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Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_14506
Title of the Manuscript:	Structural changes of surface layers of hard turned parts by Wiper and conventional geometry
Type of the Article	Original Research Article

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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	The manuscript titled STRUCTURAL CHANGES OF SURFACE LAYERS OF HARD TURNED PARTS BY WIPER AND CONVENTINAL GEOMETRY deals with hard turning of the hardened steel by differently shaped ceramic tools. Influence of tool wear on structural changes of the surface layers are studied. Suggestions which would improve the quality of the paper but are not essential for publication: 1. INTRODUCTION Some important closely-related studies were absent, so I provided some up-to-date references that also discuss about the field studied in the manuscript: W. Grzesik, T. Wanat, Hard turning of quenched alloy steel parts using conventional and wiper ceramic inserts. International Journal of Machine Tools and Manufacture 46 (2006) 1988-1995. Ozel, T., Karpaz, Y., Figueira, L. and Davim, P. (2007) 'Modelling of surface finish and tool flank wear in turning of AISI D2 steel with ceramic wiper inserts', Journal of Materials Processing Technology, Vol. 189 No. 1-3, pp. 192-198 Chou S.K., and Evans C.J.: White layers and thermal modeling of hard turning surfaces, Int. Journal of Machine Tools & Manufacture vol. 39, 1999, 1863-1881.	Several other studies were added.



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	Introduction need modification in such a way that provide clear statement of the research problem and the proposed approach. 2. MATERIAL AND METHODS/EXPERIMENTAL DETAILS/METHODOLOGY Change this title. Details about measuring equipments must be added. Which was the ISO grade of tool inserts? Change $f = 0.3 \text{ mm}$ in $f = 0.3 \text{ mm/rev}$ Please use a dot (.) as a decimal mark instead of a comma (,). Why the authors used only one combination of cutting parameters ($v_c = 100 \text{ m/min}$, $a_p = 0.25 \text{ mm}$, $f = 0.3 \text{ mm/rev}$)? 3. RESULTS AND DISCUSSION Pictures of critical value of tool wear for conventional and Wiper inserts would be interesting to see. Authors wrote: "There was an assumption that Wiper geometry will be worn faster because of its longer minor cutting edge, higher temperatures caused by the longer contact zone between workpiece surface and cutting tool. It was not confirmed". Why???	DONE The reason is that using more combination of cutting parameters will give more results and it will be very long publication after. ...added... This may be due the fact that cutting tool life is inversely proportional to the cutting conditions, which were the same for both geometries in this experiment.
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	Pictures of structural changes would be interesting to see. 4. Conclusion No comment.	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	I recommend this manuscript to be considered for publication after consideration of the previous comments.	