

汽车家电等行业冲压成形 解**决方**案

AUTOMOTIVE AND HOUSE APPLIANCE INDUSTRIES STAMPING AND FORMING SOLUTIONS









Company Profile

บริษัทหมิว เฉิน ออโต้ แมชชีนเนอร์รี่จำกัด เป็นบริษัทนำเข้าเครื่อวจักรและเครื่อวตรวจจับอัจฉริยะ Al ในอุตสาหกรรมยานยนต์ บริษัทขอวเราก่อตั้วขึ้นในประเทศไทยตั้วแต่ปี คศ. 2015 มีทีมบุคลากรด้านเทคนิคที่มีทักษะสูวที่ สามารถให้บริการลูกค้าชาว ทั้วก่อนการขาย ในการขาย และหลัวการขายใด้ทันเวลา สามารถรับประกันการผลิตที่มี ประสิทธิภาพในแก่ลูกค้า

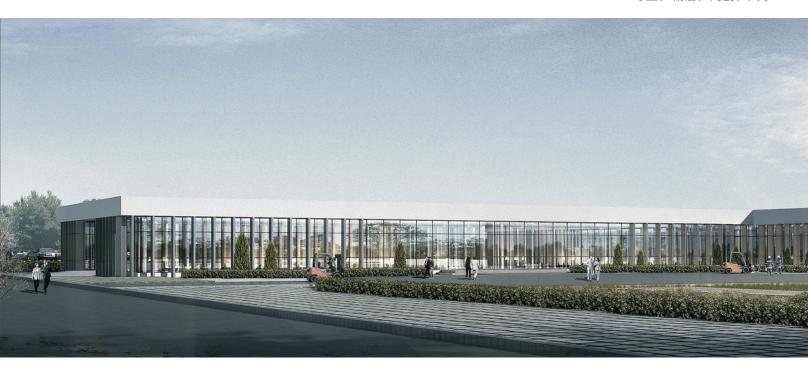
Ming Chen Auto Machinery Co., Ltd. is a company that imports machines and Al intelligent detectors in the automotive industry .

Our company has been established in Thailand since 2015 and has a team of highly skilled technical personnel who are able to serve our Thai customers. both before the sale, in the sale and after the sale in a timely manner Can guarantee efficient production to customers.









公司简介

重庆江东机械有限责任公司(以下简称为"江东机械")是集液压机、轻量化成形技术、轻量化零部件、冷热冲压模具、金属铸件等研发、生产、销售和服务于一体的综合性锻压装备和零部件制造企业。其中,公司研发液压机及生产线具有先进的自动化、智能化、柔性化,同时,江东机械能够为客户提供各种金属及非金属液压成形成套装备及成形技术一体化整体解决方案,尤其在汽车轻量化零部件精密成形技术和全自动成套成线装备研发领域,形成核心关键技术和竞争优势。

江东机械目前能够设计生产30个系列,500余个品种液压机以及生产线成套自动装备,产品规格从50吨—8000吨,广泛应用于航空航天、新能源、汽车制造、军工装备、船舶运输、轨道交通、石油化工、轻工家电、新材料等领域。江东机械率先通过了ISO9001质量体系认证,2012年产品通过了欧盟CE安全体系认证,产品已出口到欧洲、美洲、东南亚、大洋洲、非洲及日本、韩国等国家和地区。

1937年 公司前身原为中国政府兵工制造企业成立

1966年 研发与制造液压技术类型农用机械

1978年 开始生产研发与制造液压机

1993年 液压机出口东南亚、韩国等地区

1995年 取得IS09001质量体系证书

2003年 成为中国重要液压机研发与制造基地

2005年 开始参与中国液压机标准的起草与制订

2012年 液压机通过欧盟CE认证,并开始出口到欧洲

2013年 聚集汽车轻量化零部件成形技术和成套装备研发

2018年 开始搬迁与扩能新区建设,建立轻量化汽车零部件示范性工厂

2022年 全面完成新区建设,完成轻量化汽车零部件示范性工厂建设 factories for lightweight auto parts;

COMPANY PROFILE

Chongqing Jiangdong Machinery Co., LTD. (hereinafter referred to as "JD machinery") is a comprehensive forging equipment and parts manufacturing enterprise integrating R&D, production, sales and service of hydraulic press, lightweight forming technology, lightweight parts, cold and hot stamping dies, metal castings, etc. Among them, the company research and development of hydraulic presses and production line with advanced automation, intelligence, llexibility, at the same time, JD machinery to provide customers with all kinds of metal and non-metallic hydraulic forming complete sets of equipment and forming technology of integrated solutions, especially in the automotive lightweight components of precision forming technology and automatic complete sets of equipment research and development into line, form a core key technology and competitive advantage.

JD machinery is currently capable of designing and producing 30 series, over 500 varieties of hydraulic presses and complete sets of automatic forming equipment line, with products specifications ranging from 50T to 8000T, widely used in aerospace, new energy, automobile manufacturing, military equipment, ships, rail transit, petrochemical, light industrial household appliances, advanced material and other fields. JD machinery took the lead in passing the ISO9001 quality system certification and the products passed the EU CE safety system in 2012. The products have been exported to Europe, America, Southeast Asia, Oceania, Africa, Japan and South Korea and other countries and regions.

In 1937, the company's predecessor was the Chinese government military manufacturing enterprise established:

military manufacturing enterprise established; In 1966, develop and manufacture hydraulic technology type agricultural machinery;

In 1978, began to produce, develop and manufacture hydraulic press; In 1993, hydraulic press export to Southeast Asia, South Korea

and other regions; In 1995, obtained ISO9001 quality system certificate;

In 2003, become China's important hydraulic press in the research and development and manufacturing base;

In 2005, began to participate in the drafting and formulation of Chinese hydraulic press standards;

Chinese hydraulic press standards; In 2012, the hydraulic press passed the CE certification and began to export to Europe; In 2013, assemble automotive lightweight parts forming technology

In 2013, assemble automotive lightweight parts forming technology and complete set of equipment R&D; In 2018, began to relocate and expand the construction of new

areas, and set up demonstration plants for lightweight auto parts; In 2022,completed the construction of new areas, and the demonstration factories for lightweight auto parts;



行业地位

国家科技重大专项承担单位

国家高新技术企业

- 中国机床工具协会锻压机械分会副理事长单位
- 中国锻压机械标准化委员会委员单位
- 中国液压机标准化委员会委员单位
- 中国轻量化材料精密成形工艺及技术创新联盟理事单位
- 中国玻璃纤维/复合材料工业协会副会长单位
- 重庆市级企业技术中心
- 锻压装备及成形技术重庆市工程研究中心

INDUSTRY POSITION

National S&T major project responsible enterprise
National high-tech enterprise
CMTA forging machinery branch VP
Member of CFMS committee
CHPS committee member unit
CLMPFP and technology innovation alliance unit
Vice chairman Unit of China glass fiber/CMIA
Chongqing Municipal enterprise technology center
Forging equipment and forming technology Chongqing engineering center

承担国家科技项目

国家重大科技专项:温等静压成形成套设备

国家重大科技专项:高马赫数飞行器复杂构件超高温成形装备及关键技术研究

国家重大科技专项:复合材料汽车关键零部件在线模压成形技术与装备

2017年多种轻质材料焊接平台共性技术研究复合材料领域04专项

2016年工业强基工程项目:超高强钢热冲压轻量化材料精密成形工艺实施方案

2017年工业强基"一条龙"示范项目:复合材料轻量化材料精密成形工艺实施方案



























UNDERTAKEN NATIONAL SCIENCE AND TECHNOLOGY PROJECTS

National key S&T Special projects: Complete equipment for thermostat isostatic molding

National key S&T Special projects: Ultra-high temperature forming equipment and key tech for complex structural parts of aircraft National key S&T Special projects: Molding tech and equipment for key parts of composite automobile

In 2017, a variety of light weight materials welding platform common technology research composite material field 04 special Industrial strong base project in 2016: Scheme of high strength steel hot stamping lightweight material precision forming processIndustrial strong base "through-train" demonstration project in 2017: Scheme of composite& lightweight material precision forming technology



全自动汽车薄板冲压液压机生产线 AUTOMATIC SHEET STAMPING HYDRAULIC PRESS PRODUCTION LINE

该生产线将传统的人工上、下料压力机生产线改变为机械手 (机器人)上、下料、带检测功能的自动化冲压生产力线, 采用连续行程生产模式,实现了冲压工厂的智能制造,生产 运行全过程无人操作。

全自动薄板冲压生产线组成:4-5台数控液压机、垛料输送台车、磁力分层系统、清洗机、涂油机、对中台、双料检测、机器人系统及冲压附属设备、线尾皮带机、端拾器、快换系统、检验台、照明系统、废料线、电气控制系统等。

This production line changes the traditional manual loading and unloading press production line into the automatic stamping productivity line of mechanical arm (robot) loading, unloading and belt testing function, adopts the continuous stroke production mode, realizing the intelligent manufacturing of stamping plant, and the whole process of production and operation is unmanned.

Sheet stamping automatic production line: 4–5 CNC hydraulic press, the buttress material transporting trolley, magnetic layered system, oil cleaning machine, coating machine, centring, double detection, robot system and stamping accessories, line belt machine, end gripper, rapid change system, inspection platform, lighting system, waste line, electric control system, etc.



中厚板冲压拉伸液压机生产线 MEDIUM AND HEAVY PLATE STAMPING AND DRAWING HYDRAULIC PRESS PRODUCTION LINE

The production line consist of 5 presses, roller conveyors and belt conveyors, equipped with a rapid mold change system to achieve rapid mold change. It can realize 5 sequence forming and transmission of workpiece, reduce labor intensity, and realize efficient production of household appliances. The line achieves automatic produce through PLC+ bus control.

本生产线由5台压机加上滚筒输送机、皮带输送机组成,配有快速换模系统实现模具的快速更换。可以实现工件的5序成形及传输,减轻劳动强度,实现家电类产品的高效生产。整线通过PLC+总控实现全线的自动化生产。

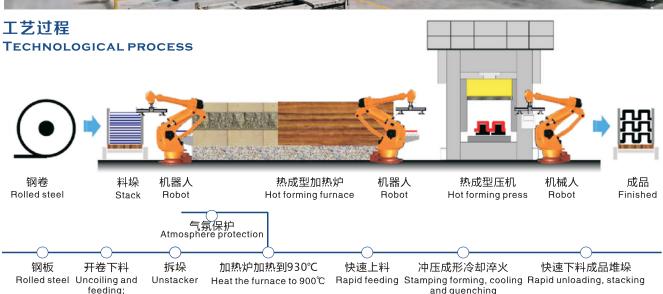


高强钢(铝)高速热冲压成形生产线 HIGH STRENGTH STEEL (ALUMINUM) HIGH SPEED HOT STAMPING FORMING PRODUCTION LINE

主要应用于高强度钢或铝板汽车车身零部件,尤其是汽车AB柱,前后门防撞梁,保险杠等进行加工。高强钢(铝)热冲压生产线由辊底式或箱式加热炉、快速上料系统、快速热冲压液压机、冷水模具、自动取料系统及后续加工如喷丸、激光切割机或自动冲切落料系统组成。

Mainly used in high strength steel plate automotive body parts, especially automotive AB column, front and back door collision beam, bumper processing. High strength steel (aluminum)high speed hot stamping forming production line consists of roller bottom or box type heating furnace, fast feeding system, fast hot stamping hydraulic press, cold water mold, automatic material unloading system and subsequent processing such as shot blasting, laser cutting machine or automatic blanking system.





超高强钢(铝)板材自动化冲切生产线 ULTRA HIGH STRENGTH STEEL (ALUMINUM) SHEET AUTOMATIC PUNCHING AND CUTTING PRODUCTION LINE

主要适用高强钢或铝热冲压成形后续加工,代替传统激光切割工艺设备。 生产线由2台带冲栽装置的液压机、3台机械手、自动上下料装置和传输 系统,实现自动化连续大批量生产。

It is mainly used for hot stamping of high strength steel (aluminum) to replace the traditional laser cutting equipment. The production line is composed of 2 hydraulic presses with blanking device, 3 mechanical hands, automatic loading and unloading device and transmission system, realizing automatic continuous mass production.



内高压成形液压机及生产线 INTERNAL HIGH PRESSURE FORMING HYDRAULIC PRESS AND PRODUCTION LINE

内高压成形技术是指依托液体或气体作为传力介质,采用精确地控制内压力及轴向进给,配合模具型腔,最终使金属中空坯料成形出整体化复杂变截面构件的先进制造技术,是汽车零部件轻量成形技术之一。

内高压成形设备适用于制造航天航空、核电、石油化工、饮水系统、管道系统、汽车以及自行车行业复杂异形截面空心构件。在汽车领域主要产品有汽车车身支撑架、副车架、底盘件、发动机支架、进排气系统管件、凸轮轴等零部件。

Internal high-pressure forming technology is one of the lightweight forming technologies for auto parts, which relies on the liquid or gas as the transmission medium, USES the precise control of internal pressure, and the axial feeding, with the mold cavity, and finally makes themetal hollow blank form the integral complex variable section member.

Internal high pressure forming equipment is suitable for manufacturing aerospace, nuclear power, petrochemical, drinking water system, pipe system, automotive and bicycle industries of complex shaped section hollow components. The main products in the automotive field are automobile body support frame, auxiliary frame, chassis parts, engine support, intake and exhaust system pipe fittings, camshaft and other parts.



工艺过程

TECHNOLOGICAL PROCESS

光管 分管 弯曲 上料台输送 Raw tube branched bending feeding 机械手转运 manipulator transport 预成型 机械手转运 pre-forming manipulator

内高压成形 internal high pressure forming

下料输送 laying-off

切割、冲孔 成品 blanking and cutting finished

0.7

全自动高速精冲液压机及生产线 AUTOMATIC HIGH-SPEED FINE-BLANKING PRESS LINE

It is suitable for metal parts precision blanking process, such as the production of car seat regulator rack, plate, modulator, brake ratchet, pawl, adjusting plate, pull arm, push rod, web, support plate; Latch, inner ring, ratchet, etc.

The production line is composed of high precision blanking forming hydraulic press, three-in-one automatic feeding device, and automatic feeding device. It has the functions of automatic feeding, blanking, conveying parts and cutting. Production line beats up to 35–50spm.

主要适用于金属零部件精密冲裁工艺,如生产汽车座椅调节器上的齿条、齿板、调角器,制动的棘轮、棘爪、调节齿板、拉臂、推杆、腹板、支撑板等;安全带上的插舌、内齿环、棘爪等。

本生产线由高精度精密冲裁成形液压机、三合一自动送料装置、自动下料装装置构成。具备自动送料、自动冲裁、自动输送零件、自动进行废料剪切等功能。生产线节拍可达35-50spm。



工艺过程 TECHNOLOGICAL PROCESS

$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$
开卷	校平	检测	送料	润滑	精冲	成品	废料剪切
Uncoiling	levelina	inspection	feeding	lubrication	fine blanking	finished	waste shear
Chedining	icveiling	mapocuon	recurry	idbiication	inic bialikiliy	minalieu	waste sileai

试模压机 TRYOUT PRESS

试模压机是在单动薄板冲压液压机功能的基础上增加行程微调功能,以满足汽车零部件模具调试功能。微调精度,点动可达行程0.05mm/次,微调方式有机械四点微调、液压伺服微调和无压下行两种方式。

The tryout press is based on the function of single action sheet stamping hydraulic press to increase the stroke fine-tuning function to meet the auto parts die debugging function. Fine-tuning precision, the inching can reach 0.05mm/stroke, the fine-tuning mode is mechanical four-point fine-tuning, hydraulic servo fine-tuning and no pressure down two ways.



模具研配液压机 DIE SPOTTING HYDRAULIC PRESS

It is used in die finishing and adjustment, especially in the process of manufacturing and maintaining large and medium-sized stamping dies, to complete the die grinding, precise debugging and processing.

According to the type of mold and the different processing, the hydraulic press is divided into two types of structure: with the mold turnover device (flip 180°) and without the mold turnover device. Due to the high requirements on the stroke control process, the press with the stroke fine-tuning function, step (or inching) stroke up to 0.02–0.05mm/stroke, the fine-tuning mode has mechanical four-point fine-tuning, hydraulic servo fine-tuning and no pressure down fine-tuning three ways.

应用于模具精加工和调整,特别适合在制造、维修大中型冲压模具过程中,完成对模具的研合、精准调试与加工。

根据模具类别和研配工艺不同分,液压机分为带上模翻转(翻转180度)装置和不带上模翻转装置两种结构形式。由于研配工艺对行程控制要求较高,压机带有行程微调功能,步动(或点动)行程可到0.02-0.05mm/次,微调方式有机械四点微调、液压伺服微调和无压下行微调三种方式。



车门扣合(包边)液压机 AUTOMOBILE DOOR OVEREDGE HYDRAULIC PRESS

主要用于左右车门、后备箱盖及发动机盖的扣合(包边)工艺及冲裁切边工艺。 压机通常配有快速换模系统,含多个数量及多种形式移动工作台,模具自动夹 紧机构和模具自动识别系统。

It is mainly used for the fastening (wrapping) process and blanking process of left and right door, trunk cover and engine cover. The press is usually equipped with a quick mold change system, including multiple quantities and various forms of moving table, mold automatic clamping mechanism and mold automatic identification system.



不锈钢水槽生产线 STAINLESS STEEL SINK PRODUCTION LINE

水槽自动生产线:是指钢卷开卷、剪切下料、冲压成型加工的自动生产线,采用机器人代替人工,自动完成水槽生产制造。

水槽自动生产线由材料供给单元和水槽冲压单元两大部分组成。两大部分之间由物流输送单元实施物流的输送。材料供给单元由开卷、覆膜、校平、剪切、叠料等设备组成;物流输送单元由移栽小车、垛料缓存线、空托盘缓存线组成;压制单元由线首切角、一次拉伸、二次拉伸、切边共4个工序的压力机及机器人自动线组成。

生产线产能为2件/分钟,年产量:约23万件。

Automatic sink production line: It refers to the automatic production line ofsteel coil uncoiling, cutting and blanking, stamping and forming processing.

Automatic sink production line consists of two parts: material supply unit and sink stamping unit. Between those two parts by the logistics transport unit to carry out. The material supply unit is composed of uncoiling, laminating, leveling, shearing and stacking equipment. The logistics transport unit is composed of transplanting trolley, stacking buffer line and empty pallet buffer line. The pressing unit is composed of a press machine and a robot automatic line with four working procedures: the first corner cutting, the first drawing, the second drawing and the cutting edge.

The production capacity of the production line is 2 pcs/min, annual output is about 230,000 pcs.



汽车内饰件液压机与生产线 AUTOMOBILE INTERIOR PRESS AND PRODUCTION LINE

主要用于汽车内部仪表盘、地毯、顶棚、座椅等内饰件材料的冷热模压成型,工艺。可根据工艺要求,压机配模具导热油加热或蒸汽加热系统,自动上下料装置、原料加热烘箱、抽气装置等组成全自动化生产线。

It is mainly used for cold and hot molding and technology of automobile interior panel, carpet, ceiling, seat and other interior materials. According to the process requirements, the press with mold heat conduction oil heating or steam heating system, automatic feeding and unloading device, raw material heating oven, exhaust device, etc. constitute a fully automated production line



成形方案服务 FORMING SOLUTION SERVICE

江东机械长期致力于识别并满足顾客需求,为顾客提供"一站式"总体解决方案,已经成为江东机械的追寻目标。为此,江东机械在做好锻压成形装备的高精度、更安全、更可靠,力求液压成形装备生产线具备自动化、智能化、柔性化外,并聚集汽车零部件轻量化成形技术的研究与开发,在材料、成形工艺、模具、检具等不断地积极探索积累核心技术,达成"交钥匙"工程,并保证在生 产效率,成形精度,加工成本等方面具有综合竞争力,与顾客实现共赢、互惠、共同发展。

Jiangdong machinery has been committed to understanding and matching customer needs, to provide customers with a "one-stop" overall solution, has become the pursuit of Jiangdong machinery goal. Therefore, Jiangdong machinery in addition to be equipped with high precision in hydro-forming equipment, safer, more reliable, and to hydro-form equipment production line automation, intelligent, flexibility, gather the automotive light weighting forming technology research and development, and in material, forming technology, mould, fixture, constantly explore accumulating core technologies such as a "turnkey" project, And to ensure that the production efficiency, forming accuracy, processing costs and other aspects of comprehensive competitiveness, and customers to achieve win-win, mutual benefit, common development.

项目实施 PROJECT IMPLEMENTATION



客户需求识别 Customer demand identification



设备、工装、模具 等制造 Equipment, tooling and mold manufacturing



工艺过程与模具 方案确认



Process and mold plan Production line set confirmation Equipment and mold confirmation



成套产线确定和 投资经济性分析





批量生产验证与 产线调试及试运行 终验收 Production line debugging Batch production verification and test running and final acceptance



设备与模具三维 仿真验证





技术培训 Technical training



系统逻辑设计及 信息集成方案

System logic design and information integration scheme



质保与回访服务 Guarantee and after service

我们的客户 **OUR CUSTOMERS**







































PROFESSIONAL、HONEST、CO-CREATION、SHARING 专业、诚信、同创、共享



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