to 2,2 m³ of material per charge. With its 1,2 x 3,6 m screen deck and separate loading pan, it provides a high material speed, which guarantees that each load is completely screened in a typical 20 second cycle time.

One of the keys to the **Screen King's** success, was the incorporation of the ROSTA oscillating mounts type AB, in 1996. Early on, DJ realized the critical role that ROSTA could play in building a

better screen plant. ROSTA mounts were designed to isolate the vibration that was typically transferred to the screen structure, and control the linear motion on the screen deck, to optimum tolerances.

"In addition", says Doug McNaughton, owner of DJ Manufacturing, "the ROSTA mounts provided our customers the benefits of both minimal amount of time required to prepare the screener for transport, as well as a fast, smooth and controlled linear shut-down of the screener, which eliminates damage to

the side walls, cross beams, and screen media."

"We went through the pain of leaf and coil spring suspensions early on", states Doug, "then researched and sourced ROSTA as an industry leader in screen control and vibration isolation. Without ROSTA in our corners, we would just be another screener – good looking, but not very functional".

With ROSTA in its corner, the Screen King has expanded its market distribution throughout Canada and the United States, where it is marketed under the trade name Screen Titan.



Editor: Steve Doodchenko
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RUBBER SUSPENSION TECHNOLOGY!

Elastic "garland" suspensions at conveyor belt transfer stations

The ROSTA type **ST-R** "garland" suspension offers the simplest and least complicated technical installation possibility for protecting belt structures at transfer stations with an elastic component from severe wear and surface damage.

Conveyor operators who have used them so far would no longer give them up and are amazed at the positive results!

The range of sizes based on our questionnaire for determining the kinetic impact energy was complicated – or was never completed by those concerned and returned to us.

We have now dramatically simplified the range and the selection table below permits the simplest possible choice according to grain size and fall height.



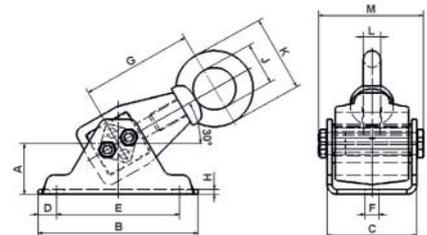
Selection of ST-R garland suspensions for belt conveyors

Height of fall (lumps)

	0.5 m	0.75 m	1.0 m	1.5 m
Grain size (diam.) ø 350 mm	ST-R 38	ST-R 38	ST-R 45	ST-R 45
ø 250 mm	ST-R 27	ST-R 38	ST-R 38	ST-R 45
ø 200 mm	ST-R 27	ST-R 27	ST-R 27	ST-R 38
ø 150 mm	ST-R 27	ST-R 27	ST-R 27	ST-R 27

Basics:

- Installation of ST-R units, always by pair per garland
- per transfer location at least 4–5 garlands should be equipped with elastic ST-R suspensions
- Specific weight mat.: ~2 kg/dm³
- for belt widths of 800 – ca. 1200 mm



Type	A	B	C	D	E	ØF	G	H	ØJ	ØK	L	M	Weight in kg
ST-R 27	42	130	73	15	100	11.5	90.5	4	35	63	14	86	1.27
ST-R 38	54	155	100	17.5	120	14	115	5	40	72	16	116	2.68
ST-R 45	62	190	122	25	140	18	145	6	50	90	20	148	4.78



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