

# DIN EN 10219-3:2020-11 (E)

## Cold formed welded steel structural hollow sections - Part 3: Technical delivery conditions for high strength and weather resistant steels

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
1	Scope .....	5
2	Normative references .....	5
3	Terms, definitions and symbols .....	7
3.1	Terms and definitions .....	7
3.2	Symbols .....	8
4	Classification and designation .....	8
4.1	Classification .....	8
4.2	Designation .....	8
5	Information to be obtained by the manufacturer .....	10
5.1	Mandatory information .....	10
5.2	Options .....	10
5.3	Example of an order .....	11
6	Manufacturing process .....	11
6.1	General .....	11
6.2	Steel manufacturing process .....	11
6.3	Grain structure .....	11
6.4	Condition of feedstock material .....	11
6.5	Structural hollow section manufacturing process .....	11
6.6	Delivery condition .....	12
7	Requirements .....	12
7.1	Chemical composition .....	12
7.2	Mechanical properties .....	15
7.3	Technological properties .....	16
7.4	Product supply condition .....	17
7.5	Non-destructive testing .....	17
7.6	Tolerances and mass .....	17
8	Inspection .....	18
8.1	Types of inspection .....	18
8.2	Types and contents of inspection documents .....	18
8.3	Summary of inspection .....	19
9	Frequency of testing and preparation of samples and test pieces .....	20
9.1	Frequency of tests .....	20
9.2	Selection and preparation of samples for product analysis .....	21
9.3	Location and orientation of samples for mechanical tests .....	21
9.4	Preparation of test pieces for mechanical tests .....	22
10	Test methods .....	22
10.1	Chemical analysis .....	22
10.2	Mechanical tests .....	22
10.3	Visual inspection and dimensional check .....	23
10.4	Non-destructive testing .....	23

10.5	Retests, sorting and reprocessing .....	24
11	Marking .....	24
	<b>Annex A(informative) Structural hollow sections of non-alloy quality steels - Chemical composition and mechanical properties .....</b>	<b>26</b>
	<b>Annex B(normative) Structural hollow sections of normalized/normalized rolled steels - Chemical composition and mechanical properties .....</b>	<b>27</b>
	<b>Annex C(normative) Structural hollow sections of thermomechanical formed steels - Chemical composition and mechanical properties .....</b>	<b>29</b>
	<b>Annex D(normative) Structural hollow sections of quenched and tempered steels -- Chemical composition and mechanical properties .....</b>	<b>34</b>
	<b>Annex E(normative) Structural hollow sections of steels with improved atmospheric corrosion resistance -- Chemical composition and mechanical properties .....</b>	<b>39</b>
	<b>Annex F(normative) Location of samples and test pieces .....</b>	<b>41</b>
	<b>Bibliography .....</b>	<b>43</b>