Dear Ms. Bella Li and dear reviewers,.

Re: Manuscript ID: processes-2418828 and Title: Application of Life Cycle of Aeroengine Mainshaft Bearing Based on Digital Twin

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled " Application of Life Cycle of Aeroengine Mainshaft Bearing Based on Digital Twin"

(ID: processes-2418828) Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. The main corrections in the paper and the responds to the reviewer's comments are as flowing:

Responds to the reviewer's comments:

Reviewer:

l. Response to comment: (However, this is of a very generic nature, without any focus on the proposed topic, and should be drastically reduced so that the proposed content prevails.)

Response: The core of the manufacturing process based on digital twins in the paper is the control and interaction at each manufacturing link, while the core of fault diagnosis is the analysis and calculation of data. The main purpose is to describe the achievements after the application of digital twins, and more importantly, to describe the role of some methods.

2.Response to comment: (However, it is just marginally referred, without any specific details to evaluate benefits. This should be extended to the proper dimension.)

Response: Your comments made me realize the serious shortcomings of this paper. I strongly agree with your comments, so I have made revisions to the end, 4.3, and conclusion of Chapter 3 of the article, emphasizing the core idea of the paper.

3.Response to comment: (The paper should emphasize real contributions from authors, not just generic integration of state-of-the-art concepts. The value of the presentation must be based on original content and custom data/information exploitation. Technical details are a must, as well as clear direct contributions (data and quantified results) from the authors.)

Response: The framework of Chapter 4.3 of this paper is the main content that this paper aims to express. My idea is that digital twin technology can be applied throughout the entire life cycle of bearings. However, currently, there is no enterprise or team in my field that can experiment with this idea, so there is a lack of experimental data support. Therefore, I want to use the literature on the application of digital twin technology to every aspect of the entire life cycle of bearings as the ideological support of this paper.

Thank you very much for your comments on this paper. I have been very careful in revising the issues you pointed out, so I replied to you quite late. Thank you again!

Sincerely,

Dr. Li, Yunfeng