

## References

1. Aritzur, B., *Handbook of metal-forming processes*. 1983.
2. Hosford, W.F. and R.M. Caddell, *Metal forming: mechanics and metallurgy*. 2011: Cambridge university press.
3. Hu, J., Z. Marciniak, and J. Duncan, *Mechanics of sheet metal forming*. 2002: Elsevier.
4. Dixit, P.M. and U.S. Dixit, *Modeling of metal forming and machining processes: by finite element and soft computing methods*. 2008: Springer Science & Business Media.
5. Emmens, W. and A.H. van den Boogaard, *Incremental forming by continuous bending under tension—An experimental investigation*. Journal of materials processing technology, 2009. **209**(14): p. 5456-5463.
6. Hein, P. and F. Vollertsen, *Hydroforming of sheet metal pairs*. Journal of Materials Processing Technology, 1999. **87**(1-3): p. 154-164.
7. Siegert, K., et al., *Recent developments in hydroforming technology*. Journal of Materials Processing Technology, 2000. **98**(2): p. 251-258.
8. Reddy, P.V., B.V. Reddy, and P.J. Ramulu, *Evolution of hydroforming technologies and its applications—A review*. Journal of Advanced Manufacturing Systems, 2020. **19**(04): p. 737-780.
9. Forouhandeh, F., et al., *Recent developments in microhydroforming*. Advances in Mechanical Engineering, 2013. **5**: p. 207165.
10. Zhang, Q., et al., *Numerical simulation and experimental research on water jet forming of copper foil*. The International Journal of Advanced Manufacturing Technology, 2016. **85**: p. 2265-2276.
11. Emmens, W.C., *Water jet forming of steel beverage cans*. International journal of machine tools and manufacture, 2006. **46**(11): p. 1243-1247.
12. Magee, J., K. Watkins, and W. Steen, *Advances in laser forming*. Journal of Laser applications, 1998. **10**(6): p. 235-246.
13. Shen, H. and F. Vollertsen, *Modelling of laser forming—An review*. Computational Materials Science, 2009. **46**(4): p. 834-840.
14. Sharma, S.K., B.K. Kodli, and K.K. Saxena, *Micro forming and its applications: An overview*. Key Engineering Materials, 2022. **924**: p. 73-91.
15. Edward, L., *Apparatus and process for incremental dieless forming*, 1967, Google Patents.
16. Jeswiet, J., et al., *Asymmetric single point incremental forming of sheet metal*. CIRP annals, 2005. **54**(2): p. 88-114.
17. Kim, J.H., J.H. Park, and C. Kim, *A study on the mechanics of shear spinning of cones*. Journal of mechanical science and technology, 2006. **20**(6): p. 806-818.
18. Iseki, H., *Flexible and incremental sheet metal bulging using a few spherical rollers*. Trans. Jpn. Soc. Mech. Eng., 1993. **59**: p. 2849.
19. Kim, T. and D.-Y. Yang, *Improvement of formability for the incremental sheet metal forming process*. International Journal of Mechanical Sciences, 2000. **42**(7): p. 1271-1286.
20. Park, J.-J. and Y.-H. Kim, *Fundamental studies on the incremental sheet metal forming technique*. Journal of Materials Processing Technology, 2003. **140**(1): p. 447-453.

## References

21. Tuominen, T., *Method and apparatus for forming three-dimensional shapes in a sheet metal*. Patent number WO2004030843A1, 2004.
22. Mulay, A., et al., *Prediction of average surface roughness and formability in single point incremental forming using artificial neural network*. Archives of Civil and Mechanical Engineering, 2019. **19**: p. 1135-1149.
23. Ziran, X., et al., *The performance of flat end and hemispherical end tools in single-point incremental forming*. The International Journal of Advanced Manufacturing Technology, 2010. **46**: p. 1113-1118.
24. Lu, B., et al., *Mechanism investigation of friction-related effects in single point incremental forming using a developed oblique roller-ball tool*. International Journal of Machine Tools and Manufacture, 2014. **85**: p. 14-29.
25. Cawley, B., D. Adams, and J. Jeswiet, *Examining tool shapes in single point incremental forming*. Proc NAMRI/SME, 2012. **26**: p. 201-206.
26. Adams, D.W., *Improvements on single point incremental forming through electrically assisted forming, contact area prediction and tool development*. 2014: Queen's University (Canada).
27. Vanhove, H., Y. Carette, and J.R. Duflou, *An explorative study on, the influence of an elliptical tool on incremental forming*. Procedia Manufacturing, 2019. **29**: p. 74-79.
28. Hussain, G., N. Hayat, and G. Lin, *Pyramid as test geometry to evaluate formability in incremental forming: Recent results*. Journal of mechanical science and technology, 2012. **26**: p. 2337-2345.
29. Yoon, S. and D.-Y. Yang, *Investigation into a new incremental forming process using an adjustable punch set for the manufacture of a doubly curved sheet metal*. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2001. **215**(7): p. 991-1004.
30. Wang, Y., et al., *Incremental Sheet Metal Forming with Multiple-Head Tools*. Steel Research International, 2010. **81**(9): p. 922-925.
31. Panjwani, D., et al., *A novel approach based on flexible supports for forming non-axisymmetric parts in SPISF*. The International Journal of Advanced Manufacturing Technology, 2017. **92**: p. 2463-2477.
32. Nasulea, D. and G. Oancea, *Achieving accuracy improvements for single-point incremental forming process using a circumferential hammering tool*. Metals, 2021. **11**(3): p. 482.
33. Liu, S., et al., *Experimental study on titanium wire drawing with ultrasonic vibration*. Ultrasonics, 2018. **83**: p. 60-67.
34. Hu, J., et al., *Evolution of acoustic softening effect on ultrasonic-assisted micro/meso-compression behavior and microstructure*. Ultrasonics, 2020. **107**: p. 106107.
35. Zhou, H., H. Cui, and Q.H. Qin, *Influence of ultrasonic vibration on the plasticity of metals during compression process*. Journal of Materials Processing Technology, 2018. **251**: p. 146-159.
36. Amini, S., A. Hosseinpour Gollo, and H. Paktinat, *An investigation of conventional and ultrasonic-assisted incremental forming of annealed AA1050 sheet*. The International Journal of Advanced Manufacturing Technology, 2017. **90**: p. 1569-1578.
37. Vahdati, M., R. Mahdavinejad, and S. Amini, *Investigation of the ultrasonic vibration effect in incremental sheet metal forming process*. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017. **231**(6): p. 971-982.

## References

38. Li, P., et al., *Evaluation of forming forces in ultrasonic incremental sheet metal forming*. Aerospace Science and Technology, 2017. **63**: p. 132-139.
39. Li, Y., et al., *Effects of ultrasonic vibration on deformation mechanism of incremental point-forming process*. Procedia Engineering, 2017. **207**: p. 777-782.
40. Sun, Y., et al., *Study on the springback effect and surface property for ultrasonic-assisted incremental sheet forming of aluminum alloy*. Symmetry, 2021. **13**(7): p. 1217.
41. Zhang, L., C. Wu, and H. Sedaghat, *Ultrasonic vibration–assisted incremental sheet metal forming*. The International Journal of Advanced Manufacturing Technology, 2021. **114**(11-12): p. 3311-3323.
42. Attanasio, A., E. Ceretti, and C. Giardini, *Optimization of tool path in two points incremental forming*. Journal of Materials Processing Technology, 2006. **177**(1-3): p. 409-412.
43. Cho, C., *Development of a new NC-controlled trial manufacturing process for sheet metal forming*, 1997, MS thesis, KAIST.
44. Lingam, R., et al., *Automatic feature recognition and tool path strategies for enhancing accuracy in double sided incremental forming*. The International Journal of Advanced Manufacturing Technology, 2017. **88**: p. 1639-1655.
45. Rauch, M., et al., *Tool path programming optimization for incremental sheet forming applications*. Computer-Aided Design, 2009. **41**(12): p. 877-885.
46. Azaouzi, M. and N. Lebaal, *Tool path optimization for single point incremental sheet forming using response surface method*. Simulation Modelling Practice and Theory, 2012. **24**: p. 49-58.
47. Lu, B., et al., *Feature-based tool path generation approach for incremental sheet forming process*. Journal of Materials Processing Technology, 2013. **213**(7): p. 1221-1233.
48. Chang, Z., W. Huang, and J. Chen, *A new tool path with point contact and its effect on incremental sheet forming process*. The International Journal of Advanced Manufacturing Technology, 2020. **110**: p. 1515-1525.
49. Chang, Z., et al., *Investigations on a novel quadratic spiral tool path and its effect on incremental sheet forming process*. The International Journal of Advanced Manufacturing Technology, 2019. **103**: p. 2953-2964.
50. Han, F., et al., *Method of closed loop springback compensation for incremental sheet forming process*. Journal of Central South University, 2011. **18**(5): p. 1509-1517.
51. Gahbiche, M.A., et al., *A finite element simulation of the incremental sheet forming process: a new method for G-code implementation*. International Journal of Materials and Product Technology, 2020. **61**(1): p. 68-86.
52. Wang, C., et al., *3D surface representation and trajectory optimization with a learning-based adaptive model predictive controller in incremental forming*. Journal of Manufacturing Processes, 2020. **58**: p. 796-810.
53. Li, W., et al., *Application of machine learning on tool path optimisation and cooling lubricant in induction heating-assisted single point incremental sheet forming of Ti-6Al-4V sheets*. The International Journal of Advanced Manufacturing Technology, 2022. **123**(3-4): p. 821-838.
54. Nagargoje, A., et al., *Performance evaluation of the data clustering techniques and cluster validity indices for efficient toolpath development for incremental sheet forming*. Journal of Computing and Information Science in Engineering, 2021. **21**(3): p. 031001.

## References

55. Pham, Q.T., et al., *A machine learning–based methodology for identification of the plastic flow in aluminum sheets during incremental sheet forming processes*. The International Journal of Advanced Manufacturing Technology, 2022. **120**(5-6): p. 3559-3584.
56. Shim, M.-S. and J.-J. Park, *The formability of aluminum sheet in incremental forming*. Journal of Materials Processing Technology, 2001. **113**(1-3): p. 654-658.
57. Kim, Y. and J. Park, *Effect of process parameters on formability in incremental forming of sheet metal*. Journal of materials processing technology, 2002. **130**: p. 42-46.
58. Bambach, M., G. Hirt, and J. Ames. *Modeling of optimization strategies in the incremental CNC sheet metal forming process*. in *AIP Conference Proceedings*. 2004. American Institute of Physics.
59. Fratini, L., et al., *Influence of mechanical properties of the sheet material on formability in single point incremental forming*. CIRP Annals, 2004. **53**(1): p. 207-210.
60. Avitzur, B. and C. Yang, *Analysis of power spinning of cones*. 1960.
61. Jackson, K. and J. Allwood, *The mechanics of incremental sheet forming*. Journal of materials processing technology, 2009. **209**(3): p. 1158-1174.
62. Kalpakcioglu, S., *On the mechanics of shear spinning*. 1961.
63. Ma, L. and Z. Wang, *The effects of through-thickness shear stress on the formability of sheet metal—A review*. Journal of Manufacturing Processes, 2021. **71**: p. 269-289.
64. Allwood, J.M. and D.R. Shouler, *Generalised forming limit diagrams showing increased forming limits with non-planar stress states*. International journal of Plasticity, 2009. **25**(7): p. 1207-1230.
65. Emmens, W. and A.H. van den Boogaard, *An overview of stabilizing deformation mechanisms in incremental sheet forming*. Journal of Materials Processing Technology, 2009. **209**(8): p. 3688-3695.
66. Eyckens, P., et al., *Small-scale finite element modelling of the plastic deformation zone in the incremental forming process*. International Journal of Material Forming, 2008. **1**(1): p. 1159-1162.
67. Sawada, T., G. Fukuhara, and M. Sakamoto, *Deformation mechanism of sheet metal in stretch forming with computer numerical control machine tools*. Journal-Japan Society for Technology of Plasticity, 2001. **42**(10; ISSU 489): p. 1067-1069.
68. Li, Y., W.J. Daniel, and P.A. Meehan, *Deformation analysis in single-point incremental forming through finite element simulation*. The International Journal of Advanced Manufacturing Technology, 2017. **88**(1): p. 255-267.
69. Duflou, J.R., Y. Tunckol, and R. Aereens. *Force analysis for single point incremental forming*. in *Key Engineering Materials*. 2007. Trans Tech Publ.
70. Aereens, R., et al., *Force prediction for single point incremental forming deduced from experimental and FEM observations*. The International Journal of Advanced Manufacturing Technology, 2010. **46**: p. 969-982.
71. Flores, P., et al., *Model identification and FE simulations: effect of different yield loci and hardening laws in sheet forming*. International journal of plasticity, 2007. **23**(3): p. 420-449.
72. Henrard, C., et al., *Forming forces in single point incremental forming: prediction by finite element simulations, validation and sensitivity*. Computational mechanics, 2011. **47**(5): p. 573-590.
73. Jeswiet, J., J.R. Duflou, and A. Szekeres. *Forces in single point and two point incremental forming*. in *Advanced Materials Research*. 2005. Trans Tech Publ.

## References

74. Petek, A., K. Kuzman, and J. Kopač, *Deformations and forces analysis of single point incremental sheet metal forming*. Archives of Materials science and Engineering, 2009. **35**(3): p. 107-116.
75. Iseki, H., *An approximate deformation analysis and FEM analysis for the incremental bulging of sheet metal using a spherical roller*. Journal of Materials Processing Technology, 2001. **111**(1-3): p. 150-154.
76. Silva, M., et al., *Revisiting the fundamentals of single point incremental forming by means of membrane analysis*. International Journal of Machine Tools and Manufacture, 2008. **48**(1): p. 73-83.
77. Bansal, A., et al., *Prediction of forming forces in single point incremental forming*. Journal of Manufacturing Processes, 2017. **28**: p. 486-493.
78. Chang, Z., M. Li, and J. Chen, *Analytical modeling and experimental validation of the forming force in several typical incremental sheet forming processes*. International Journal of Machine Tools and Manufacture, 2019. **140**: p. 62-76.
79. Fang, Y., et al., *Analytical and experimental investigations on deformation mechanism and fracture behavior in single point incremental forming*. Journal of Materials Processing Technology, 2014. **214**(8): p. 1503-1515.
80. Liu, F., et al., *Preliminary modelling of forming forces in three directions for incremental sheet forming process based on the contact area*. Procedia Manufacturing, 2020. **50**: p. 630-636.
81. Marciniak, Z. and K. Kuczyński, *Limit strains in the processes of stretch-forming sheet metal*. International journal of mechanical sciences, 1967. **9**(9): p. 609-620.
82. Ozturk, F., et al. *Grid marking and measurement methods for sheet metal formability*. in *5th International Conference and Exhibition on Design and Production of MACHINES and DIES/MOLDS*. 2009.
83. McAnulty, T., J. Jeswiet, and M. Doolan, *Formability in single point incremental forming: A comparative analysis of the state of the art*. CIRP Journal of Manufacturing Science and Technology, 2017. **16**: p. 43-54.
84. Ham, M. and J. Jeswiet, *Single point incremental forming and the forming criteria for AA3003*. CIRP annals, 2006. **55**(1): p. 241-244.
85. Bhattacharya, A., et al., *Formability and surface finish studies in single point incremental forming*. 2011.
86. Azpen, Q., et al., *Effect of process parameters on the surface roughness of aluminum alloy AA 6061-T6 sheets in frictional stir incremental forming*. Advances in Production Engineering & Management, 2018. **13**(4).
87. Echraf, S.B. and M. Hrairi, *Significant parameters for the surface roughness in incremental forming process*. Materials and manufacturing processes, 2014. **29**(6): p. 697-703.
88. Liu, Z., Y. Li, and P.A. Meehan, *Experimental investigation of mechanical properties, formability and force measurement for AA7075-O aluminum alloy sheets formed by incremental forming*. International Journal of Precision Engineering and Manufacturing, 2013. **14**: p. 1891-1899.
89. Shanmuganatan, S. and V.S. Kumar, *Metallurgical analysis and finite element modelling for thinning characteristics of profile forming on circular cup*. Materials & Design, 2013. **44**: p. 208-215.
90. Centeno, G., et al., *Critical analysis of necking and fracture limit strains and forming forces in single-point incremental forming*. Materials & Design, 2014. **63**: p. 20-29.

## References

91. Golabi, S.i. and H. Khazaali, *Determining frustum depth of 304 stainless steel plates with various diameters and thicknesses by incremental forming*. Journal of Mechanical Science and Technology, 2014. **28**: p. 3273-3278.
92. Hussain, G., et al., *The formability of annealed and pre-aged AA-2024 sheets in single-point incremental forming*. The International Journal of Advanced Manufacturing Technology, 2010. **46**: p. 543-549.
93. Zavala, J.M.D., et al., *Study of friction and wear effects in aluminum parts manufactured via single point incremental forming process using petroleum and vegetable oil-based lubricants*. Materials, 2021. **14**(14): p. 3973.
94. Xu, D., et al., *Mechanism investigation for the influence of tool rotation and laser surface texturing (LST) on formability in single point incremental forming*. International Journal of Machine Tools and Manufacture, 2013. **73**: p. 37-46.
95. Trzepieciński, T., et al., *Recent developments and future challenges in incremental sheet forming of aluminium and aluminium alloy sheets*. Metals, 2022. **12**(1): p. 124.
96. Wang, J., L. Li, and H. Jiang, *Effects of forming parameters on temperature in frictional stir incremental sheet forming*. Journal of Mechanical Science and Technology, 2016. **30**: p. 2163-2169.
97. Ullah, S., et al., *A review on the deformation mechanism and formability enhancement strategies in incremental sheet forming*. Archives of Civil and Mechanical Engineering, 2022. **23**(1): p. 55.
98. Buffa, G., D. Campanella, and L. Fratini, *On the improvement of material formability in SPIF operation through tool stirring action*. The International Journal of Advanced Manufacturing Technology, 2013. **66**: p. 1343-1351.
99. Trzepieciński, T., et al., *Investigation of surface roughness in incremental sheet forming of conical drawpieces from pure titanium sheets*. Materials, 2022. **15**(12): p. 4278.
100. Mulay, A., et al., *Performance evaluation of high-speed incremental sheet forming technology for AA5754 H22 aluminum and DC04 steel sheets*. Archives of Civil and Mechanical Engineering, 2018. **18**: p. 1275-1287.
101. Hamilton, K. and J. Jeswiet, *Single point incremental forming at high feed rates and rotational speeds: Surface and structural consequences*. CIRP annals, 2010. **59**(1): p. 311-314.
102. Duflou, J., et al., *Laser assisted incremental forming: formability and accuracy improvement*. CIRP annals, 2007. **56**(1): p. 273-276.
103. Göttmann, A., et al., *Laser-assisted asymmetric incremental sheet forming of titanium sheet metal parts*. Production Engineering, 2011. **5**(3): p. 263-271.
104. Fan, G., et al., *Electric hot incremental forming: A novel technique*. International Journal of Machine Tools and Manufacture, 2008. **48**(15): p. 1688-1692.
105. Palumbo, G. and M. Brandizzi, *Experimental investigations on the single point incremental forming of a titanium alloy component combining static heating with high tool rotation speed*. Materials & Design, 2012. **40**: p. 43-51.
106. Najafabady, S.A. and A. Ghaei, *An experimental study on dimensional accuracy, surface quality, and hardness of Ti-6Al-4 V titanium alloy sheet in hot incremental forming*. The International Journal of Advanced Manufacturing Technology, 2016. **87**(9): p. 3579-3588.
107. Al-Obaidi, A., V. Kräusel, and D. Landgrebe, *Hot single-point incremental forming assisted by induction heating*. The International Journal of Advanced Manufacturing Technology, 2016. **82**(5): p. 1163-1171.

## References

108. Ambrogio, G., L. Filice, and F. Gagliardi, *Formability of lightweight alloys by hot incremental sheet forming*. *Materials & Design*, 2012. **34**: p. 501-508.
109. Singh, S.A., S. Priyadarshi, and P. Tandon, *Comparative study of incremental forming and elevated temperature incremental forming through experimental investigations on AA 1050 sheet*. *Journal of Manufacturing Science and Engineering*, 2021. **143**(6).
110. Wankhede, P., S. Kurra, and S.K. Singh, *Heat treatment and temperature effects on formability of AA2014-T6 in incremental forming*. *Materials and Manufacturing Processes*, 2021: p. 1-9.
111. Kumar, P. and P. Tandon, *Process capabilities of commercially pure titanium grade 2 formed through warm incremental sheet forming*. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 2021. **235**(11): p. 1779-1789.
112. Ghiotti, A. and S. Bruschi, *A Novel Experimental Set-Up for Warm Incremental Forming of AZ31B Magnesium Alloy Sheets*. *STEEL RESEARCH INTERNATIONAL*, 2010. **81**: p. 950-953.
113. Zhang, S., et al., *Evaluation and optimization on the formability of an AZ31B Mg alloy during warm incremental sheet forming assisted with oil bath heating*. *Measurement*, 2020. **157**: p. 107673.
114. Zhang, S., et al., *Experimental investigation on the springback of AZ31B Mg alloys in warm incremental sheet forming assisted with oil bath heating*. *The International Journal of Advanced Manufacturing Technology*, 2020. **109**(1): p. 535-551.
115. Bouhamed, A., et al., *Homogenization of elasto-plastic functionally graded material based on representative volume element: application to incremental forming process*. *International Journal of Mechanical Sciences*, 2019. **160**: p. 412-420.
116. Said, L.B., et al., *Effects of the tool path strategies on incremental sheet metal forming process*. *Mechanics & Industry*, 2016. **17**(4): p. 411.
117. Mohanraj, R., S. Elangovan, and S. Pratheesh Kumar, *Experimental investigations of warm incremental sheet forming process on magnesium AZ31 and aluminium 6061 alloy*. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, 2022: p. 14644207221110783.
118. Singh, R.P., et al., *Robot-Assisted Cold and Warm Incremental Sheet Forming of Aluminum Alloy 6061: A Comparative Study*. *Metals*, 2023. **13**(3): p. 568.
119. Amino, M., et al., *Current Status of "Dieless" Amino's Incremental Forming*. *Procedia Engineering*, 2014. **81**: p. 54-62.
120. Vanhove, H., et al., *Production of thin shell clavicle implants through single point incremental forming*. *Procedia Engineering*, 2017. **183**: p. 174-179.
121. Eksteen, P. and A. Van der Merwe, *Incremental sheet forming (ISF) in the manufacturing of titanium based plate implants in the bio-medical sector*. *Proceedings of 42nd computers and industrial engineering*, 2012: p. 15-18.
122. Yu, J.-H., et al., *Study on the Incremental sheet metal forming process using a metal foam as a die*. *International Journal of Material Forming*, 2022. **15**(6): p. 71.
123. Kumar, Y. and S. Kumar, *Incremental sheet forming (isf)*, in *Advances in Material Forming and Joining*. 2015, Springer. p. 29-46.
124. Avitzur, B. and B. Avitzur, *Pressure-induced ductility*. 1970.
125. Lorrek, W. and O. Pawelski. *The Influence of Hydrostatic Pressure on the Plastic Deformation of Metallic Materials*. in *Proceedings of the Fifteenth International Machine Tool Design and Research Conference*. 1975. Springer.

## References

126. Dembowski, P.V., J. Pepe, and T.E. Davidson, *Hydrostatic pressure induced ductility transitions in pure bismuth and tin-bismuth alloys*. *Acta Metallurgica*, 1974. **22**(9): p. 1121-1131.
127. Khalifa, N.B. and S. Thiery, *Incremental sheet forming with active medium*. *CIRP Annals*, 2019. **68**(1): p. 313-316.
128. Singh, R.P., et al., *Robot assisted incremental sheet forming of Al6061 under static pressure: Preliminary study of thickness distribution within the deformation region*. *Materials Today: Proceedings*, 2021. **47**: p. 2737-2741.
129. Küçüktürk, G. and H.V. Yazgın, *Improvement of incremental sheet metal forming with the help of a pressurised fluid system*. *Materials Testing*, 2022. **64**(8): p. 1214-1222.
130. Kumar, Y. and S. Kumar, *Experimental and analytical evaluation of Incremental Sheet Hydro-Forming strategies to produce high forming angle sheets*. *Heliyon*, 2019. **5**(6): p. e01801.
131. Shang, M., et al., *Wall Thickness Uniformity in ISF of Hydraulic Support: System Design, Finite Element Analysis and Experimental Verification*. *Machines*, 2023. **11**(3): p. 353.
132. Kumar, Y. and S. Kumar. *Design and development of single point incremental sheet forming machine*. in *5th International & 26th All India Manufacturing Technology, Design and Research Conference*. 2014.
133. Kumar, Y. and S. Kumar, *Analysis of incremental sheet forming process through simulation*. *Int. J. Mech. Prod. Eng. Res. Dev*, 2018. **8**(3): p. 145-152.
134. Skjødt, M., et al., *Multi stage strategies for single point incremental forming of a cup*. *International Journal of Material Forming*, 2008. **1**: p. 1199-1202.
135. Naronikar, A.H., et al., *Optimizing the heat treatment parameters of Al-6061 required for better formability*. *Materials Today: Proceedings*, 2018. **5**(11): p. 24240-24247.
136. Dalir, M. and R. Seifi, *Direct method for deriving equilibrium equations in solid continuous systems*. *Engineering Solid Mechanics*, 2014. **2**(4): p. 321-330.
137. Liu, F., et al., *Comprehensive modeling of forming forces in three directions for incremental sheet forming process based on the contact area*. *Journal of Manufacturing Processes*, 2022. **84**: p. 986-1000.
138. Ambrogio, G., et al. *Sheet thinning prediction in single point incremental forming*. in *Advanced materials research*. 2005. Trans Tech Publ.
139. Young, D. and J. Jeswiet, *Wall thickness variations in single-point incremental forming*. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 2004. **218**(11): p. 1453-1459.
140. Keeler, S., *Forming limit criteria—sheets*, in *Advances in deformation processing*. 1978, Springer. p. 127-157.
141. Yajima, M., M. Ishii, and M. Kobayashi, *The effects of hydrostatic pressure on the ductility of metals and alloys*. *International Journal of Fracture Mechanics*, 1970. **6**(2): p. 139-150.
142. Fitzpatrick, M., et al., *Measurement good practice guide No. 52: determination of residual stresses by X-ray diffraction—Issue 2. National Physical Laboratory. Determination\_of\_Residual\_Stresses\_by\_X-ray\_Diffraction\_-\_Issue\_2*. pdf, 2005.
143. Kumar, A., et al., *Failure mechanism during incremental sheet forming of a commercial purity aluminum alloy*. *Engineering Failure Analysis*, 2023. **146**: p. 107090.

## References

144. Li, J.-c., F.-f. Yang, and Z.-q. Zhou, *Thickness distribution of multi-stage incremental forming with different forming stages and angle intervals*. Journal of Central South University, 2015. **22**(3): p. 842-848.
145. Kuhlmann-Wilsdorf, D., *Evolution of FCC deformation structures in polyslip*. Acta Metall. Mater., 1992. **40**(4): p. 205.
146. Bay, B., N. Hansen, and D. Kuhlmann-Wilsdorf, *Deformation structures in lightly rolled pure aluminium*. Materials Science and Engineering: A, 1989. **113**: p. 385-397.
147. Chang, Z., M. Yang, and J. Chen, *Experimental investigations on deformation characteristics in microstructure level during incremental forming of AA5052 sheet*. Journal of Materials Processing Technology, 2021. **291**: p. 117006.
148. Kumar, A., et al., *Microstructure and texture evolution during incremental sheet forming of AA1050 alloy*. Journal of Materials Science, 2022. **57**(11): p. 6385-6398.
149. Schell, K.G., et al., *Microstructure and mechanical properties of Li 0.33 La 0.567 TiO 3*. Journal of Materials Science, 2017. **52**: p. 2232-2240.
150. Gao, Q., et al., *Hot deformation of alumina-forming austenitic steel: EBSD study and flow behavior*. Journal of Materials Science, 2019. **54**(11): p. 8760-8777.
151. Winning, M. and A.D. Rollett, *Transition between low and high angle grain boundaries*. Acta materialia, 2005. **53**(10): p. 2901-2907.
152. Liu, Z., et al., *Multi-pass deformation design for incremental sheet forming: analytical modeling, finite element analysis and experimental validation*. Journal of Materials Processing Technology, 2014. **214**(3): p. 620-634.
153. Nirala, H.K., et al., *An approach to eliminate stepped features in multistage incremental sheet forming process: Experimental and FEA analysis*. Journal of Mechanical Science and Technology, 2017. **31**: p. 599-604.

## References

List of publications from this thesis :

- Singh, Ravi Prakash, et al. "A Mathematical Model for Force Prediction in Single Point Incremental Sheet Forming with Validation by Experiments and Simulation." *Processes* 11.6 (2023): 1688.
- Singh, R. P., Gupta, S. K., Singh, P. K., & Kumar, S. (2021). Robot-assisted incremental sheet forming of Al6061 under static pressure: Preliminary study of thickness distribution within the deformation region. *Materials Today: Proceedings*, 47, 2737-2741
- Singh RP, Kumar S, Singh PK, Meraz M. Experimental Investigation of Multi-stage Robot-Assisted Single Point Incremental Sheet Forming of Al 6061 Sheet. *advances in Forming, Machining and Automation 2023* (pp. 61-69). Springer, Singapore.
- Singh, Ravi Prakash, et al. "Robot-Assisted Cold and Warm Incremental Sheet Forming of Aluminum Alloy 6061: A Comparative Study." *Metals* 13.3 (2023): 568.