**ORIGINAL**

# INSPECTION CERTIFICATE
## (EN 10204-3.1)


**ARAH DAGANG SDN.BHD.** (202899-M)

No.10, Jalan Jasmine 3, SEK BB10, Bandar Bukit Beruntung, 48300 Selangor Darul Ehsan, Malaysia.

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**Purchaser**
**Order No**
**Starting Material** : **SEAMLESS PIPE**
**Country Of Original** : **MALAYSIA**
**Heat Treatment (*)** : **S**
**(*)Steel Making Process** : **Y**
**Certificate No** : **AD/08/24/9800CR**
**Date** : **10-Aug-24**
**INVOICE NO** : **AD/EX/SM0002/24**

**Specification for Inspection** : **ASME B16.9 (2018)**
**NACE MR 0175(2021) / ISO 15156 (2020)**
**Specification for Material** : **ASTM A234 (2024) / ASME SA234 (2023)**
**Appearance (Visual)** : **Satisfactory**
**Dimension** : **Satisfactory**
**Certification** : **Issued in agreement with TUV SUD industrie service GmbH. QS approved acc, to PED,Annex I, Para.4.3 by Notified Body 0036" (PED 2014 / 68 / EU) Certificate no. DGR-0036-QS-W 1056/2022/MUC-01**

| No | Manufacturing No. (Heat ID No.) | Raw Material Heat No | Article, Size & Grade | Quantity | Chemical Composition | | | | | | | | | | | | Tension Test (20'C) | | | Elongation % | Hardness (HB) | Pipe Maker |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | C x100 | SI x100 | Mn x100 | P x1000 | S x1000 | Cu x100 | Ni x100 | Cr x100 | Mo x100 | V x100 | NB x100 | CE | (*)Test direction | Yield P.S.I [MPA] | Tensile P.S.I [MPA] | | | |
| | | | | Min:- | | 10 | 29 | | | | | | | | | | | 35000 | 60000 | 30 | | |
| | | | | Max:- | 30 | | 106 | 50 | 58 | 40 | 40 | 40 | 15 | 8 | | 0.50 | | | 95000 | | 197 HB | |
| 1 | LC100 | 13324260 | 2" X 1.1/2" XH CON RED WPB - XCR02.001.5 | 76 | 18 | 24 | 44 | 9 | 4 | 3 | 4 | 7 | 2 | <1 | 1 | 0.26 | L | 53200 | 75300 | 37.6 | 156-159 | BAOSTEEL |
| 2 | LJ148 | 19300976 | 6" X 4" XH CON RED WPB - XCR0604 | 6 | 20 | 20 | 38 | 14 | 11.4 | 5.4 | <1 | 6.4 | <1 | <1 | <1 | 0.26 | L | 61900 | 74100 | 38.8 | 152-156 | HENGYANG |
| 3 | LJ150 | 19300976 | 6" X 4" XH CON RED WPB - XCR0604 | 64 | 20 | 20 | 38 | 14 | 11.4 | 5.4 | <1 | 6.4 | <1 | <1 | <1 | 0.26 | L | 61900 | 74100 | 38.8 | 152-156 | HENGYANG |
| 4 | LCW44 | 83577H | 12" X 10" XH CON RED WPB - XCR1210 | 130 | 20 | 25 | 55 | 20 | 11 | 1 | 2 | 3 | <1 | <1 | <1 | 0.29 | L | 42200 | 65100 | 36 | 134-134 | YANTAI |
| 5 | MBL121 | 23306816 | 10" X 8" STD ECC RED WPB - SER1206 | 30 | 15 | 22 | 82 | 14 | 5.7 | 3.9 | 3.7 | 6.8 | 3.4 | <1 | <1 | 0.29 | L | 45400 | 69700 | 37.8 | 143-146 | HENGYANG |
| 6 | NC82 | 0823830 | 2" X 1.1/2" XH ECC RED WPB - XER02.001.5 | 10 | 16 | 23 | 67 | 9 | 7 | 8 | 3 | 2 | 1 | 1 | <1 | 0.27 | L | 57800 | 77400 | 36.8 | 159-163 | HENGYANG STEEL |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | |

*NOTE:*
CE = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15
Fully Killed Steel

(*)
A) Hot Forming operation : at a temperature between 690'C ~ 980'C and cooled in still air.
S) Cold Forming operation : Normalizing at a temperature between 850'C ~ 910'C and cooled in still air.
Y = Basic oxygen process L = Longitudinal
E = Electric furnace T = Transverse

We hereby certify that the product described herein has been manufactured in accordance with the specification concerned and also with the purchaser's requirement and the result of all examination and test are acceptable.

ARAH DAGANG SDN BHD 202899-M

Factory Manager