Comparison of Mechanical Properties For Different Alloys

| Steel/alloy type | DIN Material code | Density (g/cm³) | Tensile Strength (N/mm2) | Yield Strength (N/mm2) | Elongation (%) | Hardness (HB) |
|-----------------------------|-------------------|--------------------|-----------------------------|---------------------------|-------------------|------------------|
| Austenitic stainless steel | 1.4308 | 7.8 | 440-640 | ≥ 200 | ≥ 30 | - |
| Austenitic stainless steel | 1.4408 | 7.8 | 440-640 | ≥ 210 | ≥ 30 | - |
| Martensitic stainless steel | 1.4021 | 7.8 | 650-850 | ≥ 500 | ≥ 10 | - |
| Martensitic stainless steel | 1.4057 | 7.8 | 780 | 590 | 25 | 229 |
| Duplex stainless steel | 1.4517 | 7.8 | 650-850 | 480 | 22 | - |
| Carbon steel | 1.0619 | 7.8 | 420-600 | ≥ 240 | ≥ 22 | _ |