

Datasheet

RS Trapezoidal Steel and Stainless Steel Lead Screw



General choice criteria

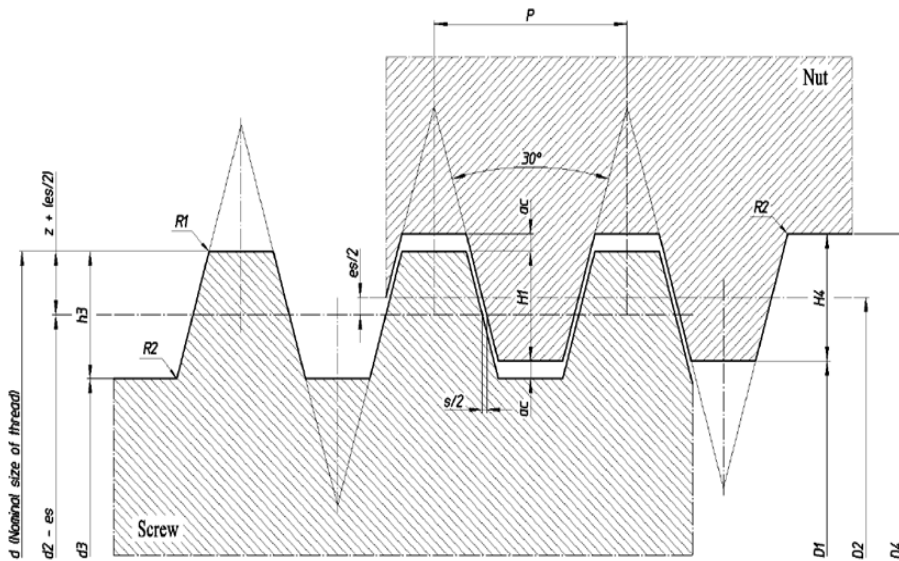
The choice between different types of screws and nuts available is generally carried out in light of the following considerations:

Choice of the screw

Working environment

For work environments where there are no particular corrosive or oxidizing agents C45 screws can be used. Where these conditions are not met, we recommend using stainless steel screws A2 or A4 which are particularly suitable in the following cases:

- With relative humidity of 70/80% and above.
- Immersed in water, even in sea water.
- In presence of particular corrosive agents such as chlorides. In case of highly corrosive agents please contact our Technical Department.
- Where, due to special construction requirements, components must not oxidise, for example in the food industry, where they are coupled with nuts HDA.
- Where screws can not be reached for lubrication. In particular, for lubricating “maintenance free” fittings they are coupled with plastic nuts.
- Where working temperature is relatively high because the stainless steel A2 and A4 feature a relatively high slag temperature due to the austenitic structure of the material.



$$\begin{aligned}
 H_1 &= 0,5 P \\
 h_3 = H_4 = H_1 + a_c &= 0,5 P + a_c \\
 z &= 0,25 P = H_1/2 \\
 d_3 &= d - 2 h_3 \\
 d_2 = D_2 &= d - 2 z = d - 0,5 P \\
 D_2 &= d + 2 a_c \\
 a_c &= \text{bottom play} \\
 es &= \text{top deviation for screw} \\
 s &= 0,26795 es \\
 R_1 \text{ max.} &= 0,5 a_c \\
 R_2 \text{ max.} &= a_c
 \end{aligned}$$

RS Number	Screw Type	Material	Screw	Diameter x lead	Length	Thread starts	Laed accuracy $\mu\text{m} / 300 \text{ mm}$	Straightnes s mm / mm	Weight kg/mt	Surface Hardness after rolling
8625272	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 10x2	1000 mm	1	100	0.5 / 300	0.48	App. 250 HB
8625281	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 12x3	1000 mm	1	100	0.5 / 300	0.65	App. 250 HB
8625284	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 14x3	1000 mm	1	100	0.5 / 300	0.93	App. 250 HB
8625288	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 16x4	1000 mm	1	100	0.5 / 300	1.17	App. 250 HB
8625297	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 18x4	1000 mm	1	100	0.5 / 300	1.53	App. 250 HB
8625290	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 20x4	1000 mm	1	100	0.5 / 300	1.94	App. 250 HB
8625294	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 22x5	1000 mm	1	100	0.2 / 300	2.29	App. 250 HB
8625304	Trapezoidal	Carbon Steel C45 1.0503	Right	Tr 24x5	1000 mm	1	100	0.2 / 300	2.78	App. 250 HB

RS Number	Screw Type	Material	Screw	Diameter x lead	Length	Thread starts	Laed accuracy $\mu\text{m} / 300 \text{ mm}$	Straightnes s mm / mm	Weight kg/mt	Surface Hardness after rolling
8625307	Trapezoidal	A4 Stainless Steel - AISI 316 1.4403	Right	Tr 10x2	1000 mm	1	200	1.5 / 300	0.48	App. 280 HB
8625301	Trapezoidal	A4 Stainless Steel - AISI 316 1.4403	Right	Tr 12x3	1000 mm	1	200	1.5 / 300	0.65	App. 280 HB
8625310	Trapezoidal	A4 Stainless Steel - AISI 316 1.4403	Right	Tr 14x3	1000 mm	1	200	1.5 / 300	0.93	App. 280 HB
8625313	Trapezoidal	A4 Stainless Steel - AISI 316 1.4403	Right	Tr 16x4	1000 mm	1	200	1.5 / 300	1.17	App. 280 HB
8625317	Trapezoidal	A4 Stainless Steel - AISI 316 1.4403	Right	Tr 20x4	1000 mm	1	200	1.5 / 300	1.94	App. 280 HB