

GOST-380-71

# GOST-380-71

CARBON STEEL OF  
ORDINARY QUALITY GRADES  
AND GENERAL TECHNICAL  
REQUIREMENTS

244

220

150

85

141

25

GOST : 380-71

TITLE : CARBON STEEL OF ORDINARY QUALITY  
GRADES AND GENERAL TECHNICAL REQUIREMENTS

TRANSLATED  
AND  
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1.2. Depending upon the standardised parameters, steel of each group is subdivided into six categories.

Steel of group A into categories 1, 2 and 3;

Steel of group B (B) into categories 1 and 2;

Steel of group B (V) into categories 1, 2, 3, 4, 5 and 6.

Note: The above categories do not apply to steel sheets of thickness less than 4 mm.

(REVISED EDITION - ISI No. 1, 1973).

1.3. Steel is manufactured in the following grades:

Steel of group A - C<sub>1</sub>0, C<sub>1</sub>1, C<sub>1</sub>2, C<sub>1</sub>3, C<sub>1</sub>4, C<sub>1</sub>5, C<sub>1</sub>6  
(St0, St1, St2, St3, St4, St5, St6)

Steel of group B (B) - BC<sub>1</sub>0, BC<sub>1</sub>1, BC<sub>1</sub>2, BC<sub>1</sub>3, BC<sub>1</sub>4, BC<sub>1</sub>5, BC<sub>1</sub>6;  
(BSt0, BSt1, BSt2, BSt3, BSt4, BSt5, BSt6)

Steel of group B (V) - BC<sub>1</sub>1, BC<sub>1</sub>2, BC<sub>1</sub>3, BC<sub>1</sub>4, BC<sub>1</sub>5.  
(VSt1, VSt2, VSt3, VSt4, VSt5)

(REVISED EDITION - ISI No. 1, 1973).

1.4. Steel of grades 1, 2, 3 and 4 belonging to all groups are produced as rimmed, semikilled and killed depending on the degree of reduction. Steel of grades 5 and 6 belonging to all groups are produced as semikilled and killed steel.

Semikilled steel of grades 3 and 5 is produced with normal and increased percentage of manganese.

Steel of grade C<sub>1</sub>0 and BC<sub>1</sub>0 have the same degree of reduction.  
(St0) (BSt0)

1.4.1. Degree of reduction for all groups is selected by the manufacturer, if it is not indicated in the order.

1.5. Steel of grades BC<sub>1</sub>1, BC<sub>1</sub>2 and BC<sub>1</sub>3 for all degrees of reduction and BC<sub>1</sub>3 with increased manganese content are supplied with weldability guarantee. If the customer so desires, steel of

ГОСТ СТАНДИЯ

ГОСТ 804.14 - 122.4 (ОБС. 7)  
 Grades and general Technical Requirements  
 GOST 380-60  
 This superseded  
 GOST 380-60  
 Valid from 1.1.61

The present standard relates to carbon steel of ordinary quality: hot-rolled - assorted, sections, thick sheets, thin sheets, wide strips (universal) and cold-rolled - thin sheets. The standard also covers the part relating to norms for chemical composition of ingots, blooms, slabs, sheet bars, blanks rolled and cast by continuous casting process, for steel tubes, forgings and stampings, tapes, wires and metal ware.

The standard does not cover steel produced by Bessemer conversion. This standard takes into account the CMAA recommendations PC 1-70 on standardisation.

1. GRADES

1.1. Depending upon end use, steel is divided into three groups as below:

- A - Steel supplied as per mechanical properties;
- B (B) - Steel supplied as per chemical composition;
- B (V) - Steel supplied as per mechanical properties and chemical composition.

grades BC1, BC2 and BC3 of all degrees of reduction and of  
(Bst1, Bst2, Bst3)  
grade BC3 with increased manganese content is also supplied with  
(Bst3)  
guaranteed weldability.

(REVISED EDITION - ISI No. 1, 1973).

1.5.1. Weldability is ensured by the production technology and  
by observing all requirements of chemical composition envisaged  
for steel of groups B and B.  
(B) (V)

(REVISED EDITION - ISI No. 1, 1973).

1.5.2. Supply of steel of group B with guaranteed weldability  
(B)  
is specified in the order and in the certificate.

(REVISED EDITION - ISI No. 1, 1973).

1.5.3. Steel containing more than 0.22% carbon in the finished  
rolled stock is used for welded structures under welding conditions  
which ensure reliability of the welded joint.

(REVISED EDITION - ISI No. 1, 1973).

1.6. Alpha-numeric designation of steel grades must be used in  
ordering, stamping and marking in the certificate, on the drawing  
and in other documents.

1.6.1. The letters C denote "steel" and the numerals 0 to 3  
denote the number of the grade depending upon the chemical  
composition of steel and its mechanical properties, for example  
C0, C1, C2, C3.  
(St0 St1, St2, St3)

1.6.2. The letters B and B before the designation of the  
(B) (V)  
grade indicate the group of steel; in the case of group A, the  
letter is not indicated before the designation of grade.

For Example - BC3, BC3, C3.

1.6.3. Indices are added after the number of the grades in

order to designate the degree of reduction -  $\kappa_{(p)}$  - for rimming steel,  
 $\eta_{(p)}$  - for semikilled steel,  $\sigma_{(p)}$  - for killed steel. For example,  
 C73 $\kappa_{(p)}$ , C73 $\eta_{(p)}$ , BC73 $\sigma_{(p)}$ , BC73 $\eta_{(p)}$ .  
 (St3 $\kappa_{(p)}$ , St3 $\eta_{(p)}$ , B St3 $\sigma_{(p)}$ , V St3 $\eta_{(p)}$ )

1.6.4. The category of steel is designated by adding the number of the corresponding category at the end of the designation of the grade, for example - C3nc2, BC73nc2, BC74nc2.  
 (St3ps2, B St3kp2, V St4ps2)

1.6.5. Category 1 is not indicated in the designation of the grade of steel, for example - BC73 $\kappa_{(p)}$ , BC73nc.  
 (B St3 $\kappa_{(p)}$ , V St3ps)

1.6.6. While ordering steel of the necessary category without indicating the degree of reduction, the number of the grade and the number of the category are separated by a dash in the designation of steel, for example C73-2, BC73-2.  
 (St3-2, B St3-2)

1.6.7. Semikilled steel with increased manganese content is designated by adding the letter Г (G) after the number of the grade in the designation of the steel, for example C73Гnc, BC73Гc, BC73Гnc.  
 (St3Gps, V St3Gps, V St3Gps)

1.6.8. Letters and numbers of the same height may be used for stamping.

Steel rolls made by hot stamping may be marked without indicating the designation of the group and the category of steel. These are indicated in the certificate. Groups and categories may be marked by mutual agreement.

(REVISED EDITION - ISI. No. 1 1973).

1.6.9. Melting process for steel of group B and categories 4, 5, and 6 is indicated in the certificate. (V)

Note: Melting process is to be indicated only upto 1<sup>st</sup> January, 197

1.6.10. Steel BC73cn (in the form of ingots, blooms, slabs and blanks) intended for rerolling into sheets and supplied in categorie

4, 5 and 6 should meet the requirements of clause 2.4.5.

( ADDED - ISI No. 1, 1973).

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2. TECHNICAL REQUIREMENTS

2.1. Steel should meet the requirements of the corresponding standards for individual rolled stock as to shape, sizes, deviation limits, surface condition and other technical requirements not envisaged in this standard.

2.2. STEEL OF GROUP A

2.2.1. Standardised parameters for steel of group A are given in Table 1.

Table 1

Category of steel	Grades of steel of all degrees of reduction and with increased manganese content	Ultimate strength	Relative elongation	Sag in cold condition	Yield limit
1	C <sub>10</sub> - C <sub>16</sub>	+	+	-	-
2		+	+	+	-
3	C <sub>22</sub> - C <sub>28</sub>	+	+	+	+

Note: 1. Sag in cold condition is not specified for steel of grade C<sub>16</sub>.

2. '+' sign means the parameter is specified and '-' sign means it is not specified.

(REVISED EDITION - ISI No. 1, 1973).

2.2.2. Mechanical properties of steel under tension and also test conditions for bending through 180° in cold condition should conform to the norms given in Table 2.

(REVISED EDITION - ISI No. 1 1973).

Table 2

Grade of steel	Ultimate strength kgf/mm <sup>2</sup>	Yield limit for thickness, mm			Relative elongation %, for thickness, mm			Bending through 180° (A-sample thickness A-mandrel diameter) for thickness, mm
		kgf/mm <sup>2</sup>			%			
		upto 20	Over 20 upto 40	Over 40 upto 100	upto 20	Over 20 upto 40	Over 40	
		Not less than						
Ст0	Not less than 31	-	-	-	23	22	20	d=2a
Ст1кн	31 to 40	-	-	-	25	34	32	d=0 (without mandrel)
Ст1сн	32 to 42	-	-	-	34	33	31	d=0 (without mandrel)
Ст2кн	33 to 42	22	21	20	33	32	30	d=0 (without mandrel)
Ст2сн	34 to 44	23	22	21	32	31	29	d=0 (without mandrel)
Ст3кн	37 to 47	24	23	20	27	26	24	d=0.5a
Ст3сн	38 to 49	25	24	21	26	25	23	
Ст3Гсн	38 to 50	25	24	21	26	25	23	

Diameter of mandrel is in-  
crossed to the thickness of the sample

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Grade of steel	Ultimate strength kgf/mm <sup>2</sup>	Yield limit for thickness, mm				Relative elongation %, for thickness, mm			Bending through 180° (a-sample thickness d-mandrel diameter) for thickness, mm
		upto 20		Over 20		upto 20	Over 20	Over 40	
		upto 40	Over 40	upto 100	Over 100				
		Not less than							
Cr4Kv	41 to 52	26	25	24	25	24	24	22	d=2a
Cr4nG, Cr4nT	42 to 54	27	26	25	24	23	23	21	
Cr5nG, Cr5nT	50 to 64	30	29	27	26	26	19	17	d=3a
Cr5nG	46 to 60	29	28	27	26	20	19	17	
Cr6nG, Cr6nT	Not less than 60	32	31	30	30	15	14	12	

Notes:

1. The upper limit of ultimate tensile strength may be exceeded by 3 kgf/mm<sup>2</sup> as compared to the value indicated above, provided all other norms are fulfilled. Such excess may be unlimited, if the customer agrees.
2. Yield limit may be lowered by 1 kgf/mm<sup>2</sup> as compared to the value indicated above for sheets and wide strips of all thicknesses and for steel profiles of thickness over 20 mm.
3. Relative elongation may be reduced by 1% absolute for each millimetre decrease in thickness for sheet steel of thickness from 6 to 4 mm. Norms of relative elongation for sheets of thickness less than 4 mm are defined in the corresponding standards.

4. Relative elongation of sheets, widestrips and profiles of all thicknesses may fall short by 1% (absolute).

5. Yield limit of reinforcement steel of periodic profiles made out of steel of grades BC1Dnc, BC1Bcn and of thickness upto 40 mm should be not less than 30 kgf/cm<sup>2</sup>.

6. Norms of mechanical properties for sheet steel of thickness above 60 mm are optional upto 1st January, 1974.

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2.2.3. Chemical composition of steel is not regulated but is indicated in the certificate.

2.3. STEEL OF GROUP B  
(B)

2.3.1. Standardised parameters for steel of group B are given in Table 3.

Table 3

Category of steel	Grades of steel of all degrees of reduction and with increased manganese content	Proportion of carbon, manganese, silicon, phosphorous, sulphur, arsenic and nitrogen	Proportion of chromium, nickel and copper
1	BC10 to BC16	+	
2	BC11 to BC16	+	+

Note:

1. Only carbon, phosphorus and sulphur content norms are standardised for BC10 grade of steel.
2. '+' sign means the parameter is standardised and '-' sign means it is not.

2.3.2. Chemical composition of steel as per melt analysis of ladle sample should conform to the norms given in Table 4.

(REVISED EDITION - ISI No. 1, 1973).

- 1. Grade of steel
- 2. Carbon
- 3. Manganese
- 4. Silicon
- 5. Phosphorus
- 6. Sulphur
- 7. Chromium
- 8. Nickel
- 9. Copper
- 10. Arsenic

Proportion of elements, % Table 4

Марка стали 1	2	3	4	5						10
				6	7	8	9	10		
3St0	BCr0	Не более 0,23	—	—	0,07	0,06	—	—	—	—
3St1kp	BCr1kn	0,05—0,12	0,25—0,50	Не более 0,5	0,04	0,05	0,30	0,30	0,30	0,08
3St1ps	BCr1nc	0,06—0,12	0,25—0,50	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St1cp	BCr1cn	0,06—0,12	0,25—0,50	0,12—0,30	0,04	0,05	0,30	0,30	0,30	0,08
3St2kp	BCr2kn	0,09—0,15	0,25—0,50	Не более 0,7	0,04	0,05	0,30	0,30	0,30	0,08
3St2ps	BCr2nc	0,09—0,15	0,25—0,50	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St2cp	BCr2cn	0,09—0,15	0,25—0,50	0,12—0,30	0,04	0,05	0,30	0,30	0,30	0,08
3St3kp	BCr3kn	0,14—0,22	0,30—0,60	Не более 0,7	0,04	0,05	0,30	0,30	0,30	0,08
3St3ps	BCr3nc	0,14—0,22	0,40—0,65	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St3cp	BCr3cn	0,14—0,22	0,40—0,65	0,12—0,30	0,04	0,05	0,30	0,30	0,30	0,08
3St3ps	BCr3nc	0,14—0,22	0,60—1,10	Не более 0,7	0,04	0,05	0,30	0,30	0,30	0,08

Steel Марка стали grade	C углерод	Mn марганец	Si кремний	5						
				6	7	8	9	10		
3St4kp	BCr4kn	0,18—0,27	0,40—0,70	Не более 0,7	0,04	0,05	0,30	0,30	0,30	0,08
3St4ps	BCr4nc	0,18—0,27	0,40—0,70	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St4cp	BCr4cn	0,18—0,27	0,40—0,70	0,12—0,30	0,04	0,05	0,30	0,30	0,30	0,08
3St5ps	BCr5nc	0,28—0,37	0,50—0,80	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St5cp	BCr5cn	0,28—0,37	0,50—0,80	0,15—0,35	0,04	0,05	0,30	0,30	0,30	0,08
3St5cps	BCr5nc	0,22—0,30	0,80—1,20	Не более 0,7	0,04	0,05	0,30	0,30	0,30	0,08
3St6ps	BCr6nc	0,38—0,49	0,60—0,80	0,05—0,17	0,04	0,05	0,30	0,30	0,30	0,08
3St6cp	BCr6cn	0,38—0,49	0,60—0,80	0,15—0,35	0,04	0,05	0,30	0,30	0,30	0,08

1. Arsenic content upto 0.15% and phosphorus upto 0.050% are allowed in steel smelted from Merch-based ores.

2. Silicon content of less than 0.05% is allowed when semikilled steel is reduced by aluminium, titanium or other reducing agents containing silicon and by using more than one reducing agent (ferro silicon and aluminium, ferro silicon and titanium and others) reduction by titanium, aluminium and other reducing agents not containing silicon is specified in the certificate.

3. Manganese content may be reduced by 0.10% in rolled stock from steel of grade numbers 3, 4, 5 and 6 (for all degrees of reduction) and thickness upto 12 mm inclusive.

4. Nitrogen content in finished rolled stock and also in ingots, blooms, slabs, sheet bars and blanks from oxygen laced Bessemer converter and open hearth, intended for further rolling should be not more than 0.008%.

5. Silicon content upto 0.15% is allowed in finished rolled stock for chemically plugged rimmed steel except in cases when the steel is intended for cold upsetting and drawing or stamping which should be specified in the order.

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2.3.3. Permissible deviations in chemical composition of finished rolled stock from norms indicated in Table 4 should correspond to those given in Table 5.

Table 5

Elements	Permissible deviations, %	
	for rimmed steel	killed and semikilled steel
Carbon	± 0.03	+0.03 -0.02
Manganese	+ 0.05 - 0.04	+0.05 -0.03
Silicon	-	+0.03 -0.02
Phosphorus	+0.006	+0.005
Sulphur	+0.006	+0.005

Notes:

Plus deviations for carbon are not allowed in steels of grade 5Cr3 for all degrees of reduction and grade 5Cr3Mn supplied with weldability guarantee as per the requirements of the customers.

2.3.4. Chemical analysis of finished rolled stock at the manufacturer's premises need not be carried out provided the manufacturer ensures all established norms.

2.3.5. Chemical analysis for the proportion of chromium, nickel, copper, arsenic, nitrogen in steels of all degrees of reduction and also for silicon content in rimmed steel need not be carried out provided the manufacturer ensures all established norms.

Determination of arsenic content in steel smelted from ferrous-based ores is mandatory.

2.4. STEEL OF GROUP B (V)

2.4.1. Standardised parameters for steel of group B (V) are given in Table 6.

Table 6

Categories of steel	Grades of steel of all degrees of reduction and with increased manganese content	Chemical composition	Ultimate tensile strength	Yield limit	Relative elongation	Bending in cold condition.	Impact strength	
							at a temperature of °C	
							+20	-20
1	BCr1 to BCr5	+	+	-	+	+	-	-
2	BCr2 to BCr5	+	+	+	+	+	-	-
3	BCr3 to BCr4	+	+	+	+	+	+	-
4	BCr3	+	+	+	+	+	-	+
5		-	-	-	-	-	-	-
6		+	+	+	+	+	-	+

Note:

1. Steel of categories 3, 4, 5 and 6 is supplied as semikilled and killed. Steel of grades BCr3 and BCr4 category 3 may be supplied as rimmed by mutual agreement. In this case the norms of impact strength at +20°C are taken in accordance with the norms for killed and semikilled steel of grades BCr3 and BCr4 mentioned in Table 7.

2. '+' sign means the parameter is standardized and '-' sign means it is not.

(REVISED EDITION - ISI No. 1, 1973).



2.4.7. Carbon and manganese contents should be 0.30 - 0.39 % and 0.6 - 0.9 % respectively for steel of grade BC-5nc meant for reinforcement steel of periodic profile and diameter 10 to 28 mm inclusive. For diameters greater than 28 mm these should be 0.28 - 0.37% and 0.8 - 1.1 % respectively.

Table 7

Grade of steel	Type of rolled stock	Location of sample with respect to rolled stock	Thickness, mm	Impact strength kgf/mm <sup>2</sup>		
				at temperature of °C		After mechanical ageing
				+ 20°	-20	
(Vst 3ps) BC-3nc BC-3cn (Vst 3sp)	Sheets	Transverse	5 to 9	8	4	4
			10 to 25	7	3	3
			26 to 40	5	-	-
Wide strips	Longitudinal	5 to 9	10	5	5	
		10 to 25	8	3	3	
		26 to 40	7	-	-	
Assorted and profiles	Longitudinal	5 to 9	11	5	5	
		10 to 25	10	3	3	
		26 to 40	9	-	-	
BC-37nc (Vst 26ps)	Sheets	Transverse	5 to 9	8	4	4
			10 to 30	7	3	3
			31 to 40	5	-	-
Wide strips	Longitudinal	5 to 9	10	5	5	
		10 to 30	8	3	3	
		31 to 40	7	-	-	
Assorted and profiles	Longitudinal	5 to 9	11	5	5	
		10 to 30	10	3	3	
		31 to 40	9	-	-	
(Vst 4ps) BC-4nc BC-4cn (Vst 4sp)	Sheets	Transverse	5 to 9	7	-	-
			10 to 25	6	-	-
			26 to 40	4	-	-
Assorted and profiles	Longitudinal	5 to 9	10	-	-	
		10 to 25	9	-	-	
		26 to 40	7	-	-	

Note:

1. "-" sign indicates that impact strength test is not conducted.

2. Impact strength is determined for

- round steel - having diameter 120 mm and more
- square steel - having side 100 mm and more
- profile round steel - having diameter 100 mm and more

3. Impact strength at -20°C for sheet steel rolled on continuous rolling mills and having thickness 5 to 9 mm may be reduced by 2 kgf. m/cm<sup>2</sup> upto 1st January, 1974.

2.4.8. Permissible deviations in chemical composition of finished rolled stock from those envisaged in clause 2.4.4 should conform to Table 5, except for plus deviations of carbon which are not allowed in steel BC-3 of all degrees of reduction and in steel of grade BC-3Г no.

Sulphur and phosphorus contents in finished rolled stock should not exceed 0.055 and 0.045% respectively.

Phosphorus content in finished rolled stock from steel smelted on the base of kerch ores should not exceed 0.045% for categories 4, 5 and 6 and 0.055% categories 1, 2 and 3. The sulphur content should not exceed 0.055% for all categories.

(REVISED EDITION ISI No. 1, 1973).

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2.4.9. Chemical analysis of finished rolled stock in the absence of customer's requirements and also of steel of all degrees of reduction for determining the proportion of chromium, nickel, copper, arsenic and nitrogen need not be carried out, if the manufacturer ensures all established norms. Similarly, for rimmed steel also the analysis for determining the above mentioned elements as well as silicon need not be carried out, if the manufacturer ensures all established norms.

(REVISED EDITION - SIS No. 1 1973).

3. ACCEPTANCE RULES AND METHODS OF TESTING

3.1. Acceptance rules, sample selection methods and procedure for testing are defined in the standards relating to the corresponding type of rolled stock.

4. PACKING, MARKING, TRANSPORT AND STORAGE

4.1. Packing, marking and formulation of documents are defined in the standards relating to the corresponding type of rolled stock.

4.2. Steel is marked by indelible paint. Colours indicated in Table 8 are used irrespective of the group of steel and degree of reduction.

Table 8

Grade of Steel	Colour for Marking
C-0 (St 0)	Red and Green
C-1	White and black
C-2	Yellow
C-3	Red
C-4	Black
C-5	Green
C-6 (St 6)	Blue
C-3fnc (St 3 Gps)	Red and Blue
C-5fnc (St 5 Gps)	Green and white

Paint marking may be omitted mutual consent.

(REVISED EDITION - ISI No. 1, 1973).

GENERAL PROVISIONS

1.1. GOST 380-71 replaces GOST 380-60 and comes into effect from 1-1-1972. All revisions and corrections in state and regional standards, technical specifications and technical documentation containing references to the current GOST 380-60 should be identified and brought to the notice of the organisations using such documentation before implementing the GOST 380-71.

## 1. GENERAL PROVISIONS

1.1. GOST 380-71 replaces GOST 380-60 and comes into effect from 1-1-1972. All revisions and corrections in state and regional standards, technical specifications and technical documentation containing references to the current GOST 380-60 should be identified and brought to the notice of the organisations using such documentation before implementing the GOST 380-71.

1.2. Revisions in and corrections to the current state standards resulting from the introduction of GOST 380-71 are worked out and agreed upon by the corresponding ministries and departments and sent for approval to the USSR STATE STANDARD in the established manner to the extent these standards are reexamined. The present procedural instructions together with the current standards containing references to GOST 380-60 should be used till the revisions are introduced or till they are reexamined.

1.3. Instructions on steel melting are excluded from all standards and technical documentation which presently regulate steel melting as per GOST 380-60.

1.4. In case there are instructions "as per customer's requirements" as envisaged in GOST 380-60 in standards, orders and other documentation, such requirements, except for weldability guarantee, are not indicated. Instead, the group and category envisaging the necessary requirements have been introduced in the designation of

grade of steel in GOST 380-71. For example, the conformity of the categories and grades of steel as per GOST 380-71 with the requirements and grades of GOST 380-60 is given in the Table below, taking killed steel of grade number 3, as an example. Page 17

Groups of steel, additional requirements envisaged in clauses 2.3.8, 2.4.8 and 2.5.2, designation of grades of steel as per GOST 380-60 and the groups of steel corresponding to them and the categories and designations of grade of steel as per GOST 380-71.

(Taking killed steel of grade number 3 as an example)

GOST 380-60			GOST 380-71		
Group of steel	Designation of grades	Clauses containing additional requirements	Group of steel	Category	Designations of grades
A	Cr.3cn Ст 3сп	—	A	1	Cr3cn Ст 3сп
	Cr.3cn	cl. n.2.3.8a		2	Cr3cn2
	Cr.3cn	cl. n.2.3.8a, b		3	Cr3cn3
B (B)	MCr.3cn KCr.3cn	—	B (B)	1	BCr3cn BСт 3сп
	MCr.3cn KCr.3cn	n.2.4.8a		2	KCr3cn2
B (V)	BMCr.3cn BKCr.3cn	n.2.5.2a	B (V)	1	BCr3cn
	BMCr.3cn BKCr.3cn	n.2.5.2b		2	BCr3cn2 VСт 3сп2
	BMCr.3cn BKCr.3cn	n.2.5.2b, c		3	bCr3cn3
	BMCr.3cn BKCr.3cn	n.2.5.2b, d		4	BCr3cn4
	BMCr.3cn BKCr.3cn	n.2.5.2b, e		5	BCr3cn5
	BMCr.3cn BKCr.3cn	n.2.5.2b, z		6	BCr3cn6
	BMCr.3cn BKCr.3cn	n.2.5.2b, z, a			

1.5. Requirements as to guarantee of weldability for steel of groups B and B are given in the text.  
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2. SUBSTITUTION OF REFERENCES TO GOST 380-60  
in standards and technical specifications on metal products.

2.1. If GOST 380-60 has been referred to without indicating the grade of steel, GOST 380-71 is substituted. If it has been referred to with indication of grade of steel, the requirements of section 1 GOST 380-71 and the Table of the present procedural instructions should be followed.

2.2. If Bessemer process of melting is indicated in the text or in the designation of grade of steel, the reference to GOST 380-60 is excluded.

Bessemer steel is supplied as per technical specifications or regional standards approved in the established manner.

2.3. Acceptance rules, sample selection methods, method of testing, marking, packing, storage of metal products and formulation of documents as a rule are indicated in state and regional standards and technical specification for the corresponding types of products.

If these instructions are not already available, they should be introduced in the corresponding standards and technical specifications.

3. SUBSTITUTION OF REFERENCES TO GOST 380-60 IN  
STANDARDS, TECHNICAL SPECIFICATIONS AND OTHER TECHNICAL  
DOCUMENTATION RELATING TO MACHINES, MECHANISMS AND STRUCTURES.

3.1. While substituting the references to GOST 380-60 in standards and the corresponding technical documentation relating to machines, mechanisms and structures the requirements section 1(1)