



RAW MATERIAL INCOMING INSPECTION REPORTS

D.C. No. : F/05/01
Issue no. : 01.01.07.2018
Rev. no. : 01.11.05.23

| | | | | | | | |
|-----------|------------|-------------------|---------|----------------|---------|-----------------|------------|
| Report NO | 1736 | SECTION :- | 65 | HAET NO. :- | K/95383 | INVOICE NO. :- | 970005720 |
| DATE :- | 27/11/2024 | STEEL SUPPLIER :- | KALYAN | RECQTY :- | 5470 | INVOICE DATE :- | 26/11/2024 |
| GRADE :- | 25-7B | STEEL TC NO. :- | K/95383 | NO. OF BARS :- | | | |

Process / Milling Route

| | | | | | | | | | | | | | | | |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Chemistry | %C | %Si | %Mn | %P | %S | %Ni | %Mo | %Al | %Cu | %As | %Sb | %V | %Nb | %Ti | %B |
| Min | 0.14 | 1.2 | 1.5 | 0.01 | 0.01 | 1.4 | 0.03 | 0.05 | 0.10 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| Max | 0.17 | 1.203 | 1.275 | 0.024 | 0.012 | 1.276 | 0.182 | 0.053 | 0.103 | 0.005 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Mill Tc Value | 0.15 | 1.246 | 1.273 | 0.023 | 0.013 | 1.235 | 0.192 | 0.06 | 0.132 | 0.11 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| Spectro Value | | | | | | | | | | | | | | | |

Bar Size (As per W.L.) Qty: 10 % of Total Heat

| | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|----|----|
| S.NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 65 | 64.3 | 64.8 | 64.7 | 64.6 | 64.7 | 64.5 | 64.2 | 64.8 | 64.9 | 64.7 | | |

No of Bar Checked : 6

Gas Content (PPM): As per Mill Tc

| | | | |
|---------|-----|-----|-----|
| Min | 90 | 112 | 102 |
| Max | 116 | 116 | 116 |
| Value | 116 | 116 | 116 |
| Mill Tc | | | |

Steel Supply Condition: AS ROLLED

MACRO (I) Internal soundness Sample : (ASTM E381 or as per customer) 52 R2 C2

(II) Dendrite structure O1 sample : 252 CR2 C2

(III) Step Down Test Sample : (IS4075 or as per customer) OK

Micro structure As Rolled : Micro structure : (I or as per customer) OK

ULTRASONIC TEST (AS PER ASTM A328) : Mill Tc

INCLUSION RATING (IS 14163 (ASTM: E454 OR REQUIRED BY CUSTOMER))

| | A Sulphide | | B Aluminate | | C Silicate | | D Oxide | | DS | |
|----------------|------------|----|-------------|-----|------------|-----|---------|-----|----|----|
| | TN | TK | TN | TK | TN | TK | TN | TK | TN | TK |
| Cut Specif Any | - | - | 2.0 | 1.0 | 0.5 | 0.5 | 1.0 | 1.0 | | |
| Mill Tc | - | - | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | | |
| SSB | - | - | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | | |

GRAIN SIZE : (ASTM E112 / IS-4748) Spec: 5-8 Mill Tc 7-0 SSB 6-5

JOINT HARDENILITY (IS-3848 / ASTM A255) (As per required by Customer)

| | | | | |
|-----------|-------|-------|-------|--------|
| Distance | 55 | 310 | 325 | 350 |
| Specified | 25-44 | 25-40 | 27-32 | 24-17h |
| Mill Tc | 42.6 | 33.4 | 31 | 27.7 |
| Observed | 41 | 38 | 29 | 27 |

MECHANICAL PROPERTIES : (If Required in TDC / Customer)

| | U.T.S N/mm2 / MPA | | Y.S N/mm2 / MPA | KEL | As per IS: 1757 | |
|---|-------------------|----------|-----------------|-----|---------------------|-------------------|
| | Specified | Observed | | | IMPACT VALUE CHERRY | IMPACT VALUE IZOD |
| 1 | 2 | 3 | 4 | 5 | | |
| - | - | - | - | - | | |

As Rolled Hardness (BHN (Hear / Min)) (If Required in TDC / Customer)

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| - | - | - | - | - |

VISUAL : (i) Surface Condition 100 % Bars Checked OK NO (603 (4 H2O2, CRACK, RUST))

(ii) Head No. 100 % Bars Checked OK (K/95383)

(iii) Color Code. 100 % Bars Checked OK Hair (42/104 + Red)

REDUCTION RATIO : Specify BLOOM SIZE : 200x200 REDUCTION RATIO : 117.05

DECAH LEVEL : (If Required in TDC / Customer)

| | | | |
|-----------|----------|----|----|
| Specified | Observed | PD | 10 |
| | | | |

UPPER TENSILE TEST (AS PER IS 10103) :

Test Certificate verified for Each Heat no : Available & OK Not Available Not Conforming

100 % / Customer 210 (If Required in TDC / Customer) Mill Tc Date Verified by :

100 % / 1127 (If Required in TDC / Customer) Verified by Mobile Spectro / X-Ray Gun / Spark Test

Other Remarks : Accepted Rejected

Checked By : 09/7 Approved By :

