

## 測試報告

## Test Report

號碼(No.) : CE/2018/13564

日期(Date) : 2018/01/23

頁數(Page): 1 of 4

俊益鋼鐵股份有限公司

JUNG YI STEEL CO., LTD.

台中市大里區工業九路九號

NO. 9, GONGYE 9TH RD., DALI DIST., TAICHUNG CITY 41280, TAIWAN (R. O. C.)



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 俊益鋼鐵股份有限公司 (JUNG YI STEEL CO., LTD.)  
 樣品名稱(Sample Description) : 鋼棒-快削鋼12L14  
 樣品材質(Sample Material) : 12L14  
 供應廠商(Supplier Company) : 俊益鋼鐵股份有限公司 (JUNG YI STEEL CO., LTD.)  
 電話(Tel) : 886-4-24914678  
 傳真(Fax) : 886-4-24914680  
 E-MAIL : jungyi.steel@gmail.com  
 原材料供應商(Vendor) : 新日鐵住金株式會社 (NIPPON STEEL & SUMITOMO METAL CORPORATION)  
 原產國(Country of Origin) : 日本 (TAIWAN)  
 樣品批號(Item/Lot No.) : 2018-1Q-0115-1  
 收件日期(Sample Receiving Date) : 2018/01/16  
 測試期間(Testing Period) : 2018/01/16 TO 2018/01/23

測試需求(Test Requested) : 依據客戶指定, 參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻。(As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted sample(s).)

測試方法(Test Method) : 請參閱下一頁 (Please refer to following pages).

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).

  
 Troy Chang / Manager - Tech  
 Signed for and on behalf of  
 SGS TAIWAN LTD.  
 Chemical Laboratory - Taipei

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頁數(Page): 2 of 4

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### 測試結果(Test Results)

測試部位(PART NAME)No. 1 : 鐵灰色金屬 (IRON-GRAY METAL)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿 原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg		2	2780
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013), 以感應耦合電漿 原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)(#2)	µg/cm <sup>2</sup>	參考IEC 62321-7-1 (2015), 以UV-VIS檢 測. / With reference to IEC 62321-7-1 (2015) and performed by UV-VIS.	0.10	n. d.

### 備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. (#2) =
  - a. 當六價鉻結果大於0.13 µg/cm<sup>2</sup>, 表示樣品表層含有六價鉻. / The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI).
  - b. 當六價鉻結果為n.d. (濃度小於0.10 µg/cm<sup>2</sup>), 表示表層不含六價鉻. / The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10 µg/cm<sup>2</sup>). The coating is considered a non-Cr(VI) based coating.
  - c. 當六價鉻結果介於 0.10 及 0.13 µg/cm<sup>2</sup> 時, 無法確定塗層是否含有六價鉻. / The result between 0.10 µg/cm<sup>2</sup> and 0.13 µg/cm<sup>2</sup> is considered to be inconclusive - unavoidable coating variations may influence the determination.

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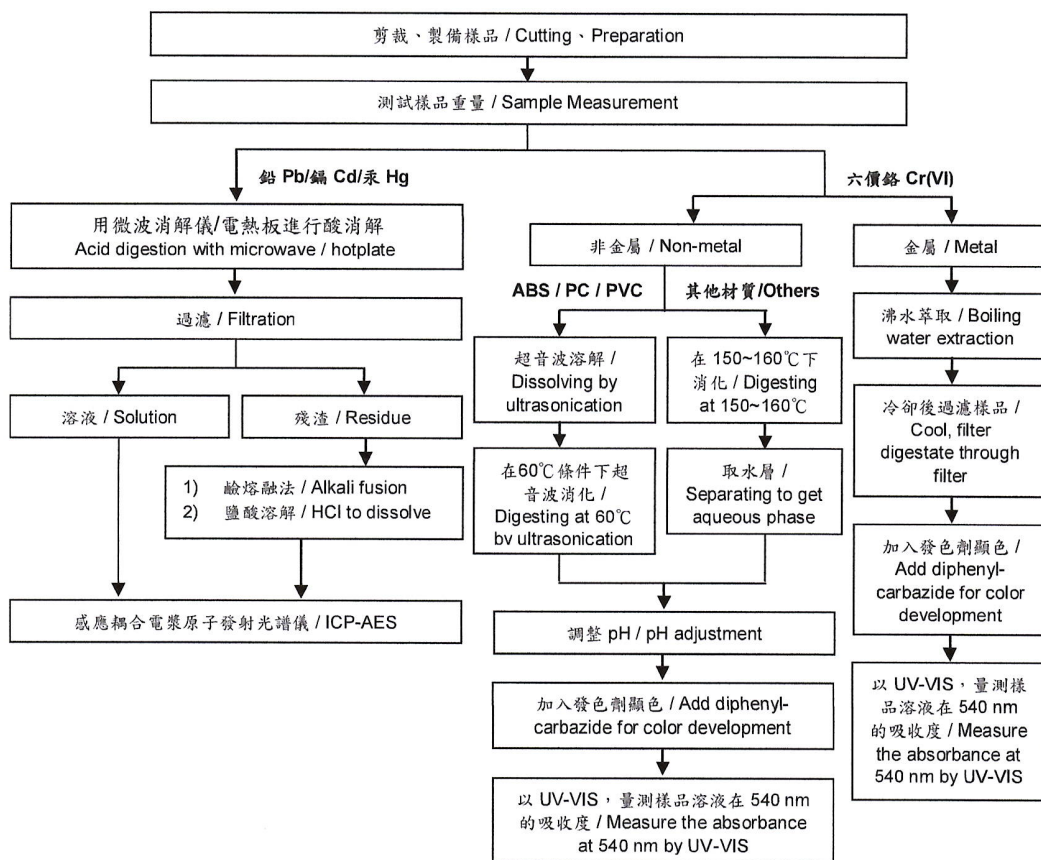


### 重金屬流程圖 / Analytical flow chart of Heavy Metal

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)

- 測試人員：王志瑋 / Technician : JR Wang
- 測試負責人：張啟興 / Supervisor: Troy Chang



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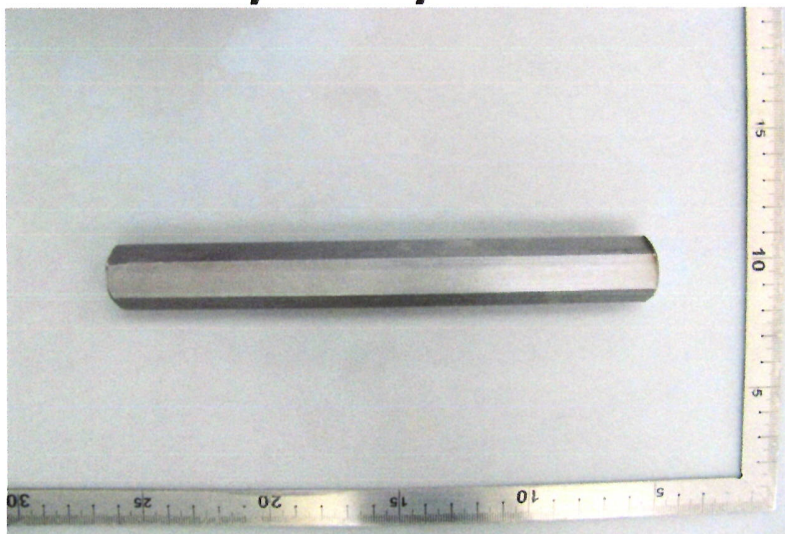
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\* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 \*

(The tested sample / part is marked by an arrow if it's shown on the photo.)

### CE/2018/13564



\*\* 報告結尾 (End of Report) \*\*

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