

60~400T

GANTRY TYPE HIGH SPEED PRECISION FOUR-PILLAR PRESS



APJ SERIES

龙门式高速精密四导柱冲床

高精度稳定性和可靠性

高钢合金铸造机架结构，（通过计算机解析设计出最适合机架）经过消除内应力工艺处理，进一步提高了对于精度不可缺少的高刚性机架，实现了低噪音和低振动化，提高模具使用寿命。

HIGH PRECISION STABILITY AND RELIABILITY

High steel alloy casting frame structure (with the most suitable for the frame designed by computer analysis), processed by the internal stress elimination process, further improving the high rigidity frame which is indispensable for precision, achieving low noise and low vibration, and improving service life of the die.

Technical parameters 技术参数

机型	Model	型号规格	APJ-60	APJ-80	APJ-125	APJ-150	APJ-200
吨数	Tonnage	ton	60	80	125	150	200
行程	Travel	mm	30	30	30	30	30
每分钟行程数	Number of strokes per minute	s.p.m	200~800	200~700	150~700	150~600	150~600
下工作台尺寸	Lower table size	mm	950x650	1100x750	1200x850	1400x850	1700x950
下料孔	Blanking hole	mm	700x125	800x150	1000x200	1200x200	1300x250
滑块面积	Sliding block area	mm	950x420	1100x500	1200x600	1400x600	1700x700
模高调整行程	Die height adjustment stroke	mm	300~350	330~380	360~410	360~410	370~420
模高调整马达	Die height adjustment motor	kw	0.4	0.75	0.75	0.75	1.5
送料线高度	Feeding line height	mm	160	175±50	195±50	195±50	200±50
主电动机	Main motor	kw*p	19	22	30	37	45

机型	Model	型号规格	APJ-220	APJ-300	APJ-350	APJ-400	APJ-450
吨数	Tonnage	ton	220	300	350	400	450
行程	Travel	mm	30	30	30	30~50	40
每分钟行程数	Number of strokes per minute	s.p.m	150~600	150~400	150~350	150~350	120~300
下工作台尺寸	Lower table size	mm	1900x1000	2200x1000	2400x1000	2800x1200	3000*1200
下料孔	Blanking hole	mm	1400x300	2000x300	2200x300	2200x400	2400*400
滑块面积	Sliding block area	mm	1900x750	2200x900	2400x900	2800x1100	3000*1100
模高调整行程	Die height adjustment stroke	mm	370~420	400~450	400~450	420~470	450~500
模高调整马达	Die height adjustment motor	kw	1.5	2.2	2.2	3.7	3.7
送料线高度	Feeding line height	mm	200±50	210±50	210±50	220±50	220±50
主电动机	Main motor	kw*p	45	55	55	75	90 X 4

标准配置

- 电动式模高调整
- 模高显示精度0.01mm
- 寸动定位装置
- 电脑可记忆30组(套)模具加工资料
- 三组批置控制
- 二组送料送出
- 连动、单动具有0°及90°定位功能
- 主机正反转装置
- 液压式滑块锁紧装置
- 润滑油冷却循环机
- 意大利宇意一体式离合刹车
- 独立式电控箱
- 工作箱
- 工作灯
- 主机马达变频控制
- Electric model height adjustment
- Die height display precision 0.01mm
- Inching positioning device
- The computer can memorize data of 30 sets of mold processing materials
- Three groups of batch control
- Two groups of feed error detection
- Linked/single action, with 0° and 90° positioning function
- Host forward/reverse device
- Hydraulic slide lock device
- Lubricating oil cooling cycle machine
- Italian OMPI integrated clutch brake
- Stand-alone electric control box
- Work box
- Work lamp
- Main motor frequency converting control

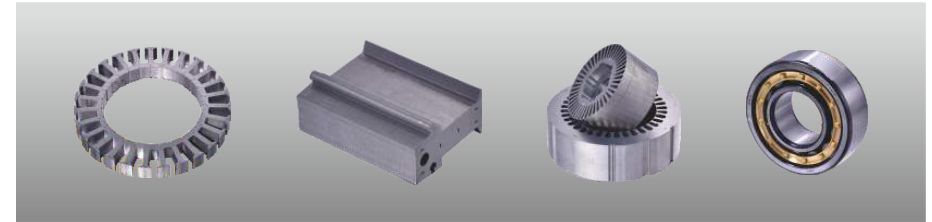
Standard configuration

选择配置

Optional configuration

- 下死点精密检测器
- 快速夹模装置
- 油压举模装置
- 高速送料机
- 双头油压开卷机
- 整平出料机
- 油压式防震底座装置
- 冲压控制器
- 前后隔音安全门
- Bottom dead center precision detector
- Rapid die clamping device
- Hydraulic die lifting device
- High speed feeder
- Double head hydraulic unwinder
- Leveling discharge machine
- Oil hydraulic shockproof foot device
- Punching controller
- Front and rear sound insulation safety door

本公司随时进行研究改善的工作，因此本型录内所规定尺寸及设计特性，得以变更，不另行通知。
The Company is constantly working on research and improvement. Therefore, the size and design features specified in this manual are subject to change without notice.



周边配套设备 PERIPHERAL EQUIPMENT



双头料架
Double rack



整平机
Bump-cutter machine



齿轮式送料机
Gear feeder

$$P = \frac{\pi \times D}{\text{分割数}} \times \frac{N1 \times N3}{N2 \times N4}$$

Number of divisions

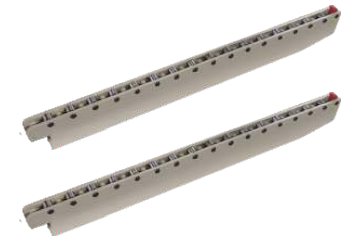
P = 送料长度
D = 70 (主动轮直径)
N1 = 第1号齿轮之齿数
N2 = 第2号齿轮之齿数
N3 = 第3号齿轮之齿数
N4 = 第4号齿轮之齿数

P=feeding degree
D=70 (drive wheel diameter)
N1=number of teeth of the first gear
N2=number of teeth of the second gear
N3=number of teeth of the third gear
N4=number of teeth of the fourth gear

材料宽度	Material width	mm	Max.150	Max.200	Max.300	Max.400
材料外径	Material outer diameter	mm	Max.1200	Max.1200	Max.1200	Max.1200
材料内径	Material inner diameter	mm	450-520	450-520	450-520	450-520
材料速度	Material speed	M/min	1-60	1-60	1-60	1-60
材料重量	Material weight		500kg x 2	1000kg x 2	2000kg x 2	3000kg x 2
校平辊子	Leveling roller	Pcs	11	11	11	11
驱动马达	Drive motor		1.5 kw	2.2kw	2.2kw	3.0kw



冷却机
Cooler



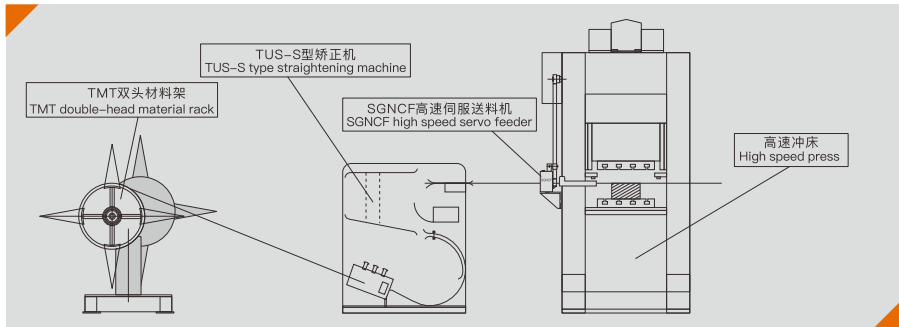
移模臂
Die removal arm



防震垫
Absorbing pad



油压举模臂
Hydraulic die lift arm



TMT 双头料架 TMT DOUBLE-HEAD MATERIAL RACK

Performance description 性能描述

本机由机架，主轴箱体，载料架三部分构成，其主轴箱为整体，长轴距支承，具有体积小，占地小承载大，装料方便，使用灵活之功能。
由于采用双轴悬挂式结构，方便料卷装卸，可一遍使用一遍装料，极大节省换料时间，提高生产能力，降低生产成本，因采用无动力结构，除能配合一般矫正机使用外，其特点主要是能配合高速矫正机使用，其效果最佳。

The model consists of three parts: the spindle box body, the spindle box and the carrier, of which the spindle box is integral and has long axle distance. It features functions such as small volume, small footprint, convenient loading and flexible use.

Double-axis hanging structure is applied to facilitate material roll handling and enable repeated feeding, greatly saving the recharging time, improving the production capacity and reducing the production cost. Unpowered structure is applied, which enables not only use with ordinary straightening machines but also optimal performance with high-speed straightening machine.



型 式	Model	型号规格	TMT-200	TMT-300	TMT-400	TMT-500	TMT-600
最大宽度	Maximum width	mm	200	300	400	500	600
材料厚度	Material thickness	mm	0.2~1.5	0.2~1.5	0.2~1.5	0.2~1.5	0.2~1.5
材料重量	Material weight	mm	1000x2	2000x2	3000x2	4000x2	5000x2
卷料内径	Roller inner diameter	mm	450-530	450-530	450-530	450-530	450-530
最大卷料外径	Maximum roller outer diameter	mm	1200	1200	1200	1200	1200

S型同步送料整平机 S-TYPE SYNCHRONOUS FEEDING LEVELER

performance description 性能描述

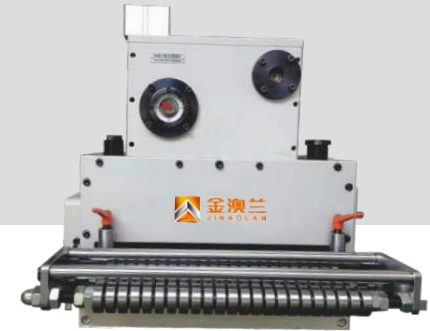
S型或U型导料系统，采用电信号→PC→变频器→速度转变，能与冲床完全同步生产，速度可达约60m/min。
本机型配双头材料架，操作简单，能与高速冲床完全同步，选用齿轮送料机使用效果更好。

S-type or U-type guide system with the process of "electrical signal → PC → inverter → speed change", enabling full synchronization with the press with the speed up to about 60m/min. The model is equipped with a double-head material frame, which is easy to operate and can be completely synchronized with the high-speed press. The use of gear feeder offers better performance.



型 式	Model	型号规格	SLQ-200	SLQ-300	SLQ-400	SLQ-500	SLQ-600
最大宽度	Maximum width	mm	200	300	400	500	600
材料厚度	Material thickness	mm	0.3~1.6				
卷料内径	Roller inner diameter	mm	1200				
整平速度	Leveling speed	m/min	60				
马达	Motor	HP	2	2	3	5	7.5
工作电压	Working voltage		AC三相220V或AC三相380V				

SGNCF 伺服送料机 SGNCF SERVO FEEDER



性能描述 Performance description

采用上下驱动送料，通过由冲床转动发出送料讯号，伺服送料机运转驱动上下滚筒来完成送料动作该机构，送料精度可达±0.02mm。上下滚轮均采用高合金钢GCr15制造，经热处理+HRC60-62°(调质+高周波处理+硬铬层)、研磨，严格保证滚轮之刚性及表面光洁度，确保高精度及高的耐磨性能，驱动齿轮采用渗碳钢20CrMnTi制造，经热处理渗碳淬火HRC58-60°后精磨齿部，齿圈径向跳动为±0.01mm，精度等级可达6级。

不需要调整送料厚度，高效的送料长度(步距)设定，在控制面板上，直接输入送料长度，即可到达所需的送距。送料范围可至0-9999.99mm,可输入多组不同的送料长度，对厚薄不同，送距长短不一，长度变化大的送料要求也非常适应。

采用气压式材料夹持释放装置，开始工作时放松架将上辊抬起材料可轻松放入，抬起高度可通过调节螺丝控制，方便送料开始调试模具。放松采用偏心轮装置，比之气压、打杆放送松，更精确、放松速度更快、调整更方便，送料速度可达600次/分钟。

The feeding is driven by the upper and lower rollers, and the feeding signal is sent by the rotation of the press machine. The servo feeder operates the upper and lower rollers to complete the feeding action. The feeding accuracy can be up to ±0.02mm. The upper and lower rollers are manufactured with high alloy steel GCr15. By thermal treatment HRC60-62° (tempering + high frequency treatment + hard chrome layer) and grinding, the rigidity and surface finish of the roller may be strictly guaranteed. The driving gear is made of carburizing steel 20CrMnTi and processed by thermal treatment carburizing and quenching HRC58-60°. Then the teeth are made accurate grinding. The radial runout of the ring is ±0.01mm and the accuracy level is up to Level 6.

It is not required to adjust the feed thickness, the efficient feed length (step). On the control panel, the feeding length may be entered directly to meet required distance. The feeding range can be set from 0 to 9999.99mm, and multiple sets of different feeding lengths may be entered. Different thicknesses require different lengths. It is also quite adaptable for feeding requirements with great length variations.

The pneumatic material is applied to hold the release device. When starting work, the release frame can be easily placed by lifting the upper roller. The lifting height may be controlled by adjusting the screw to facilitate the debugging of the die at the beginning of feeding. Eccentric wheel device is applied for release, which enables more accurate and quicker release and more convenient adjustment compared with the air pressure and rod methods. The feeding speed may be up to 600 times per minute.

型 式	Model	型号规格	NCF-200	NCF-300	NCF-400	NCF-500	NCF-600
最大送料宽度	Maximum feeding width	mm	200	300	400	500	600
最大送料长度	Maximum feeding length	mm	9999.99	9999.99	9999.99	9999.99	9999.99
材料厚度	Material thickness	mm	0.2~1.5	0.2~1.5	0.2~1.5	0.2~1.5	0.2~1.5
模具线高度	Die line height	mm	100~170	100~170	100~170	100~170	100~170
最快送料速度	Maximum feeding speed	m/min	60	60	60	60	60
工作电压	Working voltage		AC 三相 220V 或 AC 三相 380V				