

## 转底式炉热处理生产线 Rotary Hearth Furnace Plants

### 转底炉概述及特点介绍

爱协林转底炉是一种适用于大批量生产的热处理设备。热处理工件放在可转动的炉底上，由同一炉门装出料，适用于螺旋伞齿轮，同步器齿套等零件的保护气氛加热淬火。同时通过转底的多层布料方式可实现气体渗碳，碳氮共渗，离合器膜片成形压淬以及轴承套圈等零件的贝氏体等温淬火等热处理工艺。

转底炉可与淬火压床，贝氏体等温淬火装置，清洗机，回火炉等组成各种热处理生产线。

其主要特点有：

占地面积小，生产效率高：采用圆形炉膛，单门进出，装出料机械手连续装出料。

炉温均匀性好，碳势控制精度高：转动的炉底，密封的炉门，均匀分布的辐射管和循环风扇，确保炉膛的温度均匀，达到最佳状态，与AICHELIN碳势测量控制系统相配合，保证碳势的高精度控制。

设备稳定性好，可靠性高，运行成本低：爱协林转底炉独特的设计和先进的配置，确保设备运行的稳定性和可靠性；循环风扇采用油自循环冷却装置（爱协林专利），配备世界著名品牌元器件，设备寿命长，维护费用少，运行成本低。

可靠的安全性能：完善的安全设施，确保运行中操作人员，设备和产品的安全。

### Introduction

Rotary hearth furnaces, hearth dia. 1 m ~ 5 m; preheating the parts for further treatment, austenitize, carbonitriding, annealing, direct quenching; are also with subsequent hardening press for quenching with the minimum of distortion.

A Rotary hearth furnace press quenching plant are used for heat-treatment of steel parts. Incl.: protective gas heating, press quenching washing and tempering.

The production line Incl. loading – charging – protective gas heating – press quenching– transport to basket – washing – tempering.

Charging unit are mounted in front of the furnace.

It is used for charging and dis-charging of the trays (parts) in /out of the rotary hearth furnace.

Rotary hearth furnace is used for heating up the parts under protective gas, the hearth is rotated by adjustable speed, are there are heat-resistant steel trays on the hearth. The heating element and fan are installed on the top of furnace for uniform heating. The hearth is driven by gearbox motor with positioning device.

The control system use PLC with temperature controller and Carbon –P controller

The washing, tempering of the part are made in the standard AICHELIN batch type equipment Independently.

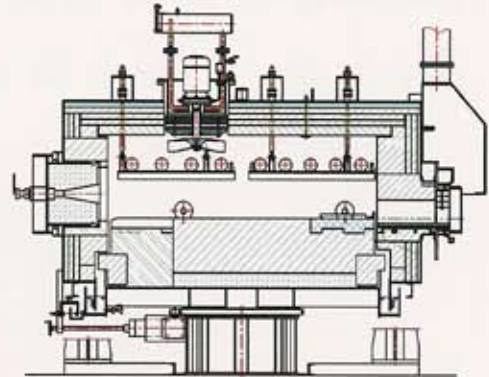


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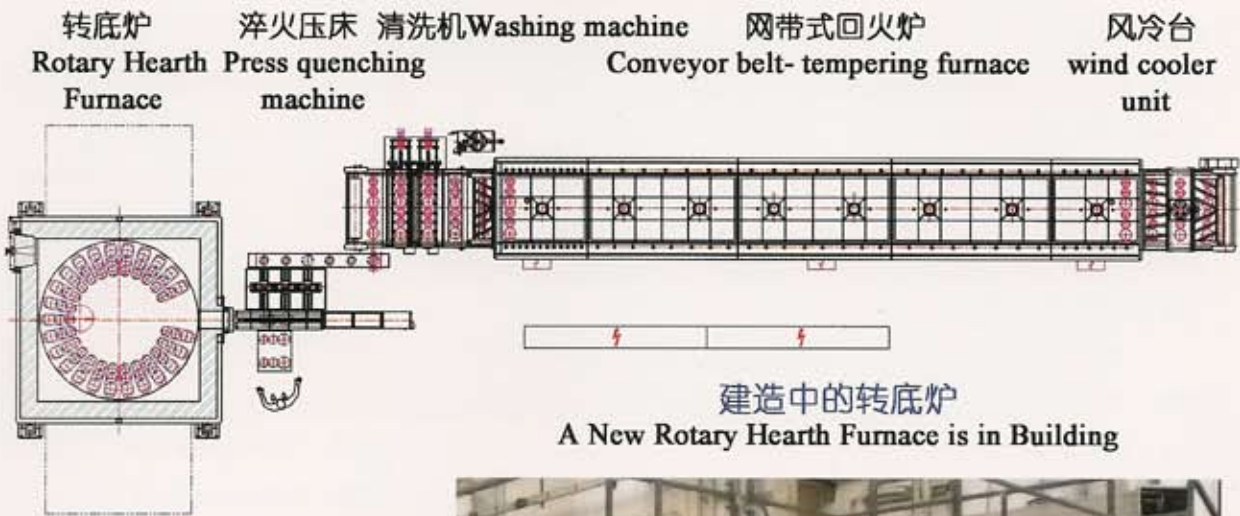
转底炉主要技术参数 Technical Data

型号 Type	转底直径 Hearth dia.	最大加热能力 Max. capacity	加热功率 heat power
RDE/G(S)100	1000mm	30~40kg/h	45kw
RDE/G(S)130	1300mm	60~70kg/h	55kw
RDE/G(S)170	1700mm	190~250kg/h	68kw
RDE/G(S)230	2300mm	210~470kg/h	112kw
RDE/G(S)270	2700mm	340~550kg/h	144kw
RDE/G(S)350	3500mm	440~750kg/h	187kw

转底炉结构图  
Structrue chart of Rotary Furnace



转底炉压淬回火生产线布置图  
The Layout of Rotary Hearth Furnace Press Quenching Plants



建造中的转底炉  
A New Rotary Hearth Furnace is in Building



工件出炉准备压淬  
A workpiece prepare to press quenching

