



SN 6274 4 NPS SLEEVE FOUR-6
 R398674
 ARCELORMITTAL TUBULAR PRODUCTS USA LLC
 132 WEST MAIN STREET
 SHELBY, OH 44875-1471
 Telephone: 419-347-2424 Fax: 419-342-1437

MATERIAL TEST REPORT

ISO 9001:2015 IATF 16949:2016

| | |
|--------------------------------|---|
| SHELBY ORDER NO.: 589660 VR | PAGE 01 OF 01 |
| NDT | MELT SOURCE |
| NDT PER ASTM E570 | CC CLEVELAND |
| S# 00489986 | STEEL BAR/STRIP MFG PROCESS CONTINUOUS/STRAND CAST |

| | | |
|--|---------------------------------------|------------------------------------|
| CUSTOMER: EARLE M. JORGENSEN CO. 1900 MITCHELL BLVD SCHAUMBURG IL 60195 ATTN: TEST REPORT DESK | SPECIFICATIONS(S): ASTM A513 2020A | CUSTOMER ORDER NO.: P204488-423 |
| | PRINT NO. | CUSTOMER PART NO.: 140411 |
| | | |

| | | | | |
|-----------------------------|---|---|-----------------------------|-----------------------------|
| GRADE 1026 | SIZE (O.D. X I.D. X WALL) 4.500 X 3.250 X .625 | QUANTITY 24 PC 14297 LB 552.79 FT | SHIPPED DATE: 06/09/2022 | TODAY'S DATE: 06/09/2022 |
| AM-SHELBY ITEM NO: 50000091 | | PRODUCT DESCRIPTION: EW DOM STRESS RELIEVE ANNEAL | | |

| CHEMICAL COMPOSITION (% WEIGHT) | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------|------|------|-------|-------|------|------|------|------|------|-------|-------|-------|--------|---|--------|-------|---|----|
| Heat No. | Sample | C | Mn | P | S | Si | Ni | Cr | Mo | Cu | V | Al | Sn | Ca | O | N | Ti | B | Cb |
| 4147384 | Heat | 0.24 | 0.65 | 0.009 | 0.003 | 0.03 | 0.02 | 0.03 | 0.01 | 0.05 | 0.001 | 0.046 | 0.003 | 0.0030 | | 0.0063 | 0.003 | | |

| MECHANICAL PROPERTIES | | | | | | | | | | | | | | | | | D.I. | Grain Size |
|-----------------------|------------|----------------|-------|----------|----------------|-------|--------|------------------|-------|--------|-------------------------|---------------------|-----|------|-----|--|----------|------------|
| Tensile Properties | | | | | | | | | | | | | | | | | Hardness | |
| Heat No. | Bundle No. | Yield Strength | Units | Method | Yield Strength | Units | Method | Tensile Strength | Units | Method | %Elongation in 2 inches | % Reduction of Area | HBW | HRBW | HRC | | | |
| 4147384 | T8573357 | 82400 | PSI | 0.20%OFF | | | | 94800 | PSI | | 25 | | | | 93 | | | |

| Charpy Impact Properties | | | | | | | |
|--------------------------|------------------------------|-------|------------|------------|------------|-------------|--------------|
| Size | Orientation (Test direction) | Temp. | Energy 1st | Energy 2nd | Energy 3rd | Energy Avg. | Energy Units |
| | | | | | | | |

| METALLURGICAL PROPERTIES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|-----------|------|------|
| Jominy Hardenability (EXPRESSED IN 16THS) | | | | | | | | | | | | | | | | | | Magnaflux | | |
| Heat No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 | 18 | 20 | 24 | 28 | 32 | Freq | Sev. |
| | | | | | | | | | | | | | | | | | | | | |

| | | | |
|-------------------------------|--|--|---------------|
| Hot Reduction Ratio 12.9:1 | OTHER INSPECTION Melted and Manufactured in USA 100% NDT TESTED NON-DESTRUCTIVE TESTED ASTM A513 Type 5 EN 10204 3.1 | THIS TEST REPORT NOTARIZED WHEN REQUIRED SWORN AND SUBSCRIBED BEFORE ME THIS DAY OF | NOTARY PUBLIC |
| | | <i>Douglas E. Musser</i> Douglas E. Musser, Chief Metallurgist Doug.Musser@Arcelormittal.com | |

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