

## Surface Roughness Comparison and Application

| International Marking Way | Rz   | Ra    | Characteristic  |  | Related Machining Way   |
|---------------------------|------|-------|-----------------|--|---|
| N12                       | 200  | 50    | Rough face      | Machining tool lines are obvious           | Sawed face, rough CNC turning, rough CNC milling, Drill holes                       |
| N11                       | 100  | 25    |                 | Machining tool lines are visible           |   |
| N10                       | 50   | 12.5  |                 | Machining tool lines are slight            |   |
| N9                        | 25   | 6.3   | Half shiny face | Machining marks are visible                | Cold draw, fine CNC turning, ream CNC milling,                                      |
| N8                        | 12.5 | 3.2   |                 | Machining marks are slight                 |   |
| N7                        | 6.3  | 1.6   |                 | Machining marks hard to recognize          |   |
| N6                        | 6.3  | 0.8   | Shiny face      | machining direction can recognize          | Stonewash, Fine CNC turning and ream CNC milling by diamond machining tools, polish |
| N5                        | 3.2  | 0.4   |                 | machining direction can recognize slightly |   |
| N4                        | 1.6  | 0.2   |                 | machining direction can't be recognized    |   |
| N3                        | 0.8  | 0.1   | Mirror face     | Matte gloss face                           | Mirror grinding, mirror polish  |
| N2                        | 0.4  | 0.05  |                 | shiny gloss face                           |   |
| N1                        | 0.2  | 0.025 |                 | Mirror-like gloss face                     |   |
|                           | 0.1  | 0.012 |                 | Fog mirror face                            |   |
|                           | 0.05 |       |                 | Mirror face                                |   |