

The Tooling Master Class

# The A Brand



The Tooling

# The A

The A Brand represents a new evolution to only the best, the A Brand emanates global manufacturing.



Master Class

# Brand

in cutting tool technology. With a commitment  
innovations essential for shaping the future of



# The A Brand LINE-UP

The A Brand is not only a premium tooling brand. It also represents the quality assurance OSG guarantees to each and every customer.

To better accommodate evolving manufacturing needs, the A Brand offering has been revamped with the addition of the A-End Mill. Whether you are looking for better tools or need assistance in choosing the right tool, give one of the A Brand products a try. You will experience the level of quality, reliability and satisfaction that can only be delivered by the A Brand tooling master class.

## A-DRILL Series



**Developed  
with  
attention to  
the finest  
details**



ADF  
Carbide Flat Drill



AD·ADO  
Carbide Drill



ADO-SUS  
Carbide Drill for Stainless Steel  
and Titanium Alloy



TRS  
3-Flute Carbide Drill



# A-TAP Series



A-SFT-A-POT  
High Efficient Multi-Purpose Tap



A-CSF-A-CHT  
Carbide Tap



XPF  
X Performer Forming Tap



# A-END MILL Series



AE-VMS  
Anti-Vibration Carbide End Mill





Applications Engineer

End Mill Development Division

**Ikuo Takikawa**

# The A Brand **STORY**

**Product development with a**



Applications Engineer  
Tap Development Division

**Takayuki Nakajima**



Advance tool qualities have been incorporated into the A Brand products, including a versatility that enables a wide range of processing in different work materials, an excellent capability to perform difficult processing tasks, and high efficiency that leads to shortened production time and cost savings. Expectations have risen that the A Brand will bring innovations into the manufacturing field, and pass on OSG's technologies from today to the future. To better understand the concept of the A Brand, interviews were conducted with OSG experts who have devoted their manufacturing careers to the development of A Brand products. They spoke enthusiastically about how their passions underpinned the development process.

**commitment to only the best**

Applications Engineer  
Drill Development Division

**Katashi Hirose**

**The A Brand Experts Bridging  
Today and Tomorrow**



**Communicating  
passion in manufacturing**

A

## The A Brand

The joy of  
delivering  
new values

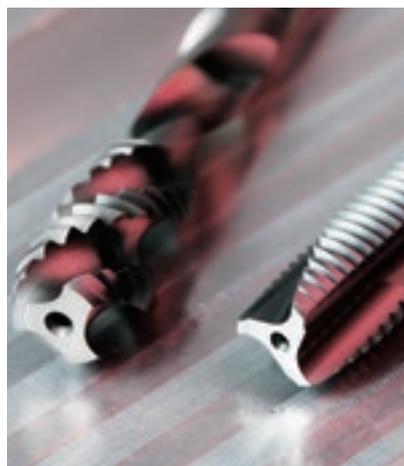
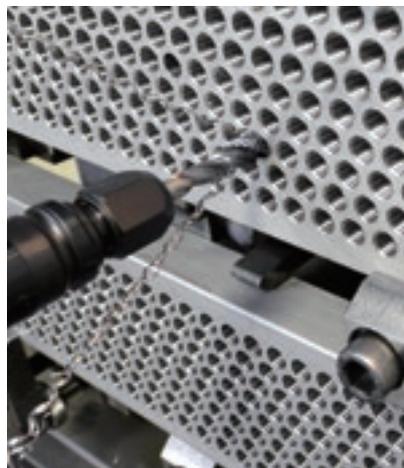
Takayuki Nakajima  
Applications Engineer  
Tap Development Division

The A-Tap, the first A Brand  
product, defied the conventional  
image of taps

I was responsible for developing the A-Tap series, the first A Brand products launched into the market. Conventionally, different taps are used according to the types of oils, machining instruments or work materials, such as aluminum, stainless steel, and steel. This was completely changed by the introduction of the A-Tap series. The series has versatile items that satisfy almost all the requirements of general threading processing by providing multi-purpose capability for any work materials and finished products. With a high cutting performance and a wide cutting range, the series is characterized by its high efficiency and multi-purpose qualities capable of responding to any work materials and machining equipment.

Passion of the development team  
— never compromise, never give  
up, and aim high

The A-Tap series development project started about one year before its product launch into the market. The time allocated for designing the products was only about half a year. At the final phase just before completing the products, opinions were expressed from within the development



team, calling for further improvement, despite high evaluation given by an internal review. We asked ourselves whether we could aim higher or could achieve further progress. These opinions were based on our passion to create products that deliver unprecedented values. Accordingly, we reviewed the entire development process from the beginning to find points requiring improvement. The staff representing the manufacturing technology division worked even on holidays to produce prototypes, converting various new ideas into reality. As a result of these concerted efforts, we have realized products of much higher quality than we had imagined. "Never compromise, never give up, and aim higher." The attitude of the team members during the development of the A-Tap series has now become the philosophy behind all A Brand products.

The role of product engineer and  
the differences we can bring

One of our customers who had used an A-Tap sent us an unforgettable comment. He told us that his child said to him, "You don't smell like oil anymore." The customer had previously used a relatively thick oil with a stronger smell. After starting to use an A-Tap, he was able to use a thinner oil with a weaker smell. He is very happy not to smell of oil anymore. Our A-Tap has successfully reduced inconvenience even to family members of our users. We learned that this is another advantage offered by our A-Tap series.

Besides cost reduction and ensuring high durability, we must consider offering additional values that allow our users to work in a pleasant, comfortable and safe environment. The customer's comment made me reconfirm the point to which I should attach most importance as a product engineer.

## The fuel to innovation and growth

Although it has been only three years since the launch of the A-Tap series, we have already issued its 8th catalog. This clearly shows that the A-Tap series has continued to evolve through our continuous efforts to listen to our customers' feedback and make improvements and additions of items accordingly. The driving force behind this is the high morale of our team members, who always ask themselves whether they are developing products suitable for the A Brand. The A Brand increases the motivation among employees in our company and provides our customers with a sense of assurance that they can count on these products for any type of work. I believe that the A Brand series will drive innovation and growth of OSG in the future.

# Commitment to quality with superior technology

## Original products created by one-of-a-kind technologies

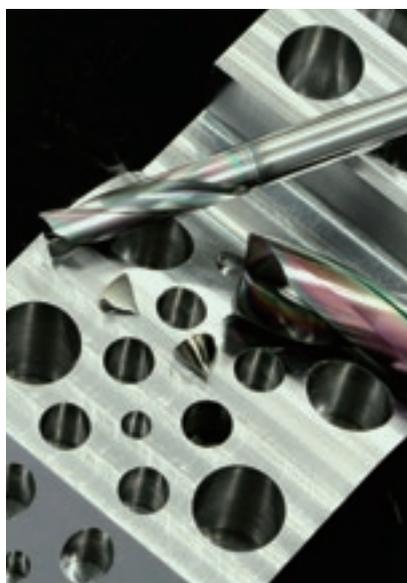
**Katashi Hiroswawa**  
Applications Engineer  
Drill Development Division

### ADF - a drill with uniqueness fitting for the A Brand

The advantage of a drill with a flat end is that it can enter the material straight without deviating even on inclined and curved surfaces. Although OSG had developed and launched the ZDS series with a flat end before any of its competitors, an upgrade with greater performance was desperately in need. The ADF carbide flat drill was developed under these circumstances. The biggest difference from its predecessor, the ZDS series, is its coating. The coating applied to the ADF is EgiAs coating, which is one of OSG's original technologies. With its exceptional wear resistance and toughness, the EgiAs coating prevents chipping and tool wear. The brilliant colored surface provides a unique appearance, which is one of the distinctive characteristics of the ADF series. To demonstrate its high performance, let us compare the number of holes made successfully by our ADF drill and a drill produced by one of our competitors. On a flat surface, the ADF made 2.1 times as many holes as the competitor's drill, and 1.7 times as many holes as the rival on an inclined surface. This exceptional performance can contribute to substantial cost savings.

### Gaining first-hand knowledge provides ideas for development

Development of each product is conducted in collaboration among various divisions, including engineering, sales, manufacturing and marketing. Three years of development were required before launching the ADF series. Because this was the first time for me to develop an A Brand product, I felt a lot of pressure. However, I wanted to



develop successful products for the sake of the entire team, and I was excited about the valuable opportunity given to us. These feelings increased my motivation for the development.

My work as a product engineer is to generate ideas and turn them into tool drawings. However, I try to visit manufacturing or testing sites of products frequently to see what is going on with my own eyes, in order to make the right decisions. I don't want to be satisfied only with reports written by other people or information gained through newspapers and catalogs. I place more priority on communicating with colleagues and gaining first-hand knowledge at actual sites. I believe these efforts lead to good ideas in product development.

### Developing products that can be created only by me, using my expertise

I always hope that our products are used by many people and are providing complete satisfaction. The reason I continue with product development is that I want to see the smiles of customers. Ensuring safe and comfortable use is the first priority in my tool development.

My future goal is to continue to make improvements on the ADF series and to expand its lineup. Personally, I want to develop new products for the world that can only be created by me, using my expertise. I am determined to continue research and analysis, expand my capacity for imagination and creativity, and enhance my expertise to become an engineer who can create products that may explore new frontiers for OSG. Making this a reality, I believe, is one of the purposes for which I work as a member of the development team.

# Unchanged policy: work honestly, earnestly and patiently

**Ikuo Takikawa**  
Applications Engineer  
End Mill Development Division

## AE-VMS - the new standard for milling

In the past, OSG had developed end mills based on specific application needs. As machining requirements evolved over time, the need for versatile milling solutions has become increasingly vital. As a result, the AE-VMS development project was introduced to create a new standard for milling solutions, with performance so superior that the series shall be classified in the A Brand tooling master class.

Enhancing processing efficiency was one of the key objectives of the AE-VMS development project, which could lead to various cost savings due to machining time reduction. An additional focus was to ensure high quality surface finish.

OSG has accumulated a tremendous amount of data over time and has analyzed in detail the performance of our products versus other competing products in the market. These data and customer feedback are the fuels to innovation such as the AE-VMS series.



## Innovation from trial and error

The hardest part of the development process was to add originality to the product. There were already a wide variety of high efficiency end mills in the market. It was a great challenge to create unique characteristics that can differentiate our end mills from competing products. Consequently, we decided to focus on the problem of burrs generated during metal processing. Because many conventional end mills have this problem, we spent many hours seeking for a new method to eliminate burrs.

Addressing a new challenge means a succession of failures. We seek the cause of the existing problem, develop countermeasures, and solved them in a step-by-step manner. To patiently repeat this process is the work of product engineers. To succeed, we have to address challenges honestly and earnestly.

## The pride and joy of A Brand product development

The AE-VMS series was launched in November 2016, but its development plan had been started about two years ago. Although I was working in a different division at the time, I was selected as one of the members for developing the AE-VMS series and was transferred to my current position to work in the development team. Of course, I felt a lot of pressure to develop a product that will be a leading product of OSG in the future. However, I greatly enjoyed participating in the development of the first end mill in the A Brand series. The project had given me a great challenge as an engineer.

With the introduction of the AE-VMS, OSG has marked a new milestone in the history of end mills. In addition to performance, I also want to pay attention to the appearance of products in the future. Cutting tools are not merely metal blades. I believe that tools should offer a sense of excitement to our customers and make them respond, "Wow, this tool looks like it has great potential," when they open the sealed package. We must ensure that customers can work in a more pleasant and enjoyable way by using our tools. Meanwhile, it is essential to further enhance the end mill lineup within the A Brand offering. As development never stops, I will continue to innovate and strive to deliver even greater tooling solutions to the manufacturing society in the future.



*shaping your dreams*