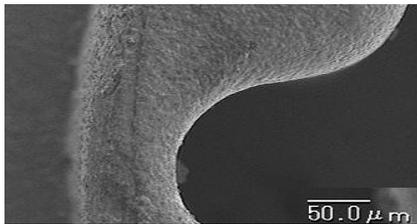


## 1. Thin MIM realised with μ-MIM®

### Success in the manufacturing of 80 μm thickness

In MIM, at the thin part deformation is often seen due to the residual strain during debinding or sintering, thus it is commonly required the secondary process, or the manufacturing itself may be impossible. So it is required to re-design for MIM manufacturing to reduce the variation of thickness generally.

However, there are some actual cases that the thin part could not be avoided functionally and could not realise from the technical and cost viewpoints even the secondary process was considered.



We have expected that the demands for thin shape and minuteness shape would increase more, and we have continued the research and development of the thin parts process using our own μ-MIM technology since more than 10 years ago.

▲The above SEM image is of a MIM product achieved by the results of our research. The thinnest part is 80μm thick. MIM manufacturers who have technology to produce these dimensions stably are limited. If you are considering MIM for thin parts or minute structural parts, please consult Taisei Kogyo.

## 2. Mirror polishing of titanium alloy MIM

### Leave the titanium MIM to Taisei Kogyo

Titanium alloy is a high capability metal having the properties of light weight, high tensile strength and good corrosion resistance.

However, it is a material that the companies produce in mass production are rare in MIM industry since the sintering is difficult. We have developed the practical use of MIM of the materials which are difficult to process in powder metallurgy, and have produced the titanium alloy MIM products stably.

It is a material that the cost saving can be expected by the MIM processing since the processing cost will be increased if it is produced by the machining because the titanium alloy is a material which machining is difficult. We have been researching the improvement of accuracy in processing and the surface quality using the difficult to process materials.



▲Mirror polished part of titanium alloy MIM



## 3. Announcement of a metal accessory with aroma

Fragrance metal was announced as a new application of porous metal last year.

Products transfused aroma oil into the ceramics or the resin sponge are well known, however we have developed an accessory material using our porous metal. It was announced as "Fragrance metal" at an exhibition. The technology is patented by Taisei Kogyo in Japan, the U.S.A and EU. Many people were interested in it, and picked up by the media for the jewel industry. We are going to continue pursuing "To realise a new value with the functional metals".

## 4. Exhibition: MEDIX Japan

We will exhibit at the MEDIX (Medical Device Development Expo), which is a part of M-Tech exhibition (Mechanical components & Materials Technology Expo) in Tokyo, Japan between 21<sup>st</sup> and 23<sup>rd</sup> June 2017.

Hall: East 4

Booth: 78-18

### Taisei Column



Production Dept. Thailand  
Kotaro Kanamori

Good day, I am Kotaro Kanamori. I am in charge of production department at Thai factory. My motto for the work is "Spend longer time with MIM a day than anyone". It does not mean I am going to work for long hours. It is because I think

that the same working method as other people is not sufficient for getting the capability as a person as I joined the company a few years ago. I am going to sustain my efforts since there is much I have to learn. Also, I am looking for a person who can enjoy outdoor activities with, which is one of my hobbies.