

Dang Xuan Phuong
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Department of Manufacturing Engineering
Faculty of Mechanical Engineering
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EDUCATION

University of Ulsan, Ulsan, Korea
Ph.D. in Mechanical and Automotive Engineering, 2008-2011

Nha Trang University, Nha Trang, Vietnam
ME. Naval Architecture, 2001 - 2003
B.A. Naval Architecture, 1993-1998

RESEARCH INTERESTS

- CAD/CAM/CNC/CAE
- Machining processes, design and manufacturing
- Applied optimization in mechanical engineering
- Injection molding cooling channel design and process parameters optimization
- Energy savings in manufacturing

RESEARCH EXPERIENCE

- Development of Information Technology-Based Manufacturing Process Systems for Energy Savings, International project hosted by KITECH, Korea, 2011-2013, participant.
- The research on modeling the system of experimental lessons on CNC machines for improving the training quality at Nha Trang University, University level project, 2012, principal investigator.
- Design and manufacture the composite aquarium air pump and mixture for aquaculture, Ministry of Education and Training level project, 2005-2006, principal investigator.
- Calculation of torsional vibration of fishing boat shafting, University level project, 2002, principal investigator.
- Development of optimization methods for injection molding in terms of cooling channels and process parameters, Ph.D. dissertation, University of Ulsan, 2010.

TEACHING RESPONSIBILITY

Undergraduate

- CAD/CAM/CNC
- Manufacturing technology
- Theory of machine and mechanism

Graduate

- Computer aided engineering (CAE)

PUBLICATIONS and PRESENTATIONS

Books:

1. Hong-Seok Park and **Xuan-Phuong Dang**, Design and simulation-based optimization of cooling channels for injection mold, Book chapter, New Technologies-Trend, Innovations and Research/OpenInTech 2012.

Journals

1. **Dang Xuan Phuong**, Apply approximate model in structural design and optimization, Journal of Fisheries Science and Technology, issue 1, 2012.
2. **Dang Xuan Phuong**, The study on the automation of calculating the stable level of the ship floating on sea wave using CAD technology, Journal of Fisheries – 2007.
3. **Dang Xuan Phuong**, Apply Excel to solve the kinematic of planar mechanisms, Journal of Fisheries Science and Technology - issue 2, 2007.
4. **Dang Xuan Phuong**, Calculating the strength of the marine propeller using FEM, Journal of Fisheries Science and Technology - issue 4, 2005.
5. **Dang Xuan Phuong**, The method for digitalizing experimental charts, Journal of Fisheries Science and Technology - issue 4, 2004.
6. **Dang Xuan Phuong**, Fine machining of marine propeller on three axis CNC milling machine, Journal of Fisheries Science and Technology – special issue, 2004.
7. Hong-Seok Park and **Xuan-Phuong Dang**, A Study on the Heating Process for Forging of an Automotive Crankshaft in Terms of Energy Efficiency, Procedia CIRP, Volume 7, 2013, pages 646–651 (2013).
8. Berend Denkena, Bernd-Arno Behrens, Hong-Seok Park, Jan Henjes, Stefan Kröning, Timur Yilkiran, Andreas Klassen, **X.P Dang**, T.N.T Binh, Prozessketten für Kurbelwellen ökologisch gestalten, Carl Hanser Verlag, München ZWF, Jahrg. 108(2013) 4, pp. 224-228, 2013.

9. Hong-Seok Park and **Xuan-Phuong Dang**, Reduction of heat losses for the in-line induction heating system by optimization of thermal insulation, International Journal Of Precision Engineering And Manufacturing , Vol 14, No. 6, pp.903-909, 2013.
10. H.S. Park, **X.P. Dang**, A. Roderburg, B. Nau, Development of plastic front side panels for green cars, CIRP Journal of Manufacturing Science and Technology, Vol.6, Issue 1, pp.44-52, 2012.
11. Hong-Seok Park and **Xuan-Phuong Dang**, Optimization of the In-line Induction Heating Process for Hot Forging in Terms of Saving Operating Energy, International Journal Of Precision Engineering And Manufacturing Vol. 13, No. 7, pp. 1085-1093, 2012.
12. Hong-Seok Park and **Xuan-Phuong Dang**, Development of a fiber-reinforced plastic armrest frame for weight-reduced automobiles, International Journal of Automotive Technology, Vol. 12, No. 1, pp. 83-92, February, 2011.
13. **Xuan-Phuong Dang** and Hong-Seok Park, Design of U-shape milled groove conformal cooling channels for plastic injection mold, International Journal of Precision Engineering and Manufacturing, Vol. 12, No. 1, pp. 73-84, February, 2011.
14. Hong-Seok Park, Tran Viet Anh and **Xuan-Phuong Dang**, An application of ANN-GA hybrid approach on modeling and optimizing roll forming of aluminum car doorbelt, International Journal of Modern Manufacturing Technologies, Vol. III, No. 1, pp: 57-66, 2011.
15. Hong-Seok Park and **Xuan-Phuong Dang**, Structural optimization based on CAD-CAE integration and metamodeling techniques, Computer-Aided Design, Volume 42, Issue 10, pages 889-902, October 2010.
16. Hong-Seok Park and **Xuan-Phuong Dang**, Optimization of conformal cooling channels with array of baffles for plastic injection mold, International Journal of Precision Engineering and Manufacturing, Vol. 11, No.6, December, pp. 1-12, 2010.

Presentations

1. Park Hong Seok, Berend Denkena, **Dang Xuan Phuong**, Jan Henjes and Ingo Lüken, A Study on the Heat Losses Reduction for the In-line Induction Heating System, ISGMA2012 (International symposium on Green manufacturing and Applications), Jeju-Korea, August, 27~29, 2012.
2. Hong-Seok Park and **Xuan-Phuong Dang**, Development of short fiber-reinforced plastic front side panels for weight-reduced automobiles, CIRP 44th Conference on Manufacturing Systems, Madison Wisconsin, USA, 1-3 June 2011.

3. Hong-Seok Park and **Xuan-Phuong Dang** and Guy-Bong Lee, A study on the inline induction heating for forging in terms of saving operating energy, International symposium on green manufacturing and application (ISGMA2011), Seoul National University, Korea, October 6~7, 2011.
4. Hong-Seok Park and **Xuan-Phuong Dang**, Development of a retention mechanism for minimizing defective overlap in film insert molding, International Forum on Strategic Technology (IFOST 2012, Ulsan, Korea), 18-21 Sept. 2012.
5. Hong-Seok Park and **Xuan-Phuong Dang**, Development of a green manufacturing process for making a chrome -like radiator grill, 21st DAAM International World symposium, Volume 21, No.1, pp: 0037-0038, Austria Center Vienna, Vienna, Austria Oct 20-23, 2010.
6. Hong-Seok Park and **Xuan-Phuong Dang**, Development of plastic fender for weight - reduced automobiles, KSAE 2010 Annual Conference, EXCO, Daegu, Korea, 24-27/2010.
7. Hong-Seok Park and **Xuan-Phuong Dang**, Structural optimization of mechanical components using radial basis function and CAD, KSAE 2009 Annual Conference, Songdo Convensia, Korea, 24-26/11/2009.
8. Hong-Seok Park and **Xuan-Phuong Dang**, Gyu Bong Lee, Design optimization of a plastic armrest frame, Proceeding of International Conference on Sustainability and Remanufacturing VI, September 29 – October 1, Busan, Korea, pp: 120-125.