

## Press Release

October 10<sup>th</sup>, 2023

## **The 18<sup>th</sup> Cutting Dream Contest: The Winners have been decided!**

DMG MORI CO., LTD. (hereinafter “DMG MORI”) proudly announces the winners of the 18<sup>th</sup> Cutting Dream Contest.

The Cutting Dream Contest has been held since 2004 for the companies, educational institutions or research organizations that are relevant to machining and use machine tools and / or advanced machines (additive manufacturing machines, laser machines, etc.) in Japan to study, improve, and exchange technologies and skills. The craftsmanship and creativity contained in these powerful works of art stimulate the manufacturing spirit all across the world.

This year, Professor Atsushi Matsubara of Kyoto University chaired the selection committee of six judges. Out of the 69 entries, they chose 4 winners in the Production Parts Machining Category, 6 in the Prototype & Test Cut Machining, 6 in the Artistic Form Machining, 1 in the Advanced Machining Category, and 4 in the Academic Research Category.

The award ceremony will be held on Monday, November 27, at the Imperial Hotel Tokyo, where the winners will receive a certificate and monetary prizes.

During the exhibition MECHATRONICS TECHNOLOGY JAPAN (MECT) 2023 from October 18 to 21, the winning art pieces will be exhibited at the DMG MORI booth, and a slideshow of all entries will be shown.

DMG MORI will continue to host various events and provide opportunities for industry-wide technological exchange and improvement.

An overview of the Dream Contest and previous winners can be found on our website. On October 18, the first day of MECT2023, we will release a video of all the entries for the 18th contest.

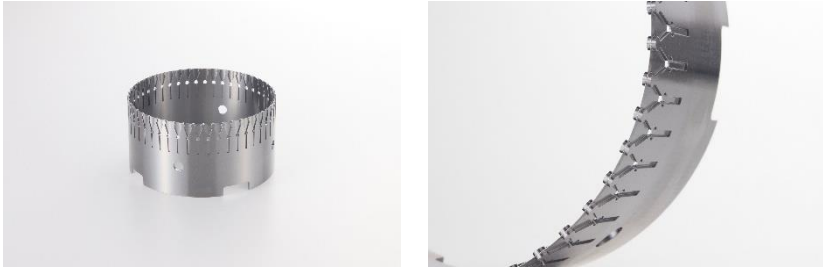
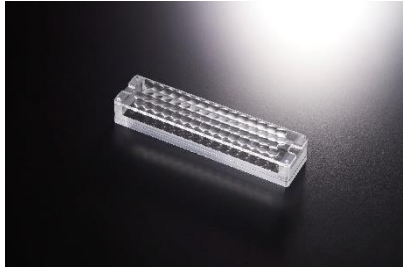
<https://www.dmgmori.co.jp/corporate/dreamcontest/en/index.html>



■ **The 18<sup>th</sup> Cutting Dream Contest Awards Committee** \*In alphabetical order of name, except for the chair

Affiliation / Position	Name
Professor, Department of Micro Engineering, Graduate School of Engineering, Kyoto University	Doctor of Engineering Atsushi Matsubara ※Chair
Emeritus Professor, Keio University	Doctor of Engineering Hideki Aoyama
Professor, Graduate School of Advanced Science and Engineering, Hiroshima University	Ph.D. Soichi Ibaraki
Professor, Department of System Design Engineering, Faculty of Science and Technology, Keio University	Doctor of Engineering Yasuhiro Kakinuma
Professor, Faculty of Science and Engineering, Department of Precision Mechanics Digital Manufacturing Laboratory, Chuo University	Doctor of Engineering Norikazu Suzuki
Chair, Board of Trustees, President, Chubu University	Doctor of Engineering Yoshimi Takeuchi

■ **The 18<sup>th</sup> Cutting Dream Contest Winning Works**

Production Parts Machining			
Prize	Title of entry	Applicant name	Address
Gold	Giant & Ultra-Thin Ring	IG EVEARTH CO., LTD.	Kariya City, Aichi
Silver	Aspherical Honeycomb Lens Array (for Image Inspection Devices)	Circle & Square Co., Ltd.	Osaka City, Osaka
Bronze	Resin Volute Springs 10°	Koga Denki Corporation	Shinagawa Ward, Tokyo
Technique	Waveguide	ShonanAutoCut Inds. Ltd.	Koza Gun, Kanagawa

<p>Gold Prize “Giant &amp; Ultra-Thin Ring”</p>		<p>Silver Prize “Aspherical Honeycomb Lens Array (for Image Inspection Devices)”</p>
		

Bronze Prize "Resin Volute Springs 10°"	Technique Prize "Waveguide"
	








<Judges' comment for the winner of Gold Prize>

"Giant & Ultra-Thin Ring" IG EVEARTH CO., LTD.

By using a 5-axis machine, the surface of this large, thin-walled workpiece was machined with high accuracy while successfully avoiding chattering. The fact that the ring shape was finished with a minimum wall thickness of  $0.5 \pm 0.02$  mm and that the workpiece was successfully turned into a product is also astonishing.

Prototype & Test Cut Machining			
Prize	Title of entry	Applicant name	Address
Gold	Ultra-Thin & Long Part	Koga Denki Corporation	Shinagawa Ward, Tokyo
Silver	Screw-Spring	KYOCERA Corporation	Yasu City, Shiga
Bronze	Ultra-Thin Capsule with Ultra-Fine Holes	IG EVEARTH CO., LTD.	Kariya City, Aichi
Bronze	Mini Kettle (No Boiling!)	Askk Co., Ltd.	Hirakata City, Osaka
Technique	Sea Anemone Micro Nozzle	Akitsu Industry Co., Ltd.	Higashi-Osaka City, Osaka
Technique	Turbine Blade Ammonite	CASTEM CO.,Ltd.	Fukuyama City, Hiroshima

Gold Prize "Ultra-Thin & Long Part"	
	



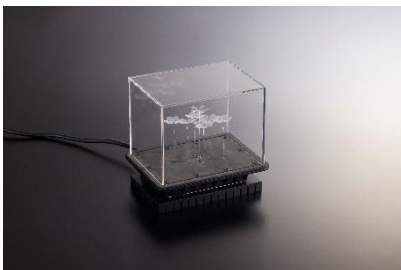



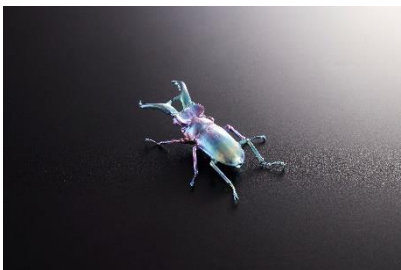
<p>Silver Prize “Screw-Spring”</p>		<p>Bronze Prize “Ultra-Thin Capsule with Ultra-Fine Holes”</p>	
			
<p>Bronze Prize “Mini Kettle (No Boiling!)”</p>			
			
<p>Technique Prize “Sea Anemone Micro Nozzle”</p>		<p>Technique Prize “Turbine Blade Ammonite”</p>	
			

<Judges' comment for the winner of Gold Prize>

“Ultra-Thin & Long Part” Koga Denki Corporation

It takes masterful craftsmanship to machine a  $\phi 0.5 \times 500$  mm-long part with an extremely high aspect ratio. The clever use of a steady rest to minimize run-out and careful material selection is also worth pointing out.

Artistic Form Machining			
Prize	Title of entry	Applicant name	Address
Gold	Paper	Seibu Co., Ltd.	Ayase City, Kanagawa
Silver	Helicopter	Noda Plastic Seikou Co., Ltd.	Niwa Gun, Aichi
Bronze	Oxalis	Circle & Square Co., Ltd.	Osaka City, Osaka
Bronze	Lucanus Maculifemoratus	YAMAMOTO SEIKI CO., LTD.	Yao City, Osaka
Technique	Two-Face Cup with Latent Images	IG EVEARTH CO., LTD.	Kariya City, Aichi
Technique	Petit Paris	ASAHI YUKIZAI CORPORATION	Nobeoka City, Miyazaki

Gold Prize "Paper"	Silver Prize "Helicopter"
	
Bronze Prize "Oxalis"	
	
Technique Prize "Two-Face Cup with Latent Images"	Technique Prize "Petit Paris"
	
Bronze Prize "Lucanus Maculifemoratus"	
	

<Judges' comment for the winner of Gold Prize>

"Paper" Seibu Co., Ltd.

The realistic creation of a 130 x 130 mm-large and 0.1 mm-thick resin paper is very impressive.

The thin-walled shapes were expressed beautifully with reverse engineering and clever usage of jigs.

Advanced Machining			
Prize	Title of entry	Applicant name	Address
Gold	Transparent Picture Frame (Umezawa Hamlet-Fields)	INAC Co., Ltd.	Okazaki City, Aichi








<Judges' comment for the winner of Gold Prize>

"Transparent Picture Frame (Umezawa Hamlet-Fields)" INAC Co., Ltd.

If the laser irradiation energy differs, the laminated resin layers show different light transmittance. Utilizing this concept for drawing hidden patterns is an excellent idea. Also, the lamination thickness was controlled exquisitely.

Academic Research			
Prize	Title of entry	Applicant name	Address
Gold	Slit Lenticular Puzzle	Kobe Advanced Institute of Technology	Kobe City, Hyogo
Silver	Fans Made of Recycled Bottle Caps	Kindai University Technical College	Nabari City, Mie
Bronze	Rose and Beetle (Interior Plastered)	Chugoku Polytechnic college	Kurashiki City, Okayama
Bronze	Oloids	Hyogo Prefectural Monodzukuri Institute	Himeji City, Hyogo

Gold Prize “Slit Lenticular Puzzle”		Silver Prize “Fans Made of Recycled Bottle Caps”	
 			
Bronze Prize “Rose and Beetle (Interior Plastered)”		Bronze Prize “Oloids”	
			

<Judges' comment for the winner of Gold Prize>

“Slit Lenticular Puzzle” Kobe Advanced Institute of Technology

Multiple techniques such as processing puzzle pieces and grooving patterns were combined. In particular, the four patterns from lenticular and slits are impressive.