

DIN 2395-2 RECTANGULAR AND SQUARE ELECTRIC WELDED PRECISION STEEL TUBES

1. Field of application

This Standard specifies the technical conditions of delivery for rectangular and square welded precision steel tubes according to DIN 2395 Part 1 made of the steel grades listed in section 5.

Tubes in accordance with this Standard are manufactured by cold forming and electric resistance pressure welding.

This Standard does not apply to hollow sections for structural steel engineering according to DIN 59411.

1. Chemical composition

Code number for material	Chemical composition (%)						
	C	P	S	N	Si	Mn	Al
USt37.2	0.21Max	0.065Max	0.065Max	0.009Max	-	-	-
RSt37.2	0.19Max	0.060Max	0.060Max	0.010Max	-	-	-
St37.3	0.19Max	0.050Max	0.050Max	-	-	-	*)
St44.2	0.24Max	0.060Max	0.060Max	0.010Max	-	-	-
St44.3	0.23Max	0.050Max	0.050Max	-	-	-	*)
M22	0.16 to 0.23	0.040Max	0.040Max	-	0.28Max	0.40 to 0.75	0.02Min
QStE340N	0.18Max	0.035Max	0.035Max	-	0.53Max	1.56Max	-

*) Contains a sufficient quantity of aluminum or other nitrogen-fixing elements

2. Mechanical property

Code number for material	Mechanical properties for conditions on delivery					
	NBK (nominalized) ¹⁾			BKM (welded and sized)		
	Tensile strength R _m N/mm ²	Yield point ReH N/mm ² min.	Elongation at rupture A ₅ % min.	Tensile strength R _m N/mm ²	Yield point ReH N/mm ² min.	Elongation at rupture A ₅ % min.
USt37-2	360 to 470	235	23	390	250	7
RSt37-2						
St37-3						
St44-2	430 to 540	275	21	460	290	6
St44-3						
M22	420Min	290	25	-	-	-

QStE340 N	460 to 580	340	27			
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1) After any heat treatment that may be necessary following working, the strength characteristics specified may fall at the most by 20-N/mm².

2. Other relevant standards

DIN 2395 Part 2 Rectangular and square electric-welded precision steel tubes; technical conditions of delivery for general use

DIN 1614 Part 1	Flat steel products; hot-rolled strip and sheet of mild unalloyed steels; quality specifications
DIN 1623 Part 1	Flat products of steel; cold-rolled strip and sheet of mild unalloyed steels; quality specifications
DIN 1623 Part 2	Unalloyed steel sheet; sheet in general purpose structural steel; quality specifications
DIN 1624	Flat products of steel; cold-rolled strip in widths of up to 650mm of mild unalloyed steels; quality specifications
DIN 2395 Part 1	Rectangular and square electric welded precision steel tubes; dimensions for general use
DIN 17 100	Steels for general structural purposes; quality standard
DIN 50 049	Certificates on material testing
DIN 50 140	Testing of metallic materials; tensile test on tubes and strips from tubes
DIN 50 145	Testing of metallic materials; tensile test

For tubes with virtually sharp edges, no guarantee can be given as to the static or dynamic stress ability.

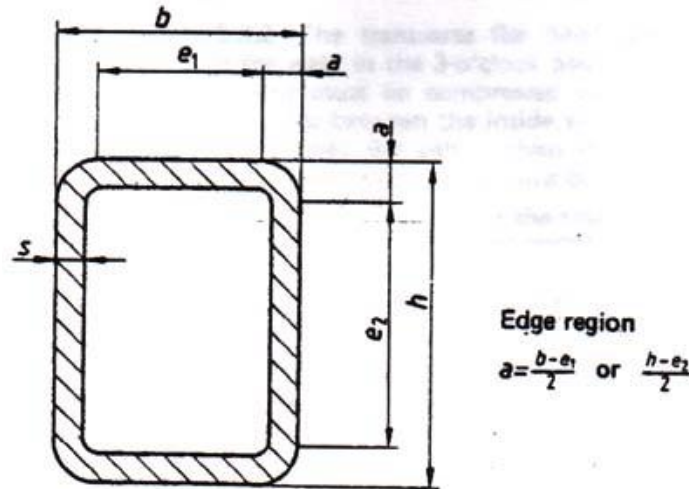


Figure 1.