



EX-1300E Automatic Die Cutting And Creasing Machine



I Brief Introduction

EX Series Automatic Die Cutting and Creasing Machine is based on the similar products in China and overseas. With mature technology and new developments by our engineer, it is special for high grade color carton box. High tensile gripper bars and advanced feeding facility can handle various papers, cardboard and corrugated paper; front, side and back positioning guarantee the precision of the die cutting; high precision intermittent mechanism; fast action pneumatic clutch and pneumatic locking plate mechanism. PLC and man-machine interface can display the running speed, quantity of paper and total running time. Troubles are displayed which is easy to solve the problems. Transducer controls the motor and change speed without stop. There are many sensors and safety devices to ensure the running of machine and safety of worker. The front and back die cutting pressure can be adjusted separately. Machine driven by hand is easy. No gripper margin function is optional and make the machine with high function-price ratio.



II Specification

Model	EX-1300E
Max. Paper Size	1300×960mm
Min. Paper Size	550×500mm
Max. Die Cutting size	1280×930mm
Max. Die Cutting Pressure	300N/cm ²
Processed materials	Paperboard200-2000g/m ² , corrugated≤8mm
Precision	±0.1mm
Max. Die Cutting Speed	5000sheets/h
Max. Feeding Pile Height	1400mm
Max. Delivery Pile Height	1200mm
Total Power	17KW
Weight	18T
Dimension	6530×4500×2250mm

III Feature and Function of Each Unit

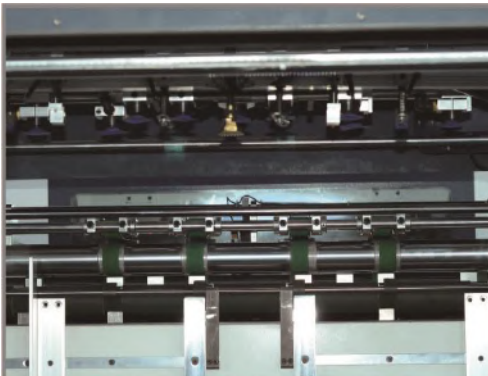
1. Paper Feeding Unit



* Four suction nozzles and five moving nozzles and all the nozzles are adjustable separately

* Adjustable side lays (one set in each side)

* Automatic lifting device driven by double speed motors in paper table is to lower the labor intensity and improve the productivity

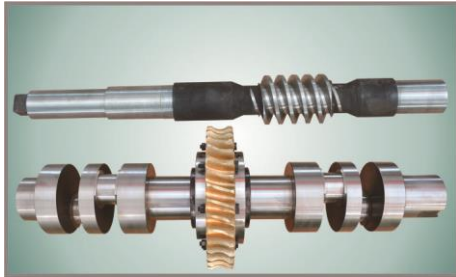


* Paper presser and front lay ensure the paper pushed into die cutting unit smoothly.

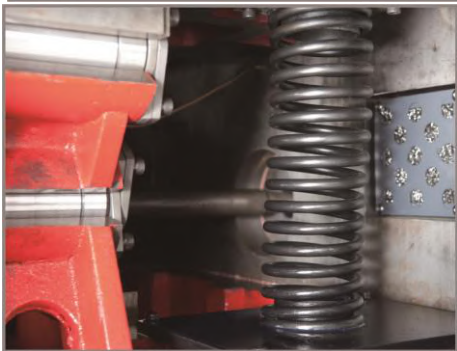
* Touch roller device give more time for the operator feeding the paper, lower the work intensity.



2. Die Cutting Unit



* Worm and worm wheel is made by high grade wear-resistant material and machined by high precision machine tool to ensure long service life.



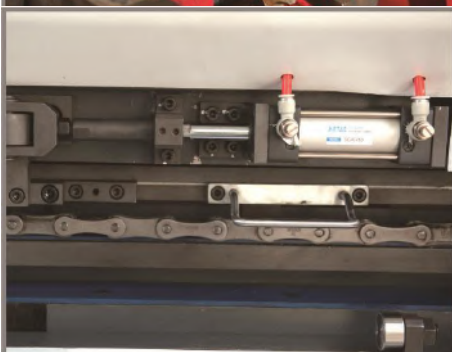
* Enlarged moving distance of platform make the 8mm board easy out of the die plate.

* Pneumatic together with mechanical plate locking ensure the safety of plate locking.



* High tensile gripper bar and advanced paper gripping device can handle many kinds of cardboard and corrugated board.

* Front, back and side positioning ensure the precision of die cutting.



* High precision intermittent device, high torque pneumatic clutch ensure running stable and reliable.

* The die cutting pressure adjusted easily (No grip margin die cutting is optional)

* Suspending die cutting steel plate is easy for pushing in or out.

* Imported high precision drive chain for gripper bar.

* Die cutting knife plate and die cutting plate frame are connected by nail nuts

* Front lays both side can be adjusted separately.

* Drive chain together with automatic oil feeding device ensure low running noise and improve stretch fatigue strength.



* Four sets of spring are installed to lower the movement inertia of moving platform to improve the service life of oscillating part.

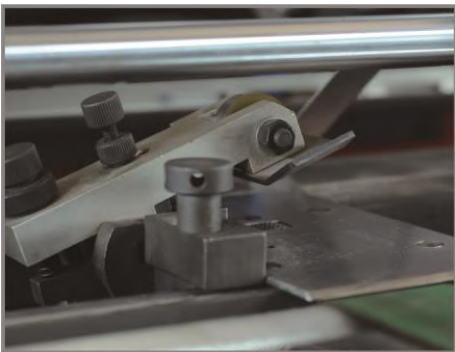
* Air cushion when die cutting prevent the connection between board and steel plate and lower the dispersing rate of board.

* Bottom platform is cast steel and machined by CNC center, the accuracy is 0.04mm comparing the ones 0.2mm machined by milling and grinding machine.

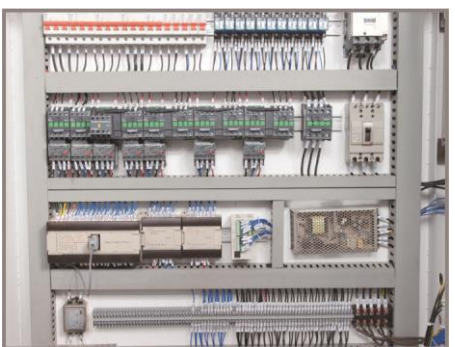
3. Transferring Unit



* Unique Pressing Transferring Unit, the board are transferred under pressure from the roller. And it avoid the crash between the roller and board.



*Side lay has two functions, pushing and pulling which can be adjusted according to the board.



4. Electrical Unit

* PLC adopted, man-machine interface and trouble-shooting system.

* Stepless speed of the main motor controlled by variable-frequency driver.

* The functions is included such as paper stacking, counting, paper falling, back paper preventing, gripper bar chain protection and lubrication.



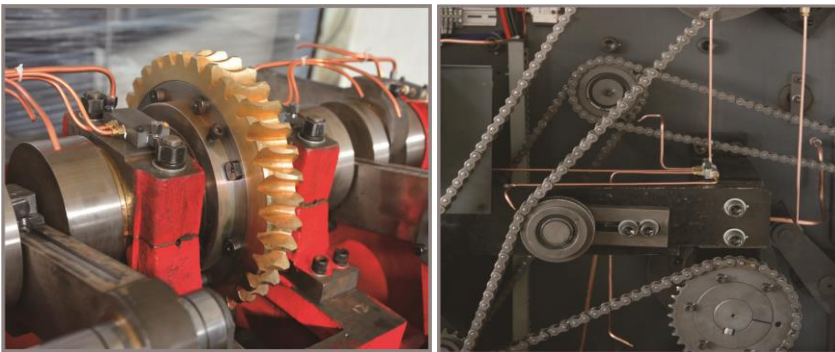
5. Delivery Unit:



- * Pneumatic sampling device ensure the safety of operator.
- * Automatic lifting of delivery platform
- * Aligning device is equipped on both sides
- * Paper full early warning device
- * Delivery double speed motor to improve production

efficiency.

6. Lubrication System:



All the key moving parts, chains and touch points are lubricated automatically by central oil pump.



IV Origin and Brand of Main Parts

Item	Name	Model/Specification	Supplier	Note
1	Worm Wheel	ZQAL9-4		Scraping
2	Crank	40Gr		High Frequency Quench
3	Worm	41Gr		Advanced Quality, High Frequency
4	Wall	45#		50MM
5	Top Platform	QT42-10		Cast with Resin Sand
6	Bottom Platform	QT42-10		Cast with Resin Sand
7	Moving Platform	QT42-10		Cast with Resin Sand
8	Intermittent Stand	HT250		
9	Connecting Rod	45#		Forging
10	Oscillating Rod	QT42-10		Cast with Resin Sand
11	Steel Plate	65Mn	Shanghai Liang Feng	Hardness:HRC45-50
12	Gripper Bar	Hard Aluminum Alloy	LC4	
13	Gripper Bar Chain		Japan TSUBAKI (England Renold)	Double Pitch
14	Intermittent Device			Triple CAM
15	Pneumatic Clutch	304-9	Shanghai Yiyu	
16	Frequency transducer		Taiwan Delta (Taiwan Dongyuan)	
17	PLC	DVP-60ES	Omron (Taiwan Delta)	
18	Man-machine Interface		Taiwan Delta	
19	Main Motor		Siemens	
20	Feeding/Delivery Motor	0.75KW	Taiwan CPG	
21	Bolt Track Bearing		Korea JMC	
22	Electromagnetic valve	VS3135-24V	Air TAC	
23	Button		Schneider	
24	Relay		Schneider(Omron)	
25	Contactore		Schneider	
26	Photoelectric switch		Omron(Schneider)	
27	Expansion	DVP-16XM	Delta	
28	Voltage stabilizer	24V,100W	Schneider (MW Taiwan)	
39	Auto air switch	3 phase-380V-60A	Schneider (Fuji Japan)	
30	Travel switch	TZ7166.TZ7120. TZ7310.TZ7311	CNTD	
31	Cylinder	HEYE	Imported	
32	Front Lay Switch	E32-ZD200	Omron	



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33	High speed rotating joint	KXH12-04	SMC	
34	Plate Frame	Double Tiers Fixed		Steel Cushion, Aluminum Alloy Flexible Cushion
35	Bearings	NTN	Japan	
36	Air Source Triple Parts		Air TAC (SMC Japan)	
37	Oil Pump	Geer Wheel Pump	Shanghai	