



常州市名杰建材设备制造有限公司位于常州市钟楼开发区, 曾是常柴集团的控股 子公司, 具有三十余年的机械设备制造经验。凭借着丰富的机械加工经验, 雄厚的 经济实力和殷实的技术基础,名杰在加气混凝土设备制造行业一直处于领先地位。

近几年来, 随着时代的飞跃, 科技的发展, 公司本着一股与时俱进、不断开 拓创新的精神,通过机制转换、股权激励、人才引入以及设备完善,已经一跃成为 国际上技术领先、管理规范、质量上乘、服务优质的现代化股份制企业。

## (1) 国际标准化的专业厂房

公司占地面积约为48000平方米, 共有五座国际标准化专业厂房, 分别用于原材料的储存、金属 板材类的切割、回转体零件的精加工、整体设备的装配和成品的分类保养, 便于公司质检部门按照 国际化先进的规章制度为各个独立的生产环节进行质量检测。

公司拥有雄厚的技术力量,先后投资1亿多人民币来采购 并完善企业的生产和检测设备。目前为止,公司拥有30余台精 密级数控车床和精密级数控铣床,加工精度为±1~1.5μm;为 了满足大中型工件的制造,公司采购三台精度达到±2μm的大 型龙门式数控铣床;同时,为了配合特种加工以及精度检测需 求,公司还配备了五台数控等离子弧和火焰双用切割机床、三 台数控激光切割机床、十余台数控压力机、数控剪板机、数控 折弯机以及十余台高精度数控多坐标测量仪。

## (3) 完备的品质控制体系

为满足各消费者的需求,同时也为了产品质量控制和品牌 建设的需要,企业高层制定明确的质量方针和目标,并且建立 了专用于质量检测的实验室。公司为建立质量检测实验室投入 了大量的资金进行基础建设和设备配置,总投资500多万元, 建筑面积300多平方米,配备了10多套进口检测设备。





## 公司简介 Company Profile

## (4) 积极主动的合作研发意识以及高技术人才的引入

随着经济的飞速发展,企业的规模也在不断扩张。为了保持企业在科技竞争方面上的领先地位,公 司海纳百川、广聘人才,从2000年起先后与常州工学院、江苏大学以及其他大型科研单位合作。结合公 司的雄厚资金力量、先进的设备以及各大高校和研究所的研发能力、公司先后突破了多项技术难点、分 别获得多项政府颁发的荣誉证书以及褒奖,如江苏省技术创新优势企业、省级科技进步创新奖、江苏省 民营科技企业、常州市工程技术研究中心、中国高新技术企业(申报中)、质量工作先进企业、A+级信 用企业等。

公司在与各大高校及研究所合作的同时也在不断地开展人才储备工作,公司现有员工200余名,其 中中高级工程师占全部人数的10%以上;从事设计、检测、管理等技术型职位的人员占公司员工总数的 30%以上并且全部为国家重点学校本科及以上学历毕业的高学历人才。

## (5) 健全的售后服务体系

公司秉承"诚信、务实、精益、创新"的企业文 化,努力为客户提供优质的售后服务。售后服务部由 公司副总领导,设有维修人员15名,根据客户需求以 及现场实际情况,组织相应的维修人员配备一名技术 人员将第一时间到达现场。









Changzhou Mingjie Building Material Equipment Manufacturing Co., Ltd, located in zhonglou development zone in Changzhou, had been subcompany of Changzhou Diesel Group for more than 30 years. Based on rich experience on mechanical processing, strong economic strength and substantial technical basis, Mingjie has been a leader in the autoclaved aerated concrete equipment manufacturing industry.

In recent years, with great change of times and fast development of science and technology, insisting on the spirit of advancing with the times and continuous innovation, by system conversion, stock option incentives, talent introduction and well-appointed, Mingjie has become the worldwide modern joint-stock enterprise with leading technology, standardized management, superior quality and excellent service.

## 1. The international standardization professional plant

The company covers an area of about 48,000 square meters, a total of five international standardization professional workshops, respectively, for the storage of raw materials, cutting of sheet metal, finish machining of parts, assembly of equipment, and classification and maintenance of finished products, easy to do quality detection in accordance with the international rules and regulations by the quality department.

### 2. Advanced production and inspection equipments

The company has strong technical force, has invested more than 100 million to purchase and improve the production and testing equipments. So far, the company has more than 30 sets of precision grade CNC lathes and CNC milling machines with the machining accuracy of  $\pm$  1 to 1.5 $\mu$ m. In order to meet the demand of large and medium-sized workpieces' manufacturing, the company purchased three sets of large gantry CNC milling machines with accuracy up to  $\pm 2\mu m$ . At the same time, in order to meet the needs of special processing as well as accuracy inspection, the company is also equipped with five sets of CNC plasma arc and flame double-purposed cutting machines, three sets of CNC laser cutting machines, more than ten sets of CNC presses, CNC plate shearing machines, CNC bending machines, and more than ten sets of high-precision CNC multi-coordinate measuring instruments.

## 3.Complete quality control system

To meet the consumers' needs, as well as the needs for product quality control and brand building, the company executives develop the clear quality policy and objectives, and set up a laboratory dedicated to quality testing. The company invests a total amount of 500 million for infrastructure and equipment procurement of the quality testing laboratory, which building area is over 300 square meters, also equipped with more than 10 sets of imported testing equipments.



## 公司简介 Company Profile

## 4. Active research and development awareness and introduction of highly skilled talents

With the rapid development of the economy, the size of the business is also unceasing expanding. In order to keep the leading position in the technological competition, the company widely employs talents, also has cooperated with Changzhou Institute of Technology, Jiangsu University and other large scientific research organization since year 2000. Combined with the company's strong capital strength, advanced equipments, as well as research and development ability of colleges and universities and research institutes, the company has broken through a number of technical difficulties, was given a number of government-issued certificates of honor and praise, such as the Advantages of technological innovation enterprises in Jiangsu Province, Award of provincial scientific and technological progress and innovation, Private sci-tech enterprise in Jiangsu Province, Engineering technology research center in Changzhou, Chinese high-tech enterprise (in declaration), Quality advanced enterprise, A + grade credit enterprise.

While cooperating with colleges and universities and research institutes, the company also proceeds talent reserve. At present, the company has more than 200 employees, in which senior engineer accounts for more than 10%. The employees, who engaged in technology based position, such as design, testing and management, accounts for over 30% of the total number, and all of them graduated from national key schools.

## 5. Sound after-sales service system

The Company adheres to the corporate culture of "integrity, pragmaticism, improving, creative" and strives to provide excellent after-sales service to customers. After-sales service department, led by the vice general manager, has 15 maintenance staff. According to the customer's demand and the actual situation, the company will dispatch maintenance personnel with a technician to the site as soon as possible.

## 力量来自于凝聚 STRENGTH COMES

FROM COHESION

卓越的品质、完善的管理和一流的服务是名杰永无止境的追求! at quality, perfect management and first-class service is endless pursuit mingjie!















常州市名杰建材设备制造有限公司 Changzhou Mingjie Building Material Equipment Manufacturing Co., Ltd

# 经营理念



不断精进的技术:名杰拥有优秀的技术人员和丰富的生产经验。为使产品向高科技、高品质发展,以适应市场竞争,名杰引进了先进的生产设备,聘请了多名高学历高科技人才直接参与生产管理和产品开发。

优良的厂房设备:有优良的厂房设备,才能制作出优秀的产品。多年来名杰一直扩大厂房 规模与生产规模,增添新的生产设备,以确保产品的品质。

坚实的团队基础: 人是企业的根本,一个稳定的团队是企业取得不断前进的重要保障,自 名杰创立以来便相当重视人材的培养与工作团队的建立。从研发设计、生产制作、到营销管 理,售后维修,名杰重视每个团队的发展。

主动售后服务:名杰主动关心客户的生产运作,跟踪每部机器的使用状况。让客户安心、 放心,是客户信赖名杰业最重要的关键之一。

The continuous improving technology: Mingjie has excellent technical personnel and a wealth of production experience. In order to develop the products with high-tech and high-quality to adapt to the market competition, Mingjie imports advanced production equipments, also employs the highly educated and high-tech talents to directly engaged in production management and product development.

Modern standard workshop and advanced equipment: The excellent products are based on the modern standard workshop and advanced equipment. Over the years, Mingjie has expanded the plant size and production scale, also purchased new equipments to ensure the product quality.

Strong working group: Stable working group is an important guarantee for company's continuous progress. Since the company founded, Mingjie has attached importance to human resources training and team building. From R&D department to production department, from marketing department to service department, Mingjie pays attention to the development of each group.

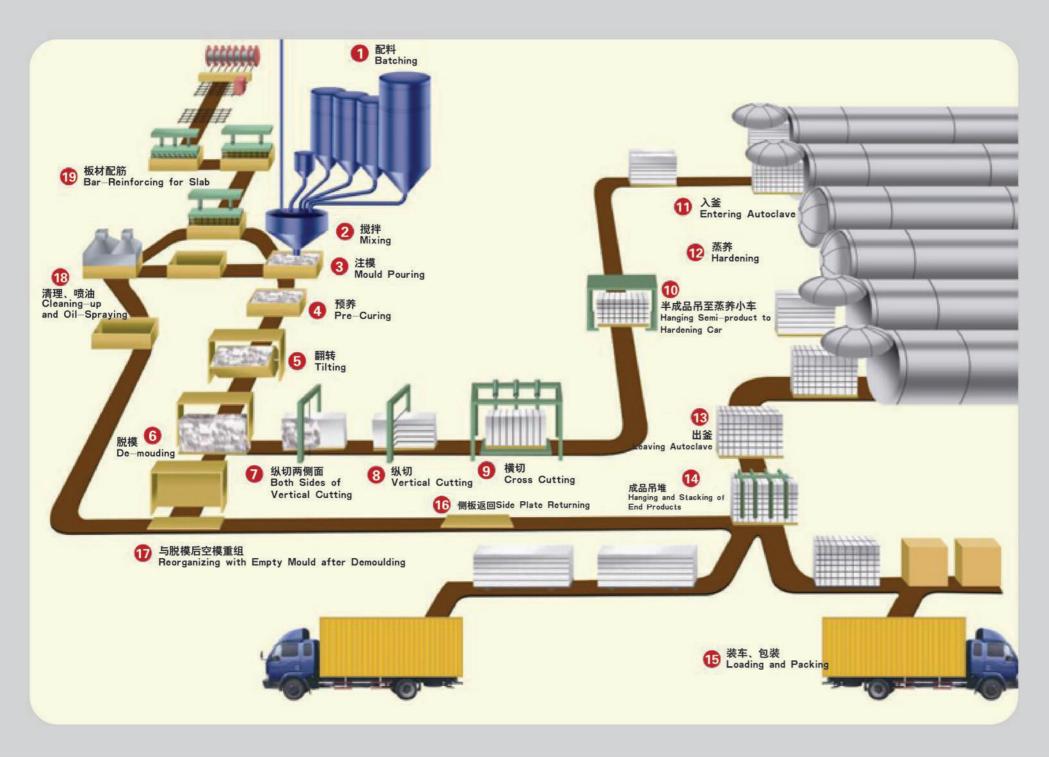
Initiative after-sales service: Mingjie takes the initiative to care about the production operation of customer's plant, also follows up the usage of each machine. One of the most important factor to gain customer's trust is making the customer feel relieved.



# 加气混凝土生产工艺流程 Technical Process of Aerated Concrete Production

## 加气混凝土生产工艺流程

Technical Process of Aerated Concrete Production



首先将储存的原材料计算配料(1)后进入浇筑搅拌机内,经搅 拌(2)均匀后浇注(3)在模具内, (板材配筋(19)), 经过 一定温度个时间的预养(4)坯体达到一定厚度后,由翻转吊具 下列功能: A把模具在空中做90度翻转(5)模具的一侧板成为支 撑坯体的底板直至蒸养出成品,B吊至小车或切割支撑架上完成 开模、脱模(6), C脱下的模框和返回的蒸养侧板(16)再重新 组合成模具(17)等待清理后喷油(18)重新浇注。坯体在切割 机上分布做六面切割: A首先进行坯体两侧面垂直切割(7), B 然后进行纵向水平式切割(8), C最后进行横向垂直铡刀式切割 (9)。切割好的坯体由半成品吊具连同底板吊至蒸养小车 (10), 然后编组入蒸压釜(11)进行高温蒸养(12), 蒸养出 釜(13),由成品吊具将成品堆垛(14)或装车、打包(15), 蒸养侧板则返回(16)。

First of all, dosrang match stored raw materials(1)and feed them into pouring mixer, after evenly mixing(2)ther are poured (3)in the mould(to be reinforced by steel bars for slabs(19). After procuring(4)under a certain temperature for a period of time, the blank shall havd a certain of hardness. The mould and the blank shall be then hanged to fulfil following actions; a. Tilting hanger to fulfil following machinery by the Tilting the mould 90 in the air(5)(one side plate of the mould become the bottom to support the blank until end product is hardened);b.hanged to the cart or demoulding(6).and shall be ready for next pouring after cleaning and oil spraying(17) (18). The blank then be cut on the cutting machinery in six sides:a.First.two vertical sides of the blank are cut(7);b.then the horizontal cutting longitudinally(8); c. And the horizontal cross cutting or chopper-like cutting at last(9). The cut blank and the bottom are hanged by the semiproduct hanged to the hardening car(10), and are fed into the autoclave in group to be handened under high temperature(11)(12). After that, end productleaves the autoclave(13)abd is hanged by the end product hanger to be stacked or losded(14)and packed (15). The hardening plates are returned (16).





## 切割机

蒸养加气混凝土切割机是由纵向(水平)切割机、横向切割机、液压顶升装置、切割小车及导轨五大件 组成。

Autoclaved aerated concrete cutting machine is composed of longitudinal (horizontal) cutter, across cutter, hydraulic lifting device, cutting trolley and guide rail.







## 工作原理

## Working principle

当浇注预养好的模坯在空中翻转90°吊至切割小车,脱去模框后,由第一部切割小车载运至纵切机、横 切机工位对坯体进行六面切割。首由纵切机对坯体进行纵向、水平四面切割,完成后由切割车载运坯体 停留在横切机工位,完成后经液压顶升装置上升抬起胚体,第一部切割小车退回初始位置准备运载下一 模胚体,以备切割。第二部切割小车行至横切机位置,液压顶升装置下降将坯体放至第二部切割小车 上,然后由横切机对坯体进行垂直切割,切割完成后仍由第二部切割车运载坯体运行至半成品吊具下 方,由半成品吊具将坯体吊到蒸养车上做预编组。切割周期约4.5min。

After pouring and procuring, the mould with the cake is turned 90° and lifted to the cutting trolley. After demoulding, the cake is transported by the first cutting trolley to the longitudinal cutter and cross cutter for six faces cutting. The longitudinal cutter cuts the cake on four faces in longitudinal direction and horizontal direction. Then the cake is moved by the cutting trolley to the cross cutting station for vertical cutting. The hydraulic lifting device lifts the cake and the first cutting trolley returns back to the initial position to carry the next cake. At the same time, the second trolley moves to the position under the across cutter, the hydraulic lifting device puts the cake on the second trolley and the across cutter cuts the cake in vertical direction. After cutting, the cake is transported by the second trolley to the position under the loading frame which transports the cake onto the hardening trolley for grouping. The cutting period is about 4.5min.



## 产品 Product

## 掰扳机

## **Separating machine**

掰扳机是代替人力将蒸养完成的 砌块层层分离开的设备

Separating machine, replacing human effort, is used to separate the blocks layer by layer after autoclaving

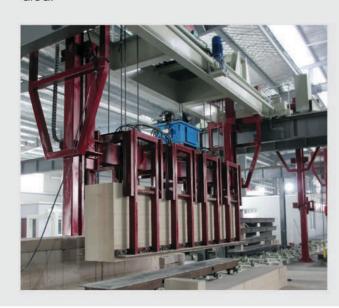


## 液压成品夹具

### Hydraulictinisheaproducts clamp

液压成品夹具是一种将蒸养完成的砌块吊至成品堆垛 区的专用夹具

Hydraulic finished products clamp is one kind of special fixture for lifting the blocks to the stacking area.



## 切割输送装置

### Cuttingtransporter



码垛输送装置 Grouping transporter



## 自动配料计量系统

### Automatic batching and metering system

## 自动电子料浆计量系统

## Automatic electronic slurry meterina system

自动电子料浆计量系统是料浆进行浇注搅拌前称重 用的专用计量容器

Automatic electronic slurry metering system is a special weighing vessel for slurry before mixing.

## 自动电子粉料计量系统

## Automatic electronic powder metering system

自动电子料浆计量系统是粉料(如石灰粉料,水泥粉料等)进行浇注搅拌前称重用的专用计量容器

Automatic electronic powder metering system is a special weighing vessel for powder(such as lime powder, cement powder, etc.) before mixing.

## 自动电子铝粉计量系统

## Automatic electronic aluminum powder metering system

自动电子铝粉计量系统是铝粉液进行浇注搅拌前称 重用的专用计量容器

Automatic electronic aluminum powder metering system is a special weighing vessel for aluminum liquid before mixing.



## PLC

加气混凝土配料系统是由名杰专为加气混凝土生产线设计研制的自动控制系统,其操作简单、智能化程度高且性能稳定可靠。

Autoclaved aerated concrete batching system is the automatic control system designed by Mingjie for autoclaved aerated concrete production line with simple operation, high intelligence degree and reliable performance.



常州市名杰建材设备制造有限公司 Changzhou Mingjie Building Material Equipment Manufacturing Co., Ltd





## 模具和侧板

## Mould and Side plate

模具是承载浇注坯体的专用器具。料浆自浇注搅拌机内注入到模具中,经发酵护养,脱去模框,即成待切割的坯体

The mould is a special tool for carrying the cake. The slurry fills into the mould from the pouring mixer, after fermenting, curing and removing the mould frame, the cake is ready for cutting.







## 蒸养小车

## Hardeningtrolley

蒸养小车是生产过程中的专用运输车辆,其装载着切割后的坯体,进入蒸压釜蒸养。蒸养后,将成品运送至成品场地。成品被吊卸后,蒸养车再次载坯体入釜蒸养。

Hardening trolley is a special transport vehicle in production, to carry the cake after cutting into the autoclave for curing. After autoclaving, the trolley carries the block to the finished product unloading, the trolley carries the cake into the autoclave again.





## 蒸压釜

## Autoclave

### 蒸压釜主要性能参数表

Performance and dimension of autoclaves

序号 No	名称 Name	单位 Unit	型号规格与参数 Type and Specifications					
			φ2.0×L	φ2.05×L	φ2.5×L	ф2.68×L	φ2.85×L	
1	釜体内径 innerm diameter	М	2	2.05	2. 5	2. 68	2. 85	
2	有效长度 effective length	L:根据用户要求 According to client's requirements						
3	设计压力 designed pressure	Мра	1.6	1.6	1.6	1.6	1. 6	
4	设计温度 designed temperature	°C	204	204	204	204	204	
5	工作压力 working pressure	Мра	1.5	1.5	1.5	1.5	1.5	
6	工作温度 working temperature	°C	201	201	201	201	201	
7	介质 medium	/	饱和蒸汽及冷凝水 Saturated Steam and Condensed water					
8	釜内轨距 rail distance	Mm	L:根据用户要求 According to client's requirements					
9	开门方式 mode of opening		手动侧开门或上开门,电动侧开门或上开门, 气动液压侧开门或上开门 Manual opening, Electric opening, Pneumatic hydraulic opening					
10	外形尺寸 overall openings (L×w×h)	m. m. m	L+1.3×2.8 ×3.34	L+1. 3×2. 8 ×3. 34	L+1.5×3.4 ×4.0	L+1.6×385 ×4.3	L+1.7×3. ×4.5	



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摆渡车 Ferry trolle

料浆搅拌机 Slurry mixe 自动堆垛机 Automatic stacking machine

翻转台 Tilting table

