

TEST REPORT QUALITY CERTIFICATE



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|---------------------|--|----------------------------|---------------|
| Product | Hexagonal Forged Nut | Contract N° / Ref. PO | PO 00915-24 |
| Date | 21-03-24 | Standard | GB/T699-2015 |
| Ref. Purchase Order | 4500959813 | Quantity | 100000 x 25mm |
| Commodity | Improved Carbon Structural Steel Round Bar | Raw Material Specification | Φ35 |

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|--------------------|------------|
| Certificate No. | WI24558667 |
| Rolling Batch No. | 0241200922 |
| Grade | Steel #45 |
| Number of Packages | 17 |

TEST REPORT OF CHEMICAL COMP.

| Item | Test | Unit | Result |
|------|--------------------------|-------|-----------|
| 1 | C | % | 0,45 |
| 2 | Si | % | 0,24 |
| 3 | Mn | % | 0,58 |
| 4 | P | % | 0,02 |
| 5 | S | % | 0,011 |
| 6 | Ni | % | 0,008 |
| 7 | Cu | % | 0,014 |
| 8 | Lower Yield Strenght | N/mm2 | 420 |
| 9 | Strength of Extension Rm | N/mm2 | 700 |
| 10 | Elongation A | % | 23 |
| 12 | Macrostructure | | Qualified |
| 13 | Hot Forging | | Qualified |

** There in no Cd, Hg, Hexavalent Chromium, PBB, PBDE found in the tests

Testing Result (Surface Hardness <HRC>)

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|-------------------|----------------|------------|-------------------------|
| Product: | 25mm Steel Nut | Material: | 45 # Steel |
| Technical request | 28 -32 HRC | Treatment: | Hardening and tempering |

| | | | | | |
|------|---|------|------|----|------|
| 25mm | 1 | 30,5 | 25mm | 6 | 30,5 |
| | 2 | 28,5 | | 7 | 28,5 |
| | 3 | 30,5 | | 8 | 31 |
| | 4 | 31 | | 9 | 30,5 |
| | 5 | 30,5 | | 10 | 28,5 |

Dimensions inspection report (mm)

| | |
|----------|-----------|
| NORMA DE | ASTM A194 |
|----------|-----------|

| No. | | 1 | 2 | 3 | 4 | 5 |
|-----|----|-------|-------|-------|-------|-------|
| 1 | De | Φ54 | Φ54.1 | Φ54.1 | Φ54.1 | Φ54.1 |
| 2 | H | 53,4 | 53,4 | 53,1 | 53,4 | 53,4 |
| 3 | H1 | 32 | 32,3 | 32,1 | 32,1 | 32,3 |
| 4 | E | 38,1 | 38,1 | 38,1 | 38 | 38,1 |
| 5 | D | Φ25.2 | Φ24.9 | Φ25 | Φ24.9 | Φ25 |

