

CERTIFICATE OF MATERIAL

* According to EN 10204:2004 (E) 3.1

Specification : ASTM A479 TYPE316/316L (STRAIN-HARDENED 2)
Material Mfr. : YAMASHIN STEEL CO., INC.
Customer : Aman Engineering
Project Name :

CAS No. :
Certificate No. : HD202503-1276
PO No. : PO-AEE-25-0070
POR No. : ENER PROCESS FZ- LLC
Date of issue : Mar-13-2025

| HCD No | Description (Part Name) | Q'ty |
|--------|---------------------------------|-------|
| JRB | Hex Head Plug 1/4 NPT(H-SPB-4N) | 16 EA |

Chemical Composition(%)

| C | Si | Mn | P | S | Ni | Cr | Mo | | | | | | | |
|--------------|-------------|-------------|--------------|--------------|-----------------|-----------------|---------------|--|--|--|--|--|--|--|
| 0.030 max | 1.00 max | 2.00 max | 0.045 max | 0.030 max | 10.00- 14.00 | 16.00- 18.00 | 2.00- 3.00 | | | | | | | |
| 0.010 | 0.23 | 1.72 | 0.034 | 0.023 | 10.09 | 16.15 | 2.63 | | | | | | | |

Mechanical Properties

| Yield Strength MPa | Tensile Strength MPa | Elongation (%) | Reduction of Area (%) | Hardness () |
|-----------------------|-------------------------|-------------------|--------------------------|-----------------|
| 515 min | 655 min | 25 min | 40 min | |
| 694 | 776 | 34 | 69 | |

Remarks
 * Visual & Dimensional Inspection : Good
 * Mechanical Tested According to ASTM A370
 * Grain Size Result : 5
 * Solution Annealed at 1040°C MIN / WQ
 * Intergranular Corrosion Test : Good

ISSUE No. : -

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order.

(Customer / Third Party)



Manager of Quality Assurance Dept.