Response to Reviewer 1 Comments

**Point 1:** The authors put a great effort in the revision of the resubmitted manuscript. I have read the provided answers to my previous review, and the new version of the paper, thoroughly. All my suggestions and major concerns about the weak points of the research have been addressed. Also, the English language and clarity of exposition has been strongly improved reaching a more than acceptable level. In the present form the paper, though not presenting particular novelties in the field (in terms of laser technology used, and weldment characterization methodological approach), nevertheless provides some valuable data and observations on the weldability, characteristics and performance of CO\(_2\) laser welded TWBs made of the investigated steel alloys. A welcome addition would have been a more local investigation of the weld seam through dedicated techniques, (such as digital image correlation usage during testing, for instance, or other techniques).

In any case, I eventually recommend publication of the manuscript on Metals.

**Response 1:** Dear reviewer, thank you for the review of revised manuscript and your suggestions, which can help improve our paper.

Using of local digital image correlation technique (DIC) to evaluate the evolution of local deformation usually are used, but we did not use it when measuring. We used the evaluation of the microstructural analysis and microhardness measurement. These measurements also provide information about the course of local deformation. Results show satisfactory of mechanical properties of TWBs.

In the next research, we will certainly use DIC technique. Thank you again.