TPS

智能裁切机

Digital Cutting Machine

S2-4060智能裁切机整机采用一体式结构设计,机器占地面积小,移动方便,采用全自动上纸吸盘和全自动升降送料平台,配合各类刀具可高速、精准地完成全切、半切、折痕、虚线切、标记等生产工艺,软件操作便捷,可一键式操作,无需繁锁设置,无需过高的人员技术要求。适用于广告标识、印刷包装行业、婚庆礼品行业的打样及小批量个性化数字模切加工。

Digital cutting machine model S2-4060 adopts one-piece structure design. It is easy to move the machine with its small footprint. It also adopts automatic material suckers and lifting feeding table. It can cooperate with all kinds of cutting tools to full cut, kiss cut, crease, perforate, mark, and complete other production processing fast and precisely. The software is easy to operate and can achieve "one-click" operation. There is no need of complicated settings and there is no need for highly technical requirements of personnel. It applies to proofing and small-batch personalized digital die-cutting processing in the signs of advertising, printing, packaging, and wedding gift industries.



TPS cutting software supports the following file formats: TPS 切割软件支持以下文件格式:











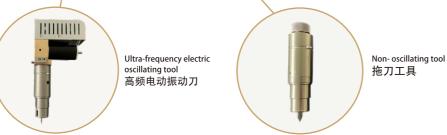








Optional tool units as following 可选的切割工具单元



Application industry 应用行业



Advertising printing industry



Packaging industry



Wedding gift industry 婚庆礼品行业



其他行业

Main technical parameters 设备主要技术参数

Overall dimension / 设备外形尺寸(含料架):	2460×975×1145mm	Drive system / 传动系统:		Full servo, linear guide rail, synchronous belt 全伺服、直线导轨、同步带
Work area / 工作尺寸:	400×600mm	Number of motor / 电机数量:		
Work platform / 工件台面: Aluminum alloy honeycomb table and conveying carpet 铝合金蜂窝真空台面+毛毡传动		Format of supported files / 支持文件格式:		AI、EPS、DXF、PLT、PDF、JPG、TIF、TPS
Max material processing height / 材料最高加工高度:	≤10mm (Depending on different material / 根据不同材质)	Equipment power / 设备总功率:		3.0Kw
Beam height / 横梁高度:	30mm	Capacity / 电压:		220V 60Hz/50Hz
Material fixation method / 材料固定方式:	Vacuum adsorption / 真空吸附	Net Weight / 设备质量:		350Kg
Max processing speed / 最大空程速度:	72M/Min.	· Applications / 适合行业及材料:		tising, printing, marriage present and other industries, can corrugated board, cardboard, PP, sticker, vinyl, reflecting
Positioning method / 定位方式:	CCD camera, Red light(红光)	Applications/坦白打亚及材料。	material, compositive material and any other kinds of flexible materials othickness within 10mm, depending on hardness of material. 应用于广告、印刷、版件扎品等行业,可切割长彻、瓦楞纸、卡纸、PP纸、纸贴、不干胶、反光材料、复合材料等不超过10mm的各种柔性材料。	
Repeatable cutting accuracy / 重复切割精度:	±0.1mm			



● 1、切割机头 / Cutting head

*配备电动振动刀、拖刀、压痕刀、及两个图文半切刀切割工具,满足用户对不同材料和不同工艺进行加工制作的需求。根据材料硬度和切割性能,振动刀的切割深度可达到10mm。 The cutting head with fixed creasing tool, 2pcs of plotting kiss-cut tool and a universal tool holder which can be installed with Electric oscillating tool(EOT) or drag tool as option according to the materials for cutting, to meet customers' production needs of different materials and different processing. The cutting depth of EOT can

*S2系列裁切机机头安装的所有刀具上下运动由伺服电机控制,大大提高了加工速度、切深精度和操作便捷性。

All tools' up and down movement of the S2 series of digital graphic die cutter is controlled by servo motor, which greatly improves the efficiency of processing, the precision of cutting depth and the ease of operation.

- *标配两个图文半切刀,可对车贴、不干胶、卡纸等相对比较薄软的材料通过不同切割深度的调整来进行全切或半切,切割精度高、速度快,并能对精细的图形和文字切出精美的效果。
- The standard configured 2pcs plotting kiss-cut tool can full cut or kiss-cut thin and soft materials such as sticker, vinyl and cardboard by adjusting to different cutting depth with high precision and high speed. The cutting effect of fine graphics and text is pretty good.
- *定位系统安装有可调照明亮度的LED装置,确保高清CCD摄像头在光线不良的环境下高精度采集到加工材料上的定位点,实现对工件的高精度套位切割。针对反光表面的材料可通过对 LED照明亮度的调节确保CCD摄像头有效采集到定位点。

The positioning system is equipped with LED lighting device with adjustable illumination brightness to ensure that the HD CCD camera can accurately capture registration marks on material under insufficient light and achieve high-precision cutting for the work pieces. For the reflective material, the LED illumination brightness can be adjusted to ensure that the CCD camera can effectively capture the registration marks.

● 2、自动升降料装置 / Automatic lifting material device

reach 10mm on the basis of the material hardness and cutting performance

把需要切割的材料放在上料台上,点击软件上的回零键进行一键回零,自动升降料装置会将材料平面升至对射红光感应位置,材料分离装置通过吹气将材料分离,再通过悬浮式强力吸纸 吸盘将片材带入加工台面进行加工,有效防止上料过程中的"带料"现象和脱落现象。

After loading the material on material lifting table and click "XY" key to set all axis home, the automatic material lifting device raises the material top to the red lightsensing position. The material separating device separates the material by blowing air, and then takes a sheet to the processing table for processing through the suspended strong sucker, effectively preventing the phenomenon of taking material and falling off during the feeding process.

● 3、切割台面 / Cutting table

采用航空铝真空吸附台面,吸附力大,确保高精度切割。裁切台面最大可裁切400X600mm,履带式切割毛毡,透气性好,将可自动将加工完成的材料送至成品集料区。

It adopts aviation aluminum vacuum table with strong adsorption to ensure high precision cutting. The effective cutting range can be up to 400x600mm on cutting table. Tracked conveyor felt with good air permeability can automatically send processed materials to the finished collection holder.

● 4、巻料机构 / Roll Material Feeding System

为了满足带有印刷和定位点的卷料进行切割的需求,卷料安装和送料机构可作为选配。

To meet the need of rolls cutting with printing and positioning points, the roll material mounting and feeding system is available as an option.

● 5、文件导入 / Files Import

CCD相机可通过对打印在切割材料上的二维码进行采集把所要加工的切割文件导入到TPS自我研发的切割软件中进行连续切割。

The CCD camera can capture the QR code printed on the cut material and import the cut file to the TPS self-developed cutting software for continuous cutting,

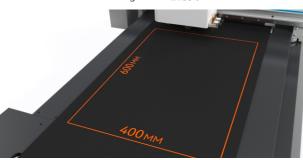
⑥ 6、成品收集 / Collection of Finished Sheets

设置成品收集盒可以将切好的成品收入盒内,无需人工捡料,方便在无人看守时,自动完成终端成品集中与收纳。

The finished sheets collection tray can collect the finished products without manual picking up, and it is convenient to finish collecting and storing the finished sheets automatically when no one is overseeing.



Cutting head / 切割机头



Cutting table / 切割台面



Automatic lifting material device / 自动升降料装置



Finished product collection / 成品收集