



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

認 證 證 書

(證書編號：L2590-240920)

茲證明

益志股份有限公司

材料測試實驗室

新北市三芝區錫板里番婆林 47 號之 8

為本會認證之實驗室

認 證 依 據：ISO/IEC 17025：2017；CNS 17025：2018

認 證 編 號：2590

初 次 認 證 日 期：一百零一年十月一日

認 證 有 效 期 間：一百一十三年十月一日至一百一十六年九月三十日
止

認 證 範 圍：測試領域，如續頁

董事長

陳怡鈴



掃描確認真偽

中華民國一一三年九月二十日

認證編號：2590

實驗室主管：李文榕

■ 01.01 金屬與合金類材料與製品

低合金鋼

C001 元素分析

1. CNS10006

2. 自訂方法: 分光儀標準檢驗程序 (文件編號: WLWI-128) 參考 ASTM E415

C: (0.044 to 1.20) %

Si: (0.11 to 1.18) %

Mn: (0.195 to 1.60) %

P: (0.01 to 0.074) %

S: (0.0078 to 0.058) %

Cr: (0.111 to 3.03) %

Mo: (0.025 to 0.98) %

V: (0.01 to 0.496) %

Cu: (0.022 to 0.694) %

Ni: (0.019 to 3.50) %

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.01 金屬與合金類材料與製品

沃斯田鐵系不鏽鋼

C001 元素分析

1. CNS10006

2. 自訂方法: 分光儀標準檢驗程序 (文件編號: WLWI-128); 參考 ASTM E1086

C: (0.022 to 0.152) %

Si: (0.44 to 1.14) %

Mn: (0.494 to 1.70) %

P: (0.008 to 0.037) %

S: (0.008 to 0.026) %

Ni: (5.66 to 12.55) %

Cr: (12.35 to 19.06) %

Mo: (1.59 to 3.55) %

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.01 金屬與合金類材料與製品

金屬材料及產品

M002 拉伸

CNS 2111

(9.8 to 441) kN

(1 to 45) tf

報告簽署人: 李文榕; 盧錦坤; 蕭國呈



M101 洛氏硬度
CNS 2114
(20 to 65) HRC
(40 to 100) HRBW

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.01 金屬與合金類材料與製品
扭力桿
M006 疲勞
MIL-S-45387B (1976) 第 4.4.11.3 節
直徑 ≤ 80 mm
長度: (500 to 2400) mm

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.01 金屬與合金類材料與製品
電鍍金屬產品
M012 鹽霧
CNS 8886
中性鹽水噴霧

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.01 金屬與合金類材料與製品
零組件產品
M017 尺寸
自訂方法: 幾何公差尺寸量測檢驗程序 (文件編號: WLWI-125)
三次元座標量測儀
X 軸: (0 to 1200) mm
Y 軸: (0 to 2000) mm
Z 軸: (0 to 900) mm

報告簽署人: 李文榕; 盧錦坤; 蕭國呈

■ 01.02 金屬與合金類材料與製品
Al-Si 合金
C001 元素分析
自訂方法: 分光儀標準檢驗程序 (文件編號: WLWI-128); 參考 ASTM E1251
Si: (6.20 to 8.00) %
Fe: (0.081 to 0.85) %
Cu: (0.039 to 0.20) %
Mn: (0.022 to 0.41) %
Mg: (0.10 to 0.66) %
Zn: (0.03 to 0.33) %
Ti: (0.05 to 0.17) %

報告簽署人: 李文榕; 盧錦坤; 蕭國呈



06.02 高分子及複合材料

橡膠及相關產品

C159 材質鑑別

自訂方法: 橡膠標準測試-紅外線光譜儀分析試驗 (文件編號: WLWI-117); 參考 ASTM D3677

EPDM 橡膠, 耐油橡膠相關產品 (丙烯酸橡膠 (ACM), 氯磺化聚乙烯橡膠 (CSM), 丁腈橡膠 (NBR), 氯丁二烯橡膠 (CR))

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M001 硬度

CNS 3555

Durometer A 型: 20 to 90

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M002 拉伸

CNS 3553 (1996)

啞鈴型試片 (1 號型, 3 號型, 5 號型, 6 號型及 7 號型)

CNS 3553

啞鈴型試片 (1 型, 1A 型, 2 型, 3 型及 4 型)

CNS 687

(49 to 490) N

(5 to 50) kgf

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M005 耐熱性彎曲

CNS 3551 (1987) 第 2.10 節

報告簽署人: 李文榕; 蕭國呈

M020 耐熱性荷重變形

台灣電力公司材料標準 C001

台灣電力公司配電處材料標準 Y067

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M021 老化

CNS 3556

CNS 687

(50 to 200) °C

硬度變化, 伸長率變化, 抗拉強度變化, 拉應力變化

報告簽署人: 李文榕; 陳柏魁; 蕭國呈



M033 浸漬

CNS 3562

ISO 1817

參考油 1 號油及 3 號油

外觀檢查, 體積變化, 硬度變化, 伸長率變化, 抗拉強度變化

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M035 臭氧

CNS 10018

CNS 687

(25 to 600) pphm

(0.25 to 250) ppm

(15 to 50) °C

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

M038 壓縮變形

CNS 3560

報告簽署人: 李文榕; 陳柏魁; 蕭國呈

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財團法人全國認證基金會

Taiwan Accreditation Foundation

Certificate of Accreditation

(Certificate No : L2590-240920)

This is to certify that

WHOLE POWER CO., LTD.

Materials Testing Laboratory

No.47-8, Fanpolin, Xiban Li, Sanchie District, New Taipei City, Taiwan, R.O.C.

is accredited in respect of laboratory

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

Accreditation Number : 2590

Originally Accredited : October 01, 2012

Effective Period : October 01, 2024 to September 30, 2027

Accredited Scope : Testing Field, see described in the Appendix



Scan to verify

Yi-Ling Chen

Yi-Ling Chen
President, Taiwan Accreditation Foundation
September 20, 2024

Accreditation Number : 2590

Laboratory Head : LEE, Wen-Jung

01. 01 Metals and Alloys Products

Low Alloy Steel

C001 Elemental Analysis

1. CNS 10006

2. In-house method: SOP of Spark Atomic Emission Spectrometry (Doc. No. WLWI-128) ; Refer to ASTM E415

C: (0.044 to 1.20) %

Si: (0.11 to 1.18) %

Mn: (0.195 to 1.60) %

P: (0.01 to 0.074) %

S: (0.0078 to 0.058) %

Cr: (0.111 to 3.03) %

Mo: (0.025 to 0.98) %

V: (0.01 to 0.496) %

Cu: (0.022 to 0.694) %

Ni: (0.019 to 3.50) %

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 01 Metals and Alloys Products

Austenitic Stainless Steels

C001 Elemental Analysis

1. CNS 10006

2. In-house method: SOP of Spark Atomic Emission Spectrometry (Doc. No. WLWI-128) ; Refer to ASTM E1086

C: (0.022 to 0.152) %

Si: (0.44 to 1.14) %

Mn: (0.494 to 1.70) %

P: (0.008 to 0.037) %

S: (0.008 to 0.026) %

Ni: (5.66 to 12.55) %

Cr: (12.35 to 19.06) %

Mo: (1.59 to 3.55) %

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 01 Metals and Alloys Products

Metals and Metal Products

M002 Tension

CNS 2111

(9.8 to 441) kN

(1 to 45) tf

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng



M101 Rockwell Hardness
CNS 2114
(20 to 65) HRC
(40 to 100) HRBW

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 01 Metals and Alloys Products
Torsion Bar
M006 Fatigue
MIL-S-45387B (1976) Sec. 4.4.11.3
Diameter $\leq$ 80 mm
Length: (500 to 2400) mm

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 01 Metals and Alloys Products
Mechanical Hardware Metals and Products
M012 Salt Spray
CNS 8886
Neutral Salt Spray

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 01 Metals and Alloys Products
Part of Assembly
M017 Dimension
In-house Method-Geometric tolerance dimensional measurement and inspection
procedures (Document No.: WLWI-125)
Coordinate Measurement Machine
X Axis: (0 to 1200) mm
Y Axis: (0 to 2000) mm
Z Axis: (0 to 900) mm

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng

01. 02 Metals and Alloys Products
Al-Si Alloy
C001 Elemental Analysis
In-house method: SOP of Spark Atomic Emission Spectrometry (Doc. No. WLWI-128) ;
Refer to ASTM E1251
Si: (6.20 to 8.00) %
Fe: (0.081 to 0.85) %
Cu: (0.039 to 0.20) %
Mn: (0.022 to 0.41) %
Mg: (0.10 to 0.66) %
Zn: (0.03 to 0.33) %
Ti: (0.05 to 0.17) %

Approval Signatory: LEE, Wen-Jung; LU, Chin-Kun; HSIAO, Kuo-Cheng



06. 02 Polymer and Composite Materials

Rubber and Related Products

C159 Material Identification

In-House: Standard Test Method for Rubber-Identification by Infrared Spectrophotometry (Doc. No. WLWI-117) ; Refer to ASTM D3677

EPDM Rubber, Oil Resistance Rubber Related (Acrylic Rubber (ACM) , Chlorosulfonated Polyethylene Rubber (CSM) , Acrylonitrile-Butadiene Rubber (NBR) , Chloroprene Rubber (CR))

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M001 Hardness

CNS 3555

Durometer Type A: 20 to 90

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M002 Tension

CNS 3553 (1996)

type No. 1, type No. 3, type No. 5, type No. 6 and type No.7 Dumbell Specimen

CNS 3553

type 1, type 1A, type 2, type 3 and type 4 Dumbell Specimen

CNS 687

(49 to 490) N

(5 to 50) kgf

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M005 Bending with Heat Resistance

CNS 3551 (1987) Sec. 2.10

Approval Signatory: LEE, Wen-Jung; HSIAO, Kuo-Cheng

M020 Deformation under Loading and Heat

Standard Material Requirements for Taiwan Power Company C001

Standard Material Requirements for Taiwan Power Company Power Distribution Department Y067

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M021 Ageing Test

CNS 3556

CNS 687

(50 to 200) °C

Change in Hardness, Elongation Change, Tensile Strength Changes, Tensile Stress Change

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M033 Immersion

CNS 3562

ISO 1817

Reference Oil No.1, Reference Oil No.3

Visual Inspection, Volume Change, Change in Hardness, Elongation Change, Tensile Strength Changes

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

P4, total 5 pages

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



M035 Ozone
CNS 10018
CNS 687
(25 to 600) pphm
(0.25 to 250) ppm
(15 to 50) °C

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

M038 Compression Set
CNS 3560

Approval Signatory: LEE, Wen-Jung; CHEN, Po-Kuei; HSIAO, Kuo-Cheng

(Null below)

