國立高雄科技大學·模具工程系

精密金屬模具研究室

Precision Metalforming Lab

壹、前言

模具技術是產品之母，惟有改善模具設計的合理性，才可有效提升產品的精密度與模具壽命。本研究室致力於開發創新模具結構與金屬成形加工法，並配合電腦輔助模擬分析，以達成模具最佳化設計。

貳、研究方向

沖壓連續模
Progressive die

鍛造、扣件、抽製模
Forging, fastener forming, drawing

汽車鈑金模
Auto panel stamping

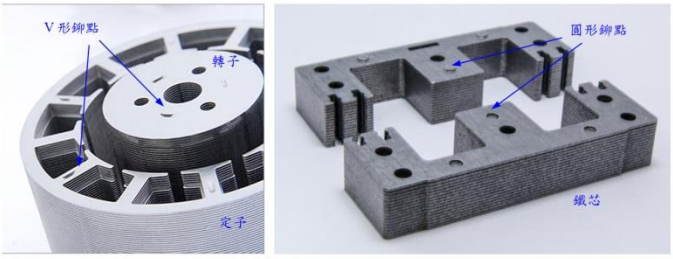
微成形
Micro forming

參、指導老師

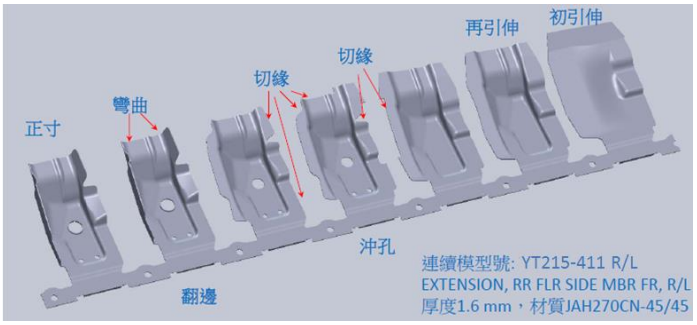
姓名：**林恆勝**
(Heng-Sheng Lin, Ph.D.)

現職：模具工程系 教授
學歷：美國西北大學機械工程博士
國立臺灣大學機械工程學士
經歷：金屬中心金屬成形組工程師
專長：模具設計與分析、金屬成形、磨潤學、IC 封裝測試

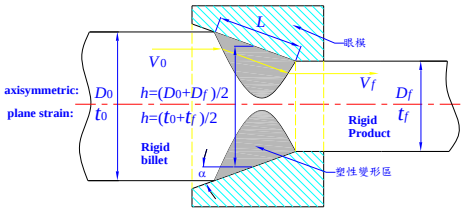
年度	補助類別	科技部計畫名稱	執行期間	核定經費
110	一般型研究計畫	以精密沖切法改善導線架封裝之烘烤翹曲與料條布列設計優化(MOST 110-2221-E-992-055)	110.08.01 111.07.31	940,000
109	一般型研究計畫	扁形引伸件之連續沖模設計對策與驗證(MOST 109-2221-E-992-029)	109.08.01 110.07.31	978,000
108	產學合作研究計畫-應用型	沖壓導線架翹曲之成因與改善對策(MOST 108-2622-E-992-024-CC3) (順德公司配合款303,500；先期技轉金73,000)	108.11.01 109.10.31	545,000
108	一般型研究計畫	扣件輥牙成形模具調校與失效之三維負荷監控分析(MOST 108-2221-E-992-060)	108.08.01 109.07.31	825,000
107	產學合作研究計畫-開發型	應用伺服沖床於沖壓成形技術之開發(1/2) (MOST 107-2622-E-110-006-CC2) 子計畫四：伺服沖床之彎曲成形技術開發	107.06.01 108.05.31	781,300
106	產學合作研究計畫-應用型	扣件複合擠伸之貫穿與表面裂紋缺陷之工法改善(MOST 106-2622-E-992-307-CC3) (華在螺帽公司配合款232,220；先期技轉金65,500)	106.06.01 107.05.31	480,000
105	一般型研究計畫	電磁鋼片鐵芯疊層鉚接之沖壓工法分析(二年期) (MOST 105-2221-E-151-012-MY2)	105.08.01 107.07.31	1,516,000



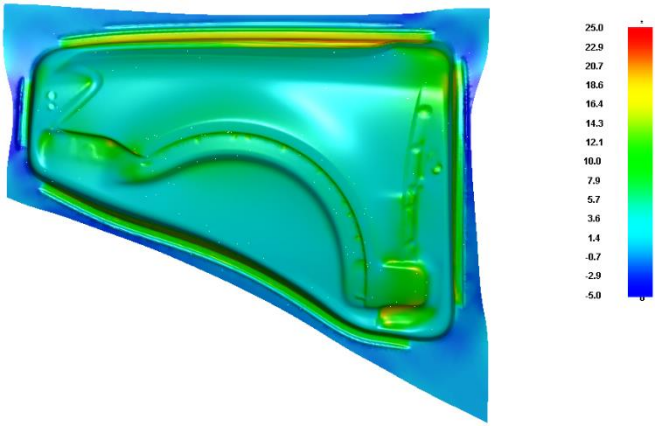
由電磁鋼片疊層鉚接而成的轉子、定子及鐵芯產品



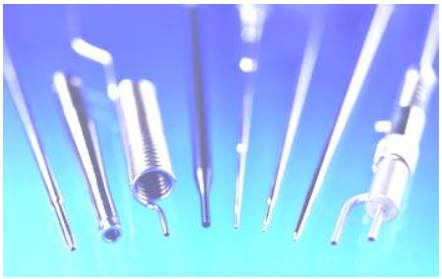
VISI 連續模設計 Design for progressive dies



DEFORM 成形分析 Analysis for bulk metal forming



DynaForm 鈑金分析 Analysis for sheet metal forming



精微醫療器材微旋鍛成形
Micro swaging for medical end-effectors

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Last updated: Sep. 2021

學歷

美國西北大學（Northwestern University）機械工程博士 1992-1998
國立臺灣大學機械工程學士 1986-1990

專長

模具設計與分析、金屬成形、磨潤學、IC 封裝測試

業界經歷

金屬工業研究發展中心 金屬成形組 工程師 1998-2001

榮譽

科技部 109 年度、107 年度(建工校區 39 位)、106 年度(42 位)、105 年度(40 位)、104 年度(60 位)、103 年度(60 位)、102 年度(63 位)、101 年度(64 位)「補助大專校院獎勵特殊優秀人才措施」獲獎

科技部/國科會計畫

年度	補助類別	科技部/國科會 計畫名稱	執行期間	核定經費
110	一般型研究計畫	以精密沖切法改善導線架封裝之烘烤翹曲與料條布列設計優化(MOST 110-2221-E-992-055)	110.08.01 111.07.31	940,000
109	一般型研究計畫	扁形引伸件之連續沖模設計對策與驗證(MOST 109-2221-E-992-029)	109.08.01 110.07.31	978,000
108	產學合作研究計畫-應用型	沖壓導線架翹曲之成因與改善對策(MOST 108-2622-E-992-024-CC3) (順德公司配合款 303,500；先期技轉金 73,000)	108.11.01 109.10.31	545,000
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107	產學合作研究計畫-開發型	應用伺服沖床於沖壓成形技術之開發(1/2) (MOST 107-2622-E-110-006-CC2) 子計畫四：伺服沖床之彎曲成形技術開發	107.06.01 108.05.31	781,300

106	產學合作研究計畫-應用型	扣件複合擠伸之貫穿與表面裂紋缺陷之工法改善(MOST 106-2622-E-992-307-CC3) (葦在螺帽公司配合款 232,220；先期技轉金 65,500)	106.06.01 107.05.31	480,000
105	一般型研究計畫	電磁鋼片鐵芯疊層鉚接之沖壓工法分析(二年期) (MOST 105-2221-E-151-012-MY2)	105.08.01 107.07.31	1,516,000
104	產學合作研究計畫	產業升級創新平台輔導計畫(協助傳統產業技術開發計畫)－新型可調節公差汽車扣件開發計畫(MOST 104-2745-8-151-001)(世德公司配合款 460,000)	104.08.01 105.07.31	460,000
104	一般型研究計畫	電磁鋼板之平面異向性對沖剪斷面品質與殘留應力之影響分析 (MOST 104-2221-E-151-048)	104.08.01 105.07.31	870,000
103	一般型研究計畫	以偏心引伸法驗證橢圓再引伸之成形特徵 (MOST103-2221-E-151-010)	103.08.01 104.07.31	825,000
102	一般型研究計畫	以連續模生產微管件之製造系統研發與應用研究(II) (NSC102-2221-E-151-011)	102.08.01 103.07.31	913,000
101	一般型研究計畫	以連續模生產微管件之製造系統研發與應用研究 (NSC101-2221-E-151-025)	101.08.01 102.07.31	880,000
100	產學合作研究計畫-應用型	銀靶熱間鍛造晶粒細化之製程改善 (NSC100-2622-E-151-002-CC3)(鑫科公司配合款 24 萬元；先期技轉金 7 萬元)	100.06.01 101.05.31	447,000
099	一般型研究計畫	金屬微成形製程及其應用之研究子計畫三：微旋鍛成形分析與製程應用之研究(二年期) (NSC99-2221-E-151-070-MY2)	99.08.01 101.07.31	1,660,000
098	一般型研究計畫	金屬微成形製程及其應用之研究子計畫二：微旋鍛成形分析與製程應用之研究(NSC98-2221-E-150-001)	98.08.01 99.07.31	738,000
098	產學合作研究計畫-應用型	內溝紋鰭管之旋壓成形製程改善 (NSC98-2622-E-150-012-CC3)(久松公司配合款 14 萬元;先期技轉金 7 萬元)	98.07.01 99.06.30	676,000
097	產學合作研究計畫-應用型	馬達聯軸器之冷間背壓鍛造模具開發 (NSC97-2622-E-150-009-CC3)(萬凌公司配合款 15 萬元;先期技轉金 5 萬元)	97.08.01 98.07.31	396,000
097	一般型研究計畫	以旋鍛縮徑成形法改善薄管件縮口沖壓之皺褶與破裂缺陷 (NSC97-2221-E-150-022)	97.08.01 98.07.31	621,000
096	提升產業技術及人才培育研究計畫	管件縮口旋鍛成形模具分析與開發 (NSC96-2622-E-150-039-CC3)(國際通公司配合款 15 萬元；先期技轉金 5 萬元)	96.11.01 97.10.31	418,000
095	一般型研究計畫	氮氣離子植佈技術之研發與實務應用子計畫三：異形條鋼之精密抽引成形與離子植入技術研究(NSC95-2221-E-150-095)	95.08.01 96.07.31	400,000
094	提升產業技術及人才培育研究計畫	六角螺栓近淨形頂鍛模具開發 (NSC94-2622-E-218-014-CC3) (鑫泰公司配合款 15 萬元;先期技轉金 5 萬元)	94.11.01 95.10.31	405,000
093	一般型研究計畫	冷間精抽之不均勻變形對轉移層和潤滑之影響 (NSC93-2212-E-218-006)	93.08.01 94.07.31	364,200
092	提升產業技術及人才培育研究計畫	複動化壓縮引伸法於沖鍛複合成形之模具開發 (NSC92-2622-E-218-012-CC3) (裕來公司配合款 187,500;先期技轉金 5 萬元)	92.12.01 93.11.30	486,000
091	提升產業技術及	板材件孔凸緣成形之軸壁增厚及直角化技術開發	91.05.01	199,800

	人才培育研究計畫	(NSC91-2622-E-218-003-CC3) (禾新公司配合款 10 萬元)	92.04.30	

產學合作計畫

年度	產學計畫名稱	執行期間	計畫金額
110	伺服沖鍛有限元素分析與模具開發研究(110AL0031)	110.01.01 110.12.31	500,000
109	國防部軍備局生產製造中心第 205 廠委託模具系執行 30 公厘空包彈模具設計射出暨射出製程開發研究乙式(109C00191)	109/09/01 110/02/28	1,182,000
107	板件深槽成形與壓印背側龜裂之模具工法分析與改善(107A6076)	107.04.01 108.03.31	500,000
107	高性能麻田散鐵/沃斯田鐵系不銹鋼開發(107A6073)	107.01.01 107.12.31	500,000
106	螺栓成形模具與胚料變異之製程感測分析(106A6046-3)	106.04.01 106.09.30	500,000
106	Nitinol 形狀記憶合金板片材開發與製程參數研究(106A6065)	106.01.01 106.12.31	800,000
105	鎳鈦合金材料分析與測試(105A6135)	105.11.01 106.03.31	300,000
105	奇泓公司專業技術諮詢顧問產學計畫(105A6121)	105.10.01 106.09.30	250,000
105	六角凸緣螺帽多道次鍛造技術(105A6022-5)	105.01.01 105.12.31	392,000
101	林恆勝老師擔任漢育公司專業技術諮詢顧問產學計畫(101A6164)	101.08.01 102.07.30	240,000
101	車用多變異型鈑件之連續模具工法設計與分析(101A6058)	101.02.01 102.01.31	200,000
101	不鏽鋼料理杯沖壓成形技術輔導(101A6178)	100.12.01 101.11.30	65,000
100	高強度鋼葉子板沖壓成形分析技術開發(100A6121)	100.07.01 102.06.30	1,500,000
100	傳動及衝壓系統技術輔導(100A6173)	100.03.16 100.11.30	60,000
096	縮口成形支撐機構改善與旋鍛成形可行性評估(虎尾科大 96AD14)	96.12.01 97.11.30	625,000
096	建立管件旋鍛與脹形加工技術 (南部傳統產業科技關懷計畫－學界認養計畫)	96.09.01 97.05.31	108,000
095	金屬角隅整緣成形模具設計 (中部精密模具創新研發社群－精密模具創意構想計畫)	95.08.10 96.03.31	210,000
093	金屬板材前向與後向複合擠伸成形模具開發 (中部精密模具創新研發社群－精密模具創意構想計畫)	93.07.01 93.12.31	200,000

092	DCPD 成型技術與設備開發之機器設備開發技術可行性評估－合模系統	92.09.01 93.02.29	100,000

著作

期刊論文：

Lin, Heng-Sheng; Lee, Chien-Yu; Li, Wen-Shun. 2021. "Piercing and Surface-Crack Defects in Cold Combined Forward-Backward Extrusion" Appl. Sci. 11, no. 9: 3900. Published: 26 April 2021, https://doi.org/10.3390/app11093900 (MOST 106-2622-E-151-005-CC3) * Applied Sciences 2019 Impact Factor (WoS) - 2.474 (Q2 in "Physics Applied", "Chemistry, Multidisciplinary" and "Engineering, Multidisciplinary")

Heng-Sheng Lin, Jyun-Yi Ke, Lian-Yu Lin, Yi-Wei Hsu, and Ting-En Huang, Compensation of contour distortion in stretch-flanging metal sheets, Vol. 830, pp 29-35, Key Engineering Materials, Online: 2020-02-06. (MOST 107-2622-E-110-006-CC2)

Heng-Sheng Lin, Chien-Yu Lee, Chia-Jung Lin, and Ho-Chung Fu, Evaluation of the sinking processes for high-pressure-gas cylinders, MATEC Web of Conferences 185, 00007 (2018) ICPMMT 2018, DOI: https://doi.org/10.1051/matecconf/201818500007 Published online 31 July 2018. (NSC96-2622-E-150-039-CC3)

Ying-Chieh Lin, **Heng-Sheng Lin**, Zheng-Han Hong, Zong-Hsin Liu, Cheng-Tang Pan, Shing-Yi Wu, The Development of Polycaprolactone (PCL) Microcarriers with an Emulsification Module by Ultrasonic Spraying, First Online 12 December 2017, Microsyst Technol (2017), https://doi.org/10.1007/s00542-017-3650-z (**SCI 0.974**)

Heng-Sheng Lin, Ho-Chung Fu, Li-Hsiang Liu, Yun-Kui Huang, Te-Hua Fang, Stacking with cylindrical spots in lamination of stamped electrical steel sheets, Procedia Engineering, Volume 207, 2017, Pages 992–997, https://doi.org/10.1016/j.proeng.2017.10.864 (MOST 105-2221-E-151-012-MY2)

Heng-Sheng Lin, Chien-Yu Lee, Wen-Shun Li, and Cheng-Tsung Wu, Piercing and surface-crack defects in combination extrusion of fasteners, MATEC Web of Conferences 123, 00018 (2017), ICPMMT 2017, Published online: 21 September 2017, DOI: 10.1051/matecconf/201712300018 (MOST 106-2622-E-151-005-CC3)

Ying-Chieh Lin, **Heng-Sheng Lin**, Zheng-Han Hong, Zong-Hsin Liu, Manufacture of SiO_2 Microparticles Using a Mechanically Machined and Assembled Microfluidic Device, Microsyst Technol (2017) 23:525-530, DOI 10.1007/s00542-016-3202-y. (**SCI 0.974**) Volume 23, Number 2, pp. 525–530, Feb. 2017

Ying-Chieh Lin, Chung-Ching Lee, **Heng-Sheng Lin**, Zheng-Han Hong, Fu-Chuan Hsu, Tsung-Pin Hung, Yu-Ting Lyu, Fabrication of microfluidic structures in quartz via micro machining technologies, Microsyst Technol, Volume 21, Number 12, Dec. 2015, pp 1–9, DOI 10.1007/s00542-015-2717-y. (**SCI 0.974**) Volume 21, Number 12, Dec. 2015

Heng-Sheng Lin, Yuan-Chuan Hsu, Chia-Chou Ke, Effect of bulge formation on strain inhomogeneity in axi-symmetric metal drawing of light reductions, International Journal of Advanced Manufacturing Technology Oct 2015, Vol. 81 Issue 1–4, p53-65, DOI 10.1007/s00170-015-7196-x. (**SCI 1.568**)

Heng-Sheng Lin, Yu-Da Liu, Hsin-Te Wang, Kun-Min Huang, Zhe-An Lin, A 3-D analysis of the sheared cross-section of electrical steel plates, MATEC Web of Conferences 21, 04005 (2015), DOI: 10.1051/matecconf/20152104005 (MOST 104-2221-E-151-048, EI)

Heng-Sheng Lin, Ying-Chieh Lin, Ming-Ru Lee, Effect of Workpiece Thickness and Surface Texturing on the Micro Cupping Tests, Key Engineering Materials Vol. 626 (2015) pp 420-425 doi:10.4028/www.scientific.net/KEM.626.420 (NSC101-2221-E-151-025, EI)

Heng-Sheng Lin, Jian-Min He, Elliptical redrawing from circular and elliptical cups, Procedia Engineering 81 (2014) 899–904, DOI: 10.1016/j.proeng.2014.10.115, http://authors.elsevier.com/sd/article/S1877705814013940 (MOST103-2221-E-151-010, EI)

Heng-Sheng Lin, Chung-Ching Lee, Ying-Chieh Lin, Chia-Hsien Li, Micro Rotary Plunge-Swaging of Stainless Pipes, Key Engineering Materials Vols. 622–623 (2014) pp 725-730 doi:10.4028/www.scientific.net/KEM.622-623.725 (NSC99-2221-E-151-070-MY2, EI)

Sy-Wei Lo, Tzu-Chun Yang, **Heng-Sheng Lin**, The lubricity of oil-in-water emulsion in cold strip rolling process under mixed lubrication, Tribology International 66 (2013), pp. 125–133. (**SCI 2.124)**
http://www.sciencedirect.com/science/article/pii/S0301679X13001941

C. Y. Lee, **H. S. Lin** and H. T. Yau, Using graphic hardware to accelerate pocketing tool-path generation, Applied Mechanics and Materials Vol. 311 (2013) pp 135–140.
Online available since 2013/Feb/27, http://www.scientific.net/AMM.311.135

Heng-Sheng Lin, Chien-Yu Lee, Shi-Jie Chang, The Influence of Process Parameters on Ball Spinning for Grooved-Fin Pipes, Steel Research International, Special Edition: 14th International Conference, (2012), pp. 559–562. (NSC98-2622-E-150-012-CC3, **SCI 1.023**)

Heng-Sheng Lin, Yuan-Chuan Hsu, Chia-Chou Ke, Evaluation of Strain Inhomogeneity through Strain Components in Axi-symmetric Drawing, Advanced Science Letters, 8, 376-380 (15 April, 2012). ISSN: 1936-6612 (Print): EISSN: 1936-7317 (Online)
http://www.ingentaconnect.com/content/asp/asl/2012/00000008/00000001/art00067?token=003610c2405847447b49792f7a31636f3b3a634c7d3375686f23cd

Heng-Sheng Lin, Sheng-Chi Tsai, Yuan-Chuan Hsu, Ming-Che Hsiao, Chia-Chou Ke, Bean-Yin Lee, A Design of Forming Dies for a Manifold of Airbag Inflator, Advanced Materials Research, Vols. 328-330 (2011) pp 849-852. (**EI**)

Heng-Sheng Lin, Chia-Jung Lin, Yuan-Chuan Hsu, Jing-Herng Lee, Bean-Yin Lee, Yu-Chiang Chen, Feasibility of Sinking with Rotary Swaging for High Pressure Gas Cylinders, Steel Research International, Vol. 81, (2010) No. 9, pp. 576-579. (NSC97-2221-E-150-022, **SCI 1.023**)

Yang, T-S, Hsu,Y-C, **Lin H-S**, Chang, S-Y, "A Finite Element Analysis for the Initial Blank's Shape Design of Sheet Metal in Deep Drawing Process," Key Engineering Materials, Vols. 364-366, pp. 980-985, 2008. (**EI)**

Yuan-Chuan Hsu, **Heng-Sheng Lin**, An analysis of the influence of decompression cavity on the cold hobbing processes, Journal of Achievements in Materials and Manufacturing Engineering, Vol. 28-1, pp. 55-58, 2008. (**EI**)

Lin*, H-S, Hsu, Y-C, Keh, C-C, "Inhomogeneous deformation and residual stress in skin-pass axisymmetric drawing," Journal of Materials Processing Technology 201 (2008) 128-132. (NSC93-2212-E-218-006, **SCI 2.041**)

Lin*, H-S, Tung, C-W, "An investigation of cold extruding hollow flanged parts from sheet metals," International Journal of Machine Tools & Manufacture 47 (2007) 2133-2139. (NSC92-2622-E-218-012-CC3, **SCI 2.743**)

Lin*, H-S, Lee, C-Y, Wu, C-H, "Hole flanging with cold extrusion on sheet metals by FE simulation," International Journal of Machine Tools & Manufacture 47 (2007) 168-174.

(NSC92-2622-E-218-012-CC3, **SCI 2.743**)

Lin*, H-S, Wu, C-H, "Hole Flanging with Multi-action Extrusion," Journal of the Chinese Society of Mechanical Engineers, Vol. 26, No. 5, (2005) pp. 565-570. (NSC92-2622-E-218-012-CC3, **EI**)

Lee, H-T, **Lin*, H-S**, Lee, C-S, Chen, P-W "Reliability of Sn-Ag-Sb lead-free solder joints," Materials Science and Engineering A, A 407 (2005) 36-44. (NSC90-2216-E-006-056, **SCI 2.409**)

Kuo, T-Y, **Lin, H-S** and Lee, H-T, "The relationship between of fracture behaviors and thermomechanical effects of alloy AA2024 of T3 and T81 temper designations using the center crack tensile test," Materials Science and Engineering A, A 394 (2005) 28–35. (NSC83-0424-E-006-095, **SCI 2.409**)

Lin, H-S, Marsault, N., and Wilson, W. R. D., 1998, "A Mixed Lubrication Model for Cold Strip Rolling Part 1: Theoretical," STLE Tribology Transactions, Volume 41, pp. 317-326. **(SCI 1.081)**

專利：

林恆勝, 張婉琪, 溫志群, "扣件成形的感測方法," 發明專利申請案號:108144117 號 2019 年 12 月 3 日. (MOST 108-2221-E-992-060)

林恆勝, 簡有彥, 張俊傑, 簡吉鴻, "平模鍛造成形均勻度之改良方法," 發明專利案號: I473674 號, 專利權期間: 2015 年 2 月 21 日－2032 年 5 月 31 日. (NSC100-2622-E-151-002-CC3)

林恆勝, 周金龍, 許源泉, 楊東昇, 董志偉, "以金屬胚料進行角隅整緣成形方法," 發明專利案號: I306416 號, 專利權期間: 2009 年 2 月 21 日－2026 年 11 月 20 日. (NSC91-2622-E-218-003-CC3)

林恆勝, 李建佑, 吳家宏, "以金屬板材進行前向或後向擠伸成形凸緣," 發明專利證書號數: I268186, 專利權期間: 2006 年 12 月 11 日－2024 年 8 月 22 日. (NSC92-2622-E-218-012-CC3)

專書及專書論文：

林恆勝, 滿梓芸, 2014, "智慧型模具生產技術," 出版單位: 社團法人中華民國模具技術發展學會. (ISBN 978-986-90265-2-9)

Lin, H-S, 1998, "A Mixed Lubrication Model for Cold Strip Rolling," Ph.D. dissertation, Northwestern University, Evanston, Illinois, USA.

國際研討會論文：

Heng-Sheng Lin and Jun-Jie Zhuang, The cause and its improvement of leadframe warpage from the stamping process, 6th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2021), paper #12, Howard Plaza Resort, Kenting, Taiwan, May 21-23, 2021. (MOST 108-2622-E-992-024-CC3)

Heng-Sheng Lin, Chih-Chin Wen and Yi-Hung Chen, Three-dimensional load monitoring of threading-plate adjustment and failure in thread rolling of fasteners, 22nd International Conference on Advances in Material & Processing Technologies (AMPT 2019), ID 58, Oct. 20-24, 2019, Howard Civil Service International House, Taipei, Taiwan. (MOST 108-2221-E-992-060)

Heng-Sheng Lin, Jyun-Yi Ke, Lian-Yu Lin, Yi-Wei Hsu, and Ting-En Huang, Compensation of contour distortion in stretch-flanging metal sheets, 4th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2019), paper # 09, Howard Plaza Resort,

Kenting, Taiwan, May 24-26, 2018. Vol. 830, pp 29-35, Key Engineering Materials, Online: 2020-02-06. (MOST 107-2622-E-110-006-CC2)

Heng-Sheng Lin, Ho-Chung Fu, Hsin-Te Wang, Wun-Huei Wang, Stacking with V-shape spots in lamination of stamped electrical steel sheets, The 11th Asian Workshop on Micro/Nano Forming Technology, November 4-7, 2018, #G1016, National Formosa University, Yunlin, Taiwan. (MOST 105-2221-E-151-012-MY2)

Heng-Sheng Lin, Chien-Yu Lee, Chia-Jung Lin, and Ho-Chung Fu, Evaluation of the sinking processes for high-pressure-gas cylinders, 3rd International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2018), paper # 10, Crowne Plaza Hotel, Auckland, New Zealand, February 4-8, 2018. MATEC Web of Conferences 185, 00007 (2018) ICPMMT 2018, DOI: https://doi.org/10.1051/matecconf/201818500007 Published online 31 July 2018. (NSC96-2622-E-150-039-CC3)

Heng-Sheng Lin, Ho-Chung Fu, Li-Hsiang Liu, Yun-Kui Huang, Te-Hua Fang, Stacking with cylindrical spots in lamination of stamped electrical steel sheets, Procedia Engineering, 12th International Conference on Technology of Plasticity, ICTP 2017, paper # 302, The University of Cambridge, Cambridge, UK, Sep. 17-22, 2017. Procedia Engineering, Volume 207, 2017, Pages 992–997, https://doi.org/10.1016/j.proeng.2017.10.864 (MOST 105-2221-E-151-012-MY2)

Heng-Sheng Lin, Chien-Yu Lee, Wen-Shun Li, and Cheng-Tsung Wu, Piercing and surface-crack defects in combination extrusion of fasteners, 2nd International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2017), paper # 27, Howard Plaza Resort, Kenting, Taiwan, May 19-21, 2017. MATEC Web of Conferences 123, 00018 (2017), ICPMMT 2017, Published online: 21 September 2017, DOI: 10.1051/matecconf/201712300018 (MOST 106-2622-E-151-005-CC3)

Heng-Sheng Lin, Yu-Da Liu, Hsin-Te Wang, Kun-Min Huang, Zhe-An Lin, A 3-D analysis of the sheared cross-section of electrical steel plates, 4th International Conference on New Forming Technology (ICNFT2015), 04005, Crowne Plaza, Glasgow, Scotland, UK, 6th to 9th August, 2015. MATEC Web of Conferences 21, 04005 (2015), DOI: 10.1051/matecconf/20152104005 (MOST 104-2221-E-151-048, EI)

Heng-Sheng Lin, Jian-Min He, Elliptical redrawing from circular and elliptical cups, 11th International Conference on Technology of Plasticity, ICTP 2014, 19-24 October 2014, Nagoya Congress Center, Nagoya, Japan. Procedia Engineering 81 (2014) 899- 904. (MOST103-2221-E-151-010, EI)

Heng-Sheng Lin, Chung-Ching Lee, Ying-Chieh Lin, Chia-Hsien Li, Micro Rotary Plunge-Swaging of Stainless Pipes, Metal Forming 2014, Palermo, Italy, Sep. 21-24, 2014. Key Engineering Materials Vols. 622-623 (2014) pp 725-730. (NSC99-2221-E-151-070-MY2, EI)

Heng-Sheng Lin, Ying-Chieh Lin, Ming-Ru Lee, “Effect of Workpiece Thickness and Surface Texturing on the Micro Cupping Tests,” 12th Asia-Pacific Conference on Engineering Plasticity and Its Applications, Kaohsiung, Taiwan, Sep. 1-5, 2014. Key Engineering Materials Vol. 626 (2015) pp 420-425. (NSC101-2221-E-151-025, EI)

Heng-Sheng Lin, Chih-Tsung Su, Horng-Yih Liou, Ya-Hang Zheng, An investigation of stamping with high-strength-steel sheets for an automotive aftermarket part, Advances in Material and Processing Technologies 2013 Conference, ID 169, Sep. 22-26, 2013, Grand Hotel, Taipei, Taiwan. (to be published in Advanced Materials Research (EI))

Heng-Sheng Lin, Chien-Yu Lee, Shi-Jie Chang, “The Influence of Process Parameters on Ball Spinning for Grooved-Fin Pipes,” Metal Forming 2012, pp. 559-562, AGH University of Science and Technology, Sep. 16-19, 2012, Kraków, Poland. Also published in Steel Research International,

Special Edition: 14th International Conference, (2012), pp. 559-562. (NSC98-2622-E-150-012-CC3, SCI 0.455)

Heng-Sheng Lin, Sheng-Chi Tsai, Yuan-Chuan Hsu, Ming-Che Hsiao, Chia-Chou Ke, Bean-Yin Lee, A Design of Forming Dies for a Manifold of Airbag Inflator, 2011 International Conference on Mechatronics and Materials Processing (ICMMP2011), November 18-20, 2011, Guangzhou, China. Also published in Advanced Materials Research, Vols. 328-330 (2011) pp 849-852. (EI)

Heng-Sheng Lin, Yuan-Chuan Hsu, Chia-Chou Ke, Evaluation of Strain Inhomogeneity through Strain Components in Axi-symmetric Drawing, 1st ICETI-Kenting, Taiwan, November 11-15, 2011. Also published in Advanced Science Letters, 8, 376-380. (15 April, 2012, SCIE)

H.S. Lin, J.J. Chang, Y.C. Hsu, C.C. Ke, G.J. Huang, W.S. Wang, "Upsetting with Conical Dies for Metal Sputtering Targets," 10th International Conference on Technology of Plasticity, ISBN: 978-3-514-00784-0, P. 127-132, Aachen, Germany, Sep. 25-30, 2011. (NSC100-2622-E-151-002-CC3)

Heng-Sheng Lin, Chia-Jung Lin, Yuan-Chuan Hsu, Jing-Herng Lee, Bean-Yin Lee, Yu-Chiang Chen, "Feasibility of Sinking with Rotary Swaging for High Pressure Gas Cylinders," Metal Forming 2010, Hotel Nikko, Toyohashi, Sep. 19-22, 2010, Toyohashi, Japan. Also published in Steel Research International, Vol. 81, (2010) No. 9, pp. 576-579. (SCI 0.455)

Lin, H-S, Hsu, Y-C, Keh, C-C, Process Design of Cold Combination Extrusion for a Motor Coupling, Advances in Material and Processing Technologies 2009 Conference, ID 173, Oct. 26-29, 2009, International Islamic University Malaysia, Kuala Lumpur, Malaysia. (NSC97-2622-E-150-009-CC3)

Yuan-Chuan Hsu, **Heng-Sheng Lin**, An analysis of the influence of decompression cavity on the cold hobbing processes, The 16th International Scientific Conference on Achievements in Mechanical and Materials Engineering AMME 2008, June. 22-25, 2008, Gliwice-Ryn, Poland.

Lin, H-S, Hsu, Y-C, Keh, C-C, Inhomogeneous deformation and residual stress in skin-pass axisymmetric drawing, Advances in Material and Processing Technologies 2007 Conference, Oct 7-11, 2007, KAIST, Daejeon, Korea. Also published in Journal of Materials Processing Technology 201 (2008) 128-132. (NSC93-2212-E-218-006, SCI 1.570)

Hsu, Y-C, **Lin, H-S**, Yang, T-S, Influences of Cross-sectional Geometry and Surface Roughness on the Compression Stability in Upsetting High Aspect-Ratio Shaped Billets by FE Analysis, Proceedings of IMECE 2006, 2006 ASME International Mechanical Engineering Congress and Exposition, IMECE2006-13840, November 5-10, 2006, Chicago, Illinois, USA.

Lin, H-S, Hsu, Y-C, Lin, S-Y, Shao, S-Y, "Application of Hole Flanging with Counter-pressure: Gear-Shape Forming and Edge sizing," the 4th JSTP International Seminar on Precision Forging, Nara, Japan, March 21-24, 2006, pp. 135-140. (NSC92-2622-E-218-012-CC3)

Lin, H-S, Wu, C-H, "Hole Flanging with Multi-action Extrusion," the 9th Asian Symposium on Precision Forging (9th ASPF), Oct. 2-5, Kao-Hsiung, Taiwan, 2005, pp. 565-570. (NSC92-2622-E-218-012-CC3)