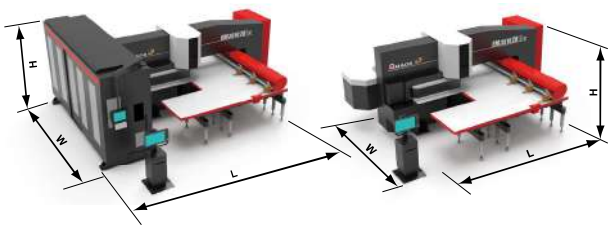
Dimensions

Unit :mm

- EM-3612ZRTe
  (L : 7415 x W : 6220 x H : 2666)
- EM-3510ZRTe
  (L : 7005 x W : 5120 x H : 2666)
- EM-3612ZRBe
  (L : 6582 x W : 6220 x H : 2367)
- EM-3510ZRBe
  (L : 6157 x W : 5120 x H : 2367)



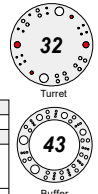
EM-3612ZRTe
EM-3510ZRTe

EM-3612ZRBe
EM-3510ZRBe

Machine specifications

Model		EM-3510ZRTe	EM-3612ZRTe	EM-3510ZRBe	EM-3612ZRBe
Model name (Note the points listed below)		EM3510ZRTE	EM3612ZRTE	EM3510ZRBE	EM3612ZRBE
Press capability	kN	300			
Drive system		AC servo direct twin drive			
Turret specifications		ZR turret			
Number of stations (TSU)		179 or 300 stations		—	
Number of stations (Buffer)		—		69 or 65 or 75 station	
Processing range	mm	2500 x 1275	3050 x 1525	2500 x 1275	3050 x 1525
Maximum workpiece thickness	mm	3.2			
Maximum workpiece mass	kg	50(F1)/150(F4)			
Table feed rate	m/min	120 x 80	100 x 80	120 x 80	100 x 80
Hit rate	min^{-1}	500(Stroke length= 5mm pitch= 25.4mm)			
Pass line	mm	1050 (Standalone configuration)			
Processing accuracy	mm	±0.1 (according to our inspection standards)			
Slug pulling prevention device		Slug suction			
Mass of machine	kg	23500	25000	20000	21500

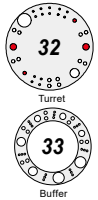
32ST-4AI Maximum tool diameter: D range



Tool size	Number of tools	
	Turret	Buffer
1/2"	14(14)	23
1 1/4"	8(8)	17
1 1/4" (AI)	2(2)	
1･1/4"-tap	4(4)	
2"	-	2
2" (AI)	2(2)	
3 1/2"	2(2)	1
4 1/2"	-	

1.Numbers in parenthesis indicate the station numbers where shaped tools can be installed.
2.Tapping stations ca be used for punching and forming tool

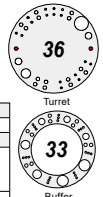
32ST-4AI Maximum tool diameter: E range



Tool size	Number of tools	
	Turret	Buffer
1/2"	14(14)	20
1 1/4"	8(8)	9
1 1/4" (AI)	2(2)	
1･1/4"-tap	4(4)	
2"	-	2
2" (AI)	2(2)	
3 1/2"	1(1)	1
4 1/2"	1(1)	1

1.Numbers in parenthesis indicate the station numbers where shaped tools can be installed.
2.Tapping stations ca be used for punching and forming tool

36ST-2AI Maximum tool diameter: E range



Tool size	Number of tools	
	Turret	Buffer
1/2"	16(16)	20
1 1/4"	10(10)	9
1 1/4" (AI)	2(2)	
1･1/4"-tap	4(4)	
2"	2(2)	2
2" (AI)	-	
3 1/2"	1(1)	1
4 1/2"	1(1)	1

1.Numbers in parenthesis indicate the station numbers where shaped tools can be installed.
2.Tapping stations ca be used for punching and forming tool

For your safe use, be sure to read the "Instruction Manual" carefully before use.
●When using this product, appropriate personal protection equipment must be used.

*Specifications, appearance and equipment are subject to change without notice.
*The official model names of machine and units described in this catalogue is EM3510ZRTE, EM3612ZRTE, EM3510ZRBE, EM3612ZRBE.
Use these registered model names when you contct the authorities for applying for installation, exporting, or financing.
The hyphenated spelling like EM-3510ZRTe, EM-3612ZRTe, EM-3510ZRBe, EM-3612ZRBe are used in some portions of this catalog for sake of readability.
*Photographs of the machine's hazard-prevention measures and some of the covers have been removed for the purpose of filming.
*The specifications described in this catalog are for use in Japan.

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Inquiries

E157-HQ01en
Jan. 2024

SOLUTION

AMADA DIGITAL INNOVATION V-factory

EM ZR e SERIES

High quality punching automated solution

EM-3510ZRTe / EM-3612ZRTe / EM-3510ZRBe / EM-3612ZRBe

Blanking

The Engineering AMADA

The decarbonized society is rediscovering its potential appeal.

Premium NCT takes you one step further

The EM Series, equipped with the unique AC servo direct twin drive system, is now attracting interest again as a machine that can both realize a sustainable society and benefit customers!
Experience premium processing with the power realized with the EM-ZRe's minimum energy, high speed, high precision machining & the advantages of a turret with the usability of a single punch.

AC Servo/Direct Twin Drive

Machines with AC servo direct twin drives are marked with the DD symbol.

Fully-automatic punching machine

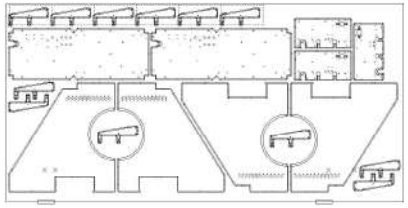
EM ZR e SERIES

Processing examples with sample workpieces

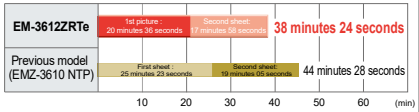
Material:SECC 1.6 mm
Size :500×400 mm
Processing features: Integrated forming and tapping processes

Processing time 6 minutes 40 seconds

Material: Aluminum 3.0mm
Size :2000×1000 mm
Number of workpieces: 2
Number of tools used: 21
Processing features: Tapping 114 hit



Comparison of processing time
15% reduction



Material:SECC 1.6 mm
Size :184×180 mm
Processing features: share joint with common cut processing

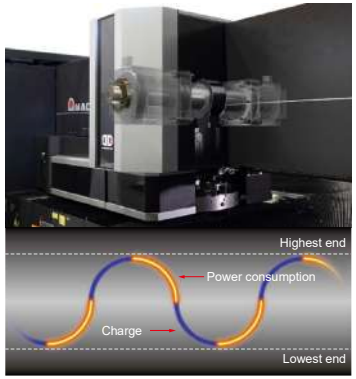
Processing time 1 minute 20 seconds

EM-ZRe Series New Technology

1 Energy-saving, high quality, stable and secure processing

Eco&Power AC servo direct twin drive

The AC servo direct twin drive combines the features of both the mechanical type that performs high-speed processing with its inherent power and the hydraulic type that produces high precision processing through hydraulic control. This drive system is energy-saving, oil-free, and low-noise, making it suitable for a sustainable society.
Braking energy during ram control is recovered and stored in a capacitor. **A power leveling energy-saving circuit** that reuses this energy during ram acceleration to realizes energy-saving processing.

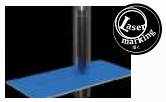


ZR Turret solves issues of bottom scratches and top and bottom forming and is ideal for processing with the latest tooling

With the EM-ZRe, concern about bottom scratches caused by dies, and devising a program for forming are no longer necessary. ZR turret and the full flat table revolutionized the turret punch press. Since only the die required for processing is raised and lowered, top-and-bottom forming and high-height forming can now be processed without flaws.
Additionally, high-capacity tool storage expands the range of processing.

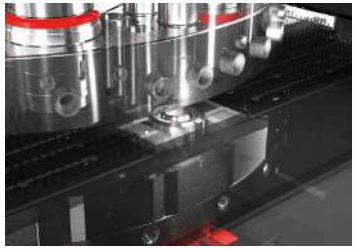
(ARFT ball chamfer tool) note)

T-UpII tool (Positioning tool)



ARFT marking tool (Positioning tool)

NOTE) Optional roller tool software is required.



Only the die required for processing is raised and lowered.

Digital control of quality with ID tools

❶ **Prevent tool setting errors**
ID tool
Each tool is digitally controlled by an ID engraved on the tool. The machine automatically checks the ID when the tool is installed, eliminating installation errors.

❷ **Tool condition management ensures high quality processing**
Tools that require maintenance are identified and maintained best condition at all times.

❸ **Elimination of shimming time**
Automatic die height adjustment
The height of dies is automatically adjusted to suit their regrinding amount. This means that their height doesn't need to be adjusted by shimming.

❶ **ID tool**

❷ **Tool condition management**

MPT tapping unit

Equipped with a tapping unit in the turret.
The range of punching and tapping is common, reducing program time and processing time.

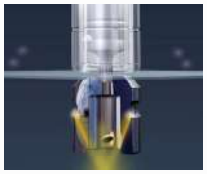
*Compatible with M2.5~M8
*Can be used for cutting and rolling taps

1-clamp punch and tapping of 5'×10' material

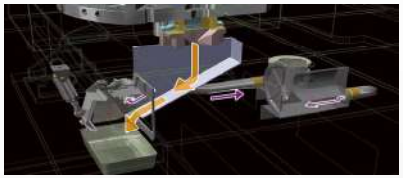
The X-axis travel of 3050 mm (in the case of EM-3612ZRTe/EM-3612ZRBe) enables high speed, stable punching, forming, and tapping of 5' x 10' material without having to repostion. It also reduces complicated work on the program.

Stable and high speed processing with less debris

❶ **Power vacuum system to prevent slug pulling in small diameters (standard)**
Power vacuum system injects powerful air downward inside the die to suction extracted slug to the bottom.



❷ **Large-diameter slug pull prevention by slug suction unit (standard)**
Vacuum discharges the extracted shavings into the scrap box, preventing shavings from rising up.



Reduce setup time with clamp positioner (option)

Clamps are automatically postioned as programmed to allow for long, continuous automatic operation.

■**Clamp Positioner Specifications**

EM-ZRe Series New Technology

2 Automation of tool setup

2 clearances for 1 punch, maximum 300 tools for automatic exchange operation

Tool changes are a mentally and physically demanding task for punching machine operators, and the time spent on this task directly affects machine operation rates. The EM-ZRe series automates this process and can automatically change up to 300 tools. 2 dies with different clearances for each punch allow processing of different plate thicknesses and materials with the proper clearance. This makes it easy to create nesting data according to the production plan.

Mass tool storage

Rack		Type 179	Type 300
Upper row	1/2"	88	152
	1 1/4"	65	100
Middle row	1 1/4"	11	25
Lower row	2"	10	15
	3 1/2" or 4 1/2"	Together 5	Together 8

3 Linking machines with customers

AMNC 4ie

The new AMNC 4ie NC system is developed based on the concept of the "4 e's" to address the key issues in sustainability, namely "human issues" and "environmental issues." In addition to controlling machines and peripheral devices, the AMNC 4ie has enhanced interface functions to connect customers and machines.

Easy operation for anyone to use	Efficiency in remote operation from anywhere
Easy	Efficiency
Environmental sustainability in production	Evolution together with our customers
Environmental	Evolution

Facial recognition
Language and screen display can be switched.
(setting is required in advance)

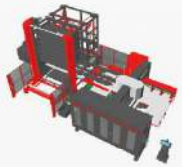
Startup inspection guidance
Navigation video that allows anyone to perform startup inspections according to the procedures. Management and sharing of inspection history.

Mobile HMI
Notification of remote start/end prediction/completion using mobile HMI.

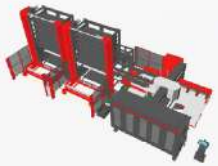
CO_2 emission reporting function
CO_2 emissions are measured for each component, and reports can be created and filed.

4 Automation

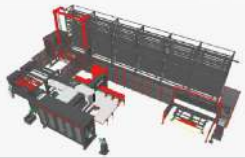
■Space saving
The single sheet pick-up device in the tower allows flexible scheduling regardless of material thickness and types.



■2 tower specifications (material and product tower)
The two tower specification of material, product and skeleton tower enables continuous operation of multiple materials and products.



■Automatic warehouse connection specification
Continuous operation is realized by connecting automatic warehouses. Efficient layout is possible according to the customer's installation space and height.



5 V-factory

Amada's recommended V-factory is based on the concept of "creating profits for customers". V-factory will co-create factory reforms with customers by providing visualization, taking advantage of IoT technology and maximizing machine utilization.

V-factory Connecting Box

Used to connect machines to the cloud and start V-factory.

V-monitor *

Automatically records the state of the machine during automatic operation.