



WORKS / MILL TEST CERTIFICATE

F / QLY / 23 R 00

T.C.NO: JSAW / Q / XP2402000246 / B
 P.O.NO: 26.092
 S.O.NO: 4111005986-40
 INV.NO: XP2402000246

DATE: 11.07.2024
 DATE: 15.03.2024
 DATE: 21.03.2024
 DATE: 11.07.2024

CUSTOMER

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PRODUCT : HOT FINISHED CARBON STEEL SEAMLESS PIPES
 PIPE SPECIFICATION : API 5L GR B / X42 PSL 1, 46th Edition/ASTM A 106 GR B-19a/ASME SA 106 GR B, (ASME SEC II PART A EDN.-2023)

| PIPE DIMENSIONS | | LENGTH (FEET) | END CONDITIONS | STRAIGHTNESS | HEAT NO. | QUANTITY | |
|-----------------|---------|---------------|----------------|--------------|----------|--------------|-----------|
| OD | WT | | | | | NOS. | FEET |
| 3.500" | 0.216" | 20.00 | Beveled Ends | Satisfactory | 3322749 | 43 | 860.000 |
| 3 NPS | SCH STD | | | | | | |
| | | | | | | TOTAL | 43 |

CHEMICAL COMPOSITION :

| Heat No. | Analysis | % C | % Mn * | % Si | % S | % P | % Cr | % Ni | % Cu | % Mo | % V | % Nb | % Ti | % B | Nb + V | Nb + V+Ti | % C _E |
|----------|------------|-------|--------------|-------------|-----------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|-------|--------|---------------|--------------|------------------|
| | | Reqd. | 0.28 Max. | 0.29 - 1.06 | 0.10 Min. | 0.030 Max. | 0.030 Max. | 0.40 Max. | 0.40 Max. | 0.40 Max. | 0.15 Max. | 0.08 Max. | - | - | 0.001 Max. | 0.06 Max. | 0.15 Max. |
| 3322749 | Heat | 0.17 | 1.12 | 0.28 | 0.005 | 0.011 | 0.02 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.001 | <0.01 | <0.01 | 0.36 |
| | Product I | 0.18 | 1.13 | 0.29 | 0.006 | 0.012 | 0.02 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.001 | <0.01 | <0.01 | 0.37 |
| | Product II | 0.18 | 1.12 | 0.28 | 0.005 | 0.011 | 0.02 | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.001 | <0.01 | <0.01 | 0.37 |

* Mn 1.65 Max. as per Table 1 clause B of ASTM A 106

MECHANICAL TESTS :

| Heat No. | | LONGITUDINAL TENSILE TEST | | | | OTHER TESTS | |
|----------|----------|--|----------------|---------------------|---------------|--------------------------------|-----------------|
| | | Y. S. (0.5% EU) | U.T.S. | % E G.L. = 50.00 mm | HARDNESS TEST | HYDROSTATIC TEST (100%) | FLATTENING TEST |
| | | Longitudinal Tensile specimen width 19.05 mm | | | | | |
| 3322749 | Reqd. | 42100 PSI Min. | 60190 PSI Min. | 21.50% Min. | N. A. | 2500 PSI for 5 Seconds Minimum | As Per Spec. |
| | Obtained | 53081 Mpa | 75561 Mpa | 31 | - | Satisfactory | Satisfactory |
| 3322749 | Obtained | 366 Mpa | 521 Mpa | 29 | - | Satisfactory | Satisfactory |
| | | 54027 Mpa | 76277 Mpa | | | | |
| | | 373 Mpa | 526 Mpa | | | | |

Remarks :

- Steel Making Process : EAF-LRF-VD-CCM, Fully Killed.
- Visual Inspection : Satisfactory
- Country of melt : India.
- Steel Supplier & Location : Jindal Steel and Power Limited, Raigarh - 496001, Chhattisgarh, India.
- Pipe manufacturer & Location : Jindal Saw Limited, Sinnar - 422113, Dist. : Nashik, Maharashtra, India.
- Marking on Pipes - JSAW API SPEC 5L / ASTM A 106 GR B / ASME SA 106 GR B 3.500" OD x 0.216" WT (3 NPS SCH STD) GR B / GR X42 PSL 1 SMLS HYDRO 2500 PSI HEAT NO. 3322749 LENGTH 20 FT ± 1/8 IN ± 1/8 HFS P.O. NO 26.092 MADE IN INDIA

T.C. AS PER EN10204 - 3.1

We hereby certify that the material herein described has been manufactured, sampled, tested & inspected in accordance with above standard and specification & satisfy the requirements.

Signature
 Authorized Signatory
 S. S. TILK (SR.Executive-Q.A.)

