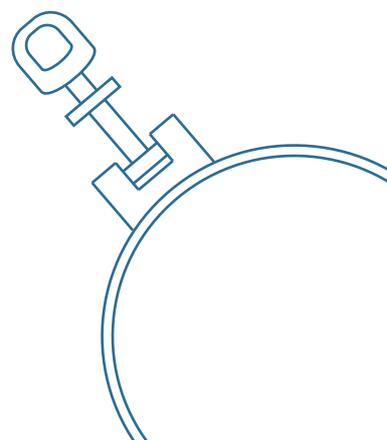


YENSTRON®

益瀚儀器





鑄鐵製

混凝土圓柱試體模具

最佳抗壓測試結果

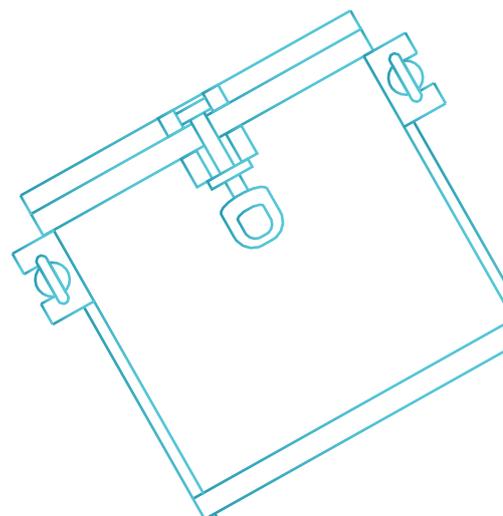
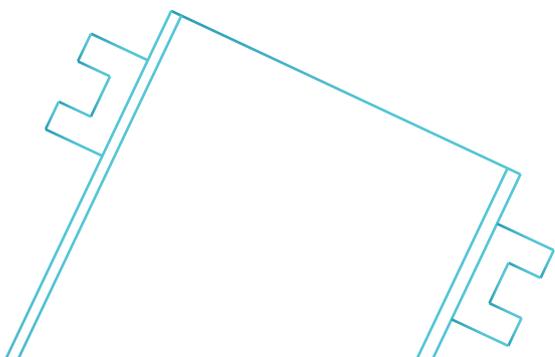
產品型號

歐洲/亞洲：D5xH10、D7.5xH15、D10xH20、D12xH24、D12xH24、D15xH30

美洲：D4" xH8"、D6" xH12"

法國：D11xH22、D16xH32

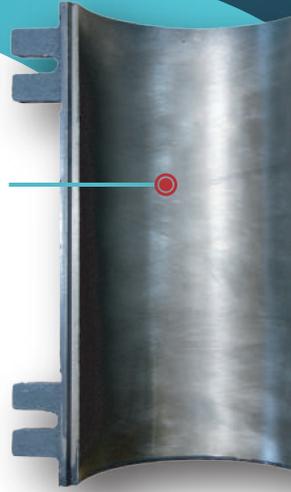
	尺寸	重量	符合國家標準
YS-6IX12I	6 inch x 12 inch	10.5 kg	◦ ASTM C39 ◦ AASHTO T23 ◦ AASHTO T126 ◦ EN 12390-1 ◦ JIS A 1132 ◦ NF P18-400 ◦ CNS 10991
YS-4IX8I	4 inch x 8 inch	5.2 kg	
YS-16X32	160 mm x 320 mm	11.2 kg	
YS-15X30	150 mm x 300 mm	10.0 kg	
YS-12X24	120 mm x 240 mm	7.0 kg	
YS-11X22	110 mm x 220 mm	6.5 kg	
YS-10X20	100 mm x 200 mm	5.2 kg	
YS-7.5X15	75 mm x 150 mm	4.5 kg	
YS-5X10	50 mm x 100 mm	3.5 kg	



產品特點

內牆研磨

圓柱試體成型完美
擁有最佳真圓度



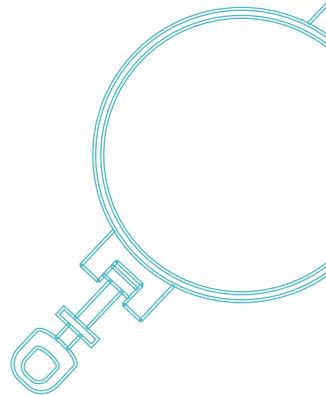
斜角接縫 專利設計

混凝土漿不外漏



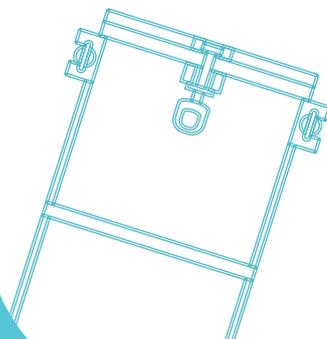
結構強化

模具可以長期重複使用



底盤研磨

底盤極度光滑平整



產品認證

符合美國 ASTM / AASHTO、歐盟EN與日本 JIS規範標準

SGS 驗證

符合各國規範項目

SGS Measurement Report
Calibration & Measurement Laboratory-Taichung

Report No: ETIC269315 1 of 2

Applicant: CHANGCHU CONCRETE MOLD INDUSTRIAL CO.

Equipment: Concrete Test Mold

Manufacturer	Model	4" * 8"	Serial No	D1" * 8"	
Procedure used	Received Date	2015/9/28	Measurement Date	2015/9/28	
Operator	Phillie Bang	Temperature(°C)	20 °C ± 2 °C	Relative Humidity(%)	50 % ± 10 %
Add-Customer	No. 6, No. 2, La Sh. Road 3d., Kwei San., Taichung (710 04, Taiwan R.O.C.)	Location	Laboratory		

Equipment	Manufacturer	Model	Calibration Date
Mass Comparator	METTLER	1P2040	2015/9/27
Coordinate Measuring Machine	DEKKA	ACCURA EI	2014/9/27
Step Gauge	METUTOYO	S15-743	2014/10/29

Serial Number	Traceability	Report No.	Due Date
112740100	SGS (TMF 1190)	ETIC261413	2016/9/28
137609	METUTOYO(TAF 6394)	L-18-103-04-506	2016/9/28
1310018	SHI(TAF 8455)	S1910018	2015/10/28

★ Reproduced report in partial is not effective without approval by SGS.
★ The results of the inspection are only effective for the samples inspected.
★ The sketch or photograph is refer to following pages.
★ Please refer to following pages to see the inspection result.

Signature: *Ball*

Certificate
CONCRETE CYLINDER MOLDS conform to ASTM C39 and ASTM C873 standards

Report No: Q-106-001 Page 1/3

Applicant: CHANGCHU CONCRETE MOLD INDUSTRIAL CO.

Customer address: No.6, No.2, La Sh. Road 3d., Kwei San., Taichung City 414, Taiwan R.O.C.

Equipment: Concrete Cylinder Molds

Manufacturer: CHANGCHU CONCRETE MOLD INDUSTRIAL CO.

Model: CCM-15 150mm * 300mm

Serial No.: OSJLV-1530-001 & OSJLV-1530-002

Procedure used: ASTM C39 and ASTM C873

Measurement Date: 2016/10/06

Operator: WEI LIAN LIN

Temperature(°C): 20 °C ± 2 °C

Location: Laboratory

Following Standards: ASTM C39 & ASTM C873

1. Purpose:
Verify that the molds conform to the standards.

2. Items verified:
[ASTM C39]
- Specimens shall not be tested if any individual diameter of a cylinder differs from any other diameter of the same cylinder by more than 2 %
- Prior to testing, neither end of test specimens shall depart from perpendicularity to the axis by more than 0.5° (approximately equivalent to 1 mm in 100 mm [0.12 in. in 12 in.])
- The ends of compression test specimens that are not plane within 0.054 mm [0.002 in.]

TAIPEI INSPECTION AND TECHNOLOGY CO., LTD.
No. 7, Hsuehsheng Rd., West Dist., Taichung City 414, Taiwan (R.O.C.)
Phone: (+886)423385905 Fax: (+886)423385906

TESTED AND VERIFIED

SGS Measurement Report

Report No: ETIC269315

Applicant: CHANGCHU CONCRETE MOLD INDUSTRIAL CO.

Equipment: Concrete Test Mold

Manufacturer: Model 4" * 8" Serial No D1" * 8"

Procedure used: Received Date 2015/9/28 Measurement Date 2015/9/28

Operator: Phillie Bang Temperature(°C) 20 °C ± 2 °C Relative Humidity(%) 50 % ± 10 %

Add-Customer: No. 6, No. 2, La Sh. Road 3d., Kwei San., Taichung (710 04, Taiwan R.O.C.) Location Laboratory

SGS Measurement Report

Report No: ETIC269315

Applicant: CHANGCHU CONCRETE MOLD INDUSTRIAL CO.

Equipment: Concrete Test Mold

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SGS Measurement Report

Report No: ETIC269315

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Operator: Phillie Bang Temperature(°C) 20 °C ± 2 °C Relative Humidity(%) 50 % ± 10 %

Add-Customer: No. 6, No. 2, La Sh. Road 3d., Kwei San., Taichung (710 04, Taiwan R.O.C.) Location Laboratory

委託台灣科技大學所做的抗壓試結果顯示，使用本公司的試體模具所製作的試體，其抗壓測試結果較其他模具高4.47%、7.38%與10.21%。



國立台灣科技大學營建工程系先進工程材料試驗室
Advanced Engineering Materials Laboratory, Department of Civil and Construction Engineering
National Taiwan University of Science and Technology

Test Report of Compressive Strength of Cylindrical Concrete Specimens

Report No.: CS16100501 Test Date: 16-00, October 12, 2016

Project Name: CONCRETE MOLD INDUSTRIAL CO. Date of Specimen Preparation: October 05, 2016

Client: CONCRETE MOLD INDUSTRIAL CO. Test Method: ASTM C39-16

● by mail Mailing address: Numbers of Specimens: 6 pcs

 No. 8, Aly. 2, Ln. 35, Rongli St., Wuri Dist., Client Photo No.: -

 Tainan City 714, Taiwan (R.O.C.) Contractor Photo No.: -

Contract No.: - Receipt No.: Reports in 3 copies

 研發字第4648 號

Group	Concrete Specimen	Age (days)	Dimension (mm) (H x D)	Core-Section Area (mm ²)	Correction Factor	Minimum Loading (kN)	Compressive Strength (MPa)	Fracture Type	Mold No. and Type
A	X1	7	150.25x289	17730	1.0	454.93	25.7	A	X1 (cast iron)
	X4	7	149.00x303	17437	1.0	428.66	24.6	A	X4 (thick expert)
B	X2	7	150.00x300	17672	1.0	462.84	26.2	A	X2 (cast iron)
	X5	7	150.00x307	17672	1.0	430.35	24.4	A	X5 (thick expert)
C	X3	7	150.25x301	17730	1.0	459.62	25.9	A	X3 (cast iron)
	X6	7	149.00x304	17672	1.0	415.87	23.5	A	X6 (thick expert)

Notes:

- This report is in conjunction with Test Reports MD16100501, MD16100502, CD16100501, CD16100502, and CD16100503.
- Groups A, B, C were prepared with same concrete mix design and specimens in each group were prepared by the same batch of concrete mixture.
- The mix design of concrete is shown as follows: unit: kg/m³

Water	Fine Aggregates	Coarse Aggregates	Cement
205	609	1180	323

(4) The specimens were self-cured in molds for 7 days prior to the tests.

(5) Fracture types:

 A B C D E F

(6) Comparisons in compressive strength:
Group A: X1 is higher than X4 by 4.47%.
Group B: X2 is higher than X5 by 7.38%.
Group C: X3 is higher than X6 by 10.21%.

Test performed by 范家輝

(6) Comparisons in compressive strengths:
Group A: X1 is higher than X4 by 4.47%.
Group B: X2 is higher than X5 by 7.38%.
Group C: X3 is higher than X6 by 10.21%.



混凝土抗壓強度需求 : 4,000 PSI
(最終抗壓測試結果)



使用我們模具所需準備的
混凝土實際強度 : 4,000 PSI



使用他牌模具所需準備的
混凝土實際強度 : 4,300 PSI

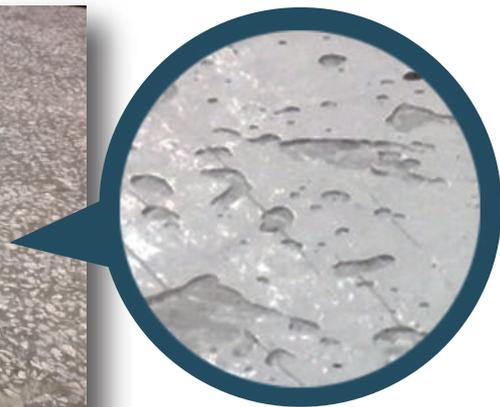
(需增加7.5%混凝土原料成本才能壓出4,300PSI)

每立方米混凝土可節省約新台幣100元的原料成本
台灣每一混凝土廠平均年產量為150,000立方米混凝土，約可省1,500萬元原料成本

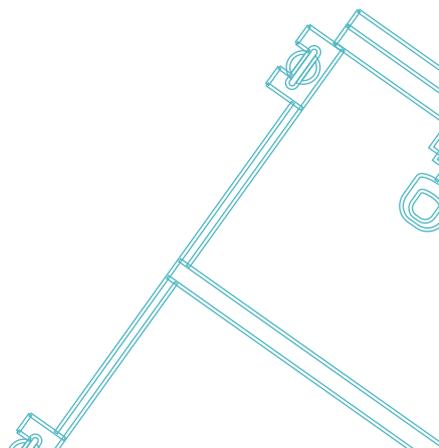
試體成型比較



使用我們鑄鐵模具所產生的試體



使用他牌鋼模、鑄鐵模、紙模、塑膠模所產生的試體



技術規格

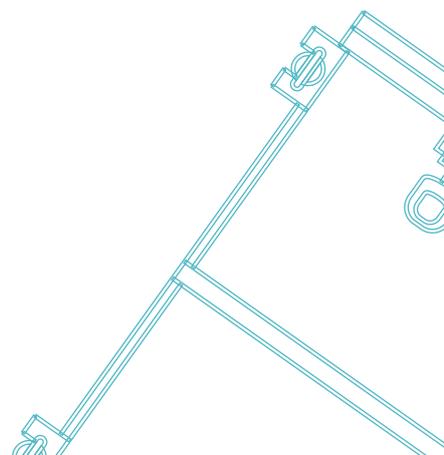
高精度

高準度

符合世界各地規範所設定之規格：(ASTM, AASHTO, EN, JIS)

1. The tolerance in both the diameter and height should be within 1.5%.
2. The tolerance on the flatness of the load-bearing surfaces should be within 0.05mm.
3. The planes of the bottom shall be perpendicular to the axis of the mold within 0.5°.
4. No diameter of a mold shall differ from any other same mold by more than 2%.

	我們的鑄鐵模具	鋼鐵模具	塑膠或紙模具
直徑誤差值	<0.25%	<1.5%	≅ 1.5%
底盤平整度誤差值	<<0.03mm	<0.05mm	<0.05mm
垂直角度	<0.5°	≅ 0.5°	≅ 0.5°
抗壓測試結果	1.1x	1.05x	1x



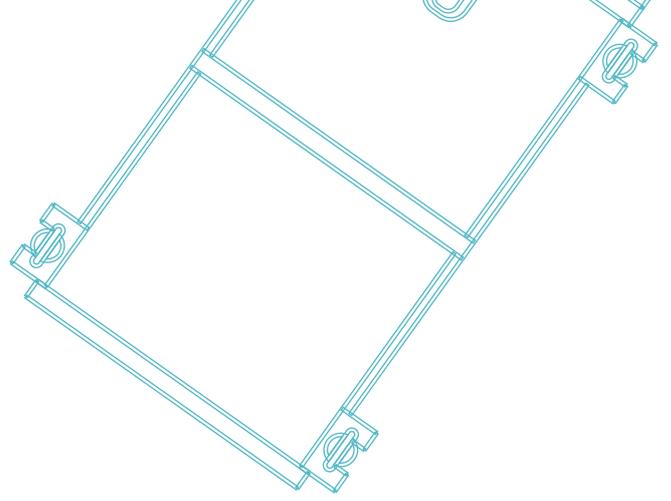
製造技術

多次內壁與底盤的精準研磨技術，有效提高精準度。

我們的鑄鐵試體模具		其他廠牌的鑄鐵試體模具	
內壁	底盤	內壁	底盤
精準切削處理	切削處理	切削處理	切削處理
一次研磨處理	水平研磨處理		
二次研磨處理			

多次品質檢驗管理

一次品檢	外觀缺陷檢查
二次品檢	內壁缺陷檢查
三次品檢	底盤平整度檢查
四次品檢	國家標準規範規定之誤差檢驗
最終品檢	刻上產品序號



使用原料

巴西高純度鐵礦

碳	矽	錳	磷	硫
4.03pct	2.37pct	0.64pct	0.13pct	0.01pct

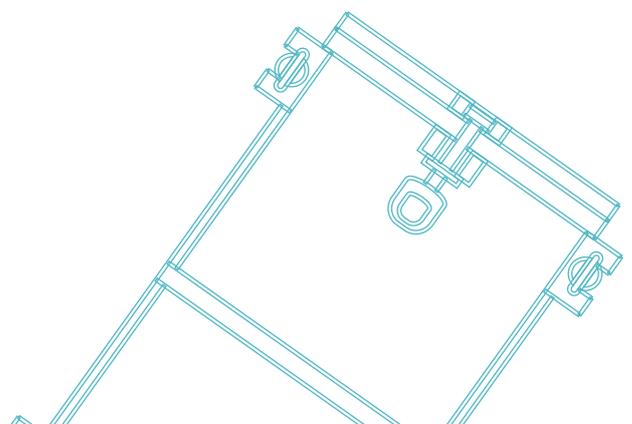
比較表

	硬度	重量	密度	延展性	價格
鑄鐵	HB 235(FC 20)	7,250 kg/m ³	380~480 Mpa	10 - 20%	ECONOMIC
鋼	HB 200~300	7,850 kg/m ³	320~531 Mpa	12 - 35%	EXPENSIVE

★ 在長期的重複使用下，鑄鐵模具較鋼模具可維持內壁直徑與真圓度的一致性。

模具比較

	我們的鑄鐵模具	鋼鐵模具	塑膠/厚紙模具
抗壓測試結果	1.1X	1.05X	1.0X (不準確)
重量	6~11kg	10~15kg	0.3~9kg
價格	經濟	昂貴	便宜
耐用度	5 ~ 15 年	5 ~ 15 年	一次性使用
性價比	高	中	低





益翰儀器專業總代理及研發製造：儀器、度量衡計器 & 試驗設備
經營理念：科技為本、誠意服務、公益社會～品質就是未來!

企業信念：益瀚科技、大家滿意～是我給您的承諾！

-  益翰國際企業股份有限公司
-  <http://www.yenstron.com.tw/>
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-  04-23598507