



Certificado de Calidad

IT020305 rev.01

N° NN-20835

Industrias Nelson
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| | Descripción | Código | Cantidad | Certificado |
|---|----------------------|-----------|-------------|-------------|
| 1 | ½ CUPLA 1" NPTH | ½ 103S16 | | AZ-319 |
| | Componentes | Material | Certificado | |
| | BARRA REDONDA 44.4mm | AISI 316L | AZ-319 | |

Protocolo de ensayo :

| Tipo | | Presión de trabajo | Estado | Presión de prueba | Estado | Tiempo |
|------------|---|--------------------|--------|-------------------|--------|-------------|
| Hidráulico | 1 | 6.000PSI | Ok | 8.500PSI | Ok | 60 segundos |

Dimensional:

Se controlaron los pasos con el calibre correspondientes dando como resultado satisfactorio. Se controlaron también la rugosidad superficial y las dimensiones generales dando un resultado satisfactorio.

Visual/Funcional:

Se controlaron la porosidad, rebabas, ensamblado, terminación superficial y su función mecánica dando como resultado: satisfactorio

Observaciones: los conectores comprendidos dentro del certificados, son probados con tuercas, virolas y caño de nuestra propia comercialización


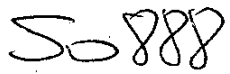
Se certifica que las piezas descritas fueron construidas de acuerdo a lo indicado en nuestros estándares internos, que se cumplen de acuerdo a un sistema de Gestión de Calidad certificado ISO 9001:2015, manteniendo en archivo los certificados correspondientes a cada material.

Firma: **INDUSTRIAS NELSON S.A.**







VIRAJ PROFILES LIMITED (SRM Division)
 Works: SURVEY NO.- 25/1, 25/2, 26 & 34. Village- MAAN, Taluka- PALGHAR, Dist.- PALGHAR, MAHARASHTRA -401 506, INDIA.
 e-mail- vielqc@viraj.com

| (A02) INSPECTION CERTIFICATE & MILL TEST REPORT (DIN EN 10204-3.1) | | | | | | | | | | | | | | | | | |
|--|--------------------|-------------|------------------------|---|----------------|--------------------------|-------------------|----------------------|----------|---------------|--------|--------|--|--|--|--|--|
| (A06)CUSTOMER : APERAM STAINLESS SERVICES & SOLUTIONS ARGENTINA S A AVDA.DESCARTE 4200,B1667AYP BUENOS AIRES, ARGENTINA. Argentina | | | | Manufacturer's Symbol (A04) | | (A03)MTR NO. 910004036/7 | | | | | | | | | | | |
| | | | |  | | (Z02) DATE 20.02.2022 | | MATERIAL SPEC. | | | | | | | | | |
| | | | | | | (B02) GRADE AISI 316 | | DIMENSIONAL SPEC. h9 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| (B01) : STAINLESS STEEL BRIGHT BARS,ANGLE (B04) DELIVERY CONDITION : PEELED & POLISHED | | | | | | | | | | | | | | | | | |
| Approved acc. To AD 2000-Merkblatt W0 and certified acc. To PED (2014/68/EU) by Certification Body for Pressure Equipment of TUVNORD System (Notified body,reg.no:0045) | | | | | | | | | | | | | | | | | |
| (A07)ORDER NO: APERAM-10/21 | | | | | | | | (A09)Article No: | | | | | | | | | |
| (B09-B11)ITEM DESCRIPTION | | | | LENGTH | | (B08) PIECES(Nos) | | NET WEIGHT(TO) | | (B07) HEAT NO | | | | | | | |
| ROUND 44.450 MM | | | | 6.00 - 6.20 | | 7 | | 0.528 | | CA282 | | | | | | | |
| Bundle No | | 14000069515 | | | | | | | | | | | | | | | |
| (C71-C92) CHEMICAL ANALYSIS | | | | | | | | | | | | | | | | | |
| ELEMENT | %C | %Mn | %Si | %S | %P | %Cr | %Ni | %Cu | %Mo | %Ti | %Co | %N | | | | | |
| HEAT | 0.0180 | 1.6000 | 0.4000 | 0.0230 | 0.0360 | 16.8200 | 10.0800 | 0.6400 | 2.0400 | 0.0030 | 0.1600 | 0.0790 | | | | | |
| MECHANICAL PROPERTIES | | | | | | | | | | | | | | | | | |
| TEST SPECIFICATION (ISO 6892-1) | | | | | | | | | | | | | | | | | |
| INSPECTION NO. | (C03) TEST TEMP @R | | (C02) TEST DIRECTION L | | Proof Strength | | (C13) Elongation% | Reduction of Area% | Hardness | | | | | | | | |
| | RP=0.2% | RP = 1% | | | MPA | MPA | | | MPA | Lo=4D | HBW | | | | | | |
| 89000311011 | | | | | | | | | | | | | | | | | |
| | 637.00 | 368.00 | | | | | 49.00 | 71.00 | | 186 | | | | | | | |
| METALLURGICAL PROPERTIES | | | | | | | | | | | | | | | | | |
| (B03)COROSION TEST | | | | MICRO OBSERVATION | | | | | | | | | | | | | |
| PASSED IGC TEST PER ASTM-A262 & DIN EN ISO 3651-2 | | | | NO CARBIDE PRECIPITATION OBSERVED ON GRAIN BOUNDARIES | | | | | | | | | | | | | |
| (B06)PRODUCT MARKING : SIZE, GRADE, HEAT NO., LOGO & INSPECTOR STAMP | | | | | | | | | | | | | | | | | |
| MATERIAL CONFIRMS TO ASTM A276/A276M-17 COND A, INTERGRANULAR CORROSION TEST SATISFACTORY AS PER ASTM A262-15 PRACTICE E. CERTIFIED AS PER EN 10204-3.1. | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | |
| REMARKS : MINIMUM SOLUTION ANNEALING TEMPERATURE 1050 C, SOAKING TIME 01 HR/INCH WATER QUENCHED.. MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD-OR WELD REPAIRS. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. | | | | | | | | | | | | | | | | | |

we certify that the above material has been inspected and tested and complies with the order/contract and is of Indian origin

VI
1
(Z03)Inspector's Stamp



 AUTHORIZED WORKS INSPECTOR
 RADHAKRISHNA MURTHY