



AIDA's Independently Developed Peripheral Equipment
Product Launch of a Dedicated and Fully Integrated High-Speed Press Line for Forming EV Vehicle Drive Motor Cores

AIDA ENGINEERING, LTD. (President and Representative Director: Kimikazu Aida; hereafter referred to as 'AIDA') has independently developed the peripheral equipment required to produce EV drive motor cores using its high-speed precision presses.

As a result, AIDA is not only able to supply a press by itself, it can also supply a high-speed precision press line as a fully integrated system. A summary is provided below.



※The press shown here is a test model

■ **Development Background**

Demand for high-speed precision presses continues to increase along with the increasing production of drive motor cores essential for the electrification of vehicles. Up to the present, AIDA has only been supplying high-speed precision presses and then procuring and incorporating 3rd-party peripheral equipment. However, the manufacturing leadtimes and service terms for the various peripheral equipment differ by manufacturer, and many customers have been asking for integrated all-AIDA systems.

In order to improve customer service and achieve industry-leading high-performance systems, we have developed a complete set of peripheral equipment, ranging from the uncoiler and S-loop equipment at the head of the press line to the feeder (push-pull type), core rotating equipment, and scrap cutter (for material skeletons). The small motor we have incorporated in our feeder leverages the high-torque servo motor technologies that AIDA developed in-house for its presses to deliver powerful material feeding capabilities.

Going forward, we will leverage AIDA's global network to enable turn-key solutions for entire high-speed precision press lines, and we will also be able to provide optimal service support for motor core production both within Japan and overseas.

■ Product Overview (For a Press Line Running 600 mm-Width Material)

[Uncoiler "ADU-5-600E"] + [S-Loop Equipment "ASV-600"]

- (1) Industry-Leading S-Loop Coil Line (Max. Feed Speed: 130 m/min.)
- (2) Quick-Start Feature That Eliminates Automatic Acceleration (Startup Time: 0.2 sec.)
- (3) Compact Line Length (Approx. 15% Shorter Than a Double-Uncoiler Line)
- (4) Auto-Threading is Standard (Reduces Coil Insertion Setup Times)

[High-Speed Feeder "ADF-600"]

- (1) Industry-Leading Feeder (Max. Feed Speed: 130 m/min.)
- (2) Equipped with AIDA's Independently Developed Small Water-Cooler Servo Motor for Feeder Applications
- (3) Creation of a Synchronization System for the Push-Pull Feeder (The Feeder Model Number Denotes the Material Width, and the Feed Roll Width is Even Wider)
 - A model accommodating 450 mm width material is also available.

[Servo Drive Scrap Cutter "ASC-600"]

- (1) A compact design with a lower overall height achieved by leveraging the features of the press.
 - A model accommodating 450 mm width material is also available.

[Core Rotator "ARM-30"; "ARM-45"]

- (1) It is possible to have a 'shared operation panel' for the feeder and core rotator. (Simple operability made possible by single-sourcing.)
 - Available in two types--30 kW and 45 kW.

[Line Specifications]

		450 mm Width	600 mm Width	
Coil Weight	(kg)	MAX. 3000 x 1	MAX. 5000 x 1	※1
Coil I.D.	(mm)	φ508	φ508	
Coil O.D.	(mm)	MAX. φ1500	MAX. φ1500	
Coil Material Width	(mm)	100~450	150~600	
Coil Material Thickness	(mm)	0.15~0.5	0.15~0.5	
Line Speed	(m/min.)	15~120	15~130	※2
Line SPM	(min ⁻¹)	100~450	100~450	

※1: When using electromagnetic sheets.

※2: This can vary depending on the feed conditions.

■ Sales Overview

Product Launch Date: October 2022

※Please contact AIDA for questions about specific models, regions, and line specifications.

Sales Target: 30 lines/year

Estimated Selling Price: 3~4 hundred million yen (For an entire MSP-3000-370 press line)

※Will vary depending on the line specifications.

※Please note that this information is subject to change without notice.

< Inquiries Relating to This Subject >

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