

DIN 17119 WELDED COLD FORMED SQUARE AND RECTANGULAR STEEL TUBES FOR STRUCTURAL STEEL WORK

1. Field of application

1.1 This standard applies to welded cold formed square and rectangular steel tubes (hereinafter briefly referred to as "hollow section") made from the steels listed in clause 2. These hollow sections are predominantly used in structural steel work (building construction, tubular steel construction, tubular steel construction, crane building, bridge building, hydraulic engineering, etc).

1.2 This standard does not apply to

- seamless or welded square and rectangular hollow sections made from general structural steels, which are supplied in the hot formed condition or have been normalized after fabrication (see DIN 17100);
- square and rectangular tubes (hollow sections) made from fine grain structural steels for structural steelwork (see DIN 17125 (at present at the stage of draft));

Symbol	Steel grade Material Number	For properties see
USt37.2	1.0036	DIN 17100
RSt37.2	1.0038	
St37.2	1.0116	
St37.2	1.0044	
St37.2	1.0144	
St37.2	1.0570	Stahl-Eisen- Werkstoffblatt 087
WTSt37.2	1.8960	
WTSt37.3	1.8961	
WTSt52.3	1.8963	

2. Classification into grades

2.1. Hollow sections complying with this standard are normally manufactured from the general structural steels specified in DIN 17 100 and listed in table 1 (see also subclause 4.1.2) or from weather resistant structural steels specified in Stahl-Eisen-Werkstoffblatt (Iron and steel material sheer) 087.

2.2. If so agreed, cold formed hollow sections complying with this standard can also be made from and supplied in different steel grades, e.g. not rolled fine grain steels for cold forming as specified in Stahl-Eisen-Werkstoffblatt 092.

2.3. The selection of the steel grade is at the discretion of the purchaser (see also subclause 4.1.2).

Table1. Steel grades commonly used in the manufacture of welded cold formed square and rectangular hollow sections

Steel grade		
Symbol	Material number	For properties see
USt 37-2	1.0036	DIN 17100
RSt 37-2	1.0038	
St 37-3	1.0116	
St 44-2	1.0044	
St 44-3	1.0144	
St 52-3	1.0570	
WTSt 37-2	1.8960	Stahl-Eisen Werkstoffblatt 087
WTSt 37-3	1.8961	
WTSt 52-3	1.8963	