

DIN EN 10303:2016-02 (E)

Thin magnetic steel strip and sheet for use at medium frequencies

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Classification	6
5	Designation	6
6	Information to be supplied by purchaser	6
6.1	Mandatory information	6
6.2	Options	7
7	General requirements	7
7.1	Production process	7
7.2	Form of supply	7
7.3	Delivery condition	7
7.4	Surface condition	8
7.5	Suitability for cutting	8
8	Technical requirements	8
8.1	Magnetic properties	8
8.1.1	Magnetic polarization	8
8.1.2	Specific total loss	8
8.2	Mechanical properties at room temperature for non-oriented products	10
8.3	Geometric characteristics and tolerances	10
8.3.1	Thickness of grain-oriented steel products	10
8.3.2	Thickness of non-oriented steel products	11
8.3.3	Width	12
8.3.4	Edge camber	12
8.3.5	Residual curvature	13
8.3.6	Burr height	13
8.4	Technological characteristics	13
8.4.1	Density	13
8.4.2	Stacking factor	13
8.4.3	Number of bends	13
8.4.4	Insulation coating resistance	13
9	Inspection	13
9.1	General	13
9.2	Selection of samples	14
9.3	Preparation of test specimens	14
9.3.1	Magnetic properties	14
9.3.2	Mechanical properties	15
9.3.3	Geometrical characteristics and tolerances	15
9.3.4	Technological characteristics	15
9.4	Test methods	15
9.4.1	General	15
9.4.2	Magnetic properties	15

9.4.3	Mechanical properties	16
9.4.4	Geometrical characteristics and tolerances	16
9.4.5	Technological characteristics	16
9.4.6	Retests	17
10	Marking, labelling and packaging	17
11	Complaints	17
Annex A (informative) Minimum stacking factor for non-oriented coated products		18
Annex B (informative) Maximum specific total loss at 1,0T and 700 Hz and at 1,5T and 400Hz for non-oriented products		19
Annex C (informative) Density determination		20
Annex D (informative) Mechanical properties for non-oriented products		21
Bibliography		23