NLMK

COLD ROLLED STEEL

PRODUCT CATALOGUE

CONTENTS

SECTION 1

REFERENCE STANDARDS

EN 10130
Cold-rolled flats from low-carbon steel for cold forming

EN 10209
Cold-rolled flats from low-carbon steel for vitreous enamelling

EN 10268
Cold-rolled flats with high yield strength for cold forming

JIS G 3141
Cold-reduced carbon steel sheet and strip

GOST 9045-93
Cold-rolled thin sheets of low-carbon steel for cold forming

GOST 16523
Прокат тонколистовой из углеродистой стали качественной и обыкновенного качества общего назначения

STO 05757665-055-2016
General-purpose thin carbon-steel CR sheets, high and regular quality

TU 14-106-607-2000
Cold-rolled thin sheets for single-and two-layer enamelling of alloyed steel 06ФБЮАР

TU 14-106-608-2000
Cold-rolled thin sheets for single- and two-layer enamelling of alloyed steel 06ФБЮАР (advanced ductility)

TABLE LEGEND

$\sigma_т$	Tensile Strength
$\sigma_в$	Yield Strength
δ_4	Relative Elongation L=80 mm
r_{90}	Normal Plastic Anisotropy Factor
n_{90}	Strain Hardening Index
Ra	Roughness
Pc	Number of Peaks
–	Not rated by the standard

SECTION 2

COLD-ROLLED STEEL APPLICATIONS

Automotive industry

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Passenger vehicles	Passenger vehicles internal body parts	Longeron	DC03, DC04, DC05, HC260LA–HC500LA, HC180Y, HC180B, HC220B	08пс, 20пс, 08ГСЮТ	2.1	6
	Passenger vehicles external body parts	Door panels	DC04, DC05, DC06, HC220Y, H220P, HC180Y, HC180B, HC220B, HC260B	01Ю, 08Ю	2.2	11
	Other parts of passenger vehicles	Seat frame	HC340LA–HC420LA	08пс, 08Ю, 10пс	2.3	15
Commercial motor vehicles	Commercial motor vehicles external parts	Roof panel	DC03, DC04, DC05	08пс, 08Ю	2.4	20
	Other parts of commercial motor vehicles	Fuel tank	DC03	08пс, 08Ю	2.5	24

Household appliances, refrigeration and commercial equipment

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
White goods	Washing machines, dishwashers, microwave ovens	Load-bearing parts (frame)	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.6	27
		Cabinet panels	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.6	27
Refrigerating equipment	Household and industrial refrigerators	Load-bearing parts (frame)	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.7	30
		Cabinet panels	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.7	30
		Branch tubes	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.7	30
Trade equipment	Vending and cash register equipment	Load-bearing parts (frame)	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.8	33
		Cabinet panels	DC01, DC03, DC04	08пс, 08Ю, Ст3пс	2.8	33

Enamelling

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Heat and gas equipment	Gas and electric stoves	Oven chamber	DC01EK, DC03EK, DC04ED	08пс, 08Ю, 06ФБЮАР	2.9	36
		External panels	DC01EK, DC03EK, DC04ED	08пс, 08Ю, 06ФБЮАР	2.9	36
		Baking trays	DC01EK, DC03EK, DC04ED	08пс, 08Ю, 06ФБЮАР	2.9	36
	Boilers and water heaters	Internal (robust) housing	DC01EK, DC03EK	08Ю, 08пс	2.10	38
Enameled items	Plumbing products	Bath-tubs	DC01EK, DC03EK, DC04ED	08пс, 08Ю, 06ФБЮАР	2.11	40
	Enameled cookware	Food containers	DC01EK, DC03EK	08пс, 08Ю, 06ФБЮАР	2.12	42

Transport

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Railway transport	Locomotives and passenger cars	Finishing panels	DC03, DC04	08пс, 08Ю	2.13	44
		Housings for systems and units	DC03, DC04	08пс, 08Ю	2.13	44
Heavy-duty wheeled and crawler vehicles	Tractors and combines	Cabin load-earing elements	DC03, DC04, DC05	08пс, 08Ю	2.14	47
		Cabin front panels	DC03, DC04, DC05	08пс, 08Ю	2.14	47
		Cabin internal panels	DC03, DC04, DC05	08пс, 08Ю	2.14	47
		Fuel tanks	DC03, DC04, DC05	08пс, 08Ю	2.14	47
Mounted and trailed equipment	Equipment for agricultural machinery	Seeder hopper	DC01, DC03	08пс, 08Ю, Ст3пс	2.15	50
		Grain trailer side	DC01, DC03	08пс, 08Ю, Ст3пс	2.15	50
	Equipment for municipal machinery	Snow blower housing	DC01, DC03	08пс, 08Ю, Ст3пс	2.16	53

Electrical machine building

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Power generation	Generators	Casing parts	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.17	56
Power transmission and distribution	Transformers	Corrugated body	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.18	58
		Housing cover	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.18	58
	Electrical cabinets and control panels	Cabinet frame	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.19	60
		Doors and panels	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.19	60
Driven machines	Electric motors	Casing parts	DC01	08пс, 08Ю, 10пс, 06ФБЮАР	2.20	62

Steelmaking industry

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Production of coated rolled steel	Galvanized steel, pre-painted steel and tin	Full hard steel	DC01, DC03	08пс, 08Ю, 10пс	2.21	64

Construction and infrastructure

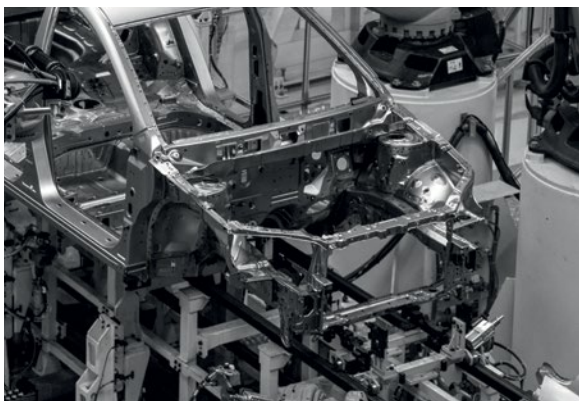
Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Lifting and transportation equipment	Elevators and escalators	Cabin frame	DC01	08пс, 08Ю, Ст3сп, Ст3пс	2.22	65
		Cladding panel	DC01	08пс, 08Ю, Ст3сп, Ст3пс	2.22	65
		Doors	DC01	08пс, 08Ю, Ст3сп, Ст3пс	2.22	65
Heating devices	Steel panel radiators	Radiator panels	DC01	08Ю	2.23	67
		Convector	DC01	08Ю	2.23	67
	Bimetallic radiators	Core	DC01	08Ю	2.24	69
Boiler equipment	Boiler tanks	External body	DC01	08пс, 08Ю	2.25	71
Doors and gates	Entrance doors	Door frame	DC01	08пс, 08Ю, 10пс, 20пс	2.26	73
		Front panel	DC01	08пс, 08Ю, 10пс, 20пс	2.26	73
	Gate systems	Leaf	DC01	08пс, 08Ю, 10пс	2.27	75
Steel furniture	Cabinets, beds, tables, chairs, workbenches	Front panel	DC01	08пс, 08Ю, Ст3сп	2.28	77
		Tube frame	DC01	08пс, 08Ю, Ст3сп	2.28	77
		Profile frame	DC01	08пс, 08Ю, Ст3сп	2.28	77
		Paintable panels	DC01	08пс, 08Ю, Ст3сп	2.28	77
	Shelving and showcases	Frame	DC01	08пс, 08Ю, 10пс, 20пс	2.29	79
		Shelf	DC01	08пс, 08Ю, 10пс, 20пс	2.29	79
		Walls	DC01	08пс, 08Ю, 10пс, 20пс	2.29	79
Hardware	Door hardware and furniture fittings	Locks	DC01, DC03	08пс, 08Ю	2.30	81
		Closers	DC01, DC03	08пс, 08Ю	2.30	81
		Hinge	DC01, DC03	08пс, 08Ю	2.30	81
		Brackets	DC01, DC03	08пс, 08Ю	2.30	81
		Guides	DC01, DC03	08пс, 08Ю	2.30	81
Other products	Hot-dip galvanized products (dipping method)	Cable tray	DC01	08пс, 08Ю, 10пс, 20пс	2.31	83
		Grating	DC01	08пс, 08Ю, 10пс, 20пс	2.31	83
	Painted items	Fencing	DC01	08пс, 08Ю, 10пс, 20пс	2.32	85
		Benches	DC01	08пс, 08Ю, 10пс, 20пс	2.32	85
		Bins	DC01	08пс, 08Ю, 10пс, 20пс	2.32	85
		Lightening system elements	DC01	08пс, 08Ю, 10пс, 20пс	2.32	85

Containers and packing

Group	Product	Use cases	Grades as per EN	Grades as per GOST and TU	Section	Page
Containers	Barrels	Shell	DC01	08пс	2.33	87
		Covers and bottom	DC01	08пс	2.33	87
	Small containers (euro buckets, cans)	Shell	DC01	08пс, 08Ю	2.34	88
		Covers and bottom	DC01	08пс, 08Ю	2.34	88
Packing	Steel strap	Regular	RSt37-2		2.35	90
		High strength			2.35	90

SECTION 2.1

Passenger vehicles internal body parts



GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC03, CR2	NLMK+*			270–370	140–240	≥(30–34)	≥1.3	≥0.16	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC04, CR3	NLMK+*			270–350	140–210	≥(34–38)	≥1.6	≥0.18	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC05	EN 10130	0.68–0.70	900–1,550	270–330	≤200	≥38	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.20	900–1,800	270–330	≤180	≥40	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC05, CR4	NLMK+*			270–330	140–180	≥(38–40)	≥1.9	≥0.20	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC06	EN 10130	0.50–1.50	900–1,800	270–330	≤170	≥41	≥2.1	≥0.22	–	–	A, B	0.6≤Ra≤1.9	Standard Special
HC220Y	EN 10268	0.60–1.50	900–1,550	340–420	220–270	≥33	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE220P	NLMK+*			340–420	220–280	≥30	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES INTERNAL BODY PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
HC260LA	EN 10268	0.58–1.45	900–1,480	350–430	260–330	≥26	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE260P	NLMK+*			380–460	260–320	≥28	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
HC300LA	EN 10268	0.60–0.70	900–1,300	380–480	300–380	≥21	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,530	380–480	300–380	≥23	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE300	NLMK+*			380–480	300–380	≥22	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
HC340LA	EN 10268	0.70	900–1,250	410–510	340–420	≥19	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,450	410–510	340–420	≥21	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE340	NLMK+*			410–530	340–440	≥20	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
HC380LA	EN 10268	0.65–0.70	900–1,330	440–580	380–480	≥17	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,420	440–580	380–480	≥19	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
08nc	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB-T)	GOST 9045-93	0.75–1.17	900–1,800	250–320	≤175	≥42	–	–	≤75 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.18–1.20	900–1,670	250–320	≤175	≥42	–	–	≤45 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB-T)	NLMK+*			260–330	≤175	≥42	2.1	0.22	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	≥38	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB)	NLMK+*			270–350	≤185	≥40	≥2	≥0.21	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (OCB)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (OCB)	NLMK+*			270–350	≤195	≥36	≥1.8	≥0.2	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES INTERNAL BODY PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (СВ)	NLMK+*			270–380	≤205	≥34	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≤65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≤65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43–2.00	900–1,580	350–500	–	≥23	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
SPCC	JIS G 3141	0.40–2.50	900–1,800	–	–	–	–	–	≤65 HRB	–	–	–	–
CPCCT-S	JIS G 3141	0.40–0.59	900–1,530	≥270	–	≥34	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	–	≥36	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	–	≥37	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	–	≥38	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,800	≥270	–	≥39	–	–	≤65 HRB	–	–	–	–
SPCD	JIS G 3141	0.40–0.59	900–1,500	≥270	≤240	≥36	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	≤240	≥38	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	≤240	≥39	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤240	≥40	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤240	≥41	–	–	≤65 HRB	–	–	–	–
CPCE	JIS G 3141	0.40–0.59	900–1,420	≥270	≤220	≥38	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,500	≥270	≤220	≥40	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,600	≥270	≤220	≥41	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤220	≥42	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤220	≥43	–	–	≤65 HRB	–	–	–	–
SPCC, SPCD, SPCEN	NLMK+*			≥265	≤186	≥(40–45)	–	–	–	–	U, E	0.6≤Ra≤1.2 Pc ≥50	–

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES INTERNAL BODY PARTS

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46	■	■	■	■					
0.47–0.59	■	■	■	■	■				
0.60–0.69	■	■	■	■	■				
0.70–0.74	■	■	■	■	■	■			
0.75–1.17	■	■	■	■	■	■	■	■	■
1.18–2.50	■	■	■	■	■	■	■		

• DC05

Thickness, mm	Width, mm				
	900	1,550	1,600	1,700	1,800
0.68–0.69	■				
0.70–0.74	■	■			
0.75–1.17	■	■	■	■	■
1.18–1.20	■	■	■	■	

• DC06

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69	■			
0.70–0.80	■	■		
0.81–1.00	■	■	■	■
1.01–1.50	■	■	■	

• HC220Y

Thickness, mm	Width, mm			
	900	1,455	1,500	1,550
0,60–0,80	■	■		
0.81–1.20	■	■	■	
1.21–1.50	■	■	■	■

• HC260LA

Thickness, mm	Width, mm		
	900	1,450	1,480
0.58–0.89	■		
0.90–1.45	■	■	■

• HC340LA

Thickness, mm	Width, mm			
	900	1,250	1,400	1,450
0.70–1.49	■			
1.50–1.89	■	■		
1.90–2.50	■	■	■	■

• HC380LA

Thickness, mm	Width, mm					
	900	1,300	1,330	1,350	1,400	1,420
0.65–0.69	■					
0.70–0.79	■	■				
0.80–0.89	■	■				
0.90–1.10	■	■	■	■		
0.11–1.49	■	■	■	■	■	
1.50–2.50	■	■	■	■	■	■

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49	■	■	■					
0.50–0.70	■	■	■	■				
0.71–0.80	■	■	■	■	■			
0.81–1.50	■	■	■	■	■	■	■	■
1.51–2.50	■	■	■	■	■	■		

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69	■				
0.70–0.87	■	■			
0.88–1.17	■	■	■	■	■
1.18–2.50	■	■	■	■	

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59	■					
0.60–0.69	■	■				
0.70–0.87	■	■	■			
0.88–1.17	■	■	■	■	■	■
1.18–2.50	■	■	■	■	■	

• 08Ю (ВОСВ)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74	■			
0.75–1.17	■	■	■	■
1.18–1.20	■	■	■	
1.21–1.80	■	■	■	

• 08Ю (ВОСВ-Т)

Thickness, mm	Width, mm		
	900	1,670	1,800
0.75–1.17	■	■	
1.18–1.20	■		

• 01Ю (СВ, ОСВ, ВОСВ, ВОСВ-Т)

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69	■			
0.70–0.80	■	■		
0.81–1.00	■	■	■	■
1.01–1.50	■	■	■	

PASSENGER VEHICLES INTERNAL BODY PARTS

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0,43–0,70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

• SPCC, SPCCT-S

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• SPCD, SPCE

Thickness, mm	Width, mm					
	900	1,420	1,500	1,600	1,700	1,800
0.40–0.46						
0.47–0.59						
0.60–0.69						
0.70–1.17						
1.18–2.50						

SECTION 2.2

Passenger vehicles external body parts

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC04, CR3	NLMK+*			270–350	140–210	≥(34–38)	≥1.6	≥0.18	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC05	EN 10130	0.68–0.70	900–1,550	270–330	≤200	≥38	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.20	900–1,800	270–330	≤180	≥40	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC05, CR4	NLMK+*			270–330	140–180	≥(38–40)	≥1.9	≥0.20	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC06	EN 10130	0.50–1.50	900–1,800	270–330	≤170	≥41	≥2.1	≥0.22	–	–	A, B	0.6≤Ra≤1.9	Standard Special
HC180B	EN 10268	0.70–1.50	1,000–1,450	290–360	180–230	≥34	≥1.6	≥0.17	–	≥35	A, B	0.6≤Ra≤1.9	Standard Special
ZStE220BH	NLMK+*			320–400	220–280	≥30	–	–	–	≥40	O3, O5	0.6≤Ra≤1.6 Pc ≥50	
HC220Y	EN 10268	0.60–1.50	900–1,550	340–420	220–270	≥33	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE220P	NLMK+*			340–420	220–280	≥30	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES EXTERNAL BODY PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, μm Pc	Flatness, tolerance class (type)
08Ю (BOCB-T)	GOST 9045-93	0.75–1.17	900–1,800	250–320	≤175	≥42	–	–	≤75 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.18–1.20	900–1,670	250–320	≤175	≥42	–	–	≤45 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB-T)	NLMK+*			260–330	≤175	≥42	2.1	0.22	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	≥38	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB)	NLMK+*			270–350	≤185	≥40	≥2	≥0.21	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (OCB)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (OCB)	NLMK+*			270–350	≤195	≥36	≥1.8	≥0.2	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (CB)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (CB)	NLMK+*			270–380	≤205	≥34	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES EXTERNAL BODY PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
SPCC	JIS G 3141	0.40–2.50	900–1,800	–	–	–	–	–	≤65 HRB	–	–	–	–
CPCCT-S	JIS G 3141	0.40–0.59	900–1,530	≥270	–	≥34	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	–	≥36	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	–	≥37	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	–	≥38	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,800	≥270	–	≥39	–	–	≤65 HRB	–	–	–	–
SPCD	JIS G 3141	0.40–0.59	900–1,500	≥270	≤240	≥36	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	≤240	≥38	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	≤240	≥39	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤240	≥40	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤240	≥41	–	–	≤65 HRB	–	–	–	–
CPCE	JIS G 3141	0.40–0.59	900–1,420	≥270	≤220	≥38	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,500	≥270	≤220	≥40	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,600	≥270	≤220	≥41	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤220	≥42	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤220	≥43	–	–	≤65 HRB	–	–	–	–
SPCC, SPCD, SPCEN	NLMK+*			≥265	≤186	≥(40–45)	–	–	–	–	U, E	0.6≤Ra≤1.2 Pc ≥50	–

Recommended by NLMK

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• DC05

Thickness, mm	Width, mm				
	900	1,550	1,600	1,700	1,800
0.68–0.69					
0.70–0.74					
0.75–1.17					
1.18–1.20					

• DC06

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PASSENGER VEHICLES EXTERNAL BODY PARTS

• HC180B

Thickness, mm	Width, mm	
	1,000	1,450
0.70–1.50		

• HC220Y

Thickness, mm	Width, mm			
	900	1,455	1,500	1,550
0,60–0,80				
0.81–1.20				
1.21–1.50				

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (ВОСВ)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74				
0.75–1.17				
1.18–1.20				
1.21–1.80				

• 08Ю (ВОСВ-Т)

Thickness, mm	Width, mm		
	900	1,670	1,800
0.75–1.17			
1.18–1.20			

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 01Ю (СВ, ОСВ, ВОСВ, ВОСВ-Т)

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

• SPCC, SPCCT-S

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• SPCD, SPCE

Thickness, mm	Width, mm					
	900	1,420	1,500	1,600	1,700	1,800
0.40–0.46						
0.47–0.59						
0.60–0.69						
0.70–1.17						
1.18–2.50						

SECTION 2.3

Other parts of passenger vehicles

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC03, CR2	NLMK+*			270–370	140–240	≥(30–34)	≥1.3	≥0.16	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC04, CR3	NLMK+*			270–350	140–210	≥(34–38)	≥1.6	≥0.18	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC05	EN 10130	0.68–0.70	900–1,550	270–330	≤200	≥38	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.20	900–1,800	270–330	≤180	≥40	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC05, CR4	NLMK+*			270–330	140–180	≥(38–40)	≥1.9	≥0.20	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

OTHER PARTS OF PASSENGER VEHICLES

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
HC260LA	EN 10268	0.58–1.45	900–1,480	350–430	260–330	≥26	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE260P	NLMK+*			380–460	260–320	≥28	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
HC340LA	EN 10268	0.70	900–1,250	410–510	340–420	≥19	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,450	410–510	340–420	≥21	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
ZStE340	NLMK+*			410–530	340–440	≥20	–	–	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
HC380LA	EN 10268	0.65–0.70	900–1,330	440–580	380–480	≥17	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,420	440–580	380–480	≥19	–	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
08nc	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB-T)	GOST 9045-93	0.75–1.17	900–1,800	250–320	≤175	≥42	–	–	≤75 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.18–1.20	900–1,670	250–320	≤175	≥42	–	–	≤45 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB-T)	NLMK+*			260–330	≤175	≥42	2.1	0.22	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	≥38	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB)	NLMK+*			270–350	≤185	≥40	≥2	≥0.21	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (OCB)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (OCB)	NLMK+*			270–350	≤195	≥36	≥1.8	≥0.2	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (CB)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (CB)	NLMK+*			270–380	≤205	≥34	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08nc, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

OTHER PARTS OF PASSENGER VEHICLES

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
10nc	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≤65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≤65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
SPCC	JIS G 3141	0.40–2.50	900–1,800	–	–	–	–	–	≤65 HRB	–	–	–	–
CPCCT-S	JIS G 3141	0.40–0.59	900–1,530	≥270	–	≥34	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	–	≥36	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	–	≥37	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	–	≥38	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,800	≥270	–	≥39	–	–	≤65 HRB	–	–	–	–
SPCD	JIS G 3141	0.40–0.59	900–1,500	≥270	≤240	≥36	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	≤240	≥38	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	≤240	≥39	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤240	≥40	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤240	≥41	–	–	≤65 HRB	–	–	–	–
CPCE	JIS G 3141	0.40–0.59	900–1,420	≥270	≤220	≥38	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,500	≥270	≤220	≥40	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,600	≥270	≤220	≥41	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤220	≥42	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤220	≥43	–	–	≤65 HRB	–	–	–	–
SPCC, SPCD, SPCEN	NLMK+*			≥265	≤186	≥(40–45)	–	–	–	–	U, E	0.6≤Ra≤1.2 Pc ≥50	–

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

OTHER PARTS OF PASSENGER VEHICLES

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• DC05

Thickness, mm	Width, mm				
	900	1,550	1,600	1,700	1,800
0.68–0.69					
0.70–0.74					
0.75–1.17					
1.18–1.20					

• DC06

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

• HC260LA

Thickness, mm	Width, mm		
	900	1,450	1,480
0.58–0.89			
0.90–1.45			

• HC340LA

Thickness, mm	Width, mm			
	900	1,250	1,400	1,450
0.70–1.49				
1.50–1.89				
1.90–2.50				

• HC380LA

Thickness, mm	Width, mm					
	900	1,300	1,330	1,350	1,400	1,420
0.65–0.69						
0.70–0.79						
0.80–0.89						
0.90–1.10						
0.11–1.49						
1.50–2.50						

• 08ПС ПО GOST 16523-97

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС ПО GOST 9045-93, 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (ВОСВ)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74				
0.75–1.17				
1.18–1.20				
1.21–1.80				

• 08Ю (ВОСВ-Т)

Thickness, mm	Width, mm		
	900	1,670	1,800
0.75–1.17			
1.18–1.20			

• 01Ю (СВ, ОСВ, ВОСВ, ВОСВ-Т)

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

OTHER PARTS OF PASSENGER VEHICLES

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• SPCD, SPCE

Thickness, mm	Width, mm					
	900	1,420	1,500	1,600	1,700	1,800
0.40–0.46						
0.47–0.59						
0.60–0.69						
0.70–1.17						
1.18–2.50						

• SPCC, SPCCT-S

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

SECTION 2.4

Commercial motor vehicles external parts

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC03, CR2	NLMK+*			270–370	140–240	≥(30–34)	≥1.3	≥0.16	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.18	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC04, CR3	NLMK+*			270–350	140–210	≥(34–38)	≥1.6	≥0.18	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC05	EN 10130	0.68–0.70	900–1,550	270–330	≤200	≥38	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.20	900–1,800	270–330	≤180	≥40	≥1.9	≥0.20	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC05, CR4	NLMK+*			270–330	140–180	≥(38–40)	≥1.9	≥0.20	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

COMMERCIAL MOTOR VEHICLES EXTERNAL PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, μm Pc	Flatness, tolerance class (type)
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB-T)	GOST 9045-93	0.75–1.17	900–1,800	250–320	≤175	≥42	–	–	≤75 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.18–1.20	900–1,670	250–320	≤175	≥42	–	–	≤45 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB-T)	NLMK+*			260–330	≤175	≥42	2.1	0.22	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	≥38	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB)	NLMK+*			270–350	≤185	≥40	≥2	≥0.21	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (OCB)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (OCB)	NLMK+*			270–350	≤195	≥36	≥1.8	≥0.2	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (CB)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (CB)	NLMK+*			270–380	≤205	≥34	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

COMMERCIAL MOTOR VEHICLES EXTERNAL PARTS

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, μm Pc	Flatness, tolerance class (type)
SPCC	JIS G 3141	0.40–2.50	900–1,800	–	–	–	–	–	≤65 HRB	–	–	–	–
CPCCT-S	JIS G 3141	0.40–0.59	900–1,530	≥270	–	≥34	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	–	≥36	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	–	≥37	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	–	≥38	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,800	≥270	–	≥39	–	–	≤65 HRB	–	–	–	–
SPCD	JIS G 3141	0.40–0.59	900–1,500	≥270	≤240	≥36	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	≤240	≥38	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	≤240	≥39	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤240	≥40	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤240	≥41	–	–	≤65 HRB	–	–	–	–
CPCE	JIS G 3141	0.40–0.59	900–1,420	≥270	≤220	≥38	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,500	≥270	≤220	≥40	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,600	≥270	≤220	≥41	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤220	≥42	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤220	≥43	–	–	≤65 HRB	–	–	–	–
SPCC, SPCD, SPCEN	NLMK+*			≥265	≤186	≥(40–45)	–	–	–	–	U, E	0.6≤Ra≤1.2 Pc ≥50	–

Recommended by NLMK

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• DC05

Thickness, mm	Width, mm				
	900	1,550	1,600	1,700	1,800
0.68–0.69					
0.70–0.74					
0.75–1.17					
1.18–1.20					

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

COMMERCIAL MOTOR VEHICLES EXTERNAL PARTS

• 08Ю (CB)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (OCB)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (BOCB)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74				
0.75–1.17				
1.18–1.20				
1.21–1.80				

• 08Ю (BOCB-T)

Thickness, mm	Width, mm		
	900	1,670	1,800
0.75–1.17			
1.18–1.20			

• 01Ю (CB, OCB, BOCB, BOCB-T)

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

• SPCC, SPCCT-S

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• SPCD, SPCE

Thickness, mm	Width, mm					
	900	1,420	1,500	1,600	1,700	1,800
0.40–0.46						
0.47–0.59						
0.60–0.69						
0.70–1.17						
1.18–2.50						

SECTION 2.5

Other parts of commercial motor vehicles

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC03, CR2	NLMK+*			270–370	140–240	≥(30–34)	≥1.3	≥0.16	–	–	A, B U, E	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
08nc	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB-T)	GOST 9045-93	0.75–1.17	900–1,800	250–320	≤175	≥42	–	–	≤75 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.18–1.20	900–1,670	250–320	≤175	≥42	–	–	≤45 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB-T)	NLMK+*			260–330	≤175	≥42	2.1	0.22	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (BOCB)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	≥38	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (BOCB)	NLMK+*			270–350	≤185	≥40	≥2	≥0.21	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (OCB)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (OCB)	NLMK+*			270–350	≤195	≥36	≥1.8	≥0.2	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

OTHER PARTS OF COMMERCIAL MOTOR VEHICLES

Grade	Standart	Product mix		Mechanical properties			Properties						
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	BH_2-effect, MPa	Surface type (finishing group)	Ra, µm Pc	Flatness, tolerance class (type)
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		–	I, II	0.6≤Ra≤1.6	AF, HF, IF
01ЮТ (СВ)	NLMK+*			270–380	≤205	≥34	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
SPCC	JIS G 3141	0.40–2.50	900–1,800	–	–	–	–	–	≤65 HRB	–	–	–	–
CPCCT-S	JIS G 3141	0.40–0.59	900–1,530	≥270	–	≥34	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	–	≥36	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	–	≥37	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	–	≥38	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,800	≥270	–	≥39	–	–	≤65 HRB	–	–	–	–
SPCD	JIS G 3141	0.40–0.59	900–1,500	≥270	≤240	≥36	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,800	≥270	≤240	≥38	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,800	≥270	≤240	≥39	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤240	≥40	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤240	≥41	–	–	≤65 HRB	–	–	–	–
CPCE	JIS G 3141	0.40–0.59	900–1,420	≥270	≤220	≥38	–	–	≤65 HRB	–	–	–	–
		0.60–0.99	900–1,500	≥270	≤220	≥40	–	–	≤65 HRB	–	–	–	–
		1.00–1.59	900–1,600	≥270	≤220	≥41	–	–	≤65 HRB	–	–	–	–
		1.60–2.49	900–1,800	≥270	≤220	≥42	–	–	≤65 HRB	–	–	–	–
		2.50	900–1,700	≥270	≤220	≥43	–	–	≤65 HRB	–	–	–	–
SPCC, SPCD, SPCEN	NLMK+*			≥265	≤186	≥(40–45)	–	–	–	–	U, E	0.6≤Ra≤1.2 Pc ≥50	–

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

OTHER PARTS OF COMMERCIAL MOTOR VEHICLES

• DC03

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (ВОСВ)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74				
0.75–1.17				
1.18–1.20				
1.21–1.80				

• 08Ю (ВОСВ-Т)

Thickness, mm	Width, mm		
	900	1,670	1,800
0.75–1.17			
1.18–1.20			

• 01Ю (СВ, ОСВ, ВОСВ, ВОСВ-Т)

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.50				

• SPCC, SPCCT-S

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• SPCD, SPCE

Thickness, mm	Width, mm					
	900	1,420	1,500	1,600	1,700	1,800
0.40–0.46						
0.47–0.59						
0.60–0.69						
0.70–1.17						
1.18–2.50						

SECTION 2.6

Washing machines, dishwashers, microwave ovens

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.04-0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–350	140–240	≥(34–38)	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
SPCC, SPCCT-S, SPCD, SPCE, 1004, 1006, 1008, CS (Type A,B,C), SS 205, SS 230, S215G	NLMK+* (JIS, ASTM, DIN)*			>270**	≥205**	≥22**	–	–	45–70**	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

** Depending on the grade

WASHING MACHINES, DISHWASHERS, MICROWAVE OVENS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.59	900–1,500	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.60–0.69	900–1,560	250–350	≤195	≥34	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

WASHING MACHINES, DISHWASHERS, MICROWAVE OVENS

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SECTION 2.7

Household and industrial refrigerators

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–350	140–240	≥(34–38)	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
SPCC, SPCCT-S, SPCD, SPCE, 1004, 1006, 1008, CS (Type A,B,C), SS 205, SS 230, S215G	NLMK+* (JIS, ASTM, DIN)*			>270**	≥205**	≥22**	–	–	45–70**	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

** Depending on the grade

HOUSEHOLD AND INDUSTRIAL REFRIGERATORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.59	900–1,500	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.60–0.69	900–1,560	250–350	≤195	≥34	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

HOUSEHOLD AND INDUSTRIAL REFRIGERATORS

- **08Ю (ОСВ)**

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

- **08Ю (СВ)**

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

- **СТ3ПС**

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.8

Vending and cash register equipment

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–350	140–240	≥(34–38)	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
SPCC, SPCCT-S, SPCD, SPCE, 1004, 1006, 1008, CS (Type A,B,C), SS 205, SS 230, S215G	NLMK+* (JIS, ASTM, DIN)*			>270**	≥205**	≥22**	–	–	45–70**	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

** Depending on the grade

VENDING AND CASH REGISTER EQUIPMENT

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.59	900–1,500	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.60–0.69	900–1,560	250–350	≤195	≥34	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

VENDING AND CASH REGISTER EQUIPMENT

- **08Ю (ОСВ)**

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

- **08Ю (СВ)**

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

- **СТ3ПС**

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.9

Gas and electric stoves

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
DC01EK	EN 10209	0.40–0.49	900–1,530	270–390	≤310	≥26	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–390	≤290	≥28	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–390	≤270	≥30	–	–	0.6≤Ra≤1.9	Standard Special	
DC04EK	EN 10209	0.40–0.49	900–1,530	270–350	≤260	≥32	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–350	≤240	≥34	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–350	≤220	≥36	–	–	0.6≤Ra≤1.9	Standard Special	
DC04ED	NLMK+*	0.50–1.40	900–1,800	210	270–350	≥38	–	–	0.6≤Ra≤1.9 Pc ≥55	Standard Special	≥40
08nc	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ВГ)	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (СВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–380	156–205	≥34	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥38	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ОСВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–350	250–350	≥36	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥40	≥1.4	≥0.20	0.6≤Ra≤1.9	–	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

GAS AND ELECTRIC STOVES

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
06ФБЮАР	TU 14-106-607-2000	0.40–0.69	900–1,530	260–360	≤260	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–360	≤240	≥34	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–360	≤240	≥36	–	–	0.6≤Ra≤1.9	–	
06ФБЮАР	TU 14-106-608-2000	0.50–0.69	900–1,530	260–350	≤240	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–350	≤210	≥36	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–350	≤210	≥38	–	–	0.6≤Ra≤1.9	–	

• DC01EK, DC04EK

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• DC04ED

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0.50–0.69				
0.70–0.80				
0.81–1.00				
1.01–1.40				

• 08ПС, 08Ю (ВГ)

Thickness, mm	Width, mm	
	900	1,800
0.70–2.50		

• 08Ю (ОСВ), 08Ю (СВ)

Thickness, mm	Width, mm	
	900	1,800
0.80–2.00		

• 06ФБЮАР

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SECTION 2.10

Boilers and water heaters

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm	Flatness	Hydrogen ratio
DC01EK	EN 10209	0.40–0.49	900–1,530	270–390	≤310	≥26	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–390	≤290	≥28	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–390	≤270	≥30	–	–	0.6≤Ra≤1.9	Standard Special	
DC04EK	EN 10209	0.40–0.49	900–1,530	270–350	≤260	≥32	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–350	≤240	≥34	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–350	≤220	≥36	–	–	0.6≤Ra≤1.9	Standard Special	
08nc	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ВГ)	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (СВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–380	156–205	≥34	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥38	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ОСВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–350	250–350	≥36	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥40	≥1.4	≥0.20	0.6≤Ra≤1.9	–	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

BOILERS AND WATER HEATERS

- **DC01EK, DC04EK**

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

- **08ПС, 08Ю (ВГ)**

Thickness, mm	Width, mm	
	900	1,800
0.70–2.50		

- **08Ю (ОСВ), 08Ю (СВ)**

Thickness, mm	Width, mm	
	900	1,800
0.80–2.00		

SECTION 2.11

Plumbing products

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
DC01EK	EN 10209	0.40–0.49	900–1,530	270–390	≤310	≥26	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–390	≤290	≥28	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–390	≤270	≥30	–	–	0.6≤Ra≤1.9	Standard Special	
DC04EK	EN 10209	0.40–0.49	900–1,530	270–350	≤260	≥32	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–350	≤240	≥34	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–2.50	900–1,800	270–350	≤220	≥36	–	–	0.6≤Ra≤1.9	Standard Special	
DC04ED	NLMK+*	0.50–1.40	900–1,800	210	270–350	≥38	–	–	0.6≤Ra≤1.9 Pc ≥55	Standard Special	≥40
08пс	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ВГ)	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.00	900–1,800	–	250–390	≥29	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (СВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–380	156–205	≥34	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥38	≥1.4	≥0.20	0.6≤Ra≤1.9	–	
08Ю (ОСВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–350	250–350	≥36	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
		1.51–2.50	900–1,800	250–380	156–205	≥40	≥1.4	≥0.20	0.6≤Ra≤1.9	–	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PLUMBING PRODUCTS

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
06ФБЮАР	TU 14-106-607-2000	0.40–0.69	900–1,530	260–360	≤260	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–360	≤240	≥34	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–360	≤240	≥36	–	–	0.6≤Ra≤1.9	–	
06ФБЮАР	TU 14-106-608-2000	0.50–0.69	900–1,530	260–350	≤240	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–350	≤210	≥36	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–350	≤210	≥38	–	–	0.6≤Ra≤1.9	–	

• DC01EK, DC04EK

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

• DC04ED

Thickness, mm	Width, mm			
	900	1,500	1,600	1,800
0,5–0,69				
0.70–0.80				
0.81–1.00				
1.01–1.40				

• 08ПС, 08Ю (ВГ)

Thickness, mm	Width, mm	
	900	1,800
0.70–2.50		

• 08Ю (ОСВ), 08Ю (СВ)

Thickness, mm	Width, mm	
	900	1,800
0.80–2.00		

• 06ФБЮАР

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–2.50					

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SECTION 2.12

Enameled cookware

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
DC01EK	EN 10209	0.40–0.49	900–1,530	270–390	≤310	≥26	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–390	≤290	≥28	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–1.50	900–1,800	270–390	≤270	≥30	–	–	0.6≤Ra≤1.9	Standard Special	
DC04EK	EN 10209	0.40–0.49	900–1,530	270–350	≤260	≥32	–	–	0.6≤Ra≤1.9	Standard Special	≥(40–50) depending on thickness
		0.50–0.70	900–1,680	270–350	≤240	≥34	–	–	0.6≤Ra≤1.9	Standard Special	
		0.71–1.50	900–1,800	270–350	≤220	≥36	–	–	0.6≤Ra≤1.9	Standard Special	
08nc	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
08Ю (ВГ)	STO 05757665-055-2016	0.80–1.50	900–1,800	–	250–390	≥28	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
08Ю (СВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–380	156–205	≥34	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness
08Ю (ОСВ)	STO 05757665-055-2016	0.70–1.50	900–1,800	250–350	250–350	≥36	≥1.4	≥0.20	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–50) depending on thickness

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

ENAMELLED COOKWARE

Grade	Standart	Product mix		Mechanical properties			Properties				
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Ra, µm Pc	Flatness	Hydrogen ratio
06ФБЮАР	TU 14-106-607-2000	0.40–0.69	900–1,530	260–360	≤260	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–360	≤240	≥34	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–360	≤240	≥36	–	–	0.6≤Ra≤1.9	–	
06ФБЮАР	TU 14-106-608-2000	0.50–0.69	900–1,530	260–350	≤240	≥32	–	–	0.6≤Ra≤1.9	AF, HF, IF*	≥(40–60) depending on thickness and type of enamelling
		0.70–1.50	900–1,800	260–350	≤210	≥36	–	–	0.6≤Ra≤1.9	AF, HF, IF*	
		1.51–2.50	900–1,800	260–350	≤210	≥38	–	–	0.6≤Ra≤1.9	–	

• DC01EK, DC04EK

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–1.50					

• 08ПС, 08Ю (ВГ)

Thickness, mm	Width, mm	
	900	1,800
0.70–1.50		

• 08Ю (ОСВ), 08Ю (СВ)

Thickness, mm	Width, mm	
	900	1,800
0.80–1.50		

• 06ФБЮАР

Thickness, mm	Width, mm				
	900	1,420	1,530	1,680	1,800
0.40–0.46					
0.47–0.69					
0.70–0.79					
0.80–1.50					

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SECTION 2.13

Locomotives and passenger cars

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–350	140–240	≥(34–38)	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

LOCOMOTIVES AND PASSENGER CARS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.59	900–1,500	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.60–0.69	900–1,560	250–350	≤195	≥34	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

LOCOMOTIVES AND PASSENGER CARS

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.14

Tractors and combines

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
HC340LA	EN 10268	0.70	900–1,250	410–510	340–420	≥19	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,450	410–510	340–420	≥21	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
HC380LA	EN 10268	0.65–0.70	900–1,330	440–580	380–480	≥17	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–2.50	900–1,420	440–580	380–480	≥19	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC04	EN 10130	0.40–0.50	900–1,500	270–350	≤250	≥34	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.70	900–1,600	270–350	≤230	≥36	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71–1.99	900–1,800	270–350	≤210	≥38	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
		2.00–2.50	900–1,700	270–350	≤210	≥38	≥1.4	≥0.180	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–350	140–240	≥(34–38)	≥1.6	≥0.180	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC05	EN 10130	0.68-0.70	900–1,550	270–330	≤200	≥38	≥1.9	≥0.200	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.71-1.20	900–1,800	270–330	≤180	≥40	≥1.9	≥0.200	–	A, B	0.6≤Ra≤1.9	Standard Special

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

TRACTORS AND COMBINES

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ВОСВ)	GOST 9045-93	0.65–0.69	900–1,555	250–350	≤185	-	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,670	250–350	≤185	≥40	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–1.80	900–1,670	250–350	≤185	-	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43-2.00	900–1,580	350–500	–	≥23	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

TRACTORS AND COMBINES

• DC03, DC04

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• DC05

Thickness, mm	Width, mm				
	900	1,550	1,600	1,700	1,800
0.68–0.69					
0.70–0.74					
0.75–1.17					
1.18–1.20					

• HC340LA

Thickness, mm	Width, mm			
	900	1,250	1,400	1,450
0.70–1.49				
1.50–1.89				
1.90–2.50				

• HC380LA

Thickness, mm	Width, mm					
	900	1,300	1,330	1,350	1,400	1,420
0.65–0.69						
0.70–0.79						
0.80–0.89						
0.90–1.10						
0.11–1.49						
1.50–2.50						

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ВОСВ)

Thickness, mm	Width, mm			
	900	1,555	1,670	1,800
0.65–0.74				
0.75–1.17				
1.18–1.20				
1.21–1.80				

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0.43–0.70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.15

Equipment for agricultural machinery

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

EQUIPMENT FOR AGRICULTURAL MACHINERY

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

EQUIPMENT FOR AGRICULTURAL MACHINERY

- **08Ю (ОСВ)**

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

- **08Ю (СВ)**

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

- **СТ3ПС**

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.16

Equipment for municipal machinery

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

EQUIPMENT FOR MUNICIPAL MACHINERY

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

EQUIPMENT FOR MUNICIPAL MACHINERY

- **08Ю (ОСВ)**

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

- **08Ю (СВ)**

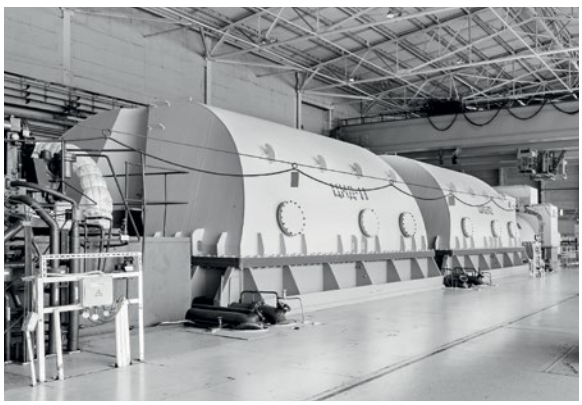
Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

- **СТ3ПС**

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.17

Generators



GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

GENERATORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.18

Transformers

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

TRANSFORMERS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.19

Electrical cabinets and control panels

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

ELECTRICAL CABINETS AND CONTROL PANELS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• 10ПС

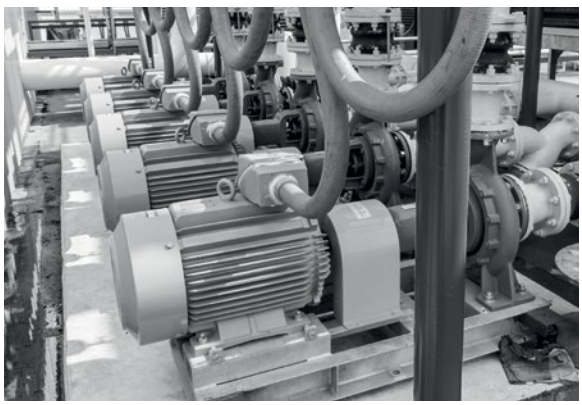
Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.20

Electric motors



GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

ELECTRIC MOTORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

• СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.21

Galvanized steel, pre-painted steel and tin

GRADES PRODUCED BY NLMK

Shipped as full-hard product

• DC01 ПО EN 10130

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03 ПО EN 10130

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

• 08ПС ПО GOST 9045-93

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 10ПС ПО GOST 9045-93

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

SECTION 2.22

Elevators and escalators

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

ELEVATORS AND ESCALATORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3сп	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
Ст3пс	GOST 16523	0.40–2.00	900–1,580	370–530	–	≥22	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,580	370–530	–	≥24	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• СТ3СП, СТ3ПС

Thickness, mm	Width, mm						
	900	1,200	1,330	1,380	1,480	1,530	1,580
0.40–0.46							
0.47–0.80							
0.81–1.20							
1.21–1.50							
1.51–2.50							

SECTION 2.23

Steel panel radiators

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

STEEL PANEL RADIATORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

SECTION 2.24

Bimetallic radiators

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

BIMETALLIC RADIATORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

SECTION 2.25

Boiler tanks

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

BOILER TANKS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

SECTION 2.26

Entrance doors

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

ENTRANCE DOORS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

SECTION 2.27

Gate systems

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

GATE SYSTEMS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

SECTION 2.28

Cabinets, beds, tables, chairs, workbenches

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

CABINETS, BEDS, TABLES, CHAIRS, WORKBENCHES

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43-2.00	900–1,580	350–500	–	≥23	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0.43–0.70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

SECTION 2.29

Shelving and showcases

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SHELVING AND SHOWCASES

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08пс, 08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43-2.00	900–1,580	350–500	–	≥23	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• 08ПС ПО GOST 16523

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0.43–0.70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

SECTION 2.30

Door hardware and furniture fittings

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
DC03	EN 10130	0.40–0.50	900–1,500	270–370	≤280	≥30	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–370	≤260	≥32	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–370	≤240	≥34	≥1.3	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–370	140–280	≥(30–34)	≥1.3	–	–	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

• DC03

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.74									
0.75–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

DOOR HARDWARE AND FURNITURE FITTINGS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (ОСВ)	GOST 9045-93	0.50–0.69	900–1,560	250–350	≤195	≥34	–	–	≤46 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–350	≤195	≥36	–	–	≤76 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–350	≤195	≥40	–	–	≤51 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–350	≤195	≥42	–	–		I, II	0.6≤Ra≤1.9	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08ПС, 08Ю (ВГ) ПО GOST 9045

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

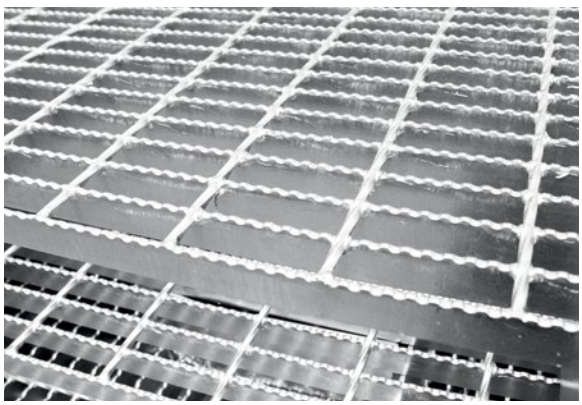
Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 08Ю (ОСВ)

Thickness, mm	Width, mm					
	900	1,500	1,560	1,690	1,700	1,800
0.50–0.59						
0.60–0.69						
0.70–0.87						
0.88–1.17						
1.18–2.50						

SECTION 2.31

Hot-dip galvanized products (dipping method)



GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm and with specialized chemical compositions

HOT-DIP GALVANIZED PRODUCTS (DIPPING METHOD)

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43-2.00	900–1,580	350–500	–	≥23	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 10ПС

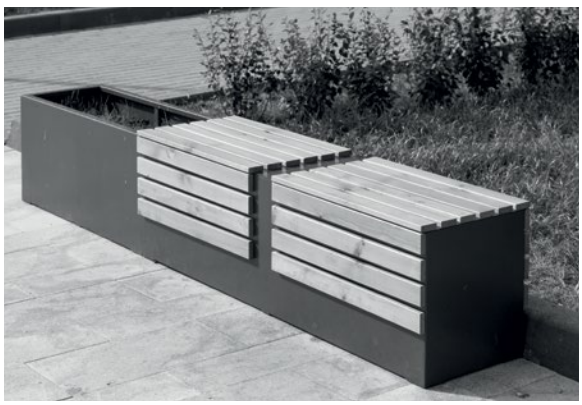
Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0.43–0.70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

SECTION 2.32

Painted items



GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

PAINTED ITEMS

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		1.51–2.00	900–1,800	250–390	–	≥29	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		2.01–2.50	900–1,800	250–390	–	≥30	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–	≤78 HRT15 (0.8–1.7 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		1.51–2.00	900–1,800	250–380	≤205	≥38	–	–	≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,800	250–380	≤205	≥40	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF
10пс	GOST 16523	0.40–2.00	900–1,670	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,670	270–410	–	≥28	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF
20пс	GOST 16523	0.43-2.00	900–1,580	350–500	–	≥23	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF
		2.01–2.50	900–1,580	350–500	–	≥24	–	–	–	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–2.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

• 10ПС

Thickness, mm	Width, mm					
	900	1,380	1,500	1,620	1,670	1,820
0.40–0.49						
0.50–0.70						
0.71–0.80						
0.81–1.50						
1.51–2.50						

• 20ПС

Thickness, mm	Width, mm				
	900	1,260	1,310	1,480	1,580
0.43–0.70					
0.71–0.80					
0.81–1.20					
1.21–2.50					

SECTION 2.33

Barrels

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–2.00	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	
08nc	GOST 16523-97	0.50–2.00	900–1,820	270–410	–	≥25	–	–	≥65 HRB	I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• DC01

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0,05–0,59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–2.00									

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.50–0.70								
0.71–0.80								
0.81–1.50								
1.51–2.00								

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SECTION 2.34

Small containers (euro buckets, cans)

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
DC01	EN 10130	0.40–0.50	900–1,500	270–410	≤320	≥30	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.51–0.69	900–1,600	270–410	≤300	≥32	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
		0.70–1.50	900–1,800	270–410	≤280	≥34	–	–	–	A, B	0.6≤Ra≤1.9	Standard Special
	NLMK+*			270–450	140–350	≥(22–30)	–	–	45–65 HRB	A, B	0.6≤Ra≤1.9 (Δ 0.6), Pc ≥55	

Recommended by NLMK

- **DC01**

Thickness, mm	Width, mm								
	900	1,200	1,300	1,420	1,530	1,680	1,700	1,750	1,800
0.40–0.46									
0.47–0.59									
0.60–0.69									
0.70–0.79									
0.80–1.17									
1.18–1.50									

* Additional capabilities of NLMK to produce rolled steel of 0.4–1.0 mm

SMALL CONTAINERS (EURO BUCKETS, CANS)

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	$\sigma_т$, N/mm²	$\sigma_в$, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, μm Pc	Flatness
08пс	GOST 16523-97	0.40–1.50	900–1,820	270–410	–	≥25	–	–	≥65	I, II	0.6≤Ra≤1.6	AF, HF, IF
08Ю (ВГ)	GOST 9045-93	0.40–0.69	900–1,520	250–390	–	≥26	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
		0.70–1.50	900–1,800	250–390	–	≥28	–	–	–	I, II	0.6≤Ra≤1.9	AF, HF, IF
08Ю (СВ)	GOST 9045-93	0.50–0.69	900–1,500	250–380	≤205	≥32	–	–	≤48 HRB (1.7–2.00 mm) ≤78 HRT15 (0.8–1.7 mm) ≤53 HRT30 (0.5–0.8 mm)	I, II	0.6≤Ra≤1.6	AF, HF, IF
		0.70–1.50	900–1,800	250–380	≤205	≥34	–	–		I, II	0.6≤Ra≤1.6	AF, HF, IF

Recommended by NLMK

• 08ПС

Thickness, mm	Width, mm							
	900	1,200	1,380	1,500	1,620	1,650	1,670	1,820
0.40–0.49								
0.50–0.70								
0.71–0.80								
0.81–1.50								

• 08Ю (ВГ)

Thickness, mm	Width, mm						
	900	1,200	1,410	1,520	1,600	1,700	1,800
0.40–0.46							
0.47–0.69							
0.70–1.50							

• 08Ю (СВ)

Thickness, mm	Width, mm				
	900	1,500	1,680	1,700	1,800
0.50–0.69					
0.70–0.87					
0.88–1.17					
1.18–2.50					

SECTION 2.35

Steel strap

GRADES PRODUCED BY NLMK

Grade	Standart	Product mix		Mechanical properties			Properties					
		Thickness, mm	Width, mm	σ_T, N/mm²	σ_B, N/mm²	δ_4, %	r_{90}	n_{90}	Hardness	Surface type (finishing group)	Ra, µm Pc	Flatness
RSt37-2	TU 14-106-748-2012	0.61–1.00	900–1,320	≥800	–	≥4	–	–	–	–	–	–

Recommended by NLMK

- **RST37-2**

Thickness, mm	Width, mm	
	900	1,320
0.61–1.00		

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