NEWS RELEASE

December 5, 2024
AIDA ENGINEERING, LTD.
Representative Director and President (CEO)
Toshihiko Suzuki

Sponsored by the Japan Forming Machinery Association

AIDA Awarded the 2024-2025 Metalforming Technology Grand Prize

This is to announce that AIDA ENGINEERING, LTD., was awarded the MF Technology Grand Prize by the Japan Forming Machinery Association (JFMA) for the following forming sample that was made using an AIDA UL Series press.

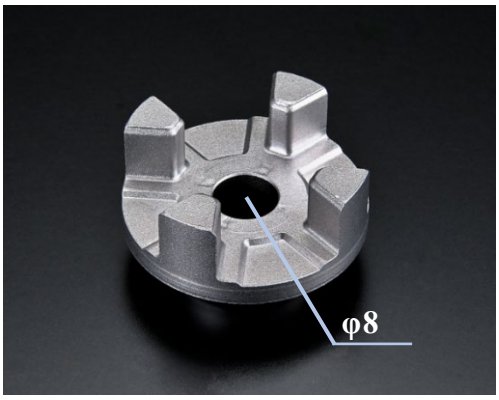
Overview of the Award-Winning Product

Award-Winning Product: **Sheet-Forged Joint Enabled by Changing the Manufacturing Method from Sintering + Machining**

Award Recipients: AIDA ENGINEERING, LTD. and YUASA SEISAKUSHO, LTD. (Tomioka City, Gunma Prefecture)

Machine: UL Series Precision Forming Press

(UL Series Precision Forming Press)



(Motorized Power Steering Joint for Vehicles)

Reasons for Bestowing the Award (Excerpted from a J-FMA News Release)

The concept of switching from a sintering methodology to a cold-forming methodology using a press received high praise. The change in manufacturing methodology not only improved the strength of the product (which was an issue with sintering methodologies) but also boosted productivity 3~5 times by eliminating the processes of powder molding, sintering, and drilling using machine tools. In addition, by reducing the number of processes, the amount of machinery required was reduced and sintering was no longer necessary, which resulted in a significant reduction in power consumption. The press-forming methodology was also praised for reducing CO2 emissions by approximately 76% compared to the sintering methodology.

[Tangible Achievements]

In the case of a conventional sintering methodology, once the powder molding process has been completed, it is also necessary to heat-treat the product and machine a φ8 hole, and in order to produce one part it takes approximately 7 seconds to complete the powder molding and 10 seconds to machine the φ8 hole. However, by switching to a press methodology, it is now possible to produce one piece in just 2 seconds. And because the forming of the φ8 hole is being completed during the press-forming process, the 3 machining centers that had been running 2 shifts when producing 300,000 parts are no longer required. Moreover, the heat treatment process also became unnecessary, and it reduced energy (electricity and natural gas) usage.

Overview of the MF Technology Grand Prize (Excerpted from a J-FMA News Release)

The MF Technology Grand Prize honors collective manufacturing capabilities that enhance the ability of metalforming technologies using forming machines and which combine the 7 essential metalforming elements--forming machines, product machining, dies, systems, raw materials, assembly, and research. Our aim is to contribute to the development of metalforming technologies that span from upstream to downstream processes by disseminating the results of comprehensive eco-friendly product manufacturing. Because the quality of a forming machine is proven by the quality of the final product, we recognize partnerships between forming machinery and processing manufacturers, etc. We consider the MF Technology Grand Prize to be the world's most prestigious forming machinery award that honors the pinnacles of metalforming technologies utilizing forming machinery (including laser and plasma cutting machinery).

< Inquiries Relating to This Subject >
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※Please visit the J-FMA homepage for more information about the awarding of this prize.
https://j-fma.or.jp/activities/mf-technology-award/award-winning-products-introduction

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