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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artikel)	:	Analysis and attenuation of impulsive sound pressure in large caliber weapon during muzzle blast		
Jumlah Penulis	:	5		
Status Pengusul	:	penulis ke-3		
Identitas Jurnal Ilmiah	:	a. Nama Jurnal	:	Journal of Mechanical Science and Technology
		b. Nomor ISSN	:	1738-494X (Print) 1976-3824 (Online)
		c. Vol, No., Bln Thn	:	25, 10, October 2011
		d. Penerbit	:	Korean Society of Mechanical Engineers (Springer Nature
		e. DOI artikel (jika ada)	:	https://doi.org/10.1007/s12206-011-0731-2
		f. Alamat web jurnal	:	https://link.springer.com/article/10.1007%2Fs12206-011-0731-2
		Alamat Artikel	:	https://eprints2.undip.ac.id/1514/1/Analysis%20and%20attenuation%20of%20impulsive%20sound%20pressure%20in%20large%20caliber%20weapon%20during%20muzzle%20blast.pdf
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Artikel ini terdiri dari: Title, Abstract, Introduction, Numerical Analysis and Simulation, Results and Discussion, Conclusion, Abbreviation, Acknowledgment, References dan ditulis sesuai dengan Guide for Author. Substansi artikel sesuai dengan bidang ilmu (Teknik Mesin).

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Artikel ini berisi tentang analisis dan simulasi gelombang tekanan yang diakibatkan oleh peluru kaliber 120 mm dan mempelajari karakteristik gelombang tekanan dan cara peredamannya. Data-data yang ditampilkan cukup banyak namun tidak diimbangi dengan referensi yang memadai didalam pembahasannya. Kesimpulan yang diberikan juga cukup singkat, sehingga secara umum kontribusi dalam pengembangan keilmuan masih belum signifikan.

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Prof. Dr. Mohammad Djaeni, S.T., M.Eng.
NIP. 197102071995121001
Unit Kerja : Fakultas Teknik Universitas Diponegoro
Bidang Ilmu : Teknik Kimia

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Surakarta, 2 Maret 2020
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NIP. 197403262000031001
Unit Kerja : Fakultas Teknik Universitas Sebelas Maret
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Analysis and attenuation of impulsive sound pressure in large caliber weapon during muzzle blast (Article)

Rehman, H.[a], Hwang, S.H.[a], Fajar, B.[b], Chung, H.[c], Jeong, H.[c]

[a]Department of Mechanical and Precision Engineering, Gyeongsang National University, 445 Inpyeong Dong, Tongyeong, 650-160 Gyeongsang Nam do, South Korea
[b]Depatment of Mechanical Engineering, University of Diponegoro, Semarang, Indonesia
[c]Department of Mechanical and Precision Engineering, Gyeongsang National University, Institute of Marine Industry, 445 Inpyeong Dong, Tongyeong, 650-160 Gyeongsang Nam do, South Korea

Abstract

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Due to the supersonic speed at which propellant gas flows through the gun barrel, a high intensity impulsive sound pressure is created, which has negative effects in many respects. Therefore, the high pressure waves generated due to muzzle blast flow of tank gun during firing is a critical issue to examine. The purpose of this paper is to study and analyze this high pressure impulsive sound, generated during the blast flow. The large caliber 120 mm K1A1 tank gun has been selected especially for this purpose. An axisymmetric computational domain has been constructed by employing Spalart Allmaras turbulence model to evaluate pressure and sound level in the tank gun using Computation Fluid Dynamics technique. Approximately 90% of pressure and 20 dB of sound level have been attenuated due to use of the three baffle silencer at the muzzle end of the gun barrel in comparison to the tank gun without silencer. Also, the sound pressure level at different points in the ambient region shows the same attenuation in the results. This study will be helpful to understand the blast wave characteristics and also to get a good idea to design silencer for large caliber weapon system. © 2011 The Korean Society of Mechanical Engineers and Springer-Verlag Berlin Heidelberg.

SciVal Topic Prominence

Topic: Projectiles | Guns (armament) | Muzzle flow

Prominence percentile: 30.708

Author keywords

Computational fluid dynamics (CFD) | Decibel | Impulsive sound | Large caliber weapon system (LCWS) | Muzzle blast | Silencer

Indexed keywords

Engineering uncontrolled terms: Decibel | Impulsive sounds | Large caliber | Muzzle blast | Silencer

Engineering controlled terms: Computational fluid dynamics | Dynamics | Ordnance | Tanks (containers) | Turbulence models | Ultrasonics

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1 Kang K., -J., Ko, S.H., Lee, D.S.
(2007) *A Study On Impulsive Sound Attenuation For High Pressure Blast Flowfield*. Cited 2 times.

2 Cooke, C.H., Fansler, K.S.
(1989) *Numerical Simulation and Modeling of a Muffler*. Cited 5 times.

3 Fansler, K.S., von Wahlde, R.
(1991) *A Muffler Design For Tank Cannon Acceptance Testing*. Cited 7 times.

4 Pater, L.L., Grubb, T.G., Delaney, D.K.
Recommendation for improved assessment of noise impacts on wildlife
U. S. Army Engineering Research and Development Center

5 Cler, D.L., Chevaugen, N., Shepherty, M.S., Flaherty, J.E., Remacle, J.-F.
Computational fluid dynamics application to gun muzzle blast-a validation case study
(2003) *Technical Report ARCCB-TR-03011*. Cited 19 times.

6 Cler, D.L.
(2003) *Techniques For Analysis and Validation of Unsteady Blast Wave Propagation*. Cited 4 times.
August

7 Fansler, K.S., Lyon, D.H.
Attenuation of muzzle blast using configurable mufflers
(1989) *Memorandum Report BLRMR-3931*. Cited 4 times.

flowfield
Guo, Z. , Pan, Y. , Li, K.
(2013) Advanced Materials Research

Numerical simulation of muzzle blast overpressure in antiaircraft gun muzzle brake
Guo, Z. , Pan, Y. , Zhang, H.
(2013) Journal of Information and Computational Science

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8 Fansler, K.S., Cook, C.H., Thompson, W.G., Lyon, D.H.
(1990) *Numerical simulation of a multi compartmented gun muffler and comparison with experiment*. Cited 2 times.
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Jeong, H.; Department of Mechanical and Precision Engineering, Gyeongsang National University, Institute of Marine Industry, 445 Inpyeong Dong, Tongyeong, South Korea; email:hmjoeong@gnu.ac.kr

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Modeling the airside dynamic behavior of a heat exchanger under frosting conditions †

Tieyu Gao and Jianying Gong*

School of Energy and Power Engineering, Xi'an JiaoTong University, Xi'an 710049, China

(Manuscript Received January 26, 2011; Revised May 13, 2011; Accepted June 7, 2011)

Abstract

A general distributed model with a non-steady-state heat exchanger model coupled with a frost model was developed to study the dynamic behavior of an airside heat exchanger in an air-to-water heat pump heater/chiller unit. The effects of water vapor diffusion and uneven fin temperature distribution were considered. The model was found to agree well with reported experimental results. Compared with the routine model, the present model has higher precision of frost layer thickness especially on the fin surface. Results include the propagation of frost formation along the tube and its effect on the dynamic characteristics of refrigerant, air, and tube sides. According to the results, the temperature difference between air and tube surface temperature was proposed to be the main driving force of frosting. Tube surface temperature is the most important factor affecting frosting when there is little variation in air humidity. Frost at the fin base was found to be thicker than that at the fin tip due to the fact that the frost layer grows faster with lower tube surface temperature.

Keywords: Air-to-water heat pump; Fin tube; Distributed modeling; Frost formation; Heat transfer; Temperature

1. Introduction

Air-to-water heat pump heater/chiller (AWHPHC) unit has been widely used in air-conditioning fields due to its perfect characteristics of energy efficiency and environmental protection. However, when such a unit operates as a heating source under low ambient temperature, the formation of frost on the surface of its airside heat exchanger becomes problematic, leading to the degradation of the heat exchanger performance or even the shutdown of the unit. Therefore, it is necessary to conduct a detailed investigation on the characteristics of airside heat exchanger in an AWHPHC unit under frosting in order to increase its energy efficiency and operational reliability.

A large number of studies [1-6] are available on the frost properties and heat transfer involved in frosting and the mechanism of frost growth. However, these studies present limited theoretical modeling on practical heat exchanger under frosting conditions. The main reason lies in the complex geometry of the practical evaporator and the volatile refrigerant flowing, as well as the dynamic variation of the parameters of air and frost.

Recent studies [7-14] on the performance of heat exchanger under frosting conditions has elucidated the effects of ambient and geometry parameters on the performance of the heat exchangers. This shows that the reported study did not consider the variation of the refrigerant temperature and the airflow condition during the frosting process. Thus, previous literature did not consider the dynamic variation of parameters inside a practical evaporator, such as the variation of evaporator temperature and airflow rate. Compared with the above studies, the decrease of airflow due to frost accumulation was taken into account only in a few studies [15, 16]. However, these studies are not applicable for a fan-driven heat exchanger used in AWHPHC units. Furthermore, Tso et al. [17, 18] studied the dynamic behavior of an evaporator used in a commercial container by developing a general distributed model coupled with a frost model validated experimentally. However, the effect of the distribution of the fin surface temperature was not considered, and such types of heat exchangers and refrigerants are not the usual types used in AWHPHC units.

Despite the large number of studies on the performance of heat exchangers under frosting conditions, only few published literature [19-21] studied the performance of air source heat pump under frosting conditions. Yao et al. [19] reported the results of their distributed model and discussed the impact of frosting characteristics on the operational performance of an AWHPHC unit under different operating conditions. Guo [20, 21] studied the effects of frost growth and morphology on the performance of an air source heat pump using numerical and

† This paper was recommended for publication in revised form by Associate Editor Ji Hwan Jeong

* Corresponding author. Tel.: +86 02982664103, Fax.: +86 02982664103
E-mail address: sunmoon@mail.xjtu.edu.cn

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Investigation of empirical correlations on the determination of condensation heat transfer characteristics during downward annular flow of R134a inside a vertical smooth tube using artificial intelligence algorithms †

Muhammet Balcılar[1], Ahmet Selim Dalkılıç[2,*], Berna Bolat[3] and Somchai Wongwises[4,5,**]

[1]*Computer Engineering Department, Yildiz Technical University, Yildiz, Besiktas, Istanbul 34349, Turkey*
[2]*Heat and Thermodynamics Division, Department of Mechanical Engineering, Yildiz Technical University, Yildiz, Besiktas, Istanbul 34349, Turkey*
[3]*Design Division, Department of Mechanical Engineering, Yildiz Technical University,Yildiz, Besiktas, Istanbul 34349, Turkey*
[4]*Fluid Mechanics, Thermal Engineering and Multiphase Flow Research Lab. (FUTURE), Department of Mechanical Engineering, King Mongkut's University of Technology Thonburi, Bangmod, Bangkok 10140, Thailand*
[5]*Academy of Science, The Royal Institute of Thailand, Sanam Suea Pa, Dusit, Bangkok 10300, Thailand*

(Manuscript Received November 3, 2010; Revised June 7, 2011; Accepted June 15, 2011)

Abstract

The heat transfer characteristics of R134a during downward condensation are investigated experimentally and numerically. While the convective heat transfer coefficient, two-phase multiplier and frictional pressure drop are considered to be the significant variables as output for the analysis, inputs of the computational numerical techniques include the important two-phase flow parameters such as equivalent Reynolds number, Prandtl number, Bond number, Froude number, Lockhart and Martinelli number. Genetic algorithm technique (GA), unconstrained nonlinear minimization algorithm-Nelder-Mead method (NM) and non-linear least squares error method (NLS) are applied for the optimization of these significant variables in this study. Regression analysis gave convincing correlations on the prediction of condensation heat transfer characteristics using ±30% deviation band for practical applications. The most suitable coefficients of the proposed correlations are depicted to be compatible with the large number of experimental data by means of the computational numerical methods. Validation process of the proposed correlations is accomplished by means of the comparison between the various correlations reported in the literature.

Keywords: Condensation; Heat transfer coefficient; Pressure drop; Genetic algorithm; Unconstrained nonlinear minimization algorithm; Nelder-mead method; Non-linear least squares

1. Introduction

Artificial intelligence methods such as genetic algorithm (GA) and artificial neural network (ANN) modeling validated by the experimental works have been gaining increased popularity in correlating two-phase flows in tubes. However, there still are not enough investigations on the prediction of in-tube condensation's characteristics by means of artificial intelligence techniques in the literature. Existing numerical studies in this subject regarding the two-phase flows in the literature are summarized in the following paragraphs.

Jenkins [1] mentioned the definition of the GA as "survival of the fittest" and ANN as "human brain activity" in his study. The principal subject of his paper is on application of the GA to find the optimum combination of design variables of a space condensation heuristic.

Akin and Demiral [2] defined the primary flow parameters required to model multiphase flow in porous media as relative permeability and capillary pressure and showed that the performance of the algorithm depends on the probabilities of crossover and mutation, and the proper usage of the fitness function of genetic algorithm.

Alizadehdakhel et al. [3] studied the two-phase flow regimes and pressure drops in a 2 cm diameter and 6 m length tube, and the flow in the test tube is modeled using a computational fluid dynamics (CFD) program and also ANN analysis. As a result of their analysis, the CFD results are more accurate than the ANN evaluations compared to their experimental results.

Magee and Boyle [4] presented a system, based on re-sampling condensation proposed by Isard and Blakes [5], for the tracking and classification of livestock movements. They reported that re-sampling condensation relies on the variation within the shape model being separated into pseudo-

† This paper was recommended for publication in revised form by Associate Editor Jae Dong Chung

* Corresponding author. Tel.: +902123832819, Fax.: +902122616659
** Co-corresponding author. Tel.: +6624709115, Fax.: +6624709111
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