



財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

(Certificate No : L2039-240507)

This is to certify that

Dragon Steel Corporation

Testing Laboratory of Metallurgical Department

No.100, Longchang Rd., Longjing Dist., Taichung City 434, Taiwan (R.O.C.)

is accredited in respect of laboratory

Accreditation Criteria : ISO/IEC 17025:2017 ; CNS 17025:2018

Accreditation Number : 2039

Originally Accredited : March 03, 2009

Effective Period : May 21, 2024 to May 20, 2027

Accredited Scope : Testing Field, see described in the Appendix



Scan to verify

Yi-Ling Chen

Yi-Ling Chen
President, Taiwan Accreditation Foundation
May 07, 2024

Accreditation Number : 2039

Laboratory Head : WU, Kai-Chih

01. 01 Metals and Alloys Products

Carbon Steel, Low Alloy Steel

C001 Element Analysis

ASTM E1019

JIS G1228-3

N: (0.0020 to 0.020) %

Approval Signatory: WU, Kai-Chih; KAO, Ping-Wei; CHANG, Shin-Chieh; CHENG, Ming-Yu

C001 Element Analysis

ASTM E415

CNS 10006

JIS G1253

ASTM E415

C: (0.020 to 1.10) %

Si: (0.020 to 1.54) %

Mn: (0.050 to 1.90) %

P: (0.006 to 0.085) %

S: (0.001 to 0.040) %

Cu: (0.006 to 0.500) %

Ni: (0.006 to 5.00) %

Cr: (0.010 to 4.10) %

Mo: (0.007 to 1.25) %

V: (0.003 to 0.300) %

Nb: (0.003 to 0.120) %

Ti: (0.002 to 0.200) %

Al: (0.006 to 0.093) %

Sb: (0.006 to 0.027) %

As: (0.003 to 0.100) %

Sn: (0.005 to 0.061) %

B: (0.0004 to 0.0070) %

Ca: (0.002 to 0.003) %

Co: (0.006 to 0.190) %

CNS 10006

JIS G1253

C: (0.010 to 1.30) %

Si: (0.020 to 3.20) %

Mn: (0.050 to 1.90) %

P: (0.002 to 0.12) %

S: (0.001 to 0.040) %

Cu: (0.002 to 1.00) %

Ni: (0.003 to 5.00) %

Cr: (0.010 to 4.10) %

Mo: (0.002 to 1.25) %

V: (0.001 to 0.800) %

Nb: (0.004 to 0.500) %

Ti: (0.002 to 0.300) %

Al: (0.002 to 0.98) %

P2, total 4 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



Sb: (0.010 to 0.089) %
As: (0.002 to 0.140) %
Sn: (0.001 to 0.110) %
B: (0.0002 to 0.011) %
Ca: (0.0003 to 0.005) %
Co: (0.003 to 0.190) %
Pb: (0.001 to 0.018) %

Approval Signatory: WU, Kai-Chih; KAO, Ping-Wei; CHANG, Shin-Chieh; CHENG, Ming-Yu

01. 01 Metals and Alloys Products

Carbon Steel

M002 Through-Thickness Reduction of Area

CNS 13813

JIS Z2241

JIS G3199

Yield Stress $\leq 500 \text{ N/mm}^2$

Thickness: (15 to 50) mm

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che; TSAI, Kang-Hsien; LAI, Chen-Tai

M005 Bend Test (Guided Bend Test)

ASTM A370

ASTM E290

CNS 3941

JIS Z2248

Thickness: (1.0 to 25) mm

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che; TSAI, Kang-Hsien; LAI, Chen-Tai

M008 Metallography Test-Grain Size (Comparison Method)

ASTM E112

JIS G0551

ASTM #0 to #12

JIS #0 to #12

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che; TSAI, Kang-Hsien; LAI, Chen-Tai

M101 Rockwell Hardness Test

ASTM E18

JIS Z2245

(20 to 65) HRC

(40 to 100) HRBW

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che; TSAI, Kang-Hsien; LAI, Chen-Tai



01. 01 Metals and Alloys Products

Steel Specimen

M002 Tensile Test

AS 1391

ASTM E8/E8M

CNS 2111

JIS Z2241

ISO 6892-1

EN 10002-1 (2001)

(20 to 1200) kN

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che;
TSAI, Kang-Hsien; LAI, Chen-Tai

M004 Charpy Impact Test

EN 10045-1 (1990)

CNS 3034

JIS Z2242

ASTM E23

ISO 148-1

AS 1544.2

-80 °C to Room Temperature

ASTM: (2.5 to 433) J

EN, CNS, JIS, ISO, AS: (2.5 to 232.5) J

Approval Signatory: LEE, Rong-Bin; CHANG, Lin-Chieh; CHEN, Hung; TSAI, Hon-Che;
TSAI, Kang-Hsien; LAI, Chen-Tai

01. 01 Metals and Alloys Products

Structure-Use Steel Plate

N002 Ultrasonic Testing

CNS 12845

Thickness: (13 to 200) mm

On-site Testing

Approval Signatory: CHI, Chun-Yu; CHEN, Li-Chang

N002 Ultrasonic Testing

JIS G0901

Thickness: (13 to 200) mm

On-site Testing

Approval Signatory: CHI, Chun-Yu; CHEN, Li-Chang

01. 01 Metals and Alloys Products

Steel Plate

N002 Ultrasonic Testing

ASME Sec. V, Article 23, SA 435

ASTM A435/A435M

Thickness: (12.5 to 90.0) mm

On-site Testing

Approval Signatory: CHI, Chun-Yu; CHEN, Li-Chang

(Null below)

