



K 800 KÖCO threaded studs – the new class!

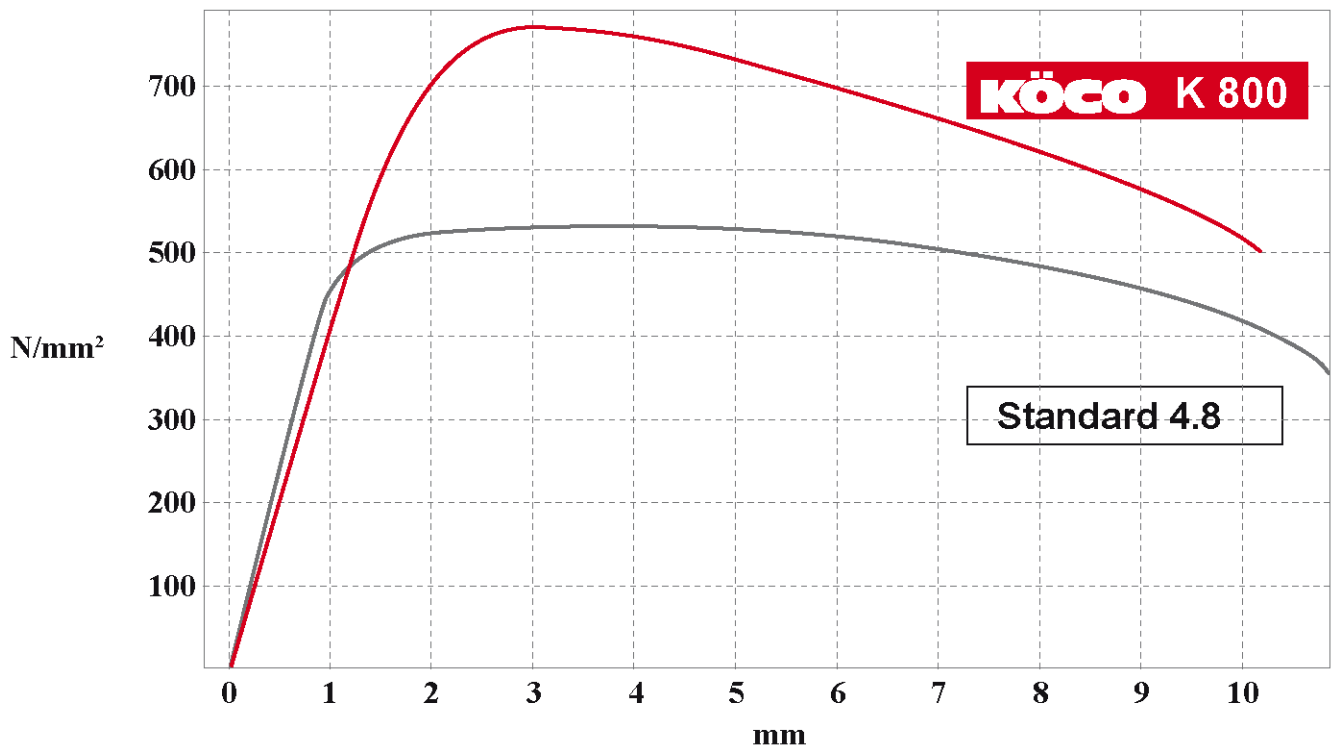
KÖCO threaded studs – now in yield strength 640 N/mm²

Advantages compared to the standard property class 4.8:

- Nominal values of tensile strength and yield strength doubled
- No embrittlement during stud welding
- Smaller stud diameters with equal load capacity
- Weight and cost reductions
- Replacement of 8.8 standard screws with KÖCO K 800 welding studs possible

Tensile test (example)

	S ₀ [mm ²]	E [N/mm ²]	R _{p0,2} [N/mm ²]	F _m [N]	R _m [N/mm ²]
Specimen 1 - K 800 (M 20)	245,00	28605	669	188688	771
Specimen 2 - K 800 (M 20)	245,00	28182	666	189723	774
Specimen 3 - S235J2 (M 20)	245,00	32325	486	131070	534
Specimen 4 - S235J2 (M 20)	245,00	33519	477	130671	534



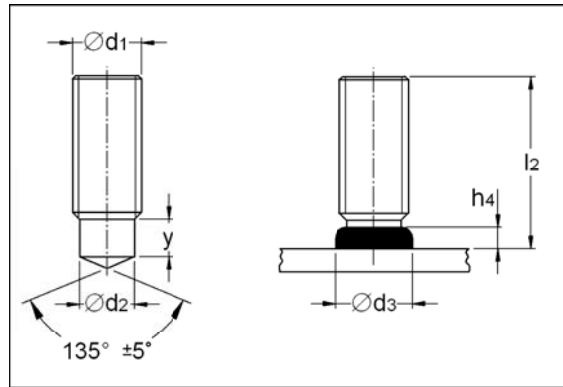
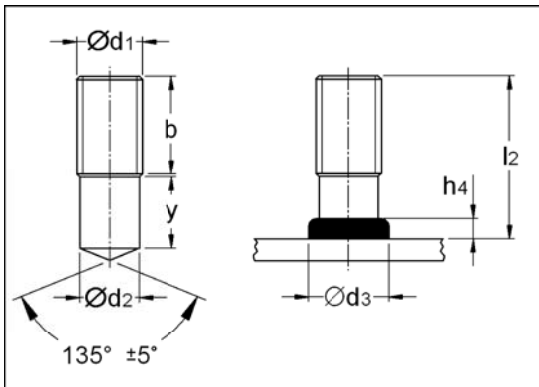
Fracture load Standard 4.8

app.130 kN

Fracture load K 800

app.190 kN

KÖCO K 800 data sheet



Threaded stud PD, dimensions acc. to EN ISO 13918 Threaded stud RD, dimensions acc. to EN ISO 13918

d ₁	l ₂	h ₄	d ₂	d ₃	y _{min}	b
M 8	15 - 45	3,5	7,19	10	9	
	50 - 100	3,5	7,19	10		40
M 10	20 - 45	4	9,03	12,5	9,5	
	50 - 75					40
	80 - 120					80
M 12	25 - 50	4,5	10,86	15,5	11,5	
	55 - 100					40
	140 - 160					80
M 16	30 - 45	6	14,7	19,5	13,5	
	50 - 100					40
	120 - 160					80
M 20	35 - 50	7	18,38	24,5	15,5	
	55 - 75					40
	80 - 160					80

d ₁	l ₂	h ₄	d ₂	d ₃	y _{min}
M 8	20 - 100	2,5	6,2	9	4
M 10	20 - 100	3	7,9	12,5	5
M 12	25 - 100	4	9,5	15,5	6
M 16	30 - 100	5	13,2	19,5	11
M 20	40 - 100	6	16,5	24,5	13

h₄ and d₃ are approximate values which are subject to the welding parameters.

Material: K 800, weldable.

Information about the material K 800:

K 800 has a minimum yield strength of 640 N/mm² with a minimum tensile strength of approx. 800 N/mm² and can replace screws of the strength category 8.8 according to ISO 898.

The low carbon content of approx. 0.1% prevents embrittlement during welding. The high level of strength in K 800 is achieved exclusively by cold forming.