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# AEM-1500VQ

Lead edge feeding automatic flatbed die cutting machine  
with waste stripping

## TECHNICAL INSTRUCTION



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## Features

- ★ Complete design, accurate installation, high stability, high security, low noise.
- ★ High strength gripper, advanced gripper device can apply all kinds of corrugated paper. Positioning device ensure the cutting precision.
- ★ Worm, worm gear and special designed crankshaft connecting device is linked by bearing bush, reduce the movement clearance, avoid impact between worm and worm gear. Run steadily, high cutting pressure. It has a function of high point pressure hold. Worm gear is made of high wear-resisting aluminum bronze, it has long durability.
- ★ Non-stop feeding and delivery device can shorten the auxiliary time, improve the efficiency.
- ★ Adopt advance cam mechanism, pressure adjusting device, pneumatic die locking, pneumatic sampling, overload protection device. Adopt imported high precision chain, imported pneumatic clutch.
- ★ Adopt lead edge feeding, apply secondary positioning mechanism, lower the requirement about paper. During the process, keep the workers hands far away from the cutting section, ensure the safety.
- ★ Pneumatic die locking mechanism makes changing of die, makeready more convenient, die frame fix firmer, more accurate, time saving.

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★ Programmable controller and man-machine interface. Digital display the working speed, processing number, total running time. The display of trouble makes trouble shooting more convenient. Automatic control and real time monitor feeding, cutting and delivery parts, cooperate with the safety device in each part. Make the operation more reliable, machine adjustment and troubleshooting more convenient.

★ High precision intermittent mechanism, high cutting precision, running steadily.

★ Automatic paper delivery, arranging device makes delivery more convenient and neat.

★ Floating function of cutting die plate make inserting and pulling out the plate more convenient

★ Double sheet, crooked sheet, empty sheet optoelectronic detecting device, ensure the paper in the right position, reduce waste.

★ Electronic control module design, adopt imported electronic components, ensure the accuracy and reliability.

★ Cycling cooling oil supply system ensure the movement parts get adequately lubricated to ensure the durability.

★ Imported pneumatic clutch, joint and withdraw conveniently, with small brake angle, it can transmit high torque high torque.

★ Front and rear cutting pressure can be adjust separately, manual wheel makes it convenient.

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★ Adopt fixed quantity at fixed timing oil supply system, ensure the movement parts get adequately lubricated to let better durability.

★ 3 waste stripping frames work together, human-friendly design, easy to install and uninstall the waste stripping plate.

★ Automatic waste stripping device can remove the waste easily.

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## Main technical parameters

|                        |                             |
|------------------------|-----------------------------|
| Max paper size:        | 1500 x 1100 mm              |
| Min paper size:        | 440 x 470 mm                |
| Max cutting size:      | 1490 x 1090 mm              |
| Cutting precision:     | $\leq \pm 0.3$ mm           |
| Max cutting pressure:  | 300 N/cm <sup>2</sup>       |
| Max cutting speed:     | 4500 s/h                    |
| Delivery stack height: | 1350 mm                     |
| Application:           |                             |
| Cardboard:             | 250~2000 g/m <sup>2</sup>   |
| Corrugated paper:      | <11 mm                      |
| Main motor power       | 15KW                        |
| Total power:           | 18.8 5W                     |
| AEM-1500VQ dimension:  | 8700 x 2600(+2300)x 2400 mm |
| AEM-1500VQ weight:     | 19 T                        |

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## Standard configuration

### Feeding section:

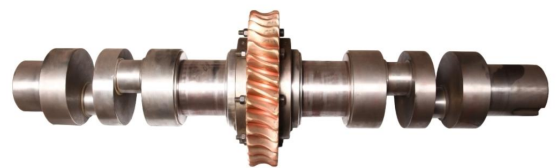
- ★ Lead edge feeding system, automatic paper feeding.
- ★ 2 side lay on both side.
- ★ Feeding system fine tuning device, non-stop adjust.
- ★ Electronic double detector.
- ★ Wear-resisting PU feeding wheel.
- ★ Feeding timing fine tuning device.
- ★ Adjustable rubber wheel and brush wheel ensure paper fed to the right position.
- ★ Front lay detector ensure the paper fed to the right position.
- ★ Adopt double side lay to meet the requirement of different printing register.



## Standard configuration

### Host machine section:

- ★ Pressure-bearing part is made of high ductile iron QT500, high strength, never deform.
- ★ Alloy crankshaft with special process treatment.
- ★ Wear resisting worm, worm gear.
- ★ Convenient die flipping device.
- ★ Cycling lubrication oil supply system with high pressure oil pump from Taiwan
- ★ High precision interval mechanism.
- ★ Pneumatic brake clutch device from Italy
- ★ Japanese SMC rotary joint.
- ★ Import gripper bar chain.
- ★ Pneumatic die locking device.
- ★ High hardness, strength Ti-Al alloy gripper.
- ★ Precise pressure adjust device.
- ★ PLC and man-machine interface from Taiwan.
- ★ Additional gripper 1set, cutting die 1set, die frame 1 set.

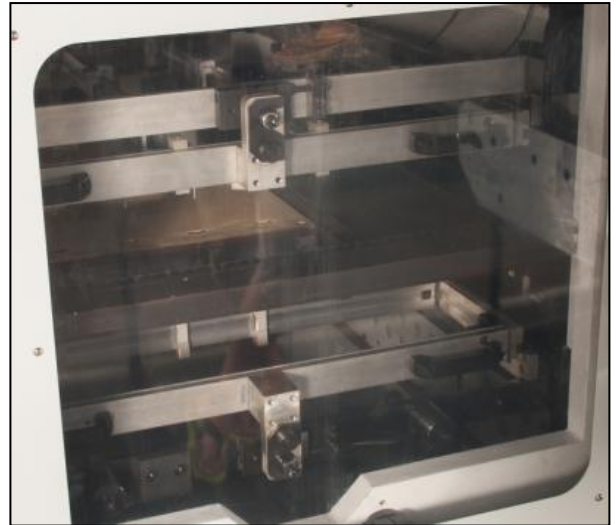
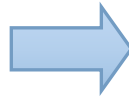


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## Standard configuration

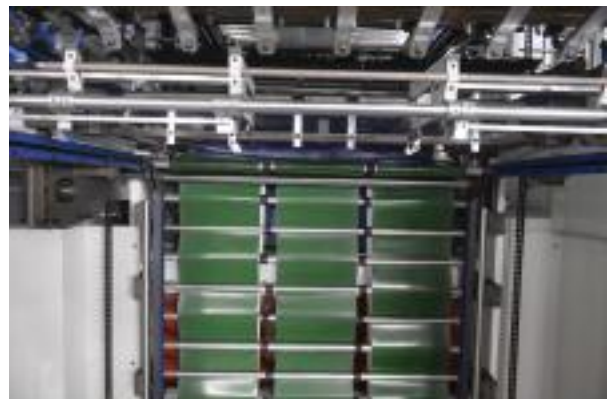
### Waste stripping section:

- ★ High strength Ti-Al waste stripping frame.
- ★ Light waste stripping needle.
- ★ (optional) High efficiency pre-install device



### Delivery section:

- ★ Delivery section with control panel, more human-friendly.
- ★ Optoelectronic sensor ensure better delivery.
- ★ Automatic delivery board control system.
- ★ Manual delivery device
- ★ Main chain protection device
- ★ Rolling back preventing device





## Main configuration list

| No | Name                        | Brand                          | Origin | No | Name                     | Brand     | Origin  |
|----|-----------------------------|--------------------------------|--------|----|--------------------------|-----------|---------|
| 1  | Shell, main structure       | QT500-7<br>DUCTILE IRON        | China  | 14 | Linear guide rail        | HIWIN     | Taiwan  |
| 2  | Mold pressing plate         | 75CR1ALLOY<br>STEEL            | China  | 15 | Fastener                 | GEM-YEAR  | Taiwan  |
| 3  | Worm, Worm gear             | XINGTANG                       | China  | 16 | Invertor                 | PANASONIC | Japan   |
| 4  | Crankshaft material         | NI-CR-MO<br>ALLOY              | China  | 17 | Man-machine<br>interface | TAISEE    | Taiwan  |
| 5  | Gripper bar                 | ALUMINUM<br>ALLOY              | Taiwan | 18 | Sensor                   | PANASONIC | Japan   |
| 6  | Gripper                     | IMPORTED<br>MANGANESE<br>STEEL | Taiwan | 19 | PLC controller           | FATEK     | Taiwan  |
| 7  | Cam box                     | HANDEX                         | Taiwan | 20 | Encoder                  | KUBLER    | Germany |
| 8  | Main transmission<br>chain  | TYC                            | Taiwan | 21 | Proximity switch         | FOTEK     | Taiwan  |
| 9  | Rotary joint                | SMC                            | Japan  | 22 | Relay                    | SCHNEIDER | France  |
| 10 | Pneumatic solenoid<br>valve | AIRTAC                         | Taiwan | 23 | Optoelectronic<br>switch | PANASONIC | Japan   |
| 11 | Main motor                  | TECO                           | Taiwan | 24 | Button                   | SCHNEIDER | France  |
| 12 | Delivery lift motor         | DUNGLLEE                       | Taiwan | 25 | AC contactor             | SCHNEIDER | France  |
| 13 | Bearing                     | NSK                            | Japan  | 26 | Circuit breaker          | SCHNEIDER | France  |