



SDI Review Form 1.6

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	Ms_BJAST_20021
Title of the Manuscript:	Performance of Shell and Tube Heat Exchangers with Varying Tube Layouts
Type of the Article	Original Research Paper

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	1) There is no boundary condition, such as inlet velocity, tube heat conductivity. 2) There is no simulation model, such as how to consider the baffles? How to consider the fluid-solid couple? 3) For the fig.3, it seems that the tube outlet velocity is lower than that of inlet. And it is suspect that author said the velocity wave was "due to the cross flow heating of the tubes from the shell". 4) How to define the performance factor? Why did the performance factor of SHTE-T not vary with Re? 5) In fig. 6, did the mass flow rate or Reynolds number vary? If not, how to explain the mechanism of Fig.6?	1) The detail about the boundary conditions were given in section 3 from line 95 to 99, but just added explanation (colour yellow) in section 2 takes care of the tube conductivity since the tube thickness is negligible. 2) Lines 96 and 97 in section 3 gave how to consider the baffles and since there is negligible tube thickness, the fluid-solid couple cannot be considered. 3) It is very clear from Figure 3 and the discussion from line 114 to line 118 in section 4 that the fluid velocity increases from tubes inlet (left) to outlet (right). 4) The definition of the performance factor was given in section 3 from line 105 to 110. The performance factor of STHE_T cannot vary because it is the reference heat exchanger as detailed in line 108 to 110. 5) From line 161 to 163 in section 4, it was clear that any increase in the value of the heat transfer coefficient and pressure drop is as a result of increase in mass flow rate or Reynolds number.
Minor REVISION comments		
Optional/General comments		