# Waspaloy Data Sheet

## Overview

Waspaloy is a nickel based, age hardenable superalloy. It has excellent strength at temperatures up to 870°C (1598°F). Alloying additions of aluminium and titanium give it high strength and age hardening ability. The alloy has good oxidation resistance up to 1000°C (1832°F).

## Typical Applications

Applications include gas turbine engine parts, airframe assemblies and missile components.

## Industry Specifications

- UNS N07001
- AMS 5706/ AMS5708
- Werkstoff Nr. 2.4654

Material may also be released to customer specifications, subject to enquiry.

## Chemical Analysis

Typical analysis:

| | C | Si | Mn | Co | Cr | Mo | Fe | Ti | Al | Zr | Ni | B | Cu | P | S | - |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Min | 0.03 | - | - | 12.00 | 18.00 | 3.50 | - | 2.75 | 1.20 | 0.02 | - | 0.003 | - | - | - | % |
| Max | 0.10 | 0.75 | 1.00 | 15.00 | 21.00 | 5.00 | 2.00 | 3.75 | 1.60 | 0.12 | BAL | 0.010 | 0.50 | 0.030 | 0.030 | % |

## Mechanical Properties

Typical properties in the aged condition:

| Tensile Min KSI (MPA) | Yield (0.2% offset), Min KSI (MPA) | Elongation in 2” or 4D min% | Reduction of Area Min% | Hardness HB |
|---|---|---|---|---|
| 175,000 (1207) | 120,000 (827) | 15 | 18 | 341-401 |

All material we supply has full traceability with inspection certification in accordance with BS EN 10402 3.1. We can supply material with intent of BS EN 10402 3.2 inspection certification on request.

We have onsite PCN and SNT Level II inspectors who can test material to your requirements.

All information included in this sheet is intended as a guide only and is correct to the best of our knowledge.