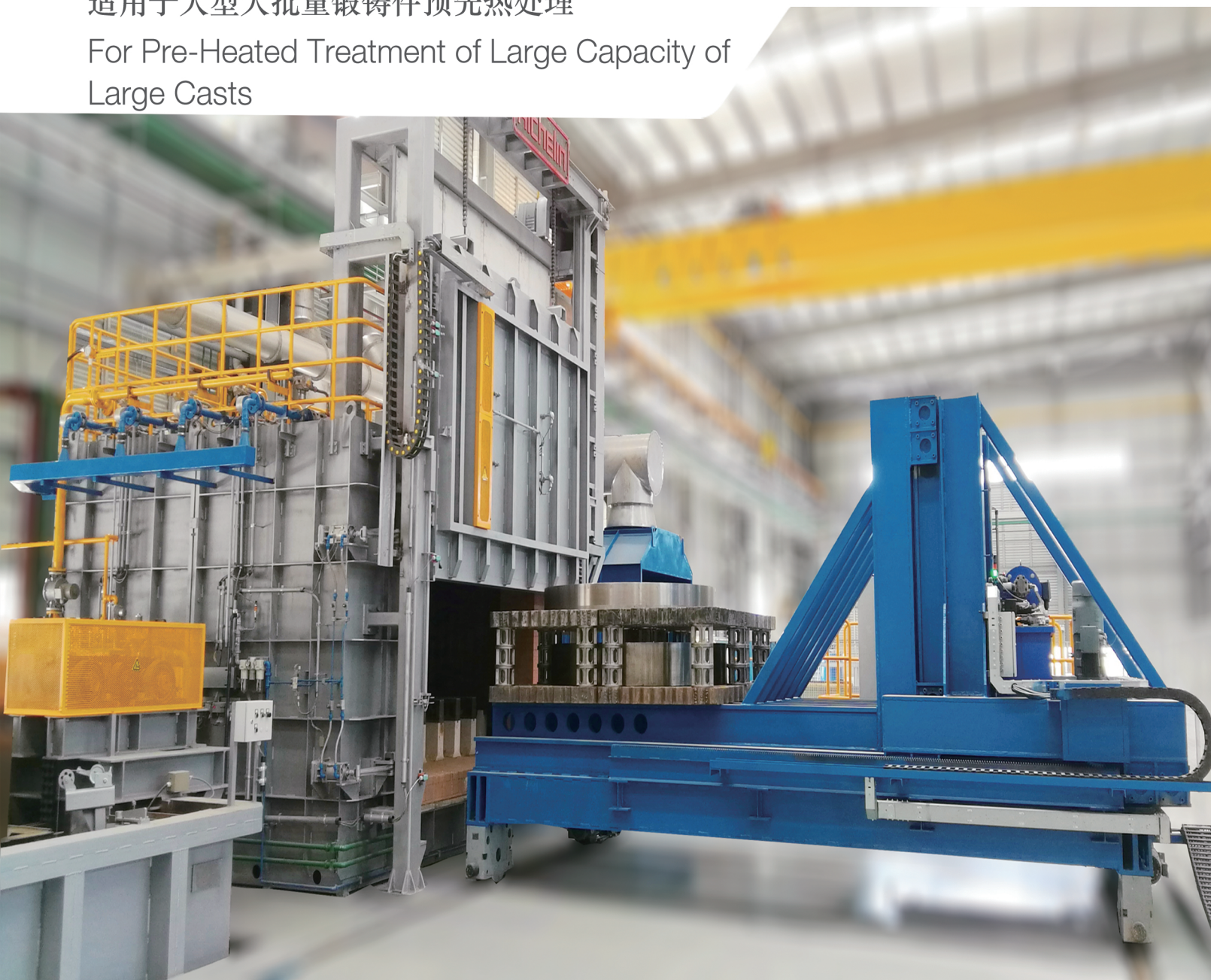


大型箱式调质热处理生产线

Large-Scaled Chamber Tempering-Hardening Furnace Plants

适用于大型大批量锻铸件预先热处理

For Pre-Heated Treatment of Large Capacity of Large Casts



Reliability at Work

爱协林热处理系统（北京）有限公司
AICHELIN Heat Treatment Systems (Beijing) Co., LTD.

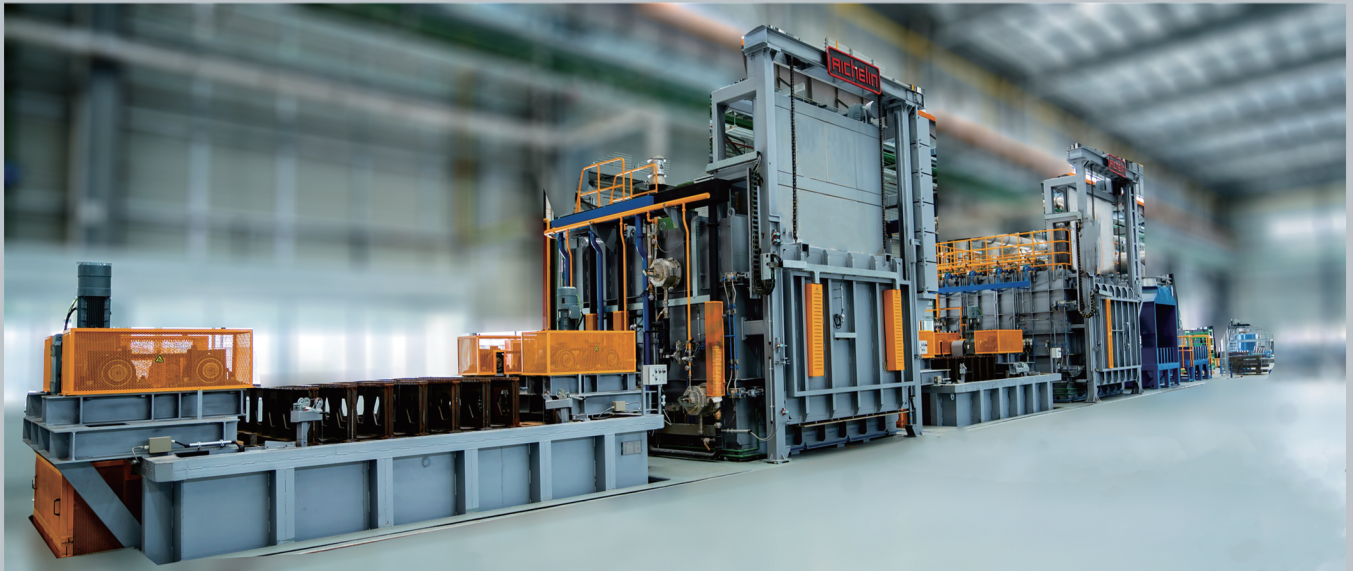
大型箱式调质生产线

Large-Scaled Tempering-Hardening Chamber Furnace Plants

生产线概述 INTRODUCTION

该线由上料台、大型箱式加热炉、轨道叉车式料车、坑式淬火槽、箱式高温回火炉、风冷台、计算机中央控制系统等组成。取消了为承载工件而反复无效加热冷却的料盘，故节能效果十分显著，是用于风电行业大型大批量铸锻件的预先热处理的先进装备。

Consists of loading table, large-scale chamber-type furnace, rail-mounted FLT charging cart, pit-type quenching tank, air-cooling table, and central computer system, etc. It canceled trays which used to be repeatedly heated together with parts and thus remarkably reduces energy consumption. This furnace plant provides an advanced pre-heat treatment for large capacity of large-scaled casts for wind energy industry.



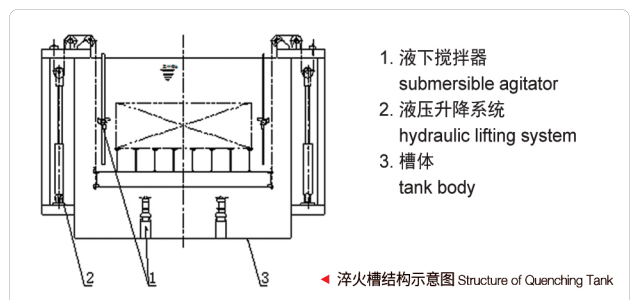
生产线特点 ADVANTAGES

- 生产线采用全自动控制，除上卸料外，不人工干涉，极大地改善工人的劳动条件。淬火槽中特别布置了多台液下搅拌机，可调节淬火液的流动方向。液压系统可实现工件的快速下降以及到位缓冲停止，满足大型厚重工件的淬硬和变形要求。

The production line adopts fully automatic control, except for loading and unloading, no manual intervention is required, which greatly improves the working conditions of workers. The quenching tank is equipped with several submerged agitators and is capable to control the flowing direction of quenching liquid. The hydraulic system facilitates the parts to quick descend and buffer to position and thus, satisfies the requirements of quenching hardness and distortion of large-scaled heavy parts.

- 采用节能设计：炉顶、炉墙采用全纤维炉衬结构，工件可以直接摆放在炉底上，不需要料具，能耗大大降低。

Adopting energy-saving design: applied with full-fiber lining structure in furnace top and furnace wall. The workpiece can be placed directly on the furnace bottom, no jigs are required, which can reduce energy consumption significantly.



生产线特点 ADVANTAGES

- 其高效空气自身预热式燃气烧嘴，利用烟气，通过内置换热器预热助燃空气换热器采用最佳形状设计，可获得极高的热效率，加热效率达到80%。炉内明火加热时，专门设计的烟气引射器确保烟气100%从烧嘴排出，并保证最低的NOx排放量。

Adopts high-efficiency self-air-pre-heated gas burner which utilizes gas and pre-heat combustion supporting air through internal heat exchanger. The internal heat exchange is in optimized design to obtain significant high heat exchanging efficiency up to 80%. Gas generates during the fire-heating is completely exhausted through the gas burner by the specially designed gas inductor whilst the emission of NOx is controlled to the minimum.



- 计算机中央控制系统由上位机、主控PLC、外电路控制系统和触摸式操作面板MP377组成一套完整的集散式控制模式,从而确保生产线可靠的控制性。主控PLC与各单体设备ET-200M和主控仪表进行通讯,控制和协调各设备的工作。上位机与主控PLC进行通讯。用户通过上位机和MP377可以查询整个生产线的各种工艺参数;通过PC机和MP377显示画面,操作人员便可总览全部设备的运行状态。

The central computer control system consists of host computer, main controlling PLC, EECC system and touch panel MP337 as an integrated distributing system to facilitate the control of the plant. The main controlling PLC communicates with ET-200M of individual module and main instruments to control and coordinate the whole plant. User can inquire process parameters operating status of all modules.

技术规格与型号 TECHNICAL SPECIFICATION AND TYPES

规格型号 Type	有效装料尺寸 Size of charges (L*W*H)	加热功率 Heating Power	最大装载量 Max. Gross Charge
CLG - 11,250/35/35	11250*350*350mm	800 kW	3000 kg
CLE - 450/450/130	4500*4500*1300mm	980 kW	30000 kg
CLE - 400/400/130	4000*4000*1300mm	850 kW	30000 kg
CLG - 380/250/150	3800*2500*1500mm	580 kW	15000 kg
CLE - 150/90/85	1500*900*850mm	120 kW	1200 kg
CLG - 120/180/60	1200*1800*600mm	90 kW	1000 kg

其他特殊型号可根据客户要求定制 Special Size Customized

国际品牌，百年企业 ABOUT AICHELIN

150+年金属材料热处理经验，与客户一起成长的爱协林，是一家有生命力的企业。

With 150+ years of experience in heat treatment of metal materials, AICHELIN, which grows with customers, shows surprising vigor and vitality.

爱协林 (AICHELIN)，创立于1868年，总部位于奥地利维也纳附近。是一家专注于热处理技术与工艺发展创新，经过150+年金属材料热处理经验积累，已成为当下国际知名热处理装备制造供应商。旗下的10家子公司遍布于欧洲、亚洲及美洲，聚焦全球3大业务单元：工业炉热处理技术、烧嘴技术及全球服务，匠心为全球客户打造高品质产品，共享爱协林全球先进技术及供应链资源。

作为爱协林集团在华子公司：爱协林热处理系统（北京）有限公司于2005年成立。在前身爱协林工业炉工程（北京）有限公司（成立于1993年）基础上，全面主导工业炉在中国的研发制造、安装调试及售后服务等，并逐步形成定制化研发制造独特风格，已为国内外客户提供低能耗、清洁化、智能化的柔性热处理装备1800+台套，这些设备广泛应用于汽车、齿轮、轴承、机械、铁路、航空、航天、船舶、石油等行业。

AICHELIN, founded in 1868, with headquarter near Vienna, Austria. It is a company focusing on the development and innovation of heat treatment technology and processes. After 150+ years of experience in heat treatment of metal materials, it has become an internationally renowned heat treatment system equipment supplier. There are 10 subsidiaries located in Europe, Asia, and America, covering 3 major global business units: industrial furnace solutions, combustion technology and global services. AICHELIN dedicated to providing high-quality products to global customers and sharing its global advanced technologies and supply chain resources.

As a subsidiary of AICHELIN Group in China: AICHELIN Heat Treatment Systems (Beijing) Co., Ltd. was established in 2005. Based on its predecessor, AICHELIN Industrial Furnace Engineering Beijing Co., Ltd. (founded in 1993), it has fully dominated the R&D, manufacturing, installation, commissioning, and after-sales service of industrial furnaces in China and has gradually formed a unique style of customized R&D and manufacturing. 1800+ set(s) of low-energy, clean and intelligent flexible heat treatment equipment are provided to local and abroad customers. They are widely used in automotive, gears, bearings, machinery, railroad, aviation, aerospace, shipping, petroleum and other industries.



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