

7.3 Mechanical properties

7.3.1 General

7.3.1.1 Under the inspection and testing conditions as specified in Clauses 8, 9 and 10 and in the delivery condition as specified in 6.3 the mechanical properties shall comply with the values given in Tables 7, 8 and 9.

7.3.1.2 For products ordered and supplied in the normalized or normalized rolled condition (see 6.3) the mechanical properties shall comply with Tables 7, 8 and 9 in the normalized or normalized rolled condition as well as after normalizing by heat treatment after delivery.

7.3.1.3 For products supplied as-rolled for normalizing by the purchaser the samples shall be normalized, if requested at the time of the order. The values obtained from the normalized samples shall comply with this document. The results shall be reported in the inspection document.

NOTE The results of these tests do not represent the properties of the supplied products but indicate the properties which can be achieved after correct normalizing.

EN 10025-2:2004 (E)

7.3.1.4 For flat products the nominal thickness applies. For long products of irregular section the nominal thickness of that part from which the samples are taken applies (see Annex A of EN 10025-1:2004).

7.3.2 Impact properties

7.3.2.1 The verification of the impact energy value shall be carried out in accordance with EN 10025-1.

7.3.2.2 The impact properties of quality JR products are verified only when specified at the time of the order.

See option 3.

7.3.2.3 For products of quality J2 and K2 with nominal thickness < 6 mm the ferritic grain size shall be ≥ 6 , verified by the method as described in EN ISO 643, if specified at the time of the order.

See option 21.

When aluminum is used as the grain refining element, the grain size requirement shall be deemed to be fulfilled if on ladle analysis the aluminum content is not less than 0,020 % total aluminum or alternatively, 0,015 % acid soluble aluminum. In this case verification of the grain size is not required, but the aluminum content shall be indicated in the inspection document.

7.3.3 Improved deformation properties perpendicular to the surface

If agreed at the time of the order products of qualities J2 and K2 shall comply with one of the requirements of EN 10164.

See option 4.