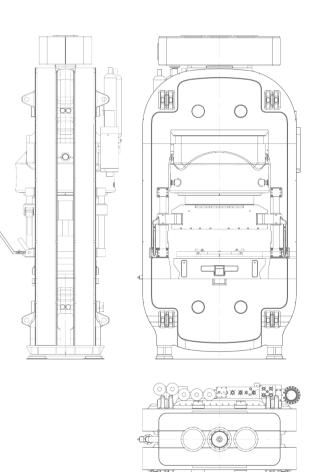
MODENA 摩德娜[®]





成型设备

HYDRAULIC PRESS



MODENA 摩德娜[®]

广东摩德娜科技股份有限公司 MODENA TECHNOLOGY LTD

广东摩德娜科技股份有限公司 MODENA TECHNOLOGY LTD

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定义高标准 Defining the highest standards

来自世界各地的肯定 **APPROVAL FROM ALL OVER THE WORLD**



摩德娜全资子公司新 兴县摩德娜机械有限 公司(占地150亩)在 广东省云浮市新兴县 新城工业园奠基。

subsidiary of 佛山市摩德娜机械有 同年获评定为"广东 oundation in Modena qualified for

限公司通过CE认证,

省高新技术企业"。

CE certification

and ranked as

"Provincial new hi-

ech enterprise".

3000平方米的新办公

New office building

of 3,000 m² put into

大楼投入使用。

operation

佛山市摩德娜机械有

限公司(广东摩德娜

科技股份有限公司前

Modena Machinery

Co.,Ltd.(predecess

身) 注册成立。

Foshan City

or of Modena

Technology Itd.)

was established.

Wholly-owned Modena, Xinxing Modena Machinery imited, laid its Xincheng Industrial Park in Xinxing Town, Yunfu City Guang-dong Province, covers

100,000sqm area

摩德娜 MFS-305型大规 格抛光砖用高效节能 宽体窑获国家科学技 术部评定为"国家重

点新产品"

high-efficiency

wide-body kiln for

polished tiles was

"National Key and

New Product" by

the Ministry of

Science and

Technology

awarded as

摩德娜自主研发辊道窑 新型节能系统RCH获得 国家技术专利 (ZL201510927025, 0) Modena's MFS-305 The very first Doubledecker kiln for largeformat sintered slab production line in Asia supplied by Modena to

LIOLI, was put into

production

successfully

Control system (ADC) and obtained National Patent (No. ZL201711461351.2). The ADC system empowers the roller kiln with more productivity and higher level of automation gas consumption reaches 390kcal/kg (for vitrified products) which is at the international leading

摩德娜成功研发并推出 新型电子空燃比(ADC)系 统并获得国家专利 (71 201711461351 2) 极大程度地赋予辊道窑 以更大的生产弹性和更 高程度的自动化水平, 并在能耗上达到了 390kcal/kg(瓷质砖), 为国际先进水平。

Modena researched

and developed its all-

new Air/Gas Smart

亚洲首条双层大规格岩板 窑炉生产线在印度LI0LI工 厂一次性投产成功,整线 热工设备由摩德娜提供。

The very first Doubledecker kiln for largeformat sintered slab production line in Asia supplied by Modena to LIOLI, was put into production successfully

在中国岩板爆发的元年, 摩德娜得到多家国内陶瓷 头部企业 (蒙娜丽莎, 东鹏 在后疫情时代, 摩德娜整 和金牌等) 的青睐, 供应多 体营业收入创下历史记 条INFINITY系列双层岩板窑 录。在出口市场尤为突 出,3352个货柜的年度出 炉和多层干燥器。截止 2020年9月,亚洲区域的所 货量冠绝行业, 覆盖全球 有双层岩板窑炉(超过9 各大陶瓷产区,且以"全 条)均为摩德娜制造。 窑型"的全面数据回答了

The year of 2020 is the

year of Sintered Slab in

thermal equipment (the

Double-decker kilns and

multilaver dryers) enjoyed

the most popularity from

the top brands (Monalisa

etc.). Till September 2020

all the Double-decker kiln:

for sintered slab in Asia

are provided by Modena

(more than 9 lines).

Donapena, Goldmedal

China, Modena's

INFINITY series

かり 炉火纯青 Mastered Fire

In the post epidemic era-Modena set a historical record of annual turnove It is particularly prominen in the overseas market. The annual shipment of 3.352 containers is the largest in the industry. covering all maior ceram zones in the world, and has answered the questionnaire of the new era with the a Full Slam of kiln models

新时代的问卷。

摩德娜与霍尼韦尔达成 氢能应用战略合作,共 同开发陶瓷行业低碳燃 烧技术。此举不仅响应 国家"双碳"目标,更 推动窑炉清洁能源结构 的革命性突破, 为全球 陶瓷产业低碳发展提供 了创新解决方案。

Modena and Honeywell

development

Modena and XinBoer established a strategic successfully achieved partnership in hydroge mass production with energy applications to jointly develop lowtheir groundbreaking carbon combustion 100,000 m²/day technologies for the porcelain tile kiln ceramic industry. This production line initiative not only aligns Featuring an innovative with China's "Dual production architecture Carbon" goals but also and optimized thermal drives a revolutionary system, this project breakthrough in the delivers unprecedented clean energy structure efficiency and of kilns, providing production stability, innovative solutions fo setting a new world the global ceramic record for single-line industry's low-carbon kiln capacity in the

线产能新纪录!

Engineered Excellence

自成立以来,摩德娜已为海内外市场客户提供了过千条陶瓷生产线,均得到了客户的认可。数字还在继续 增加中.....

More than 1,000 production lines have been successfully supplied by Modena in both domestic and overseas market and approved by the customers. And the counting still goes on

> 摩德娜与赣锋钾业合作 摩德娜与新玻尔合作的 的碳酸锂项目成功启 10万m²/天超大产量中板 动,通过独特的连续煅 窑炉生产线成功实现规 烧方式实现矿物中锂元 模化量产,通过创新的 素的释放与转化, 展现 生产架构和优化的热工 了摩德娜技术的跨界应 系统, 提供了更高效 用, 标志着摩德娜向多 率、更稳定的生产解决 元化热工装备服务商的 方案, 创下全球窑炉单 转型迈出关键一步。

Lithium successfully launched their lithium carbonate project. The innovative continuous calcination technology enables efficient lithium extraction and conversion demonstrating Modena's cross-industry technological capabilities This milestone marks a crucial step in Modena's transformation into a diversified thermal equipment solutions ceramic industry provider.

Modena and Ganfend

2003 2008 2010 2011 2012 2015 2017 2018 2020 2021 2022 2023 2024



2003

成立于2003年

中国最大的窑炉和陶瓷整线 生产装备出口企业 广东摩德娜科技股份有限公司(原佛山 市摩德娜机械有限公司,以下简称"公 司")成立于2003年,是一家专业从事建 筑陶瓷、日用瓷、卫生瓷及特种陶瓷的 整线设备研发、生产、销售与售后服务 的高新技术企业。摩德娜是中国领先的 陶瓷窑炉设备供应商,以热工设备为核 心,同时配套原料制备车间,成型设备 及施釉输送设备,带动整线成套陶瓷生 产装备出口。产品除了销往全国中高端 市场外,还远销越南、美国、印度、泰 国、台湾地区、印尼、马来西亚、孟加 拉国、沙特阿拉伯、阿联酋、巴基斯坦 、土耳其、埃及、墨西哥、哥伦比亚等 国家和地区; 为中国陶瓷设备, 尤其是 热工设备在国际市场上赢得了良好的品 牌和声誉,连续多年成为中国最大的热 工设备和陶瓷整线生产装备出口企业。

Modena Technology Limited (formerly Foshan Modena Machinery Co., Ltd., hereinafter referred to as "the company") was established in 2003. It is a high-tech enterprise specializing in R & D, manufacturing, sales and after-sales service of ceramic machinery equipment. Modena is a leading supplier of ceramic firing equipment in China. With thermal equipment as the core, the company is supplying raw material preparation equipment, forming equipment and glazing and conveying equipment to drive the export of complete solution of ceramic production line machinery. In addition to the China domestic high-end market, our products are also exported to South Korea, the United States, India, Vietnam, Bangladesh, Pakistan, Thailand, Taiwan, Indonesia, Malaysia, the United Arab Emirates, Turkey, Egypt, Mexico, Colombia and other countries and regions, winning a good brand reputation for Chinese ceramic equipment, especially our thermal equipment in the international market.

It has become China's largest thermal equipment and ceramic production line equipment export-oriented manufacturer for years.

Facing the fierce competition in the global ceramic product market, ceramic manufacturers have a strong demand for product quality and optimization, and today's society has a growing demand and dependence on automatic production equipment. In 2017, our company officially started to work with Italian companies to design and manufacture the presses for ceramic tiles with Italian technical advantages: the electrical and hydraulic control system of these presses are developed by our Italian partner, and the main body and mechanical parts are manufactured by Modena with quality quarantee, By introducing the advanced Italian hydraulic control technology and hydraulic system, Modena will provide the complete technical solutions to the customers with higher productivity, better quality and stability.

SINCE 2003

广东摩德娜科技股份有限公司

MPE SERIES

新设计、新技术、新一代 智能压机

MPE系列是摩德娜和意大利公司共同开发的新一代液压机, 重大的技术革新引进和创新简洁的外观集于一身。

油箱 / Oil tank 蓄能器 / Accumulator 可变量泵站 Variable-delivery mainpump 增压器 / Multiplier

Newly restyled, technically improved Hydraulic press

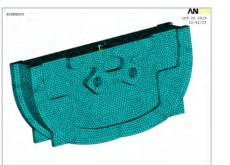
The MPE series is a latest generation of hydraulic presses, developed under cooperation by Modena and Italian technical team, concentrating the technology evolvement and creative styling with neat design in one body.

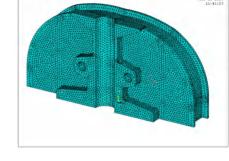


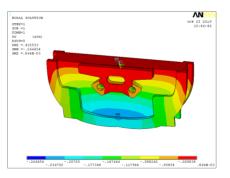
■ 框架 / Press Frame

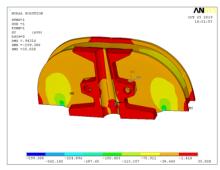
压机主体结构采用新型预应力钢丝双缠绕结构,设计时应用了有限元技术进行优化;压机的立柱、上横梁、下横梁应用预应力钢丝缠绕技术固结在一起,形成封闭的预应力框板,使预应力结构的梁体得到大大简化,应力集中少,机架刚度足,具有超强的抗疲劳性能和承载稳定性。

The main-body of the press adopts a new type of pre-loaded double-wiring structure, which is optimized by finite element technology during design; The columns, upper and lower beam of the press are consolidated by pre-loaded steel wiring technology to form a closed pre-stress frame, greatly simplified the pre-loaded structure and lessen the stress concentration. It guarantees the rigidity of the frame, and a superior fatigue resistance and bearing stability.











新型预应力 钢丝双缠绕

Pre-loaded double wiring structure

超强

抗疲劳性能、承载稳定性

Fatigue resistance and bearing stability

广东摩德娜科技股份有限公司

-

重复控制

保证密度均匀、厚度相同

PC-PLC CONTROL

Precise consistent control on density and thickness

压制油缸

合金锻钢件 极强钢性、变形极低

Alloy forging

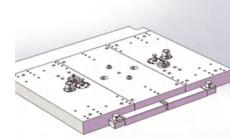
High rigidity and extreme low deformation

■ 双缸伺服顶出系统 / Dual-piston servo proportional ejection

通过PC-PLC自动控制系统,保证所压制的每块砖坯(无论大尺寸或小尺寸)密度均匀,厚度相同并重复控制。新型的双缸伺服顶出优化来油路和控制程序,提高了生产效率和更大推动力。

By automatic control system basing on PC-PLC platform, the dual-piston proportional ejection system ensure the highly repeatability of pressing force on each tiles, thus the density evenness and thickness conformity are under controlled. The optimized hydraulic circuit and evolved program greatly improve the working efficiency and ejection force of this system.





■ 压制油缸 / Oil cylinder

压制油缸是正立双作用的活塞缸,由整体合金锻钢件加工而成,特殊的锻造工艺使其具有极强的钢性,缸体变形的可能性极低。

The press applies the upright double-acting piston cylinder. It is made of integral alloy forgings. The special producing process makes the cylinder extremely strong and makes the deformation of the cylinder almost impossible to occur.



■ 液压系统 / Hydraulic system

液压系统是经意大利设计师精心设计的,优化后采用最少的 阀件和采用目前世界上最先进的液压控制技术和先进的液压 元件(比例伺服泵、逻辑阀、伺服比例阀)。横梁、顶出, 加压和增压的动作应用了伺服比例闭环控制技术,确保性能 优良,稳定可靠。 The hydraulic system was dedicately-designed by the Italian designers. The hydraulic system was optimized by using the least valves, the world's most advanced hydraulic control technology and hydraulic components. Servo proportional closed loop control technology is applied on the plunger, ejector, pressurization and boosting action to ensure excellent performance.

MAIN COMPONENTS OF HYDRAULIC SYSTEM							
部件	ltem	Brand Name					
溢流阀	Overflow Valve	Rexroth (Germany BOSCH group)					
叠加式减压阀	Overlay Pressure Reducing Valve	EATON (U.S.A.)					
单向节流阀	One-way Throttle Valve	Gorker (U.S.A.)					
伺服比例阀	Linear servo valve	MOOG (U.S.A.) / ATOS(Italy)					
三通比例流量插装阀	3-Way proportional flow-rate Cartridge Valve	Rexroth (Germany BOSCH group)					
溢流阀插件	Overflow Valve Plug-in	Rexroth (Germany BOSCH group)					
CVI插件	CVI Plug-in	EATON (U.S.A.)					
压力管路过滤器	Pressure pipe filter	HYDAC (Germany)					
离心泵	Centrifugal Pump	Calpeda (Italy)					
轴向柱塞变量泵	Plunger variable delivery pump	Rexroth (Germany BOSCH group) / Eaton(U.S.A)					
溢流阀	Overflow Valve	EATON (U.S.A.)					
电磁方向控制阀	Electromagnetic directional control valve	EATON (U.S.A.)/ Rexroth (Germany)					
回油过滤器	Return Filter	HYDAC (Germany)					
密封件	Slydring/Dust-proofer/Seal ring /Glyd ring/Stepseal/etc.	TRELLEBORG (Germany)					

PAGE 09/10 AAA MODENA 摩德娜 HYDRAULIC PRESS FOR CERAMIC TILE

■ 合作品牌 / Honor supplier



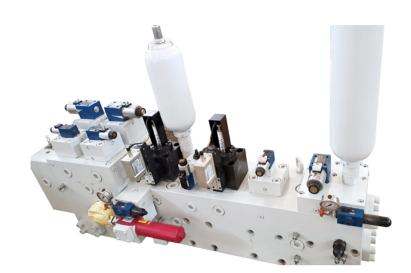












使用的主泵是传统公认的全球最好的德国力士乐公司A4VSO 恒功率变量轴向柱塞泵,它具有极高的可靠性和寿命。设计 中主泵有另一离心泵压力供油,避免泵发生吸空现象,以保 证泵的最长使用寿命。

The main pump is publicly recognized as the world's best pump: the A4VSO constant power variable-displacement pump made by Rexroth in Germany. The pump has extremely high reliability and long working life. Moreover, in order to avoid the oil suction and to improve the working life of the pump, another centrifugal pump is installed on the right side of the pump for the purpose of oil feeding





标配液压泵站主要由以下元器件组成:

- 集油箱
- 恒功率变量轴向柱塞泵
- 供油离心泵
- 12微米过滤器
- 带油路控制及稳压阀组的阀块
- 防尘隔音柜

Hydraulic control unit is consistiong of the following main components:

- Pressurised tank
- Constant power variable capacity main pump
- Centrifugal pump
- 12-micron hydraulic oil filter
- Oil control and pressure regulator valves block unit
- Soundproof cabinet
- Heat exchanger for cooling the oil (at customer's charge)

■ 双缸伺服顶出系统 / Intelligent control system



基于PC-PLC平台的图形化设计触屏操作系统,运算处理功能 更加精准,功能更强大。



The new generation of advanced PC-PLC control system makes the operations faster, simpler and clearer. The cycle of the press is controlled with a special CPU which connects the system to each control unit box via cables.

可以方便地调取并输出以下等信息:

- 料车、压制、横梁及压制工作循环等所有相关参数
- 实时显示压制曲线
- 对每一个工作参数进行解释和说明的帮助窗口
- 同步显示重要元件的工作状况曲线 (如电磁阀、伺服比例阀、传感器等所有输入输出信号)
- 可调取压机不同时段,选择任意输入输出信号制作图表,分析、比较相关信号的状态
- All relevant parameters such as feeders, strokes, beams and pressing working cycles;
- Real time graphs of cylinder pressure trend and axes positions;
- help window which demonstrates each working parameter;
- Simultaneous display of the conditions of each working elements (such as solenoid
- All the press data in the press, including operating manuals, spare parts manuals, electrical and hydraulic diagrams; etc.
- Real time automatic cycle diagram: the working curve of each sensor, solenoid valve and proportional valve; etc. According to these curves, the working cycle of the press can be monitored or detected to help find out the errors.

■ 压机选型 / Press model collection

Press Parameter 技术参数	Unit	MPE 2900	MPE 3000L	MPH 3800L	MPE 4300L	MPH 5200	MPE 8300	MPE 8900	MPE 18000	MPE 29000
Max pressing power 最大压制力	Ž Z	29,000	30,000	38,000	43,000	52,000	83,000	89,000	180,000	290,000
Clearance between columns 左右立柱间净空	mm	1,750	2,250	2,250	1,750	1,820	2,450	2,500	3,300	3,850
Max plunger stroke 最大动梁行程	mm	160	180	180	180	180	220	220	220	220
Max ejector stroke 顶出缸最大行程	шш	70	20	20	70	80	80	80	80	80
Maximum ejector power 模芯顶出力	Ž Z	150	150	150	280	280	280	280	400	400
power of the main motor 主泵电机功率	kw	06	06	110	110	132	180	200	270	360
Installed power in motors 电机安装功率	kw	86	86	122	122	143	200	220	300	390
Useful width of crossbeam 动梁工作台面宽度	шш	006	006	1,100	1,050	1,200	1,380	1,400	1,800	1,900
Width of press table 工作台面前后宽度	E	1,200	1,200	1,200	1,350	1,400	1,650	1,650	2,000	2,280
Oil quantity for hydraulic system 最大装油量	ä	1,300	1,200	1,300	1,350	1,650	3,500	4,000	6,500	000'6
Number of cycles up to 空循环次数可达	r/min	22	20	20	20	20	18	16	=	∞
Oil cooling water (24°C) 冷却水流量	ij	180 / min	180 / min	200 / min	200 / min	250 / min	350 / min	350 / min	700 / min	800 / min
Weight of the press body 主机重量	ton	58	92	100	92	115	195	220	560	700

■ 压机排砖表 / Reference table of pressing

			MPE	3000L	MPE	2900	MPE :	3800L	MPE 4	4300L	MPH	5200	MPE 8300	MPE 8900	MPE 18000	MPE 290
SIZE 规格	Unit 单位	Row 排数	WALL	Floor	WALL	Porecelain	WALL	Floor	Floor	Porecelain	Floor	Porecelain	Porecelain	Porecelain	Porecelain	Porecelai
жи	+111	JIFXX	墙砖	地砖	墙砖	瓷质砖	墙砖	地砖	地砖	瓷质砖	地砖	瓷质砖	瓷质砖	瓷质砖	瓷质砖	瓷质砖
200 x 200	mm	single	8	8	6	6										
200 x 200	mm	double	16		12											
200 x 300	mm	single	8	8	6	6										
200 x 300	mm	double	16		12											
200 x 400	mm	single	8		6	6										
250 x 330	mm	single	7	6	5	5										
250 x 400	mm	single	7	6	5	5										
300 x 300	mm	single	6	5	4	4	6	6	4	4						
300 x 300	mm	double	10	8	8	6	12	8	8	6						
300 x 450	mm	single	6	5	4	4	6	6	4	4						
300 x 600	mm	single	5	4	4	3	5	5	4	4	4	4				
300 x 900	mm	single	2	1	1	1	1	1	1	1	3	2				
300 x 900	mm	double			2	2	2	2	2	2	3	2				
350 x 700	mm	single	4		3		5	5	4	4	3	3				
330 x 600	mm	single	5	3	4	4	5	5	3	3	3	3				
400 x 400	mm	single	4	4	3	3	4	4	2		3	3	4			
400 x 800	mm	single	2		2		2	2	3	3	3	2	4			
450 x 450	mm	single	4	3	3	2	3	3	2	2	3	3				
500 x 500	mm	single	2	2	2	2	3	3	1		3	2	3			
500 x 1000	mm	single	1		1		1	1	2	2	2	1	2			
600 x 600	mm	single	2	2	2	1	2	2	2	1	2	2	3			
600 x 900	mm	single			1	1	2	2	1	1	2	1	2	2		
600 x 1200	mm	single			1		1	1	1	1	1	1	2	2	4	4
800 x 800	mm	single			1		1	1	1	1	1	1	2	2	3	3
800 x 1600	mm	single							1		1	1	1	1	2	2
900 x 900	mm	single							1		1	1	2	2	2	2
900 x 1800	mm	single											1	1	1	1
1000 x 1000	mm	single											1	1	2	2
1200 x 1200	mm	single											1	1	2	2
1800 x 1200	mm	single												1	1	1
2000 x 1000	mm	single												1	1	1
800 x 2600	mm	single													1	2
2400 x 1200	mm	single													1	1
1000 x 3000	mm	single														1
3200 x 1600	mm	single														1

说明:一般墙砖成型压力为250kgf/cm2,烧成后收缩率为0%;一般地砖成型压力为330kgf/cm2,烧成后收缩率为6%;一般瓷质砖成型压力为410kgf/cm2,烧成后收缩率为9%.

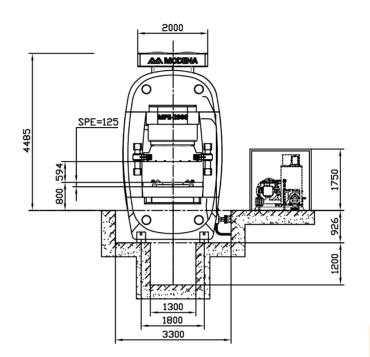
Reference criterion: Wall tile compating pressure 250kg/cm2, shrinkage 0%; Floor tile compating pressure 330kg/cm2, shrinkage 6%; Porcelain tile compating pressure 410kg/cm2, shrinkage 9%;

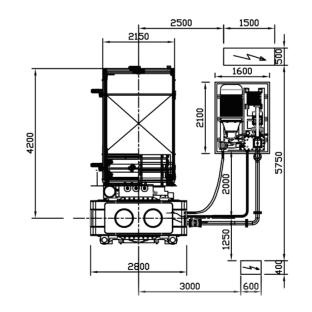
HYDRAULIC PRESS FOR CERAMIC TILE

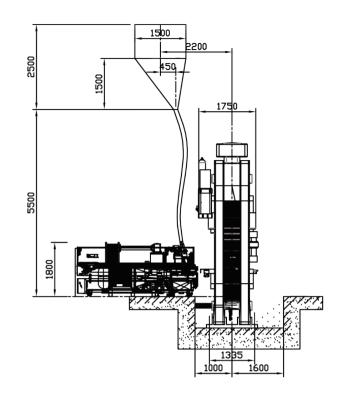
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HYDRAULIC PRESS FOR CERAMIC TILE







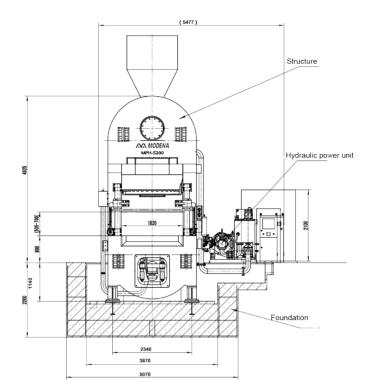


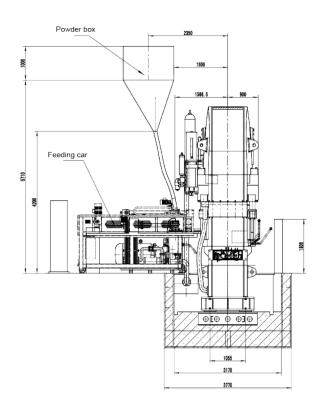
技术参数	Press Parameter	Unit	MPE 2900
最大压制力	Max pressing power	kN	29,000
左右立柱间净空	Clearance between columns	mm	1,750
最大动梁行程	Max plunger stroke	mm	160
顶出缸最大行程	Max ejector stroke	mm	70
模芯顶出力	Maximum ejector power	kN	150
主泵电机功率	power of the main motor	kw	90
电机安装功率	Installed power in motors	kw	98
动梁工作台面宽度	Useful width of crossbeam	mm	900
工作台面前后宽度	Width of press table	mm	1,200
最大装油量	Oil volume for hydraulic system	Lt	1,300
空循环次数可达	Number of cycles up to	r/min	22
冷却水流量	Oil cooling water (24°C)	Lt	180/min
主机重量	Weight of the press body	ton	58

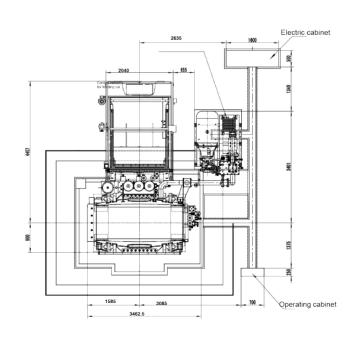
HYDRAULIC PRESS FOR CERAMIC TILE

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HYDRAULIC PRESS FOR CERAMIC TILE







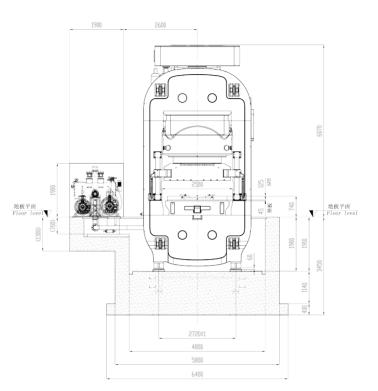


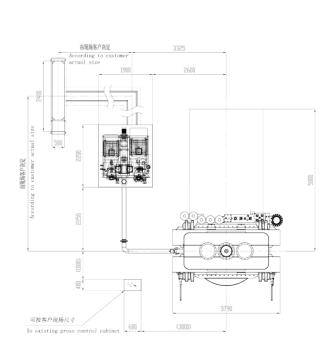
技术参数	Press Parameter	Unit	MPH 5200
最大压制力	Max pressing power	kN	52,000
左右立柱间净空	Clearance between columns	mm	1,820
最大动梁行程	Max plunger stroke	mm	180
顶出缸最大行程	Max ejector stroke	mm	80
模芯顶出力	Maximum ejector power	kN	280
主泵电机功率	power of the main motor	kw	132
电机安装功率	Installed power in motors	kw	143
动梁工作台面宽度	Useful width of crossbeam	mm	1,200
工作台面前后宽度	Width of press table	mm	1,400
最大装油量	Oil volume for hydraulic system	Lt	1,650
空循环次数可达	Number of cycles up to	r/min	20
冷却水流量	Oil cooling water (24°C)	Lt	250/min
主机重量	Weight of the press body	ton	115

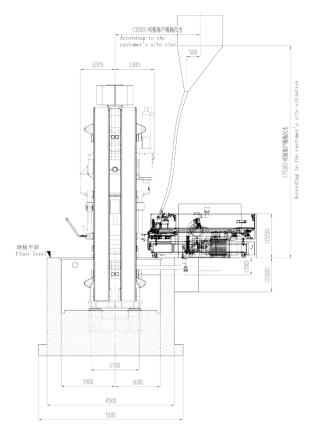
HYDRAULIC PRESS FOR CERAMIC TILE

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技术参数	Press Parameter	Unit	MPE 8900
最大压制力	Max pressing power	kN	89,000
左右立柱间净空	Clearance between columns	mm	2,500
最大动梁行程	Max plunger stroke	mm	220
顶出缸最大行程	Max ejector stroke	mm	80
模芯顶出力	Maximum ejector power	kN	280
主泵电机功率	power of the main motor	kw	200
电机安装功率	Installed power in motors	kw	220
动梁工作台面宽度	Useful width of crossbeam	mm	1,400
工作台面前后宽度	Width of press table	mm	1,650
最大装油量	Oil volume for hydraulic system	Lt	4,000
空循环次数可达	Number of cycles up to	r/min	16
冷却水流量	Oil cooling water (24°C)	Lt	350/min
主机重量	Weight of the press body	ton	220