

# Make an Impact on Your Mineral Processing!



**Oscillating mountings for screens and feeders**



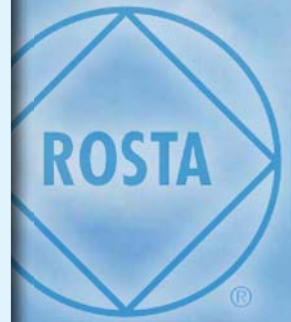
**Self-adjusting suspensions for conveyor belt scrapers**



**Self-tensioning motorbases for belt drives on pumps, screens, fans**



**Shock-absorber mounts for impact beds**



# ROSTA oscillating mountings for screens, shakers and feeders



(selection of size and quantity according to the relevant weight of the oscillating mass)

## Screen and feeder suspensions



Type	Load capacity		Height			
	Gmin. – Gmax. N	Gmin. – Gmax. Lbs.	un- loaded mm	max. load	un- loaded inch	max. load
<b>AB 27</b>	250 – 800	56.20 – 179.85	235	170	9.25	6.69
<b>AB 38</b>	600 – 1'600	134.89 – 359.70	305	225	12.01	8.86
<b>AB 45</b>	1'200 – 3'000	269.77 – 674.43	353	257	13.90	10.12
<b>AB 50</b>	2'500 – 6'000	562.03 – 1'348.86	380	277	14.96	10.91
<b>AB 50-2</b>	4'200 – 10'000	944.20 – 2'248.10	380	277	14.96	10.91
<b>AB 50 TWIN</b>	5'000 – 12'000	1'124.06 – 2'697.75	380	277	14.96	10.91
<b>AB 50-2 TWIN</b>	8'400 – 20'000	1'888.43 – 4'496.25	380	277	14.96	10.91
<b>AB-HD 50</b>	3'500 – 8'400	786.83 – 1'888.40	376	313	14.80	12.32
<b>AB-HD 50-1.6</b>	4'800 – 11'300	1'079.08 – 2'540.34	376	313	14.80	12.32
<b>AB-HD 50-2</b>	6'000 – 14'000	1'348.36 – 3'147.33	376	313	14.80	12.32

## Sub-frame suspensions (counter mass)

<b>AB-D 50</b>	4'000 – 9'000	899.25 – 2'023.31	329	272	12.95	10.71
<b>AB-D 50-1.6</b>	6'000 – 12'000	1'348.86 – 2'697.75	329	272	12.95	10.71
<b>AB-D 50-2</b>	8'000 – 16'000	1'798.50 – 3'597.00	329	272	12.95	10.71



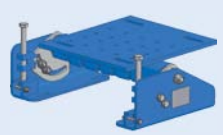
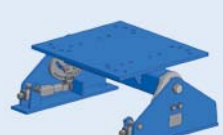
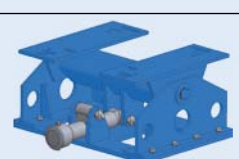
## ROSTA screen mounts type «AB» offer:

- high load capacities
- high degree of isolation
- solid borne noise absorption
- shock load resistance
- long life expectancy
- fully controlled start-up and run-out behaviour



# ROSTA automatic motorbases type MB for belt drives

(selection of relevant MB size based on motor-frame dimension and motor capacity)

IEC			NEMA			Type of Motorbase	Standard Design
Motor Frame Size	P [kW] 1000 min <sup>-1</sup> 6-pole motor	P [kW] 1500 min <sup>-1</sup> 4-pole motor	Motor Frame Size	P [HP] 1200 min <sup>-1</sup> 6-pole motor	P [HP] 1800 min <sup>-1</sup> 4-pole motor		
160M 160L	7.5 11	11 15	254T 256T	7.5 10	15 20	<b>MB 50 × 270-1</b>	MB 50 
180M 180L	– 15	18.5 22	284T 286T	15 20	25 30	<b>MB 50 × 270-2</b>	
200L	18.5 / 22	30	324T 326T	25 30	40 50	<b>MB 50 × 400</b>	
225S 225M	– 30	37 45	364T 365T	40 50	60 75	<b>MB 50 × 500</b>	
250M	37	55	404T	60	100	<b>MB 70 × 400</b>	
280S 280M	45 55	75 90	405T 444T	75 100	100 / 125 125 / 150	<b>MB 70 × 550</b>	MB 70 
315S	75	110	445T	125 / 150	150 / 200	<b>MB 70 × 650</b>	
315M 315L	90 / 110 110–160	132–160 160–200	447T 449T	150–200 200–300	200–250 250–300	<b>MB 70 × 800</b>	
315M 315L	90 / 110 110–160	132–160 160–200	447T 449T	150–200 200–300	200–250 250–300	<b>MB 100</b>	MB 100 
355S 355M 355L	132–160 200–250 200–250	200–250 250 250	586/7	250–350	300–350		

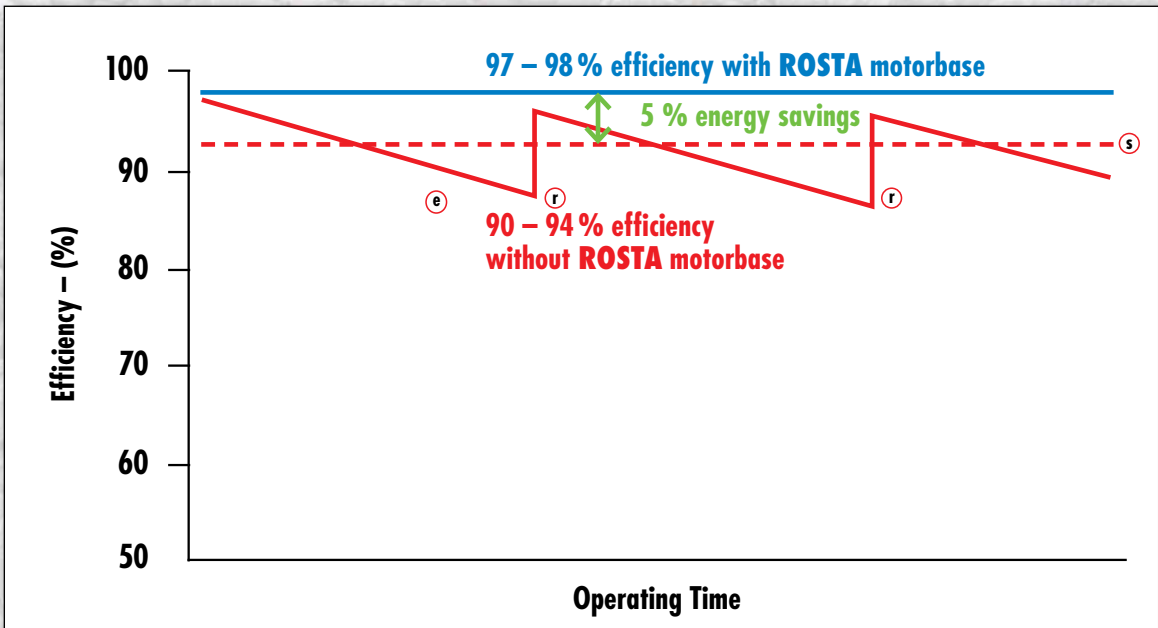


**ROSTA motorbases type «MB» offer for drives of slurry pumps, fans, screens, centrifuges and crushers:**

- automatic slack compensation
- transmission without belt-slippage
- absorption of torque peaks by start-up
- extended lifetime of belt sets
- fully maintenance-free operation



# ROSTA motorbases lead to drastic cost savings in heavy duty belt transmissions

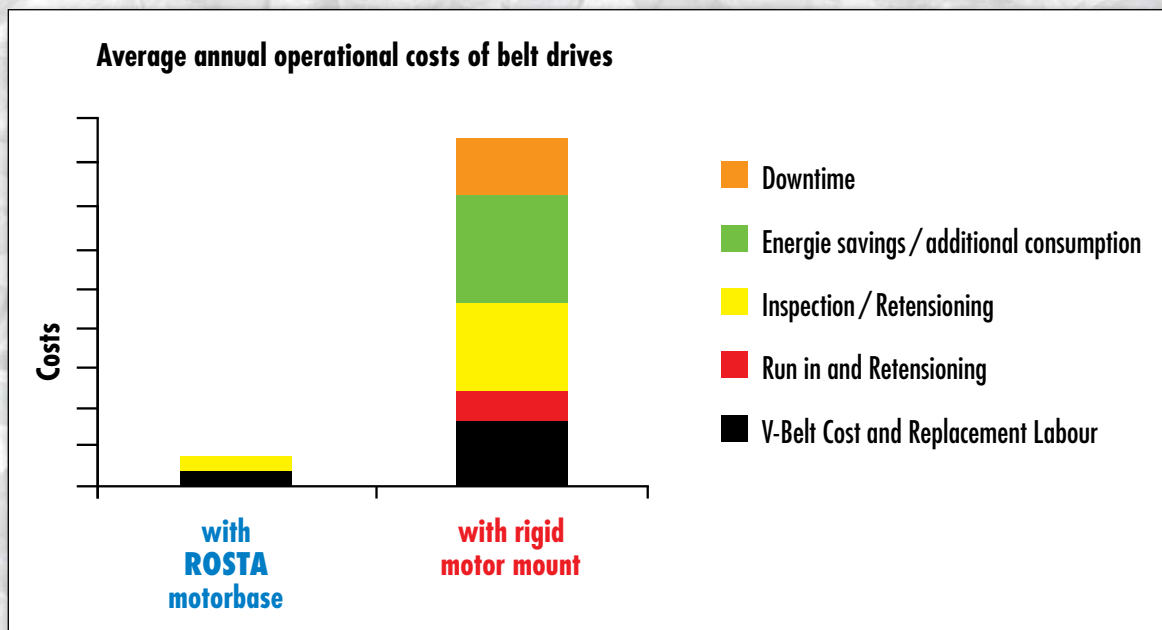


All V-belt drives are submitted to a continuous elongation (e) generating slippage on the power transmission between motor and driven gear. To avoid energy consuming slippage it requires periodical retensioning of the belt sets (r). However, most of the belt drives are **wasting at least 5 % of the costly**

**energy** due to inefficient torque transmission of loose belts (s).

**The spring loaded ROSTA motorbase is automatically compensating the belt slack and is saving an important annual amount of energy costs!**

## Annual costs comparison



To avoid useless energy wasting it requires the periodical re-tensioning of the belts. The respective maintenance outlay for a 45 KW motor is thereby at least one man-hour each time, five to six times per year.

**Maintenance works are very expensive** and stopping e.g. a crusher for an hour means all the downstream machinery in the production process are also unproductive!

# Impact table with **ROSTA** type ESL shock-absorbers for transfer stations



Impact table absorb the force of falling lumps to prevent the belt and sub-structure from damages. **ROSTA** impact table suspensions are engineered to withstand high impact forces.

## Selection table

**Table: quantity of ESL 38, ESL 45 or ESL 50 as shock absorbing suspension**

Weight of the largest lump [kg]	Drop height [m]																		
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
20	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6
30	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6	8	8	8	8
40	4	4	4	4	6	6	6	6	6	6	8	8	8	8	8	8	8	8	8
50	4	4	4	6	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8
60	4	4	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8
70	4	6	6	6	6	8	8	8	8	8	8	8	8	8	8	8	10	10	10
80	4	6	6	6	8	8	8	8	8	8	8	8	8	8	10	10	10	10	12
90	4	6	6	6	8	8	8	8	8	8	8	8	10	10	10	10	12	12	12
100	4	6	6	8	8	8	8	8	8	8	8	10	10	10	12	12	12	14	14
110	6	6	6	8	8	8	8	8	8	10	10	12	12	12	12	14	14	14	16
120	6	6	8	8	8	8	8	8	10	10	10	12	12	12	14	14	16	16	16
130	6	6	8	8	8	8	8	10	10	12	12	12	12	14	14	16	16	18	18
140	6	6	8	8	8	8	10	10	12	12	12	12	14	14	16	16	18	18	20
150	6	6	8	8	8	8	10	10	12	12	12	14	14	16	16	18	18	20	20

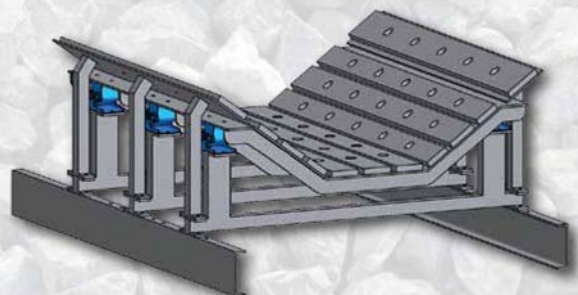
  

	Max. energy absorption per ESL	Alternative combinations
ESL 38	250 Nm	6x ESL 38 = 4x ESL 45
ESL 45	375 Nm	8x ESL 45 = 4x ESL 50
ESL 50	750 Nm	1x ESL 50 = 2x ESL 45 = 3x ESL 38



## ROSTA shock-absorbers type «ESL» offer:

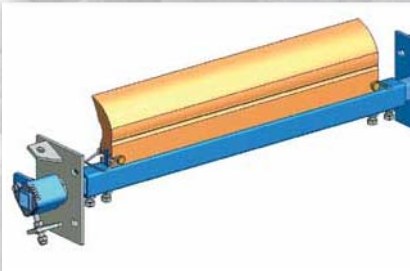
- protection to your conveyor belts
- absorption of high impact forces
- less belt abraision
- reduced noise level
- increased belt life
- low maintenance cost



# ROSTA self-adjusting suspensions of conveyor belt scrapers



belt width up to	belt width up to	Type
450 mm	18 inch	2x SE 18
600 mm	24 inch	2x SE 27
750 mm	30 inch	2x SE 27
900 mm	36 inch	2x SE 38
1050 mm	42 inch	2x SE 45
1200 mm	48 inch	2x SE 45



**ROSTA tensioners type «SE» for the suspension of conveyor belt scrapers offer:**

- continuous pressure on scraper blade
- self-adjusting (scraper wear)
- absorption of scraper vibrations
- maintenance-free operation
- fast and easy installation



Representative:



**ROSTA** 

**ROSTA AG**  
 CH-5502 Hunzenschwil  
 Phone +41 62 897 24 21  
 Fax +41 62 897 15 10  
 E-Mail [info@rosta.ch](mailto:info@rosta.ch)  
 Internet [www.rosta.ch](http://www.rosta.ch)