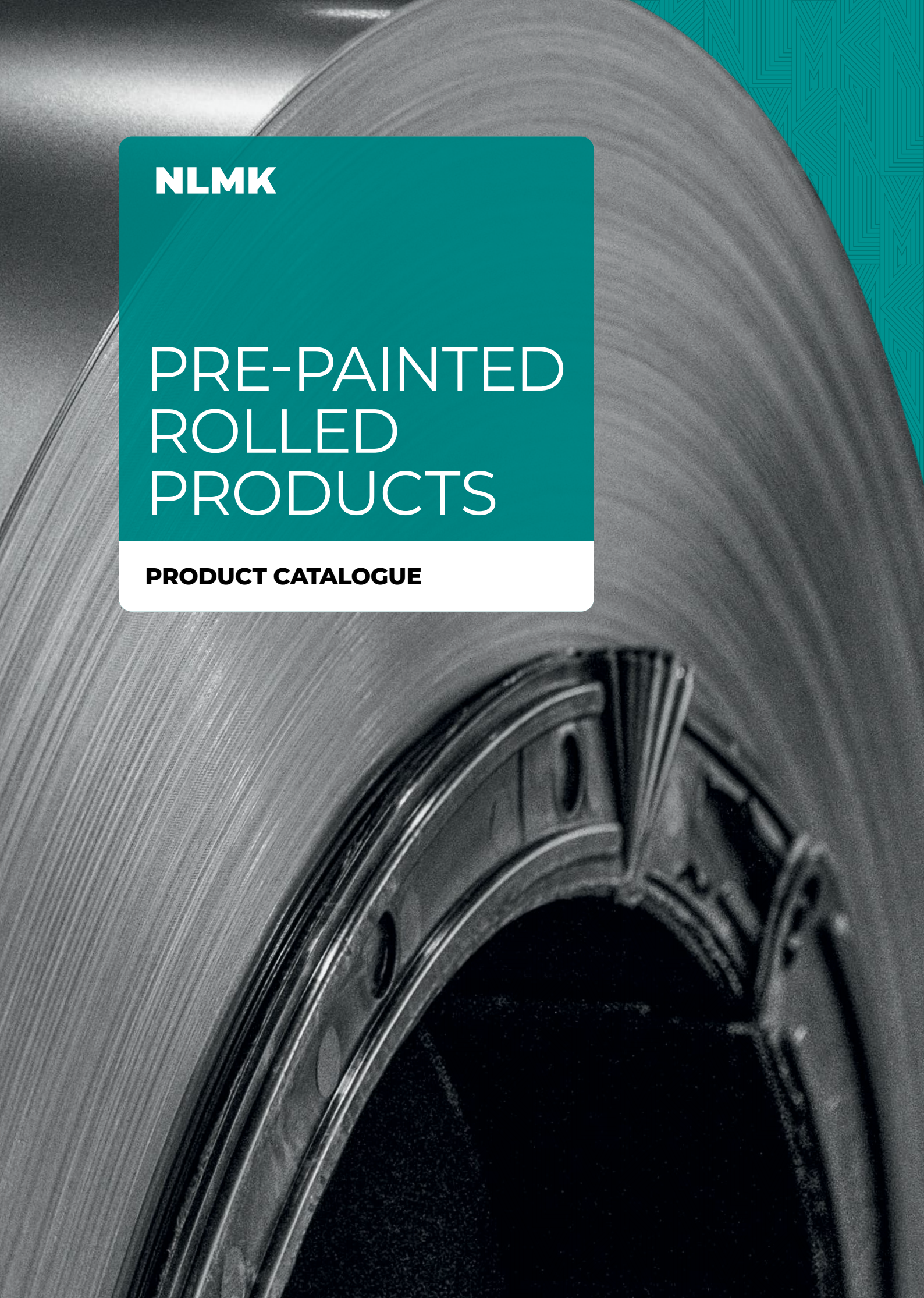


The background of the cover is a grayscale photograph of a large, curved metal surface, likely a part of a vehicle's body, showing fine, concentric rolling marks. A teal-colored geometric pattern is visible in the top right corner. A teal rectangular box with rounded corners is positioned on the left side, containing the company logo and the main title. Below this, a white rectangular box with rounded corners contains the subtitle.

**NLMK**

# PRE-PAINTED ROLLED PRODUCTS

**PRODUCT CATALOGUE**

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## SECTION 1

# REFERENCE STANDARDS

**GOST 14918**

Hot-dip galvanized rolled sheets

**GOST 16523**

General-purpose thin carbon-steel cold-rolled sheets, high and regular quality

**GOST 34180**

Steel cold rolled and cold rolled hot-galvanized sheet with polymer coating, pre-painted by the continuous coil-coating process

**EN 10169**

Continuously organic coated (coil coated) steel flat products

**EN 10346**

Continuously hot-dip coated steel flat products for cold forming

**JIS G 3302**

Hot-dip zinc-coated steel sheet and strip

**TABLE LEGEND**

|             |                            |
|-------------|----------------------------|
| PU          | Polyurethane               |
| PE          | Polyether                  |
| RC3–RC5     | Corrosion resistance class |
| RUV 2–RUV 4 | UV resistance category     |
| –           | Not rated by the standard  |

## SECTION 2

# APPLICATIONS OF PRE-PAINTED STEEL

## Transport

| Group                                 | Product                         | Use cases       | Coating type | Grades as per EN | Grades as per GOST and TU | Section | Page |
|---------------------------------------|---------------------------------|-----------------|--------------|------------------|---------------------------|---------|------|
| Superstructures and trailer equipment | Insulated and refrigerator vans | Van body panels | PE, PU       | –                | 02, 280, 350              | 2.1     | 5    |

## Construction and infrastructure

| Group               | Product                                        | Use cases                                               | Coating type                                     | Grades as per EN       | Grades as per GOST and TU  | Section | Page |
|---------------------|------------------------------------------------|---------------------------------------------------------|--------------------------------------------------|------------------------|----------------------------|---------|------|
| Roofing systems     | Roofing materials                              | Metal shingles, corrugated board                        | PE, Corall PE, PU                                | DX52D, DX53D           | 02, 03, 220, 280, 320      | 2.2     | 6    |
|                     | Seam roofing                                   | Seam roofing systems                                    | Corall PE, PU                                    | DX52D, DX53D, DX54D    | 02, 03, 04                 | 2.3     | 7    |
|                     | Rainwater systems                              | Runners, pipes, elbows, hooks, funnels                  | Corall PE, PU                                    | HX260LAD, DX52D, DX53D | 02, 03, 220, 280           | 2.4     | 8    |
| Gate systems        | Garage and industrial facility gates           | Gateways, roller doors, guides                          | PE                                               | –                      | 02, 220                    | 2.5     | 9    |
|                     | Logistics facility bays                        | Cladding of bay vestibules                              | PE                                               | –                      | 02, 220                    | 2.6     | 10   |
| Sandwich panels     | Sandwich panels for walls                      | Sandwich panel systems for walls                        | PE, Corall PE, PU, Chemical PU, Antibacterial PU | S220GD, S250GD         | 02, 03, 220, 250           | 2.7     | 11   |
|                     | Sandwich panels for roofing                    | Sandwich panel systems for roofing                      | PE, Corall PE, PU, Chemical PU                   | S220GD, S250GD         | 02, 03, 220, 250           | 2.8     | 12   |
| Facade systems      | Facade cassettes for cladding                  | Facade cladding with cassettes, panels, siding          | PE, Corall PE, PU                                | DX52D, DX53D, DX54D    | 02, 03, 220                | 2.9     | 13   |
| Interior finishing  | Commercial, social and agricultural facilities | Interior finishing (ceilings, walls, certain furniture) | PE, Corall PE, PU, Chemical PU, Antibacterial PU | DX52D, DX53D, S220GD   | 02, 03, 220                | 2.10    | 14   |
| Road infrastructure | Noise barriers                                 | Noise barrier panels                                    | PE, Corall PE, PU                                | –                      | 02, 03, 220, 280, 320, 350 | 2.11    | 15   |

## Household appliances and commercial equipment

| Group                      | Product                                          | Use cases                                                                               | Coating type | Grades as per EN                | Grades as per GOST and TU | Section | Page |
|----------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------|--------------|---------------------------------|---------------------------|---------|------|
| Large and small appliances | Washing machines, refrigerators, microwave ovens | Casing for washing machines, refrigerators, microwave ovens                             | PE           | DX52D, DX53D, DX54D, SGCC, SGCD | 02, 08nc                  | 2.12    | 16   |
| Commercial equipment       | Refrigerated tables and chambers, store displays | Casings for industrial refrigerator chambers, refrigerated tables, commercial equipment | PE           | DX52D, DX53D, DX54D, SGCC, SGCD | 02, 08nc                  | 2.13    | 17   |

## SECTION 2.1

# Insulated and refrigerator vans



## GRADES PRODUCED BY NLMK

| Steel grade  | Steel thickness, mm | Coating type | Glossiness               | Texture  | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|--------------|---------------------|--------------|--------------------------|----------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 280, 350 | 0.45–1.5            | PE           | Gloss<br>Semi-matte      | Smooth   | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 280, 350 | 0.5–1.5             | PE           | Semi-gloss<br>Semi-matte | Textured | 180–275                   | RC4                  | 35                    | RUV 4         | 0.5–1.0         |
| 02, 280, 350 | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 280, 350 | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.2

# Roofing materials



## GRADES PRODUCED BY NLMK

| Steel grade                  | Steel thickness, mm | Coating type | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|------------------------------|---------------------|--------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220, 280, 320, DX52D | 0.35–1.5            | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| DX53D, DX54D                 | 0.5–1.5             | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220, 280, 320, DX52D | 0.45–1.5            | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| DX53D                        | 0.5–1.5             | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220, 280, 320, DX52D | 0.35–1.5            | PE           | Semi-matte<br>Matte      | Textured           | 140/100–277               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| DX53D                        | 0.5–1.5             | PE           | Semi-matte<br>Matte      | Textured           | 140/100–277               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D,   | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D    | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D    | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D    | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.3

# Seam roofing



## GRADES PRODUCED BY NLMK

| Steel grade                 | Steel thickness,mm | Coating type | Glossiness            | Texture         | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-----------------------------|--------------------|--------------|-----------------------|-----------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, DX52D               | 0.45–1.5           | PE           | Deep matte            | Wrinkled Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| DX53D, DX54D                | 0.5–1.5            | PE           | Deep matte            | Wrinkled Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, DX52D               | 0.35–1.5           | PE           | Semi-matte Matte      | Textured        | 140/100–277               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| DX53D, DX54D                | 0.5–1.5            | PE           | Semi-matte Matte      | Textured        | 140/100–277               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, DX52D, DX53D, DX54D | 0.5–1.5            | PU           | Semi-gloss Semi-matte | Textured        | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, DX52D, DX53D, DX54D | 0.5–1.5            | PU           | Semi-gloss Semi-matte | Textured        | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, DX52D, DX53D, DX54D | 0.5–1.5            | PU           | Deep matte            | Wrinkled        | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, DX52D, DX53D, DX54D | 0.5–1.5            | PU           | Deep matte            | Wrinkled        | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.4

# Rainwater systems



## GRADES PRODUCED BY NLMK

| Steel grade                      | Steel thickness, mm | Coating type | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|----------------------------------|---------------------|--------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220, 280, 320, DX52D     | 0.35–1.5            | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| DX53D, DX54D                     | 0.5–1.5             | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220, 280, 320, DX52D     | 0.45–1.5            | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| DX53D, DX54D                     | 0.5–1.5             | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–276               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220, DX52D, DX53D, DX54D | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| HX260LAD                         | 0.7–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, DX54D | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| HX260LAD                         | 0.7–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, DX54D | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| HX260LAD                         | 0.7–1.5             | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, DX54D | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| HX260LAD                         | 0.7–1.5             | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.5

# Garage and industrial facility gates



## GRADES PRODUCED BY NLMK

| Steel grade | Steel thickness, mm | Coating type | Glossiness          | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-------------|---------------------|--------------|---------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 220     | 0.4-1.5             | PE           | Gloss<br>Semi-matte | Smooth             | 140/100-275               | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |
| 02, 220     | 0.45-1.5            | PE           | Deep matte          | Wrinkled<br>Corall | 140/100-275               | RC3                  | 25                    | RUV 4         | 1.5-2.0         |
| 02, 220     | 0.45-1.5            | PE           | Semi-matte<br>Matte | Textured           | 140/100-275               | RC3                  | 28                    | RUV 2-3       | 0.5-1.0         |

Recommended by NLMK

## SECTION 2.6

# Logistics facility bays



## GRADES PRODUCED BY NLMK

| Steel grade | Steel thickness,mm | Coating type | Glossiness          | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-------------|--------------------|--------------|---------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 220     | 0.4-1.5            | PE           | Gloss<br>Semi-matte | Smooth             | 140/100-275               | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |
| 02, 220     | 0.45-1.5           | PE           | Deep matte          | Wrinkled<br>Corall | 140/100-275               | RC3                  | 25                    | RUV 4         | 1.5-2.0         |
| 02, 220     | 0.45-1.5           | PE           | Semi-matte<br>Matte | Textured           | 140/100-275               | RC3                  | 28                    | RUV 2-3       | 0.5-1.0         |

Recommended by NLMK

## SECTION 2.7

# Sandwich panels for walls



## GRADES PRODUCED BY NLMK

| Steel grade                         | Steel thickness, mm | Coating type     | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-------------------------------------|---------------------|------------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220                         | 0.35–1.5            | PE               | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5            | PE               | Deep matte               | Wrinkled<br>Corall | 140/100–275               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5            | PE               | Semi-matte<br>Matte      | Textured           | 140/100–275               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5             | PU               | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5             | PU               | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5             | PU               | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5             | PU               | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5             | Chemical PU      | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220                         | 0.35–1.5            | Antibacterial PU | Gloss<br>Semi-matte      | Smooth             | 140/100                   | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |

Recommended by NLMK

## SECTION 2.8

# Sandwich panels for roofs



## GRADES PRODUCED BY NLMK

| Steel grade                         | Steel thickness,mm | Coating type | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-------------------------------------|--------------------|--------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220                         | 0.35–1.5           | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5           | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–275               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5           | PE           | Semi-matte<br>Matte      | Textured           | 140/100–275               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5            | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5            | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5            | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5            | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 250,<br>S220GD, S250GD | 0.5–1.5            | Chemical PU  | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

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## SECTION 2.9

# Facade cassettes for cladding



## GRADES PRODUCED BY NLMK

| Steel grade                         | Steel thickness, mm | Coating type | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-------------------------------------|---------------------|--------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220                         | 0.35–1.5            | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5            | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–275               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220                         | 0.35–1.5            | PE           | Semi-matte<br>Matte      | Textured           | 140/100–275               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, 220, DX52D,<br>DX53D, DX54D | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D,<br>DX53D, DX54D | 0.5–1.5             | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D,<br>DX53D, DX54D | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D,<br>DX53D, DX54D | 0.5–1.5             | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.10

# Commercial, social and agricultural facilities



## GRADES PRODUCED BY NLMK

| Steel grade                       | Steel thickness,mm | Coating type     | Glossiness            | Texture         | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|-----------------------------------|--------------------|------------------|-----------------------|-----------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220                       | 0.35–1.0           | PE               | Gloss Semi-matte      | Smooth          | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220                       | 0.35–1.0           | PE               | Deep matte            | Wrinkled Corall | 140/100–275               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220                       | 0.35–1.0           | PE               | Semi-matte Matte      | Textured        | 140/100–275               | RC3                  | 28                    | RUV 2–3       | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, S220GD | 0.5–1.0            | PU               | Semi-gloss Semi-matte | Textured        | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, S220GD | 0.5–1.0            | PU               | Semi-gloss Semi-matte | Textured        | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, S220GD | 0.5–1.0            | PU               | Deep matte            | Wrinkled        | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, S220GD | 0.5–1.0            | PU               | Deep matte            | Wrinkled        | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, DX52D, DX53D, S220GD | 0.5–1.0            | Chemical PU      | Semi-gloss Semi-matte | Textured        | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220                       | 0.35–1.0           | Antibacterial PU | Gloss Semi-matte      | Smooth          | 140/100                   | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |

Recommended by NLMK

## SECTION 2.11

# Noise barriers



## GRADES PRODUCED BY NLMK

| Steel grade                | Steel thickness,mm | Coating type | Glossiness               | Texture            | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|----------------------------|--------------------|--------------|--------------------------|--------------------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, 03, 220, 280, 320, 350 | 0.45–1.5           | PE           | Gloss<br>Semi-matte      | Smooth             | 140/100–275               | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| 02, 03, 220, 280, 320, 350 | 0.45–1.5           | PE           | Deep matte               | Wrinkled<br>Corall | 140/100–275               | RC3                  | 25                    | RUV 4         | 1.5–2.0         |
| 02, 03, 220, 280, 320, 350 | 0.5–1.5            | PU           | Semi-gloss<br>Semi-matte | Textured           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 280, 320, 350 | 0.5–1.5            | PU           | Semi-gloss<br>Semi-matte | Textured           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 280, 320, 350 | 0.5–1.5            | PU           | Deep matte               | Wrinkled           | 180–275                   | RC4                  | 35                    | >RUV 4        | 0.5–1.0         |
| 02, 03, 220, 280, 320, 350 | 0.5–1.5            | PU           | Deep matte               | Wrinkled           | 200–275                   | RC5                  | 50                    | >RUV 4        | 0.5–1.0         |

Recommended by NLMK

## SECTION 2.12

# Washing machines, refrigerators, microwave ovens



## GRADES PRODUCED BY NLMK

| Steel grade              | Steel thickness,mm | Coating type | Glossiness          | Texture | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|--------------------------|--------------------|--------------|---------------------|---------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, DX52D, 08nc          | 0.4-1.0            | PE           | Gloss<br>Semi-matte | Smooth  | 100-180                   | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |
| DX53D, DX54D, SGCC, SGCD | 0.5-1.0            | PE           | Gloss<br>Semi-matte | Smooth  | 100-180                   | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |
| 02, DX52D, 08nc          | 0.4-1.0            | PE           | High gloss          | Smooth  | 100-180                   | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |
| DX53D, DX54D, SGCC, SGCD | 0.5-1.0            | PE           | High gloss          | Smooth  | 100-180                   | RC3                  | 25                    | RUV 2-3       | 1.5-2.0         |

Recommended by NLMK

## SECTION 2.13

# Refrigerated tables and chambers, store displays



## GRADES PRODUCED BY NLMK

| Steel grade              | Steel thickness, mm | Coating type | Glossiness          | Texture | Zn mass, g/m <sup>2</sup> | Corrosion resistance | Coating thickness, μm | UV resistance | T-bend strength |
|--------------------------|---------------------|--------------|---------------------|---------|---------------------------|----------------------|-----------------------|---------------|-----------------|
| 02, DX52D, 08nc          | 0.4–1.0             | PE           | Gloss<br>Semi-matte | Smooth  | 100–180                   | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |
| DX53D, DX54D, SGCC, SGCD | 0.5–1.0             | PE           | Gloss<br>Semi-matte | Smooth  | 100–180                   | RC3                  | 25                    | RUV 2–3       | 1.5–2.0         |

Recommended by NLMK

## SECTION 3

## APPENDIX

## TECHNICAL SPECIFICATIONS OF THE STEEL SUBSTRATE

| Steel grade | Standard   | Product mix   |            | Mechanical properties               |                                   |                                |
|-------------|------------|---------------|------------|-------------------------------------|-----------------------------------|--------------------------------|
|             |            | Thickness, mm | Width*, mm | Tensile Strength, N/mm <sup>2</sup> | Yield Strength, N/mm <sup>2</sup> | Relative Elongation L=80 mm, % |
| 02          | GOST 14918 | 0.35-0.70     | 900-1,600  | 270-500                             | –                                 | ≥20                            |
|             |            | 0.71-2.00     | 900-1,600  | 270-500                             | –                                 | ≥22                            |
| 03          | GOST 14918 | 0.35-0.70     | 900-1,600  | 270-420                             | –                                 | ≥24                            |
|             |            | 0.71-1.50     | 900-1,600  | 270-420                             | –                                 | ≥26                            |
|             |            | 1.51-2.00     | 900-1,600  | 270-420                             | –                                 | ≥28                            |
| DX52D       | EN 10346   | 0.35-0.50     | 900-1,520  | 270-420                             | 140-300                           | ≥22                            |
|             |            | 0.51-0.70     | 900-1,600  | 270-420                             | 140-300                           | ≥24                            |
|             |            | 0.71-2.00     | 900-1,600  | 270-420                             | 140-300                           | ≥26                            |
| DX53D       | EN 10346   | 0.50-0.70     | 900-1,600  | 270-380                             | 140-260                           | ≥38                            |
|             |            | 0.71-2.00     | 900-1,600  | 270-380                             | 140-260                           | ≥30                            |
| DX54D       | EN 10346   | 0.50-0.70     | 900-1,600  | 260-350                             | 120-220                           | ≥34                            |
|             |            | 0.71-2.00     | 900-1,600  | 260-350                             | 120-220                           | ≥36                            |
| 220         | GOST 14918 | 0.35-0.70     | 900-1,520  | ≥300                                | ≥220                              | ≥18                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥300                                | ≥220                              | ≥20                            |
| 250         | GOST 14918 | 0.35-0.70     | 900-1,500  | ≥330                                | ≥250                              | ≥17                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥330                                | ≥250                              | ≥19                            |
| 280         | GOST 14918 | 0.35-0.70     | 900-1,320  | ≥360                                | ≥280                              | ≥16                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥360                                | ≥280                              | ≥18                            |
| 320         | GOST 14918 | 0.47-0.70     | 900-1,270  | ≥390                                | ≥320                              | ≥15                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥390                                | ≥320                              | ≥17                            |
| 350         | GOST 14918 | 0.50-2.00     | 900-1,600  | ≥420                                | ≥350                              | ≥16                            |
| S220GD      | EN 10346   | 0.35-0.70     | 900-1,520  | ≥300                                | ≥220                              | ≥18                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥300                                | ≥220                              | ≥20                            |
| S250GD      | EN 10346   | 0.35-0.70     | 900-1,500  | ≥330                                | ≥250                              | ≥17                            |
|             |            | 0.71-2.00     | 900-1,600  | ≥330                                | ≥250                              | ≥19                            |
| HX260LAD    | EN 10346   | 0.70-2.00     | 900-1,600  | 350-430                             | 260-330                           | ≥26                            |
| SGCC        | JIS G 3302 | 0.50-2.00     | 900-1,600  | ≥274                                | ≤225                              | ≥39                            |
| SGCD        | JIS G 3302 | 0.50-2.00     | 900-1,600  | ≥274                                | ≤196                              | ≥41                            |
| 08nc        | GOST 16523 | 0.40-2.00     | 900-1,600  | 270-410                             | –                                 | ≥25                            |

\* Ranges are given for the largest thickness

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