



SOLUTION

EM MII SERIES

ENERGY SAVING, HIGH TONNAGE
PUNCHING SOLUTION



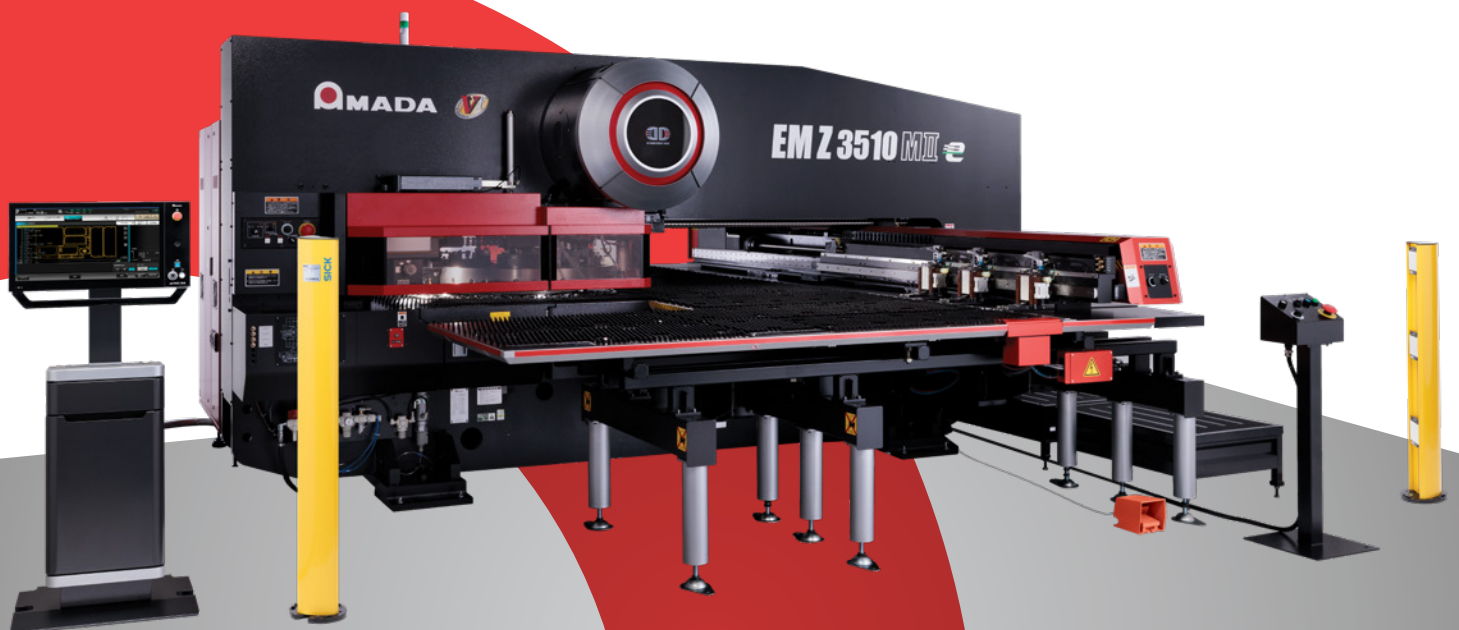
ENERGY SAVING, HIGH TONNAGE PUNCHING SOLUTION

DUAL SERVO, 30T ELECTRIC SERVO PUNCHING

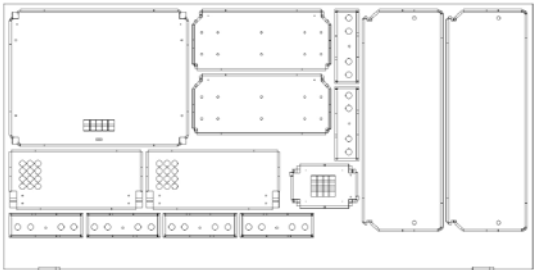
THE FUSION OF AMADA'S ORIGINAL TECHNOLOGIES ENABLES HIGH SPEED, HIGH QUALITY AND HIGH PRODUCTIVITY PROCESSING

A combination of new and original technologies are utilised on the EM-MIIe series, including AMADA's proven AC twin servo drive punching system. The result is faster, more productive, and higher-grade sheet metal processing.

ID tooling and tapping tool options can also drastically reduce setup time and achieve blanking process integration, saving time and increasing profit.



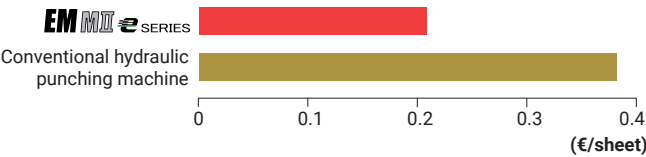
TYPICAL PROCESSING SAMPLES



Galvanised steel 2.3 mm
2438 x 1219 mm

RUNING COST COMPARISON

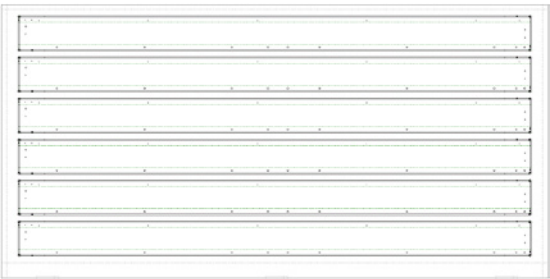
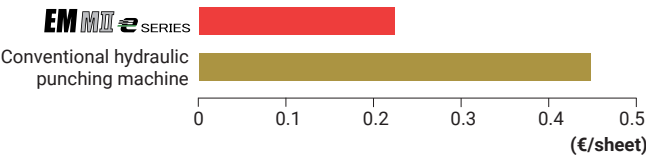
45.0% COST REDUCTION PER SHEET



Galvanised steel 2.3 mm
2438 x 1219 mm

RUNING COST COMPARISON

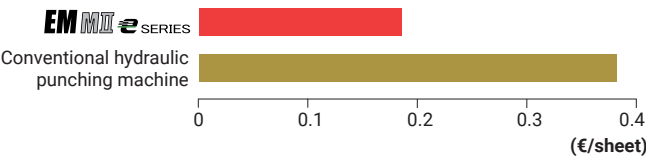
49.0% COST REDUCTION PER SHEET



Galvanised steel 2.3 mm
2438 x 1219 mm

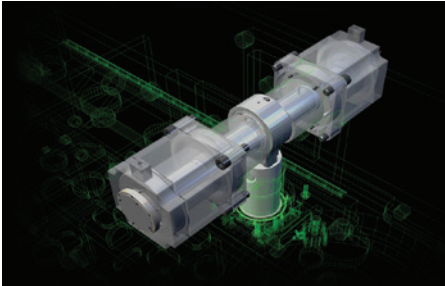
RUNING COST COMPARISON

50.0% COST REDUCTION PER SHEET



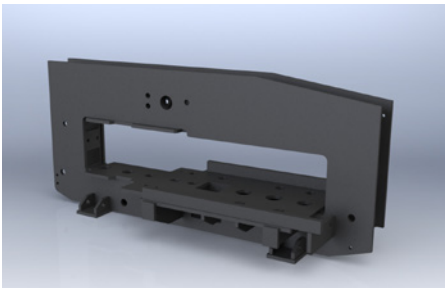
AMADA ORIGINAL TECHNOLOGIES

HIGH QUALITY, LOW RUNNING COSTS



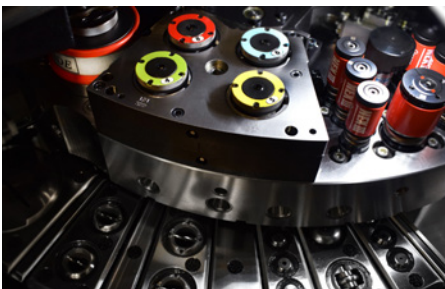
ALL ELECTRIC PUNCHING

The EM-MIIe uses twin AC servo motors to generate 30 tons of punching force, allowing a wide range of punched and formed parts to be processed. This system uses up to 70% less electricity compared to hydraulic systems.



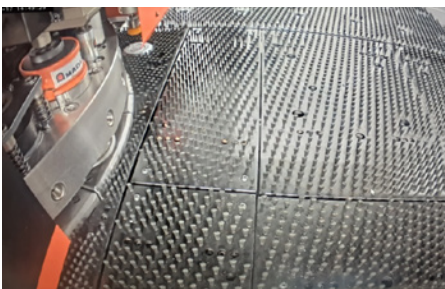
LONGER TOOL LIFE

AMADA's original bridge frame design ensures that any deflection due to punching forces does not affect the alignment between punch and die as the tool is always in a central position, potentially extending tool life.



INTEGRATED TAPPING

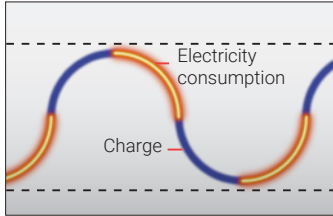
4 tapping stations are integrated into the turret of the EM-MIIe. These allow M2.5 to M8 taps to be utilized in the program. When they are not required for tapping operations, they can be loaded with standard 'B' station tools.



REAL-TIME MONITORING

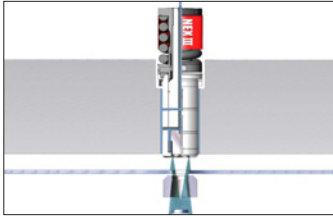
Check the real-time machine status remotely on your smart device. Additionally, whenever an alarm occurs, V-monitor will also record HD video to enable diagnosis of the issue.

STANDARD EQUIPMENT AND FUNCTIONS



Energy Recovery System

This excellent energy recovery system collects and stores energy generated when the brake is applied to the ram into a capacitor, which is then reused during the next ram acceleration.



Air Blow System

The programmable Air Blow function on the EM-M1le allows for self lubrication of the punching tools to give the benefits of prolonged tool life and increased punching efficiency.



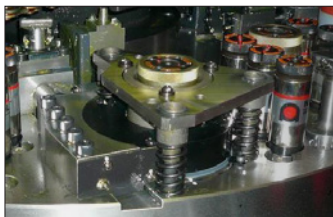
AMNC 4ie

The AMNC 4ie numerical control used on the EM-M1le is a 21.5" HD touch screen system that provides simple, intuitive operation for higher productivity. Facial recognition, service tutorial videos and connection to AMADA's IoT service systems helps increase machine uptime.



AMADA Rapid Forming tool (ARFT) Compatibility

The EM-M1le is supplied with the ability to support the AMADA Rapid Forming Tools (ARFT) for continuous, quick forming of more complex profiles such as offsets, beading and chamfering.



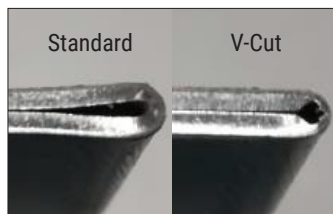
Auto Index Stations

The Auto-Index System enables punching at any angle with a single tool, thus eliminating the need for special key angle tooling. When combined with special shaped tooling, the Auto-Index System becomes even more productive and flexible.



High Density Brush Table

As standard, the machine is equipped with brush tables that support material up to 4.5mm thickness. Manual sheet loading operation is greatly facilitated by retractable ball bearings.



V-Cut Compatibility

Using the special V-Cut tooling, parts can be processed on the EM-M1le that allow sharp internal profiles and much flatter hemming bends to be achieved on the bending machines.

OPTIONAL EQUIPMENT AND FUNCTIONS*

*Not all options are compatible. Please check table below. ID Tooling is compatible with all options.



Punch & Form (P&F) System

To compliment the already high capabilities of the EM MIIe machine, the P&F system can be added. This consists of a 160 kN forming system, which activates the die to allow the processing of forms up to 22mm high.



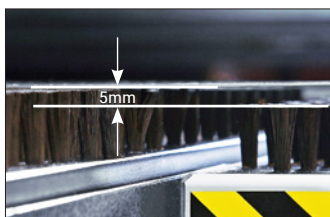
ID Tooling

Punches and dies are immediately identified and tracked for number of hits, sharpening amount, and remaining life, helping to minimize set up mistakes. The tool angle and appropriate die selection are also confirmed upon installation.



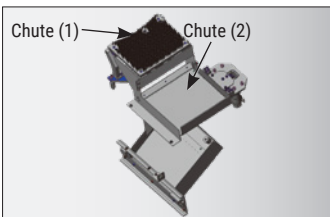
Turret Configuration To Suit Your Production

The Z turret uses different diameter upper and lower disks so dies can easily be quickly and easily changed. The K turret accommodates a large range of tools to reduce the number of tool set-ups. Both configurations allow large 'E' station (114mm) slitting tools to be used, reducing punching times.



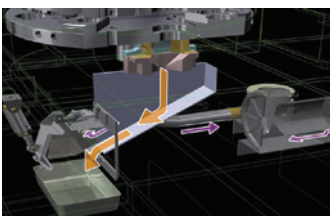
Floating Brush Table

The floating brush table ensures that when processing down forms, the form does not get caught in the die when the sheet moves to the next punching position. This provides very stable processing capabilities and higher quality parts.



Work Chute

To increase the machine productivity, the EM MIIe Series can be equipped with a 300 x 300mm work chute for the removal of finished parts. A part drop detector is also fitted to help provide consistent production.



Slug Suction Unit

To enhance the standard power vacuum system, a slug suction unit can also be fitted, helping to prevent slug pull at each turret station, depending on the material thickness and tool size.

Option Compatibility	P&F	High Speed Floating Brush Table	Workchute	Slug Suction Unit
P&F		✓	✓	X
High Speed Floating Brush Table	✓		X	✓
Workchute	✓	X		✓
Slug Suction Unit	X	✓	✓	

AUTOMATION SYSTEMS



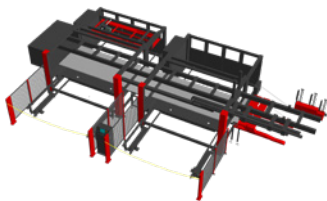
MP SheetCat
Compact, single pallet L/UL



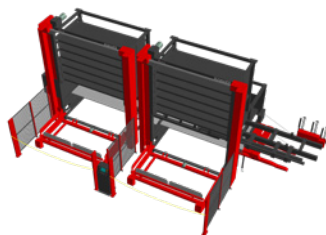
ASIII MP
Multi pallet L/UL



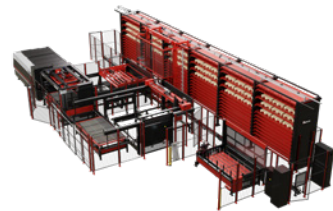
PR III
Part removal systems



LA NTK + SR NTK
Single pallet L/UL with enhanced
part removal



AS NTK + ULS NTK
Multi pallet L/UL with enhanced
part removal

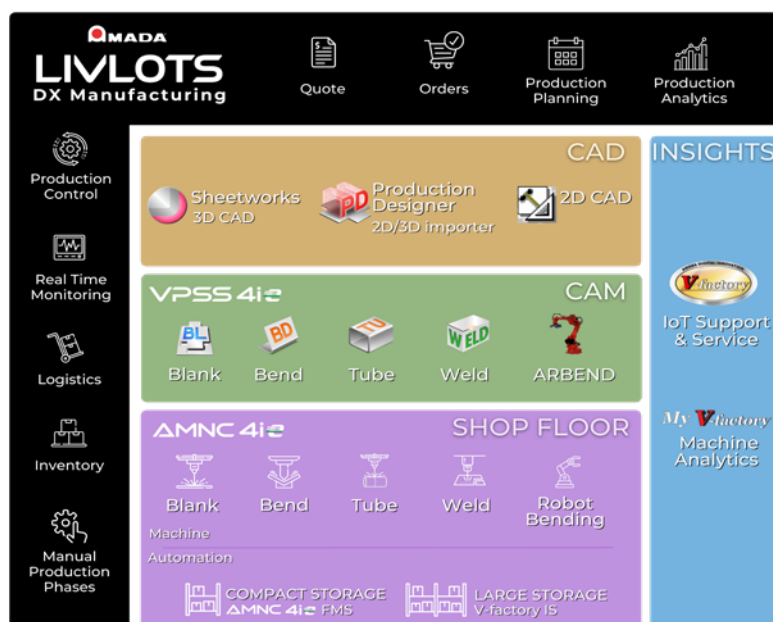


CS II
Stockyard systems

PRODUCTION PLANNING AND PROACTIVE SERVICE

With the brand-new software solution LIVLOTS (Live Variable LOT production System), AMADA demonstrates how digital transformation can make production processes more efficient and reliable.

Particularly noteworthy is the deep integration into innovative machine technologies, the VPSS 4ie CAD CAM software solution for virtual prototype manufacturing, complemented by predictive support from technical services, which reduces downtime and increases machine availability.



DIMENSIONS

EM-3510Mlle

(L) 6157 x (W) 5120 x (H) 2367

EM-3612Mlle

(L) 6582 x (W) 6220 x (H) 2367

Unit : mm



MACHINE SPECIFICATIONS

EM-Mlle Series			EM-3510 Mlle	EM-3612Mlle
Numerical control			AMNC 4ie	
Punching force		kN	300	
Drive system			AC servo, direct twin drive	
Turret	Number of stations		44 MPT or 45 stations (4 AI) Z turret 55 MPT or 58 station (4 AI) K turret	
Controlled axes			11	
Axis travel distance	X x Y	mm	2500 x 1275	3050 x 1525
Maximum simultaneous feed rate	X/Y	m/min	144	128
Maximum punching hit rate	5 mm stroke / 25.4 mm pitch 5 mm stroke / 2.0 mm pitch	hpm	500 745	
Maximum marking hit rate	1.4 mm stroke / 0.5 mm pitch	hpm	1800 (X) - 950 (Y)	
Punching accuracy		mm	± 0.1	
Work range without reposition		mm	2500 x 1275	3050 x 1525
Maximum sheet thickness		mm	4.5	
Maximum material mass		kg	50 (F1) / 150 (F4)	
Machine mass		kg	19000 (Z turret) 19500 (K turret)	21000 (Z turret) 21500 (K turret)

Specifications, appearance and equipment are subject to change without notice by reason of improvement.



For Your Safe Use

Be sure to read the operator's manual carefully before use.

When using this product, appropriate personal protection equipment must be used.

The official model name of the machines and units described in this catalogue are non-hyphenated like EM3612Mlle. Use this registered model names when you contact the authorities for applying for installation, exporting, or financing.

The hyphenated spellings like EM-3612 Mlle are used in some portions of the catalogue for sake of readability. This also applies to other machines.

Hazard prevention measures are removed in the photos used in this catalogue.

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