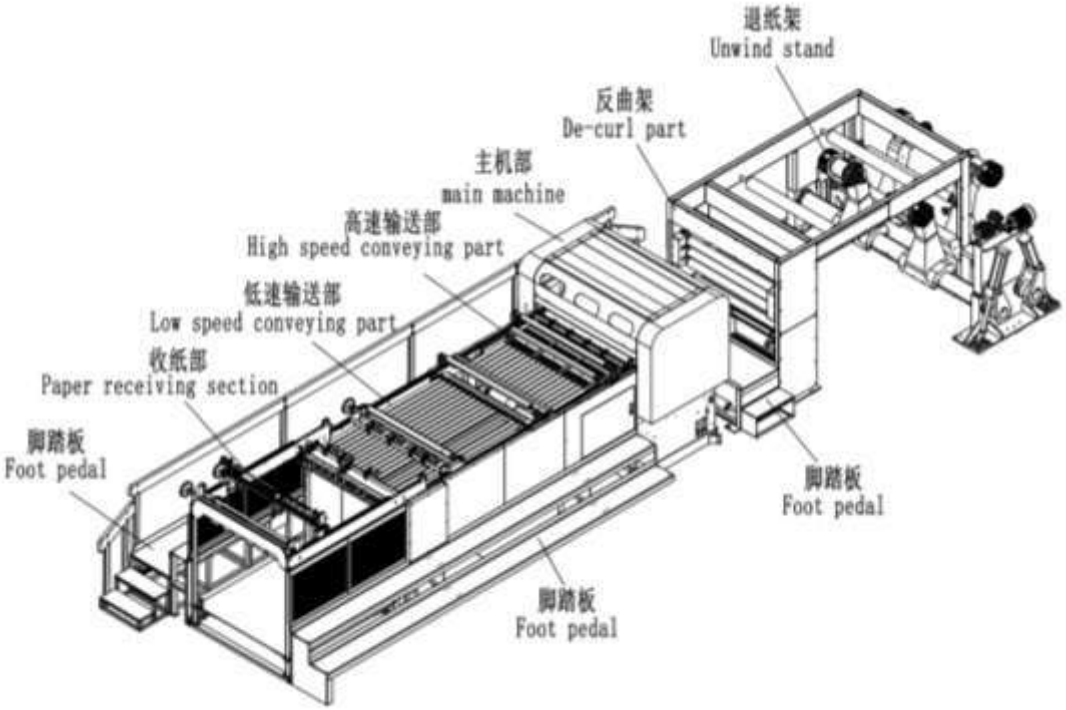
1 主要参数 Main Parameters

CHM-SGT1700

1） 适用纸张范围：	60～1000 GSM
Reference weight of cutting-paper：	60-1000GSM
2） 切断精度：	±0.5/1000 mm
Cutting accuracy：	±0.5/1000mm
3） 最高切断速度：	300 sheets/min
Max. cutting speed：	300sheets/min
4） 最高切断米数：	300m/min
Max. cutting meter speed：	300m/min
5） 切断长度范围：	450～1650 mm
Cutting length range：	450-1650mm
6） 最大卷筒纸直径：	1800 mm（71″）
Max. Roll diameter：	1800mm (71”)
7） 最大切纸宽度：	1400/1700 mm
Max. paper-cutting width：	1400/1700mm
8） 栈板堆纸高度：	1500 mm
Paper piling height：	1500mm
9） 整机总重量：	17000kg
Gross weigh：	17000kg
10）整机总功率	84KW
Total power	84KW

3 机器的总结构 Machine Structure



SGT1700 标准型卷筒纸分切机由五大部分组成，分别为主机部、输送部、收纸部、反曲架调整部和油压纸架部。后面将详细介绍每个部分组成。

SGT1700 slitting machine consists of five units: Cutting Unit, Delivery Unit, Stacking Unit, De-curling Unit and unwind stand unit.

4 主机部 Cutting Unit

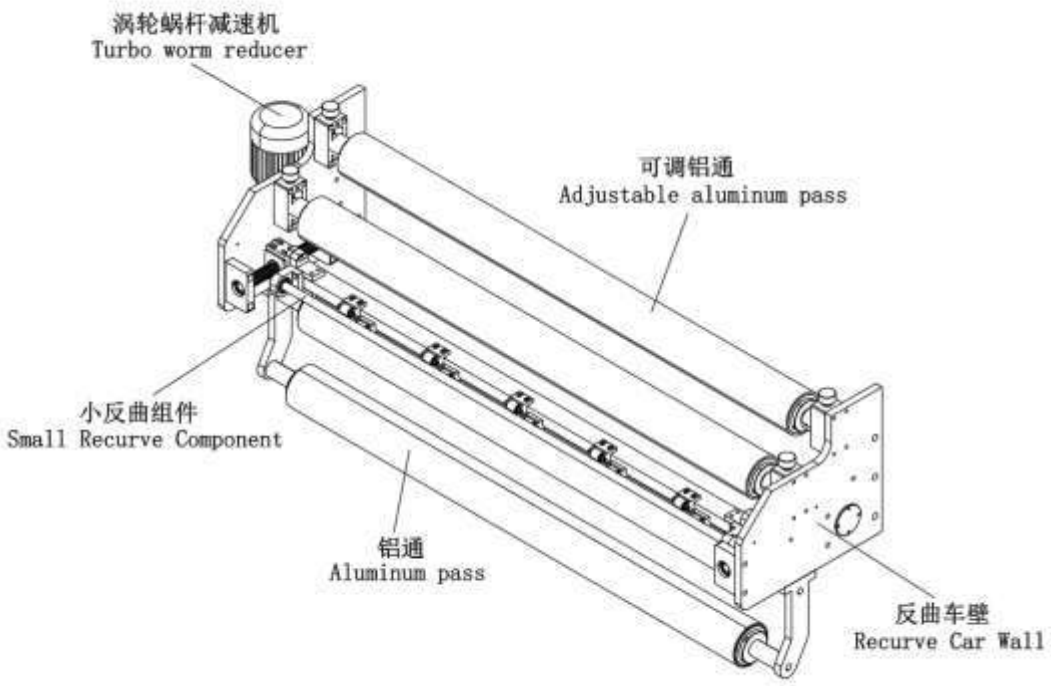
主机部分主要包含纸张反曲调节部分、修边刀部分、滚筒刀部分、传动系统、吸尘及纸边收集部分、人机界面及按钮。

Cutting Unit consist of De-curling Adjust, Trimming Adjust, Cross Cutting, Feeding Unit, Driving Unit, Vacuum Takeoff and Suction Unit, HMI and Button.

4.01 纸张反曲调节部分 De-curling Adjust

主机头的纸张反曲调节部主要由导纸铝通、导纸轴、导纸车壁及涡轮蜗杆减速机组成。其功能主要是调整和修正弯曲的纸张，以确保走纸的平整和纸张的收集, 比手动调节更加方便。结构示意如下图：

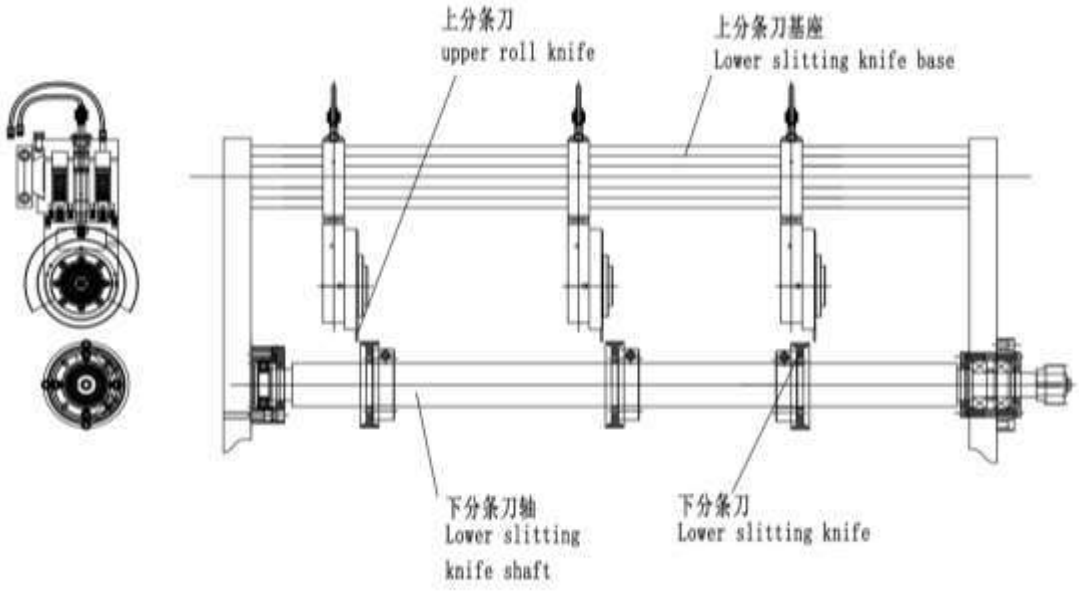
De-curling Adjust consists of Aluminum pipe, Shaft and Paper guide wall and main function for remove the wave of paper and make paper feeding and collection smooth, more convenient than manual adjustment.



4.02 修边刀部分 Trimming Adjust

修边刀部主要由上、下修边刀、传动轴及调整机构等组成。其功能主要是修整切纸的幅度，切除不需要的纸边，使切出的纸张符合规定尺寸，修边规格单边为 5mm—20mm，主要适用于薄纸。修边刀是以特殊合金钢精密加工而成，其优点为寿命长、刀刃容易调校。结构示意如下图：

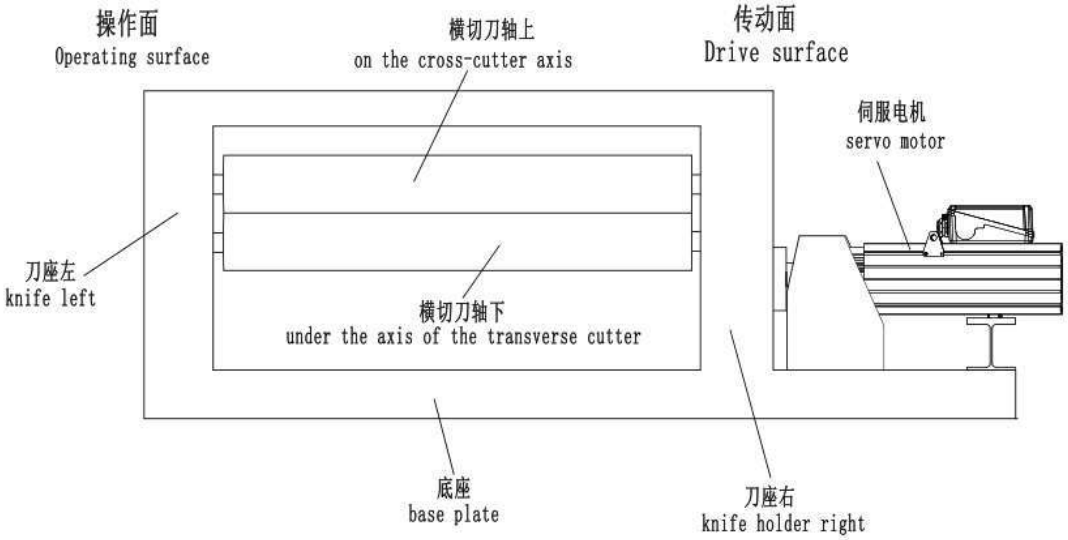
Slitting Unit consists of top slitter, bottom slitter and drive shaft and adjusting mechanism. It is mostly used for low GSM paper and function are trimming waste edge and slitting correct size. Trimming width range 5-20mm. Slitter made by alloy steel with the feature of long life and easy adjust blades.



4.03 滚筒刀部分 Cross Cutting

横切刀装置采用双螺旋对偶法线裁切技术，有效降低切纸时之荷重及噪音，以延长切刀之寿命。上、下刀辊以优质钢焊接后作精密加工，并经动态平衡调整使之能有效降低高速旋转时的震动。刀座采用铸铁一体成型而成，再经精密加工，具有吸震性好，稳定性佳。双回旋横切刀装置具有以下优点：刀组安装调整固定后无须再对棱角调整，切口无斜边有效减少纸毛、纸粉等。

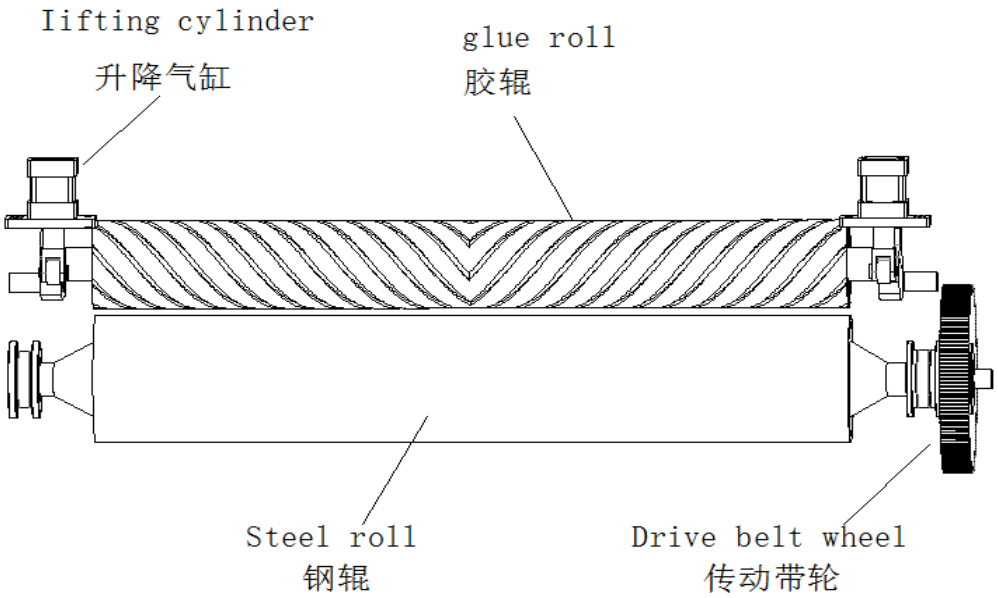
The double helical dual normal cutting technology is used to reduce the load and noise of the paper cutting, so as to prolong the life of the cutter. On the knife roller with high quality steel after welding precision machining, and the dynamic balance adjustment so that it can effectively reduce the vibration of high speed rotating. The cutter base is made of cast iron in one, and after precision machining, it has good shock absorption and good stability. The dual rotary crosscutting knife device has the following advantages: After the adjustment and fixing of the knife group, there is no need to adjust the angle, and the cut without slope effectively reduces the paper hair, paper powder and so on.



4.04 牵引部分 Feeding Unit

牵引部分结构由胶辊和钢棍相互压紧纸幅，两辊同时转动，从而完成对纸幅的牵引。牵引胶辊表面具有扩张纹路的斜螺纹槽，向两侧展开，纸幅在上面接触运动时，因为受压点的变化，纸幅会向两侧张开（舒展）拉紧。牵引钢辊，位于胶辊的下方，两者的区别是一个是胶制螺纹，一个是圆柱面的钢轮。牵引胶辊是浮动的，通过 2 个气缸控制上升和下降，通过 2 个调节旋钮控制压力大小。操作按钮，位于主机左侧面（后面有介绍）。

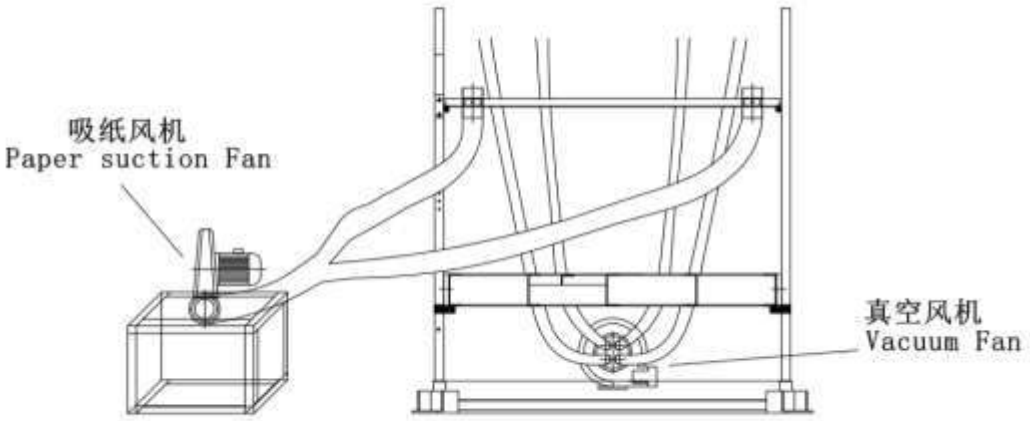
Feeding Unit done by steeling roller and rubber roll run synchronized. Rubber roll with thread groove can make paper tighten and control by two air cylinder(air tension valve can be adjust by two buttons on the cutting unit).

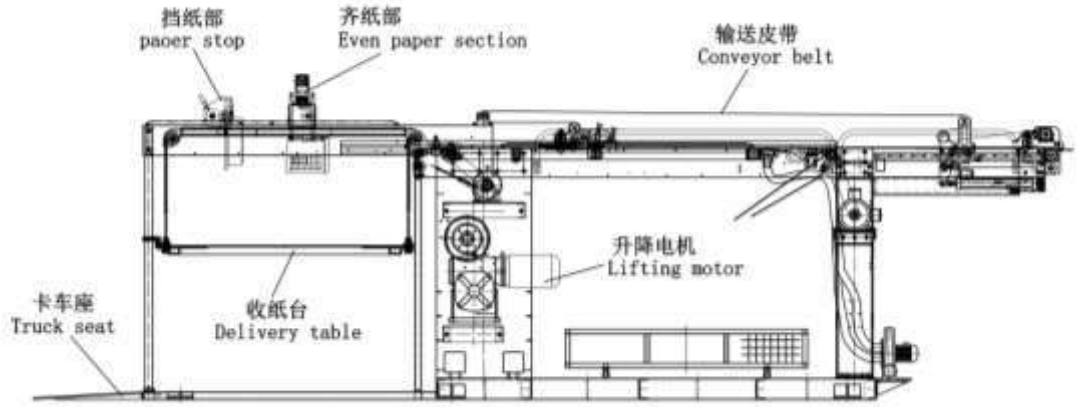


4.0 真空抽吸及纸边收集部分(选配装置)Vacuum Takeoff and Suction Unit

真空抽吸和纸边收集分别置于主机头前后，由真空风机通过吸风管使纸张更好搭叠，吸纸风机通过收纸边风管将切边时产生的多余纸屑及时排出。

Vacuum fan and Suction fan located before and after of cross cutting roller. Vacuum fan makes paper better stacked and Suction fan sucked away the extra paper edge。

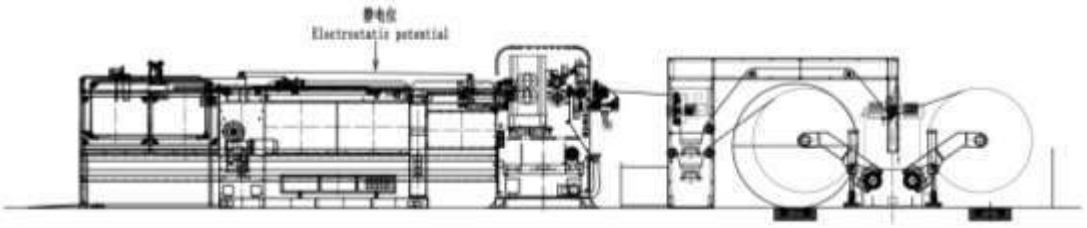




5.01 静电消除部分 Static Eliminator

静电消除主要是为了消除原纸在走纸、压纸及切纸过程中所产生的静电，消除静电荷对纸张分离、输送、堆放过程的影响。安全事项：由于其中的变压器会产生高压电，故在静电消除开启时，请不要用手触摸其尖针，以免触电。静电装置的安装位置见下图：

Static eliminator function is removing the static while paper feeding and paper pressing. Safety Attention: do not use hand or tools touching needle tip transformer generate high voltage while static eliminator function activated:



6 收纸部 Stack Unit

收纸部分则主要 4 部分组成，收纸台支架 C1/拍纸机构 C2/齐纸机构 C3/齐纸机构 C4。

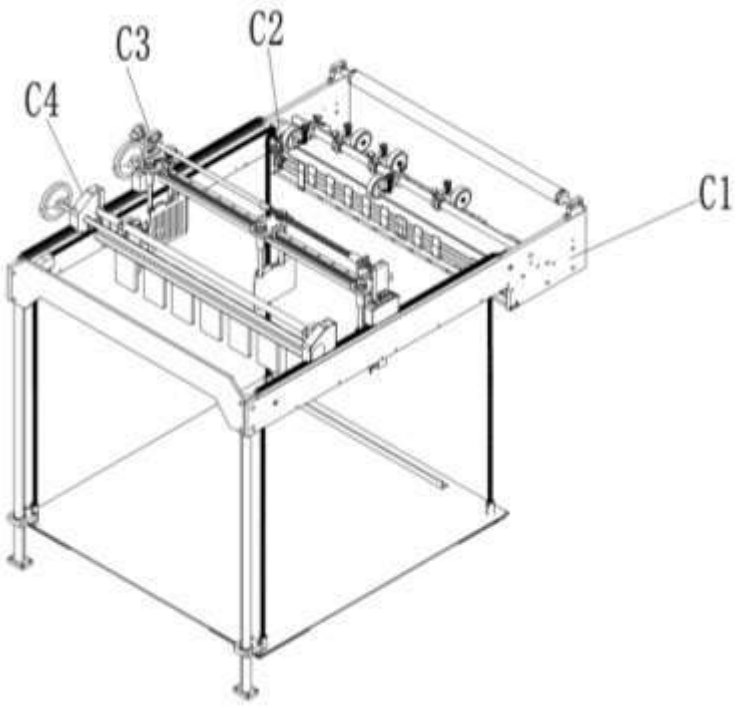
The paper receiving part is mainly composed of four parts: the paper receiving platform support C1/ paper beating mechanismC2 / paper aligning mechanism C3/ paper aligning mechanism C4

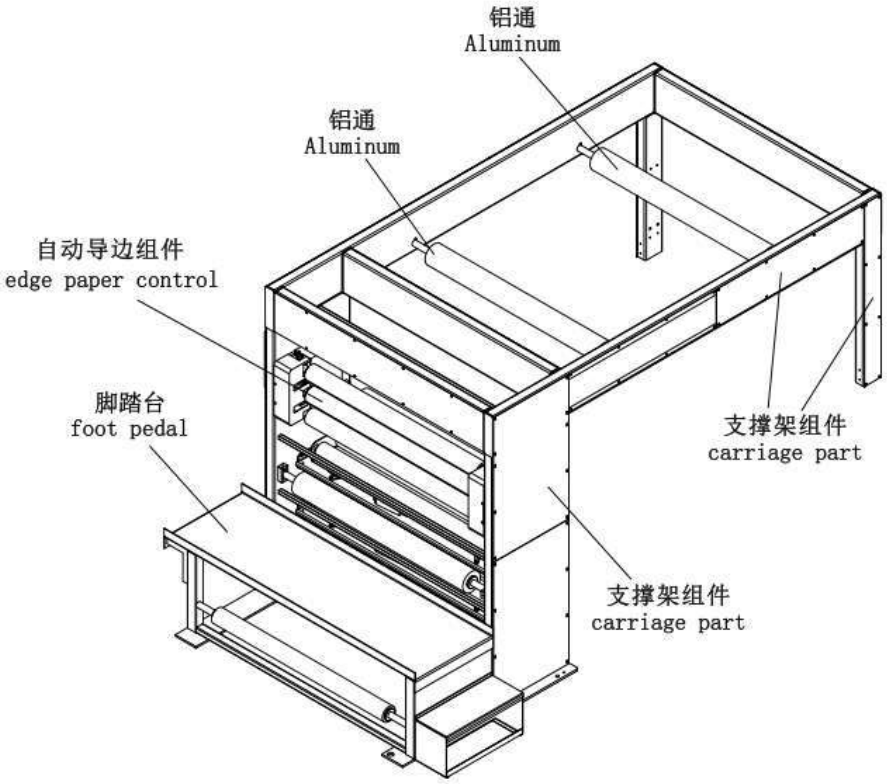
① 收纸台支架 C1，构建了收纸部的整个结构，配备手动（自动）升降的收纸台，收纸高度达 1300mm（标准机）。

The paper receiving platform support, which constructs the whole structure of the paper receiving part, is equipped with a manual (automatic) lifting paper receiving platform with a paper receiving height of 1300mm (standard machine)。

② 拍纸机构 C2，和齐纸机构 C3/C4，三者共同为收纸齐整而服务，使得收纸台堆叠起来的栈纸

The paper beating mechanism C2 and the paper aligning mechanism C3 / C4 serve for the paper receiving and finishing, which makes the stack paper stack on the paper receiving table





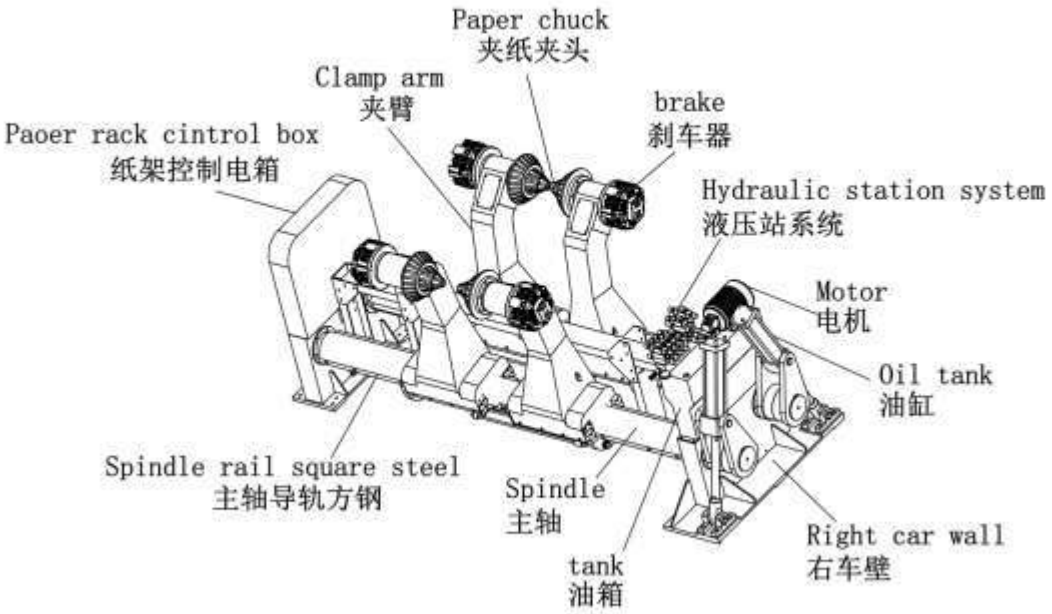
7.01 自动导边系统（用户选配）Auto Edge guide system operation instruction

如图所示，导边系统控制器位于主机电箱左侧面下方。详细操作步骤如下：

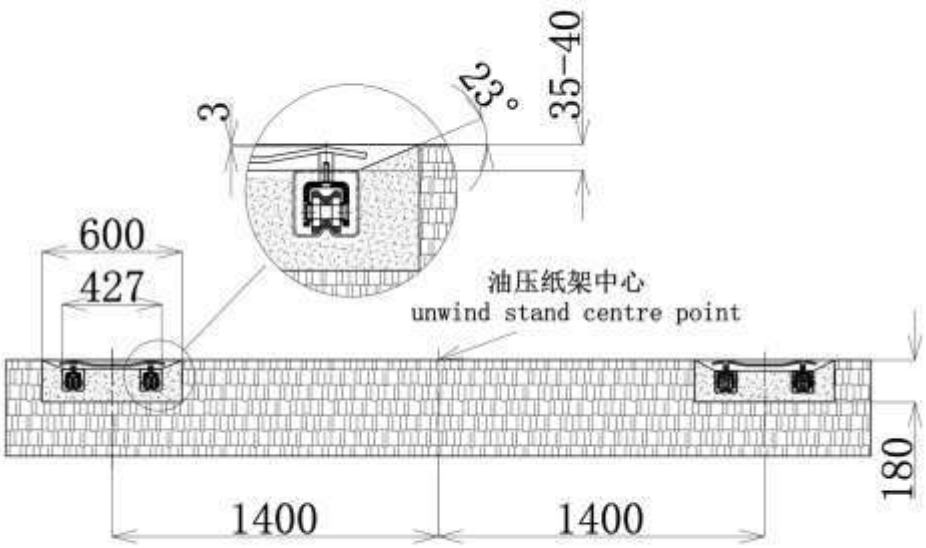
As shown in the diagram, the control panel of the Auto Guide System is located at the lower left side. Operation as below:

油压纸架的结构示意图如下：

Hydraulic Arm Structural diagram:



12.03 轨道地基安装图 Track foundation installation drawing



注意事项 Note：

① 端面线及原纸架中心线与设备中心线保持垂直，此三条线是安装设备的基准

The end line and the center line of the base paper holder are perpendicular to the center line of the equipment. These three lines are the basis for installing the equipment。

② 每个坑需水泥约 3 袋（150 公斤），碎石约 1 立方，沙子约 1 立方。

Each pit requires about 3 bags of cement (150 kg), 1 cubic meter of crushed stone and 1 cubic meter of sand。

③ 灌浆前泥土需压实，沙石经水洗后方可使用

Grouting before compaction soil, washing sand before use.

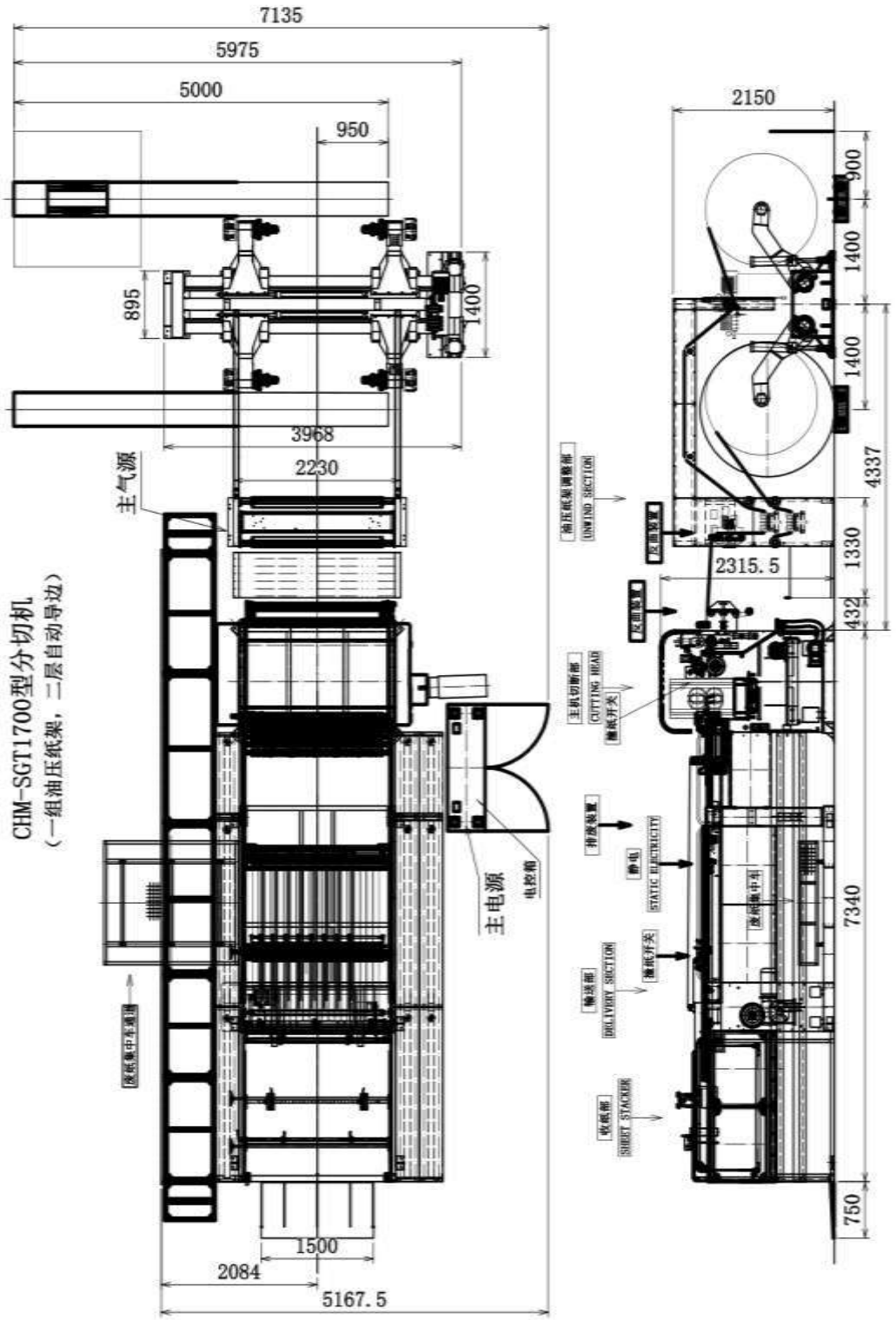
④ 一次灌浆 1：2：3，水泥 500#，碎石粒度 25

The first filling ratio 1:2:3, 500# cement, gravel size 25.

⑤ 二次灌浆 1：2：2，水泥 500#，碎石粒度 15-20

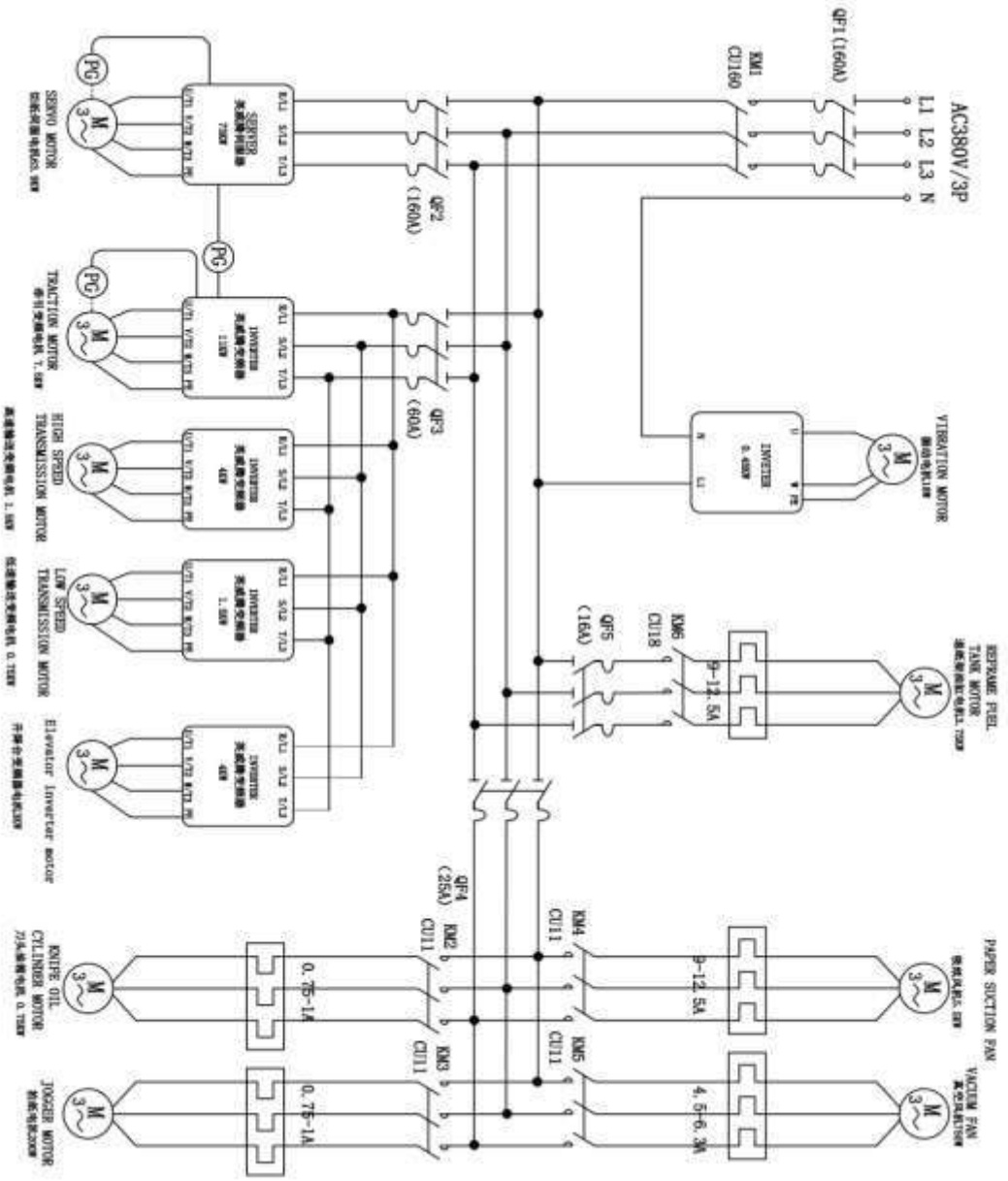
The second filling ratio 1:2:2, 500# cement, gravel size 15-20.

12.04 本机器安装尺寸图　Installation dimension drawing of the machine

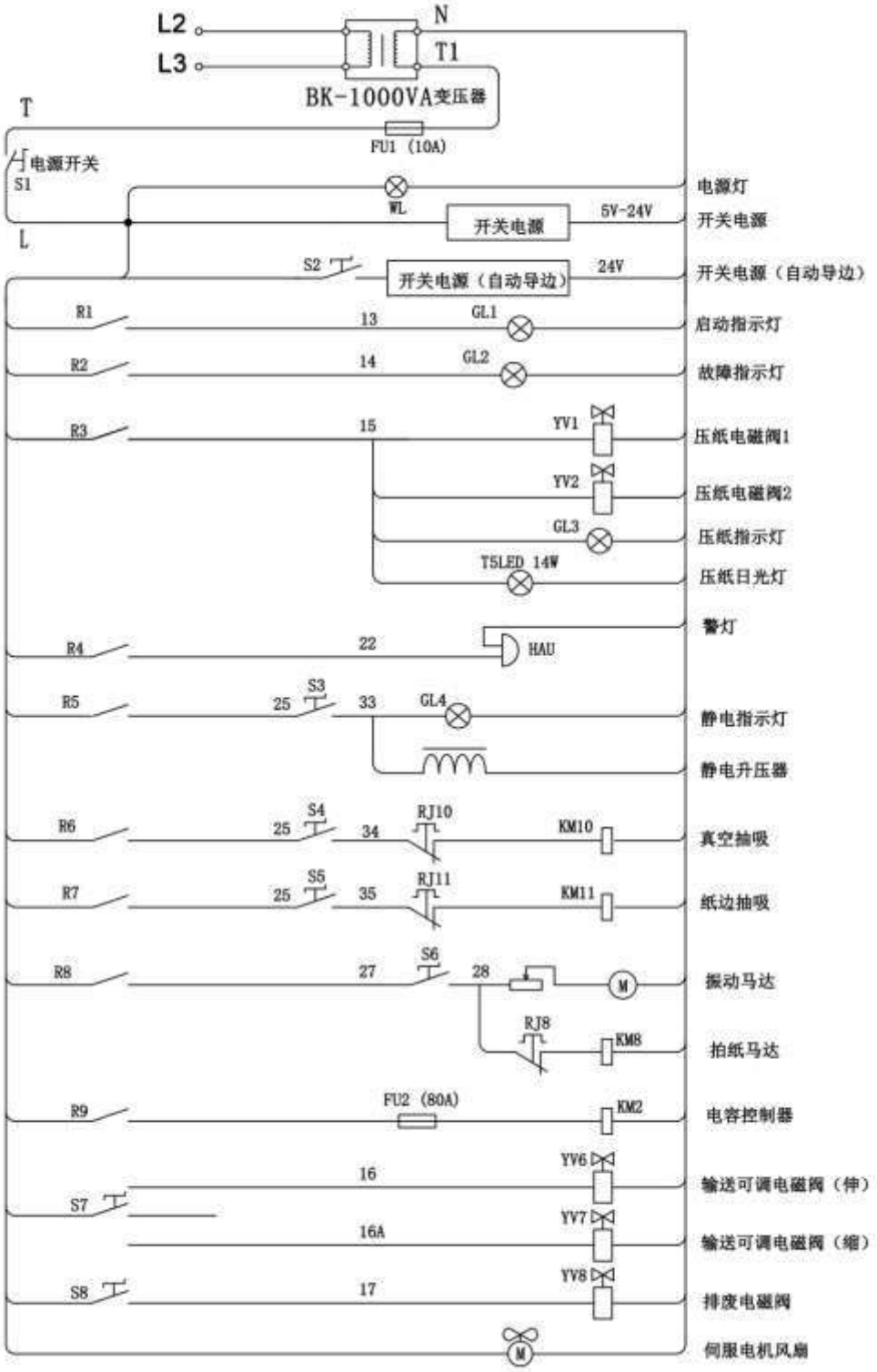


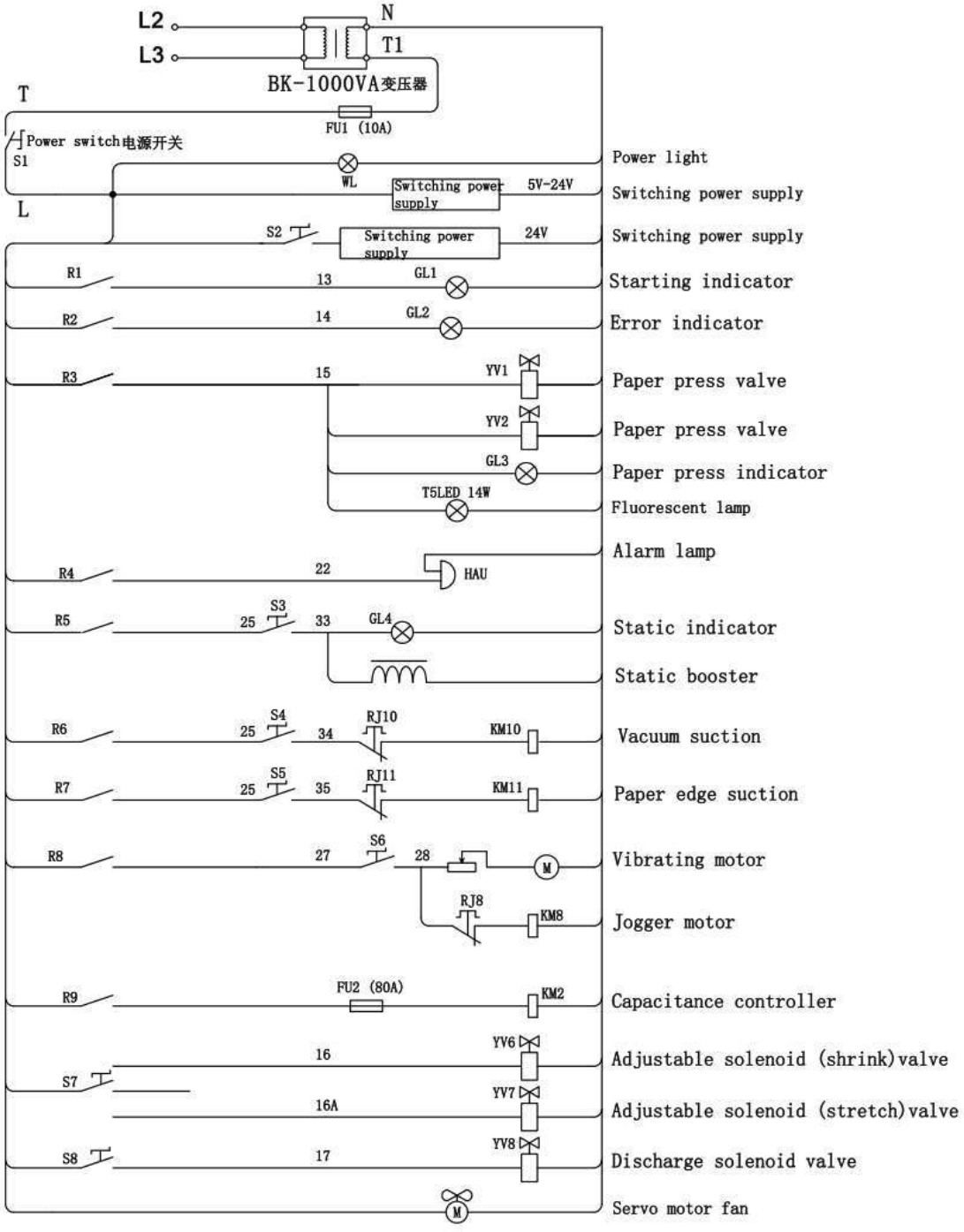
16 电器线路图 Circuit Diagram

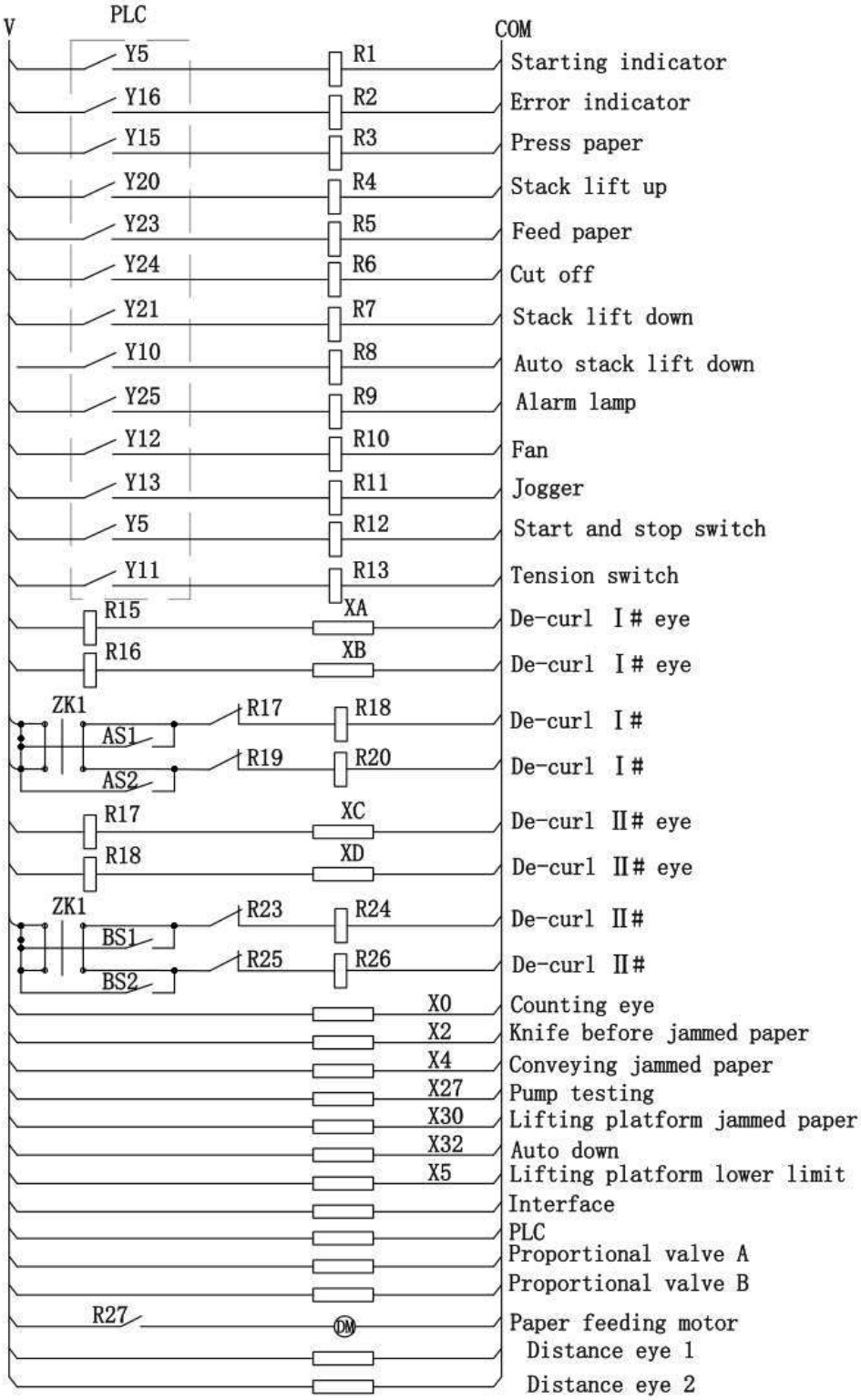
16.01 电器总控制线路图 Main circuit diagram



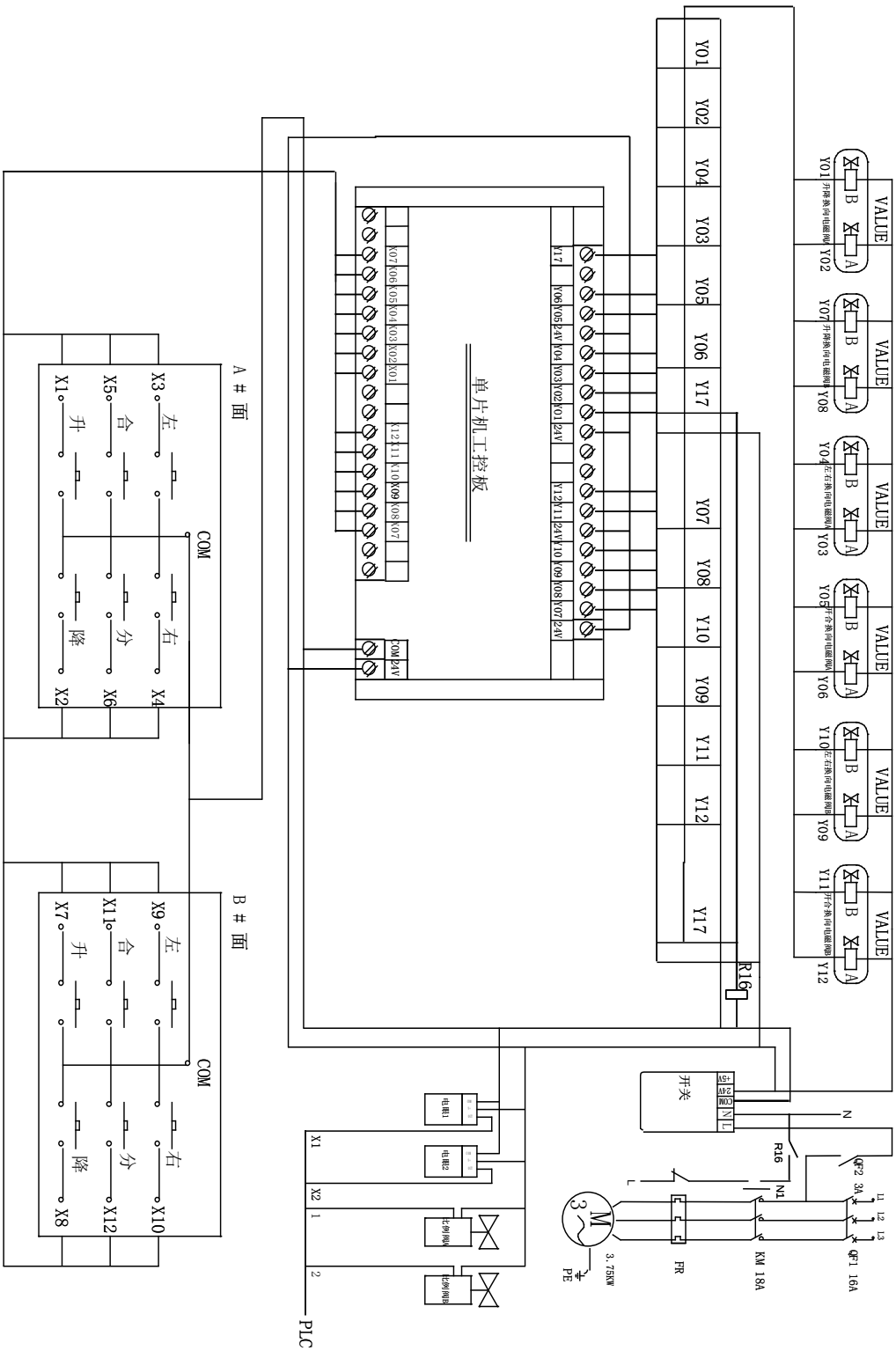
16.02 交流 220V 线路原理图 control circuit wiring diagram

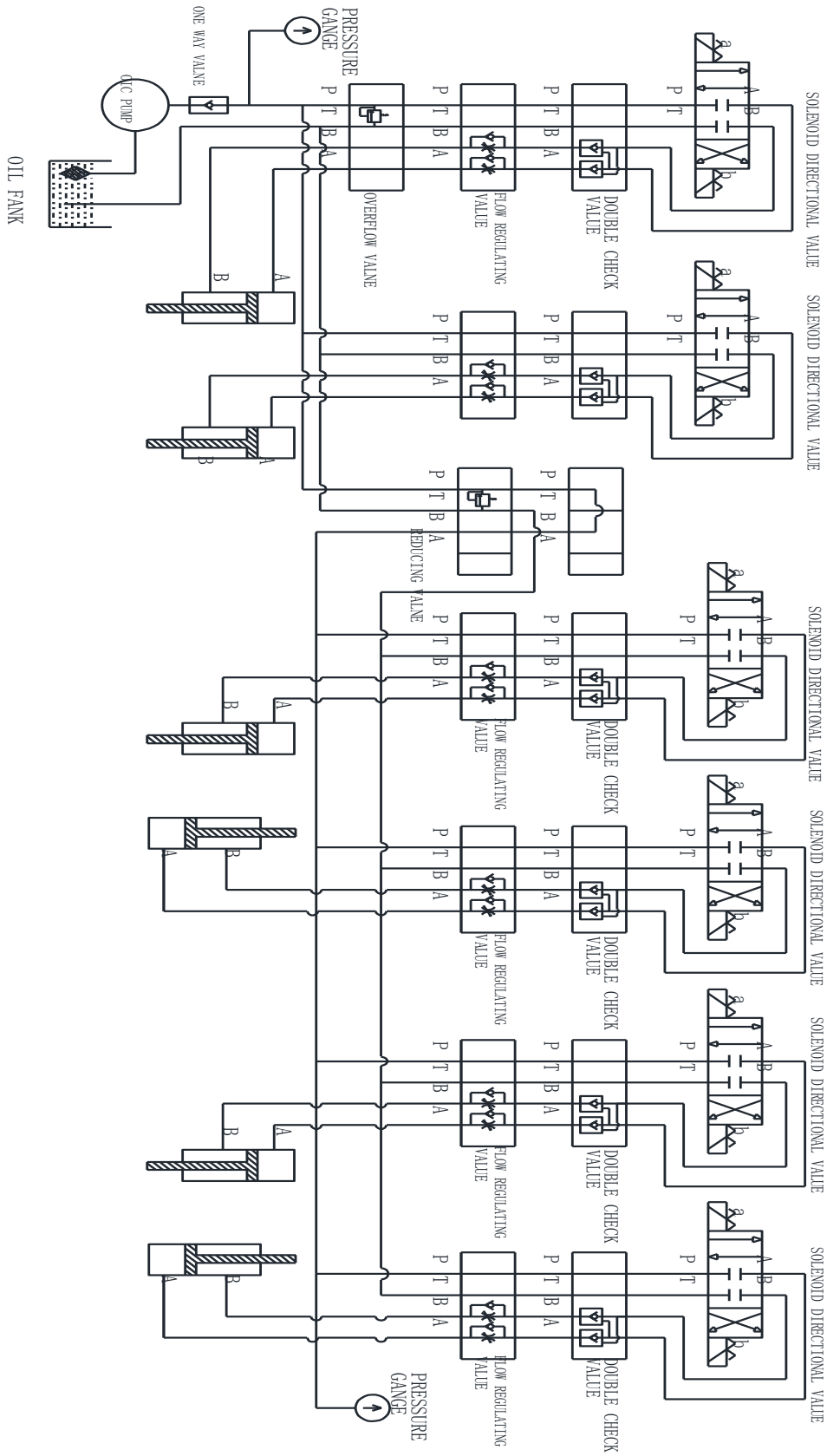


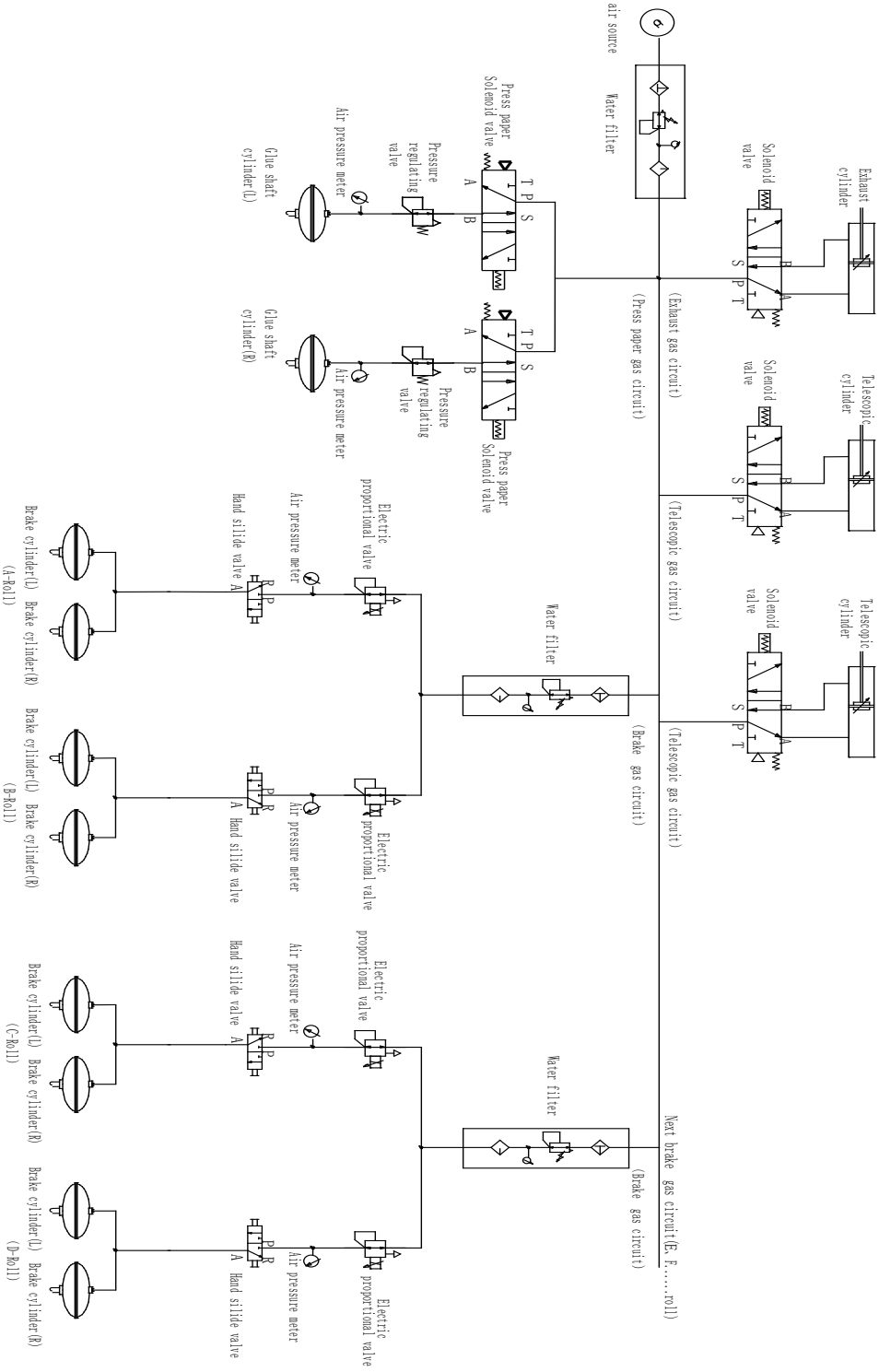

L2
L3
N
T1
BK-1000VA变压器
T
FU1 (10A)
Power switch电源开关
S1
L
WL
Power light
Switching power supply
5V-24V
Switching power supply
S2
Switching power supply
24V
Switching power supply
R1
13
GL1
Starting indicator
R2
14
GL2
Error indicator
R3
15
YV1
Paper press valve
YV2
Paper press valve
GL3
Paper press indicator
T5LED 14W
Fluorescent lamp
Alarm lamp
R4
22
HAU
R5
S3
25
33
GL4
Static indicator
Static booster
R6
S4
25
34
RJ10
KM10
Vacuum suction
R7
S5
25
35
RJ11
KM11
Paper edge suction
R8
S6
27
28
M
Vibrating motor
RJ8
KM8
Jogger motor
R9
FU2 (80A)
KM2
Capacitance controller
YV6
16
Adjustable solenoid (shrink)valve
S7
YV7
16A
Adjustable solenoid (stretch)valve
S8
YV8
17
Discharge solenoid valve
M
Servo motor fan


V
PLC
COM
Y5
R1
Starting indicator
Y16
R2
Error indicator
Y15
R3
Press paper
Y20
R4
Stack lift up
Y23
R5
Feed paper
Y24
R6
Cut off
Y21
R7
Stack lift down
Y10
R8
Auto stack lift down
Y25
R9
Alarm lamp
Y12
R10
Fan
Y13
R11
Jogger
Y5
R12
Start and stop switch
Y11
R13
Tension switch
R15
XA
De-curl I# eye
R16
XB
De-curl I# eye
ZK1
AS1
R17
R18
De-curl I#
AS2
R19
R20
De-curl I#
R17
XC
De-curl II# eye
R18
XD
De-curl II# eye
ZK1
BS1
R23
R24
De-curl II#
BS2
R25
R26
De-curl II#
X0
Counting eye
X2
Knife before jammed paper
X4
Conveying jammed paper
X27
Pump testing
X30
Lifting platform jammed paper
X32
Auto down
X5
Lifting platform lower limit
Interface
PLC
Proportional valve A
Proportional valve B
R27
DM
Paper feeding motor
Distance eye 1
Distance eye 2

16.11 油压纸架线路图 Circuit diagram of oil pressure paper frame




OIL FANK
OUC PUMP
ONE WAY VALNE
PRESSURE GANGE
OVERFLOW VALNE
REDUCING VALNE
FLOW REGULATING VALUE
DOUBLE CHECK VALUE
SOLENOID DIRECTIONAL VALUE
PRESSURE GANGE


air source
Water filter
(Press paper gas circuit)
(Exhaust gas circuit)
(Telescopic gas circuit)
(Brake gas circuit)
(Telescopic gas circuit)
Next brake gas circuit(E、F……roll)
(Brake gas circuit)
Exhaust cylinder
Solenoid valve
Telescopic cylinder
Solenoid valve
Telescopic cylinder
Solenoid valve
Press paper Solenoid valve
Pressure regulating valve
Air pressure meter
Glue shaft cylinder(L)
Press paper Solenoid valve
Pressure regulating valve
Air pressure meter
Glue shaft cylinder(R)
Water filter
Water filter
Water filter
Electric proportional valve
Air pressure meter
Hand slide valve
Brake cylinder(L)
Brake cylinder(R)
(A-Roll)
Electric proportional valve
Air pressure meter
Hand slide valve
Brake cylinder(L)
Brake cylinder(R)
(B-Roll)
Electric proportional valve
Air pressure meter
Hand slide valve
Brake cylinder(L)
Brake cylinder(R)
(C-Roll)
Electric proportional valve
Air pressure meter
Hand slide valve
Brake cylinder(L)
Brake cylinder(R)
(D-Roll)

No.	Name	Specification (model)	QTY	Unit	Amount	Note
1	Tool box		1	pcs		A set of tools
2	Grease gun		1	pcs		
3	T type barrel	17mm	1	pcs		
4	Hammer	2p	1	pcs		
5	Rubber Hammer	5p	1	pcs		
6	Hexagon key	1.5-10mm	1	pcs		
7	Hexagon key	14mm	1	pcs		
8	Hexagon key wrench	17mm	1	pcs		
9	Open wrench	27-30mm	1	pcs		
10	Open wrench	24-27mm	1	pcs		
11	Open wrench	17-19mm	1	pcs		
12	Open wrench	12-14mm	1	pcs		
13	Open wrench	8-10mm	1	pcs		
14	Opening and Plum wrench	13-13mm	1	pcs		
15	Opening and Plum wrench	22-22mm	1	pcs		
16	Socket wrench	36mm	1	pcs		
17	Activity wrench	10"	1	pcs		
18	Phillips screwdriver	8” L=200	1	pcs		
19	Slotted screwdriver	8” L=200	1	pcs		
20	Pointed pliers	6"	1	pcs		
21	Nippers	6"	1	pcs		
22	Flat file	handle 8"	1	pcs		

CHM 長江機械 CHEUNG KONG MACHINERY

CHM-SGT1400/1700

高精密双回旋刀卷筒纸分切机
High Precision Synchronize-fly Sheeter

技术指标
Technical indicators

CHM型号 CHM Type	CHM-SGT1400	CHM-SGT1700
切纸型式 Cutting Way	上下刀回旋切 Upper and lower rotary cutting mechanism	
纸张适用范围 Refence weight of cutting-paper	200-1000GSM	200-1000GSM
切断精度 Cutting accuracy	±0.5mm	±0.5mm
最高切断速度 Max cutting speed	300刀/分钟 300sheets/min	300刀/分钟 300sheets/min
最高切断米速 Max. cutting meter speed	300米/分钟 300m/min	300米/分钟 300m/min
切断长度范围 Cutting length range	450-1650mm	450-1650mm
最大卷筒纸直径 Max scroll diameter	1800mm	1800mm
纸板堆纸高度 Max.paper-cutting width	1300mm	1300mm
最大切纸宽度 Max.paper-cutting width	1400mm	1700mm
总重量 Weight	15000kg	17000kg
尺寸(长x宽x高) Dimension(L × W × H)	14453mm*4675mm*2350mm	14453mm*4975mm*2350mm

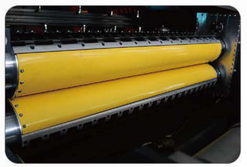
CHM-SGT1400/1700高精密双回旋刀卷筒纸分切机是以上下刀对偶螺旋线分切形式剪切，切口干净、整齐、分切精度高等特点，广泛适用于卡纸、铜版纸、牛皮纸、文化纸、双胶纸、高光相纸、金银卡纸、铝箔纸、激光镭射纸、烟酒包装纸等。

CHM-SGT1400/1700 High Precision Synchronize-fly Sheeter features fibre-less and clean cuts with high dimensional precisions. Best for board paper, RAT paper, kraft paper and packing paper or board etc.

双臂油压无轴原纸架
Hydraulic shaft-less unwind station

自动导边系统
Auto web guide system

电动小反曲控制系统
Electric de-curl unit



高精度双回旋横切刀组
High precision synchronic-fly cutting unit

自动齐纸集纸设备
Auto Jogger System

电器操控系统
Electric control system

type: 2640