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

Certificate of Accreditation

(Certificate No：L0130-251028)

This is to certify that

China Steel Corporation

Chemical Laboratory

1 Chung-Kang Road,Siaogang District, Kaohsiung 812401, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	：	ISO/IEC 17025:2017；CNS 17025:2018
Accreditation Number	：	0130
Originally Accredited	：	October 30, 1993
Effective Period	：	October 30, 2025 to October 29, 2028
Accredited Scope	：	Testing Field, see described in the Appendix

Scan to verify

Yi-Ling Chen

Yi-Ling Chen
President, Taiwan Accreditation Foundation
October 28, 2025

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

Accreditation Number ：0130

Laboratory Head ：HSIAO, Ming-Chang

◤ 01. 01 Metals and Alloys Products
Stainless Steel
C001 Elemental Analysis
ASTM E1086
C: (0.010 to 0.250) %
Si: (0.020 to 0.900) %
Mn: (0.050 to 2.00) %
P: (0.005 to 0.070) %
S: (0.003 to 0.040) %
Cu: (0.010 to 0.300) %
Ni: (7.50 to 13.00) %
Cr: (17.00 to 23.00) %
Mo: (0.010 to 3.00) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
CNS 10006
JIS G1253
C: (0.010 to 1.000) %
Si: (0.020 to 1.700) %
Mn: (0.050 to 9.10) %
P: (0.005 to 0.070) %
S: (0.001 to 0.040) %
Cu: (0.010 to 3.70) %
Ni: (0.180 to 21.00) %
Cr: (9.10 to 25.40) %
Mo: (0.010 to 3.55) %
V: (0.010 to 0.400) %
Nb: (0.020 to 1.500) %
Ti: (0.005 to 2.00) %
Al: (0.003 to 0.100) %
Sn: (0.003 to 0.100) %
B: (0.0005 to 0.0080) %
W: (0.020 to 0.950) %
Co: (0.010 to 0.950) %
Pb: (0.001 to 0.017) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

◤ 01. 01 Metals and Alloys Products
Carbon Steel, Low Alloy Steel
C001 Elemental Analysis
ASTM E415
C: (0.020 to 1.100) %
Si: (0.020 to 1.540) %

Mn: (0.050 to 2.00) %
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: (0.007 to 4.10) %
Mo: (0.007 to 1.250) %
V: (0.003 to 0.300) %
Nb: (0.003 to 0.120) %
Ti: (0.001 to 0.200) %
Al: (0.006 to 0.093) %
Sn: (0.005 to 0.061) %
B: (0.0004 to 0.0070) %
Ca: (0.0003 to 0.0030) %
Co: (0.006 to 0.200) %
Pb: (0.002 to 0.200) %
Sb: (0.006 to 0.027) %
As: (0.003 to 0.100) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
CNS 10006
JIS G1253
C: (0.010 to 1.300) %
Si: (0.010 to 3.95) %
Mn: (0.050 to 2.20) %
P: (0.002 to 0.120) %
S: (0.001 to 0.040) %
Cu: (0.002 to 1.480) %
Ni: (0.003 to 5.40) %
Cr: (0.003 to 4.10) %
Mo: (0.002 to 1.250) %
V: (0.001 to 0.850) %
Nb: (0.004 to 0.500) %
Ti: (0.001 to 0.300) %
Al: (0.002 to 1.570) %
Sn: (0.001 to 0.110) %
B: (0.0002 to 0.012) %
Ca: (0.0003 to 0.0050) %
Co: (0.003 to 0.500) %
Pb: (0.001 to 0.200) %
Sb: (0.010 to 0.090) %
As: (0.002 to 0.110) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
JIS G1258-1
Si: (0.01 to 0.60) wt%
Mn: (0.01 to 2.00) wt%
P: (0.003 to 0.10) wt%
Ni: (0.01 to 4.00) wt%
Cr: (0.01 to 3.00) wt%

Mo: (0.01 to 1.20) wt%
Cu: (0.01 to 0.50) wt%
V: (0.002 to 0.50) wt%
Co: (0.003 to 0.20) wt%
Ti: (0.001 to 0.30) wt%
Al: (0.004 to 0.10) wt%
Ca: (0.0005 to 0.005) wt%
Mg: (0.0005 to 0.011) wt%
As: (0.001 to 0.012) wt%
Zr: (0.010 to 0.060) wt%
Zn: (0.001 to 0.005) wt%

Approval Signatory: CHEN, Chih-Jung; CHENG, Chien-Chung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
In-House Method:
Iron and steel-ICP atomic emission spectrometric method
Doc. No.: GB-T435-A14
Si: (0.01 to 6.00) wt%
Mn: (0.01 to 2.20) wt%
P: (0.003 to 0.20) wt%
Ni: (0.01 to 5.40) wt%
Cr: (0.01 to 4.10) wt%
Mo: (0.01 to 1.25) wt%
Cu: (0.01 to 1.48) wt%
V: (0.002 to 0.85) wt%
Co: (0.003 to 0.50) wt%
Ti: (0.001 to 0.30) wt%
Al: (0.004 to 2.00) wt%
Ca: (0.0005 to 0.005) wt%
Mg: (0.0005 to 0.011) wt%
As: (0.001 to 0.10) wt%
Zr: (0.010 to 0.060) wt%
Zn: (0.001 to 0.005) wt%
Nb: (0.004 to 0.50) wt%
Sn: (0.001 to 0.110) wt%
B: (0.0002 to 0.012) wt%
Pb: (0.001 to 0.20) wt%
Sb: (0.010 to 0.09) wt%

Approval Signatory: CHEN, Chih-Jung; CHENG, Chien-Chung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

◤ 01. 01 Metals and Alloys Products
Carbon Steel, Low Alloy Steel, Stainless Steel
C001 Elemental Analysis
ASTM E1019
O: (0.001 to 0.005) %
N: (0.001 to 0.200) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
ASTM E1019
S: (0.001 to 0.350) %
C: (0.002 to 2.00) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
CNS 11069
JIS G1211-3
C: (0.001 to 2.00) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
JIS G1215-4
S: (0.0005 to 0.400) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

C001 Elemental Analysis
JIS G1228-3
N: (0.0008 to 0.391) %

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; CHEN, Chih-Jung; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

◤ 01. 01 Metals and Alloys Products
Zinc Coating Layer
C001 Elemental Analysis
In-House Method: Determination of zinc, iron, and aluminum content in coating layer of zinc-coated steel sheet and strip by ICP atomic emission spectrometric method
Doc. No.: GB-T435-N81
Zn: (10 to 1000) g/m^2
Fe: (0.2 to 15) g/m^2
Al: (0.05 to 10) g/m^2

Approval Signatory: CHEN, Chih-Jung; CHENG, Chien-Chung; HSIAO, Ming-Chang

◤ 01. 01 Metals and Alloys Products
Zinc Coating Steel
C055 Coating Weight
1.JIS G3302 Annex JC
2.CNS 1244 Appendix C
3.JIS G3313 Appendix JD
1. (30 to 165) g/m^2 (one-side)
2. (30 to 165) g/m^2 (one-side)
3. (30 to 165) g/m^2 (one-side)

Approval Signatory: CHIANG, Chia-Chun; KAO, Chi-Chan; CHANG, Yu-Ming; HSIAO, Ming-Chang; CHUNG, Yung-Hsin

M010 Coating Weight
CNS 1247 Sec. 5.2
JIS H0401 Sec. 5.2
ASTM A90/A90M
JIS G3313 Appendix JF
JIS G3302 Appendix JE
(2.5 to 1000) g/m^2

Approval Signatory: CHEN, Chih-Jung; CHENG, Chien-Chung; HSIAO, Ming-Chang

◤ 02. 02 Minerals
Coal, Coke
C025 Total Carbon in Analysis Samples of Coal and Coke
ASTM D5373 (Method B)
ISO 29541
Coal:
C: (65.0 to 84.0) %
Coke:
C: (86.3 to 90.0) %

Approval Signatory: KUO, Yu-Hsien; CHEN, Ying-Tsung; HSIAO, Ming-Chang

◤ 03. 01 Cements, Clays, Ceramics and Related Materials
Refractory
M020 Permanent Linear Change
JIS R2554
(-10.00 to 10.00) %
Specimen Size L×W×T: 160 mm×40 mm×40 mm

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

M023 Modulus of Rupture
JIS R2553
(1 to 50) kN
Specimen Size L×W×T: 160 mm×40 mm×40 mm

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

M028 Specific Gravity
JIS R2205
0.90 to 6.00
Exclude True Specific Gravity
Boiling Method (Water)
Vacuum Method (Kerosene)
Castable Refractory Specimen Size L×W×T: 160 mm×40 mm×40 mm

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

M069 Apparent Porosity
JIS R2205
(1.0 to 60.0) %
Boiling Method (Water)

Vacuum Method (Kerosene)
Castable Refractory Specimen Size L×W×T: 160 mm×40 mm×40 mm

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

M070 Cold Compressive Strength
JIS R2206-2
(5 to 500) kN

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

M070 Cold Compressive Strength
JIS R2553
(5 to 500) kN
Specimen Size L×W×T: 160 mm×40 mm×40 mm

Approval Signatory: LIN, Chun-Chieh; KAO, Yi-Hsiao; CHEN, Po-Hung; CHENG, Chien-Chung; HSIAO, Ming-Chang

(Null below)