

2018 Shot Peener of the Year

Dr. Yuji Kobayashi

SINCE 1992, *The Shot Peener* magazine has given “The Shot Peener of the Year” award to individuals in our industry that have made significant contributions to the advancement of shot peening. *The Shot Peener* staff was pleased to give the 2018 award to Dr. Yuji Kobayashi.

“Dr. Kobayashi was selected because of his extensive efforts to improve the shot peening process as evidenced by his receipt of 36 patents for shot peening methodology and equipment design. In addition to his job responsibilities at Sintokogio, Dr. Kobayashi contributes to the industry through his volunteer work. He is an active member of the SAE Surface Enhancement Committee and the Aerospace Surface Enhancement Committee. He was elected to membership into the International Scientific Committee on Shot Peening in 2008,” said Jack Champaigne, Editor of *The Shot Peener* magazine.

We are very pleased that Dr. Kobayashi answered the following questions for us. His answers provide more insight into his contributions to our industry.

The Shot Peener: What are your job responsibilities at Sintokogio?

Dr. Kobayashi: I work in Research and Development in shot peening and shot blasting.

The Shot Peener: What is your work history?

Dr. Kobayashi: I have worked at Sintokogio for 22 years. Before that, I worked at Toyota for three years.

The Shot Peener: In addition to your contribution to the SAE Surface Enhancement Committee, the SAE Aerospace Surface Enhancement Committee and the International Scientific Committee on Shot Peening, do you belong to shot peening societies in Japan?

Dr. Kobayashi: Yes, I am a board member of the Japan Society of Shot Peening.

The Shot Peener: Receiving 12 US patents and 24 patents in Japan is quite an accomplishment. Was there a patent-related project that was especially interesting or rewarding to you?

Dr. Kobayashi: The patent on shot peening for water cooling holes of die casting die is interesting as an original process. In addition, I believe that patents related to X-ray residual stress measuring instruments that can be used in-line are types of patents that were not found at Sintokogio until now. I applied for 38 domestic applications in Japan in 22 years of

experience and 24 patents were established. I think that this is perhaps the most among Sintokogio.

The Shot Peener: Have you published research papers on shot peening?

Dr. Kobayashi: Yes. The following were my first published papers:

- *Effect of Shot Peening on Mechanical Properties of Magnesium Alloys*: Journal of Material Testing Research Association, vol. 55, No. 4 (2010), pp. 165-172.
- *Influences of Mechanical Properties and Retained Austenite Content on Shot-Peening Characteristics*: Transactions of Japan Society for Spring Research, vol. 57 (2012), pp. 9-15.

I have co-authored 11 papers. The most interesting thing in the most recent paper is about fatigue strength of 3D printed material.

- *Influence of Shot Peening Treatment on Rotating Bending High-Cycle Fatigue Properties of Additive Manufactured Maraging Steels Material*: Kiyotaka Masaki, Yuji Kobayashi, Yuta Mizuno, Journal of the Society of Materials Science, Japan, vol. 67, No. 10, pp. 891-897, Oct. 2018.

The Shot Peener: What are your thoughts regarding receiving the 2018 Shot Peener of the Year award?

Dr. Kobayashi: I think that it is a very honorable thing. In Sintokogio, equipment designers and sales personnel for equipment are subject to respect, but research and development are not so. For young researchers, this award also has a big impact. ●



Sintokogio employees helped Dr. Kobayashi celebrate his receipt of the 2018 Shot Peener of the Year award.