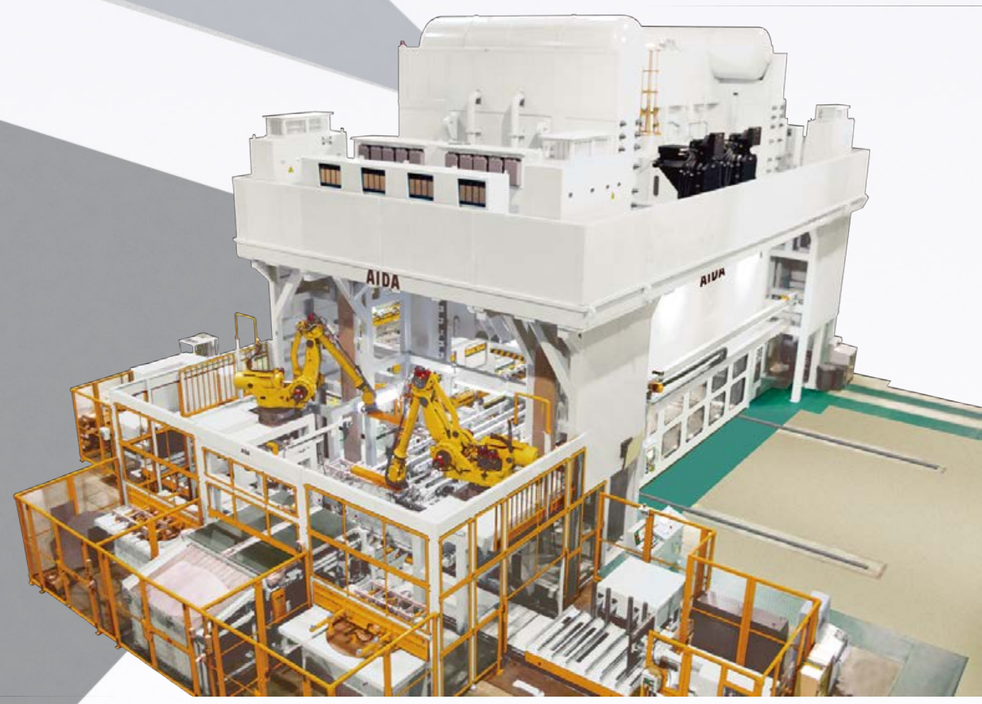
AIDA

TRANSFER PRESS

DSF-T Servo Presses

TMX Mechanical Presses



AIDA ENGINEERING, LTD.
URL : http://www.aida.co.jp/

616-A-1809E

High-Precision Transfer Press

TMX Series

A System That Combines Master Craftsmanship Manufacturing with Advanced Forming Technologies

The large frame design and the manufacturing processes were revamped in order to accommodate the forming of high-strength materials.
AIDA manufactures all the precision parts in-house in order to achieve minimal clearances in critical areas and delivers high-precision forming and high durability by means of a 8-surface slide guide design and a grip-type point design, etc.
Enables the forming of automotive structural panels and transmission parts.

A Complete System Enabled by AIDA's Peripheral Equipment

A new type of transfer enables even higher-speed production. AIDA has a long track record of delivering a wide array of automation equipment, such as high-speed destack feeders for aluminum materials.

A Proven Track Record

As a pioneer of transfer presses, AIDA offers 2-point and 4-point presses in a wide range of capacities, and we will recommend an optimized total production system tailored to your products.

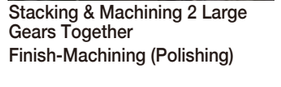

Destack Feeder for Aluminum

In-house manufacturing that cannot be imitated.


Stacking & Machining 2 Large Gears Together

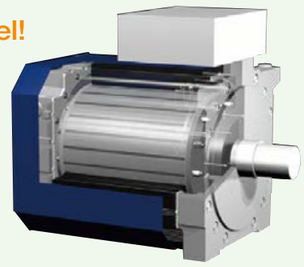

Hammer-Peening


Post-Welding Stress-Relieving


Finish-Machining (Polishing)

A Servo TMX to Boost Performance to the Next Level!

DSF-T Direct Servo Former

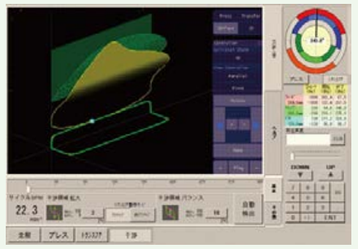


- A direct-drive design that fully transmits the servo motor RPMs to the slide.
- A maintenance-free design--No belts or speed reducers, and no regular replacement of components.
- The gear train drive eliminates slide point phasing issues.

Improved Formability	The press motion is freely programmable to match the forming application. Reduces speed when the dies come in contact and suppresses material and die vibration.
Improved Productivity	Enables easy synchronization with automation systems, and the optimization of the non-forming range of the stroke boosts productivity. Pendulum motion that does not pass through top dead center shortens the stroke length and delivers even higher productivity.
Improved Operability	Using the Step Feed controller to align dies enables worry-free die trials even for new dies. Because there is no flywheel, instantaneous reverse motion is possible.
Lower Energy Costs	The AIDA servo system's peak power reduction function in its standard high-capacity capacitor system has been further enhanced, and a control function has been added to the servo power supply in order to reduce power consumption.

Synchronization Control System AIDA Digital Motion System (ADMS)

Though the motion of a servo press is freely programmable, the motion timing of the transfer feeder to be synchronized with the press is difficult, and in many cases this issue has adversely affected productivity.
With the AIDA Digital Motion System (ADMS), once the user has programmed the press motion the ADMS will automatically calculate the optimal transfer feeder timing based on the allowable acceleration, thereby delivering productivity at the fastest speed. In addition, if the motion timing is set for each product, AIDA's revolutionary, independently-developed synchronization control system will dramatically improve productivity.



Servo Drive Die Cushion

A servo motor-driven die cushion that uses oil as the medium. Because oil is used as the pressure transmission medium, durability is significantly higher compared to a mechanical drive mechanism. The electrical power being used by the die cushion is regenerated during the forming process, thereby saving energy.
The variable pressure function and the locking mechanism enable the draw-forming of high-strength materials.Even with its compact design, cushion capacities of 2000 kN and higher are possible.