

Brand name | 15-7PH®

| Standards | Material No. | EN Designation | AISI/SAE | UNS |
|-----------|--------------|------------------|----------|--------|
| | 1.4532 | X8CrNiMoAl15-7-2 | 632 | S15700 |

Description | 1.4574 / Alloy PH 15-7 Mo® is an austenitic chromium-nickel stainless steel with molybdenum and aluminum addition.

Special properties | Due to the existing molybdenum content of the stainless steel 1.4532 against the stainless steel 1.4568, the protection of the stainless steel increased before reducing acids and chloride-containing plas which occur in river water among others. The resistance to pitting and crevice corrosion is dependent material-side on their content of chromium and molybdenum. Due to the content of molybdenum and thereby resulting nickel - molybdenum alloy increases with the 1.4532 resistance to corrosion (eg in the stress corrosion crackin

| Chemical Composition | C % | Si ≤ % | Mn ≤ % | P ≤ % | S ≤ % |
|----------------------|-----------|-----------|-----------|-----------|-------|
| | ≤ 0.10 | 0.70 | 1.20 | 0.04 | 0.015 |
| | Cr % | Mo % | Ni % | Al % | |
| | 14.0-16.0 | 2.00-3.00 | 6.50-7.80 | 0.70-1.50 | |

| Mechanical Properties 20°C | Hardness HB 30 ≤ HB | 0.2% Yield strength R _p ≥ N/mm ² | Tensile strength R _m N/mm ² | Elongation A ₅ ≥ % | Modulus of elasticity kN/mm ² |
|----------------------------|---------------------|--|---|-------------------------------|--|
| | 335 | 1000 | 900-1100 | 15 | 200 |

| Physical Properties 20°C | Density g/cm ³ | Specific heat capacity J/kg K | Thermal conductivity W/m K | Electrical resistivity Ω mm ² /m |
|--------------------------|---------------------------|-------------------------------|----------------------------|---|
| | 7.8 | 500 | 15 | 0.7 |

Suitable welding filler materials | 1.4540

Application | Aircraft industry, high strenght corrosion resistant parts

Available forms for 1.4532 / 632

