

ChugaiRO

CHUGAI RO CO., LTD.
Company Profile

中外炉工业株式会社
公司向导



Official character
THERMOTEC'h

Find the Solution with ChugaiRo

Chugai Ro Co., Ltd. pursues the development and integration of distinctive, core technology within three fundamental technologies in order to deliver the kind of innovative value suited to the increasingly diverse needs of society.

中外炉工业通过深化和融合3个基础技术支撑的独特的核心技术，提供满足多元化社会需求的新价值。



Fundamental Technologies Underlying Chugai Ro

支撑中外炉工业的基础技术

Chugai Ro has been working within the three fundamental technologies of "Thermal Technology," "Total Engineering" and "Advanced Technology" for many years to provide basic industries, like the steel and automotive industries, as well as the information and communications industries, with energy-efficient, environmentally-friendly products suited to the needs of society.

中外炉工业以长年培育的"Thermal Technology(热处理技术)"、"Total Engineering(综合工程)"、"Advanced Technology(最尖端的技术)"三项基本技术为基础,在钢铁、汽车等基础产业和信息、通信产业中,提供节能、环保、适应社会需求的产品。



Chugai Ro combines production equipment offering customizable high temperature, high pressure, vacuum, atmospheric, etc., processing environments with thermal control and other processes to provide customers with the thermal technology that they require.

通过可自由获得高温、高压、真空、气氛等处理环境的生产设备以及热控制等各种流程组合,为客户提供所需热技术



Chugai Ro provides production equipment tailored to the specific environmental requirements of each customer, along with production system designs that are not only robustly functional but also easy to use and energy-efficient, to deliver technology which is both customer-friendly and environmentally-friendly.

根据客户的环境,进行生产设备定制,不仅满足作为生产系统的功能,还凭借考虑到操作性、节能性的设计,为客户提供呵护地球的技术



Chugai Ro incorporates cutting-edge technology into clean environments, like IT and electronics, as well as into systems requiring highly precise control, in order to develop new and distinctive technological applications suited to the increasingly diverse needs of customers.

在需要洁净环境和高精度控制性能的IT、电子等设备中,引进最尖端技术,从而开发新的独特技术,满足客户多样化需求

Core Technologies Developed by Chugai Ro

中外炉工业的核心技术

For many years Chugai Ro has worked within fundamental technologies to develop and integrate creative, core technologies that provide society with the technological innovation it needs to build a prosperous future for both humanity and the earth.

通过深化和融合长年培育的基本技术所支撑的独创性核心技术,为社会提供可创造人与地球富饶未来的革新性技术。

Combustion 燃烧

Variety of solid, liquid or gas fuels are combined with oxygen and an ignition source to produce flames at will within an optimal temperature range and atmosphere. 将固体、液体、气体各种燃料与氧气、发火源组合,自由形成火焰,从而获得最适合的温度范围和气氛

Electric Heating 电热

Optimal temperature range and atmosphere are produced from an innovative combination of heater materials selection, shaping and arrangement. 在加热器材料选择、形状、配置等方面下功夫,从而获得最适合温度范围和氛围

Heating / Cooling 加热、冷却

Thermal manipulation via radiant, convective or heat conduction is used to change the temperature of a target object at will. 利用辐射传热、对流传热、热传导来操控热量,自由改变目标物温度

Pressurization / Vacuum 加压、真空

Pressure fields ranging from a vacuum to 9.9 MPa are created for the target materials processing method. 从真空到9.9MPa,获得与材料处理流程相符的压力场

Thermal Control 热控制

The temperature of a target object is raised or lowered at an appropriate speed and with uniform temperature distribution anywhere between below freezing and 3000°C. 从冰点以下到3000°C,以适当的速度提高或降低对象物的温度,从而控制均匀温度分布

Atmospheric Control 气氛控制

Atmospheric control for the target materials processing method is performed using air, exhaust gases or special gases (hydrogen, carburized gas, etc.). 利用大气、废气、特殊气体(氢、渗碳气体等),根据材料处理流程来控制气氛

Customization 定制

Tailored equipment proposals and designs matching customer needs are developed, such as scaling up systems for mass production. 根据客户的量产化等规模生产等要求,提出设备方案与设计

Saving Energy 节能

Wasted energy consumption and greenhouse gas emissions are reduced through higher efficiency combustion, radiated heat reduction, exhaust heat recovery and other methods. 通过高效率燃烧、减少散热、回收废热等,减少能源消耗浪费,为减少温室效应气体做出贡献

Simulation 分析

Simulations combining theory and experience are used to facilitate new product development and customization. 通过理论和经验的组合模拟,应对新商品开发及定制

Clean Environment 洗净

Clean processing environments are created which make it possible to keep the amount of foreign matter which target materials are exposed to at an exceptionally low level. 打造洁净的处理环境,将材料中的异物混入控制在极低水平

Maintenance 维护

After-sales service and other maintenance-focused services are provided promptly and professionally by service centers nationwide in line with customers' expectations. 针对售后服务等的要求,凭借考虑到维护性的设计以及遍布全日本的服务据点,开展迅速、细致应对

Coating 涂布

Thin, precise coating of steel plates, substrates and films is performed using various coating solutions ranging from low viscosity to high viscosity. 在钢板、基板、薄膜上,从低粘度到高粘度,进行各种液体的高精密、极薄涂布

Manufacturing 制造

Integration of design and manufacturing made possible by years of experience and proven results is applied to the production of high quality products within a short time frame. 根据多年的经验和实绩,融合设计和制造,提供短交期、高品质产品

Automation 自动化

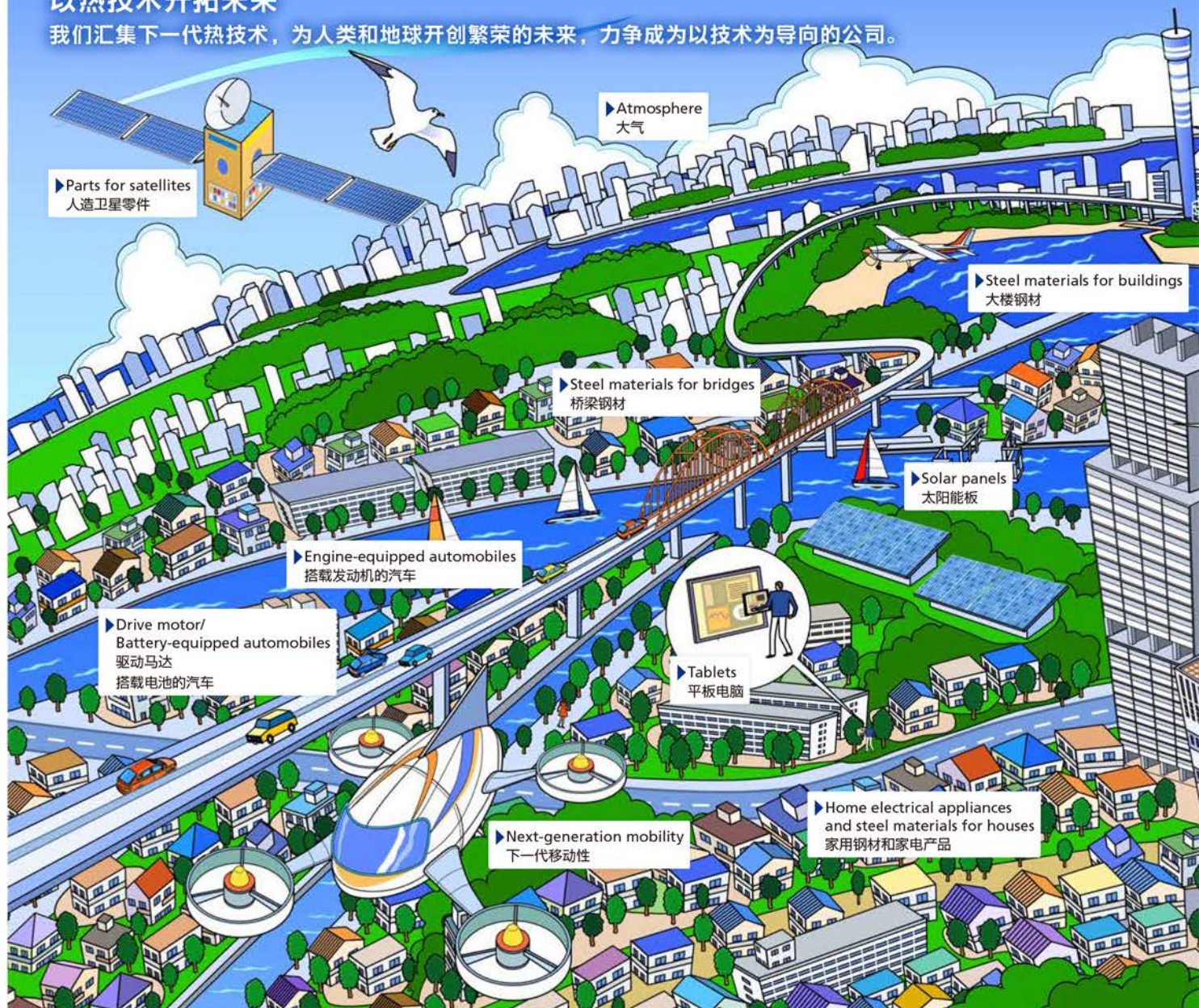
Automation of material and product conveyance, process control, equipment monitoring and other functions is achieved, thereby saving labor and improving safety. 通过自动进行材料和产品搬运、流程控制、设备监视等,实现省力化、高安全性

The Future with Thermal Technology

Our aim is to be a technology company which is focused on next-generation thermal technology that will build a prosperous future for both humanity and the earth.

以热技术开拓未来

我们汇集下一代热技术，为人类和地球开创繁荣的未来，力争成为以技术为导向的公司。



Heat Treatment Furnace for Parts and Materials

零件/材料热处理炉

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Vacuum/Gas Carburizing Furnace
真空/燃气渗碳炉



Vacuum Heat Treating Furnace
真空热处理炉



Annealing & Normalizing Furnace
退火正火炉



Decarburization Hardening & Draw Furnace
无氧化淬火和回火炉



High Temperature Furnace, Hot Press
高温炉、热压



Functional Material Heat Treating Furnace/
Magnetic Material Sintering Furnace/
Catalyst Dewaxing Furnace
功能材料热处理炉/磁性体烧结炉/催化脱脂炉



Rechargeable Battery Electrode
Material Baking Furnace
充电电池电极材料烧成炉

Plant for Steels and Non-steel Metals

钢铁/有色金属厂

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Continuous Steel
Slab Reheating Furnace
连续钢片加热炉



Continuous Strip
Annealing Line
钢带连续退火线



Continuous Galvanizing Line
连续镀锌线



Continuous Strip
Coating Line
钢板连续涂装线



Hydrogen Atmosphere
Bell Type Coil
Annealing Furnace
氢气气氛罩式带卷退火炉



Continuous Copper
Slab Reheating Furnace
连续铜坯加热炉



Continuous Copper
Strip Annealing Line
铜带连续退火线



Continuous Aluminum
Strip Annealing Line
铝带连续退火线



Transverse flux induction
heater
横向磁通感应加热装置

Burner and Combustion Control Equipment

燃烧器/燃烧控制设备

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Hydrogen Burner
氢气燃烧器



Gas Burner
煤气燃烧器



Oil Burner
油燃烧器



Oxygen Burner
氧气燃烧器



Steelmaking-related
Combustion Equipment
炼钢相关燃烧装置



Heating System
加热装置

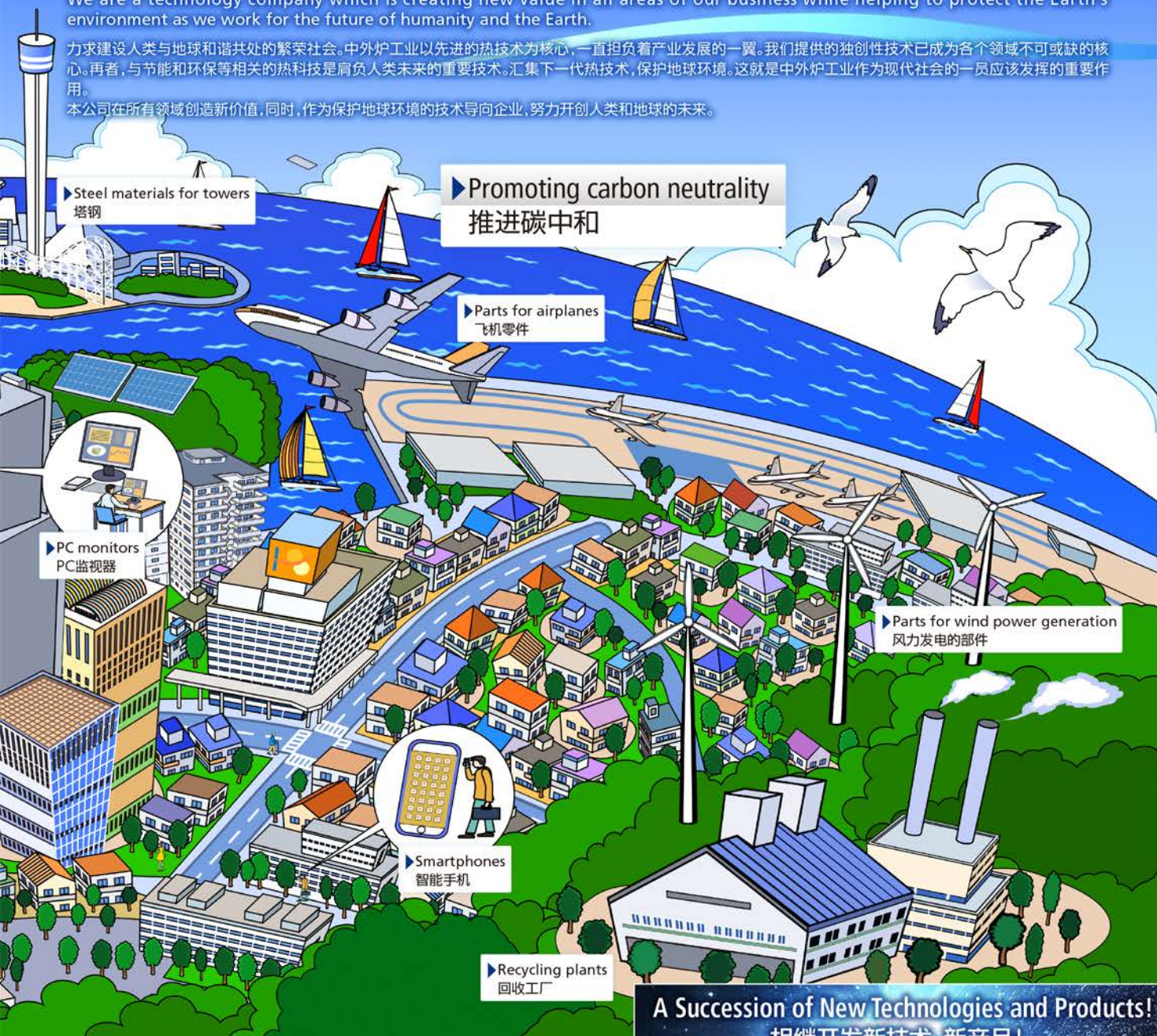


Control Device &
Auxiliary Device
控制设备、辅助设备

Chugai Ro Co., Ltd. helps the industry to advance with the latest thermal technology while working toward a sustainable society. Our proprietary technology has become indispensable in many industrial fields. Thermal technology is important because of its potential for energy conservation and environmental preservation. Our next-generation thermal technology helps protect the global environment. We regard this as a greater part of our role as today's corporate citizen. We are a technology company which is creating new value in all areas of our business while helping to protect the Earth's environment as we work for the future of humanity and the Earth.

力求建设人类与地球和谐共处的繁荣社会。中外炉工业以先进的热技术为核心，一直担负着产业发展的一翼。我们提供的独创性技术已成为各个领域不可或缺的核心。再者，与节能和环保等相关的热科技是肩负人类未来的重要技术。汇集下一代热技术，保护地球环境。这就是中外炉工业作为现代社会的一员应该发挥的重要作用。

本公司在所有领域创造新价值，同时，作为保护地球环境的技术导向企业，努力开创人类和地球的未来。



A Succession of New Technologies and Products! 相继开发新技术、新产品!

Air Pollution Control System 大气净化设备

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Regenerative Thermal Oxidizer
蓄热废气处理装置



Direct Fired Type Gas Combustion Equipment
直燃式燃气装置

Substrate/Film Coating and Drying Equipment 基板/薄膜涂布干燥设备

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Irregular Shape Coating System RS COATER™
异形涂布装置 RS COATER™



Roll-to-Roll RS COATER™
卷对卷生产 RS COATER™



High-precision Coating & Drying Equipment
精密涂布、烘干装置



Continuous Die Coating & Drying Equipment
连续工业胶水涂布、烘干装置



Ammonia Burner
氨燃烧器



Superheated Steam Generators
with the Hydrogen-burning Method
烧氢式过热水蒸气技术

*Includes some systems currently in development. Please inquire for more information.
※包括一些正在开发的项目，详情请咨询。

Kiln and Environmental Equipment 窑炉、环保工艺设备

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Multi-retort Rotary Kiln
多筒回转窑



Fluidized Bed Type Heating System
流化床加热设备

Heat Treatment Furnace for Parts and Materials

零件／材料热处理炉

Heat Treatment Furnace for Automobile and Machine Parts

Wrought Steel Normalizing Furnace
Continuous Gas Carburizing Furnace (CCF)
Batch Type Gas Carburizing Furnace "HI-SHIFTER™"
Vacuum Carburizing Furnaces "FALCON™" Series (UNIFALCON™, HIFALCON™, COMPACTFALCON™)
Vacuum Cleaning System
Vacuum Heat Treating Furnace (VF/VFV, CF/QF, T/VT, CFP/CFR Series)
Nitriding Furnace
Alloy Powder Sintering Furnace (Vacuum Sintering Furnace, Atmosphere Sintering Furnace)
Deoxidization Hardening and Draw Furnaces
Deoxidization Annealing / Normalizing Furnace
Aluminum Solution Heat Treating Furnace

Heat Treatment Furnace for Battery, Board, Catalyst and Magnetic Materials

Pressurized Gas High Temperature Furnace
Hot Press
Functional Material Heat Treating Furnace
Metal Element Furnace / Clean Oven
Shaft-type Continuous Powder Baking Furnace "VPAX™"
Vertical type Flour Calciner "VFC™" / Carbonizing-Baking System "B2Di™"

Heat Treatment Furnace for Shape, Pipe, Tube and Wire Rod

Wire Rod Hardening and Tempering / Normalizing and Annealing Furnace
Continuous Copper Tube Coils Annealing Furnace
Aluminum Shape Hardening and Tempering Furnace

Atmosphere Gas Generator (RX, URX, DX, NX, HX, HNX, AX)



Vacuum Carburizing Furnaces for Mass Production "HIFALCON™"
量产型真空渗碳炉 HIFALCON®



Batch Type Gas Carburizing Furnace Flameless "HI-SHIFTER™"
and Automatic Heat Treating System
批量式气体渗碳炉 无火焰 HI-SHIFTER® 的全自动热处理线

汽车、机械部件热处理炉

坯料调质炉、连续气体渗碳炉、批量式气体渗碳炉 HI-SHIFTER®、真空渗碳炉 "FALCON™" 系列 (UNIFALCON™、HIFALCON®、COMPACTFALCON®)、真空洗净装置、真空热处理炉 (VF/VFV, CF/QF, T/VT, CFP/CFR 系列)、氮化炉、粉末合金烧结炉 (真空烧结炉、气氛气体烧结炉)、无氧化淬火和回火炉、无氧化退火正火炉、铝固溶热处理炉

电池、基板、催化剂、磁性材料热处理炉

煤气加压高温炉、热压、功能材料热处理炉、金属元素炉、清洁烤箱轴杆式连续粉体煅烧炉 VPAX®、立式微粉煅烧炉 VFC™、炭化煅烧设备 B2Di®

型材、管材、线材热处理炉

线材、淬火回火炉、正火回火炉、铜管卷连续退火炉、铝材淬火退火炉

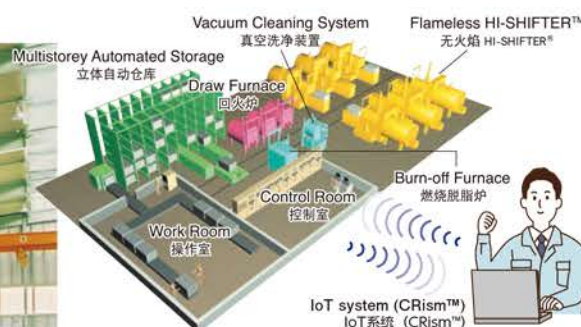
气氛气体发生装置 (RX, URX, DX, NX, HX, HNX, AX)



Vacuum Carburizing Furnaces for Multi-product Production (Batch Processing Type) "UNIFALCON™"
多品种用 (批处理型) 真空渗碳炉 UNIFALCON™



Vacuum Carburizing Furnaces for In-line Applications (Small-lot Processing Type) "COMPACTFALCON™"
内联用 (小批量型) 真空渗碳炉 COMPACTFALCON®



Vacuum Cleaning System
真空洗净装置



Roller Hearth Type Continuous Gas Carburizing Furnace
辊底式连续气体渗碳炉



Pusher Type Continuous Gas Carburizing Furnace
推进式连续气体渗碳炉



Continuous Gas Soft Nitriding Furnace
连续气体软氮化炉



Sulfonitriding Furnace
硫氮共渗炉



Continuous Deoxidization Annealing Furnace
连续无氧化退火炉



Roller Hearth Type Wire Rod Coil Continuous Annealing Furnace
辊底式线材卷连续退火炉



Vacuum Heat Treating Furnace (VF Series)
真空热处理炉(VF系列)



Vacuum Heat Treating Furnace (CF/QF Series)
真空热处理炉(CF/QF系列)

Heat Treatment Furnace for Parts and Materials

零件／材料热处理炉



RX Gas Generator "CRG-R"
RX气体发生器 "CRG-R"



Built-in Type RX Gas Generator "CRG-RC"
炉内设置型RX气体发生器 "CRG-RC"



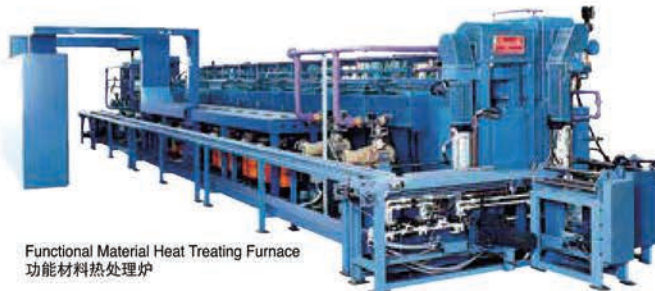
DX Gas Generator "CRG-D-F"
DX气体发生器 "CRG-D-F"



NX Gas Generator "CRG-N-F"
NX气体发生器 "CRG-N-F"



High Temperature Baking Furnace
高温烘烤炉



Functional Material Heat Treating Furnace
功能材料热处理炉



Pressurized Gas High Temperature Furnace
煤气加压高温炉



Hot Press
热压



Metal Element Furnace
金属元素炉



Clean Oven
清洁烤箱



Vacuum Sintering Furnace (VS Series)
真空烧结炉 (vs系列)



Vertical type Flour Calciner "VFC"™ Test Device
立式微粉煅烧炉 VFC™ 测试装置



Shaft-type Continuous Powder Baking Furnace "VPAX"™
轴杆式连续粉体煅烧炉 VPAX®

Plant for Steels and Non-steel Metals

钢铁／有色金属厂

■ Steel and Nonferrous-metal Reheating Furnace and Heat-treat Furnace

Walking Beam Type Reheating Furnace
Walking Beam Type Seamless Pipe Heat Treating Furnace
Rotary Hearth Furnace for New Iron Making Process

■ Metal Strip Processing Line and Coating Line

Continuous Stainless Steel Strip Annealing Line (SUS-APL,SUS-BAL)
Continuous Copper Strip Annealing Line (Cu-APL,Cu-BAL)
Floater Type Continuous Aluminum Strip Annealing Line (AL-CAL)
Continuous Galvanizing Line (CGL)
Hydrogen Atmosphere Bell Type Coil Annealing Furnace (H₂-BAF)
Continuous Strip Coating Line (CCL,AL-CCL)
Transverse flux induction heater
Coater, Oven
Continuous Degreasing and Cleaning Equipment

■ 钢铁、有色金属加热炉、热处理炉

步进式加热炉、步进式无缝钢管热处理炉、新铁源用回转炉

■ 金属带工艺生产线、涂装线

不锈钢带钢连续退火线(SUS-APL,SUS-BAL)、铜带连续退火线(Cu-APL,Cu-BAL)、浮子式铝带连续退火线(AL-CAL)、连续镀锌线(CGL)、氢气气氛罩式带卷退火炉(H₂-BAF)、带钢连续涂装线(CCL,AL-CCL)、横向磁通感应加热装置、涂胶机、烤炉、连续脱脂洗净装置



Walking Beam Type Slab Reheating Furnace
步进式钢片加热炉



Continuous Stainless Steel Strip Bright Annealing Line (SUS-BAL)
不锈钢带连续光亮退火线(SUS-BAL)



Walking Beam Type Seamless Pipe Heat Treating Furnace
步进式无缝钢管热处理炉



Transverse flux induction heater
横向磁通感应加热装置



Hydrogen Atmosphere Bell Type Coil Annealing Furnace (H₂-BAF)
氢气气氛罩式带卷退火炉(H₂-BAF)



Continuous Stainless Steel Strip Annealing and Pickling Line (SUS-APL)
不锈钢带连续退火线(SUS-APL)

Plant for Steels and Non-steel Metals

钢铁／有色金属厂



Continuous Copper Strip Annealing and Pickling Line (Cu-APL)
铜带连续退火线 (Cu-APL)



Continuous Copper Strip Bright Annealing Line (Cu-BAL)
铜带连续光亮退火线 (Cu-BAL)



Continuous Annealing Line for Cold Rolled Steel Strip (CAL)
冷轧钢板连续退火炉 (CAL)



Floater Type Continuous Aluminum Strip Annealing Line (AL-CAL)
浮子式铝带连续退火线 (AL-CAL)



Continuous Steel Strip Coating Line (CCL)
钢板连续涂装线 (CCL)



Continuous Galvanizing Line (CGL)
连续镀锌线 (CGL)

Burner and Combustion Control Equipment

燃烧器 / 燃烧控制设备

■ Hydrogen Burner / Ammonia Burner

■ Gas Burner

Model HSGB™ High-speed Gas Burner
Model TMG™ Throat Mix Gas Burner Series (TMG, H-TMG)
Model HMG™ High-momentum Gas Burner
Model ISRG Immersion Tube Type Self Regenerative Gas Burner
Model SRMG™ Super Recu. Gas Burner
Model DGB Double-cone Gas Burner
Model WRBG™ Radiant Tube Burner
Burner for Co-generation System

■ Oil/Gas Burner

Model FHC™ Low NOx Burner Series (IIIc, Va)
Model RCB Low NOx Regenerative Burner Series
(RCB-SF, RCB-FD, RCB-L, RCB-FH, RCB-S, RCB-K, P-RCB)

■ Oil Burner

Model PLB Oil Burner Series (D-PLB, H-PLB, DR-PLB, HR-PLB, FHP)
Sprayer (HB, SEA, MB, CPB)

■ Oxygen Burner

Oxy-fuel Burner Series (CTB, STB, OXL)

■ Heating System

Model AL-SREG Energy Saving Type Aluminium Melting Pot Holding Furnace
Oxygen Burner Type Billet Heater
Tundish / Ladle Preheating and Drying System

■ Control Equipment & Auxiliary Equipment

Oxygen Sensor **Lambda-i™** / Easy & Eco. Burner Control Equipment (EBC³™)
Model 1HTB Turbo Blower
Auxiliary Equipment for Oil Combustion, Flow Control and Ignition

■ Other System

Inflame Treating Equipment "INFLAZ™"

■ 氢气燃烧器、氨燃烧器

■ 煤气燃烧器

HSGB[®]型高速煤气燃烧器、TMG[®]型喉式混合煤气燃烧器、HMG[®]型高动力煤气燃烧器、ISRG型浸泡管单独蓄热式煤气燃烧器、SRMG[®]型超级换热式燃烧器、DGB型双锥口煤气燃烧器、WRBG[®]型辐射管燃烧器、回收发电及废热供暖系统用补充燃烧器

■ 油、煤气燃烧器

FHC[®]型低NOx燃烧器系列 (IIIc, Va)
RCB型低NOx再生燃烧器系列 (RCB-SF, RCB-FD, RCB-L, RCB-FH, RCB-S, RCB-K, P-RCB)

■ 油燃烧器

PLB型油燃烧器系列 (D-PLB, H-PLB, DR-PLB, HR-PLB, FHP)
喷雾器 (HB, SEA, MB, CPB)

■ 氧气燃烧器

氧气燃烧器系列 (CTB, STB, OXL)

■ 加热装置

AL-SREG节能型铝坩埚保持炉、氧气燃烧式还料加热器、中间罐、钢包 预热、烘干装置

■ 控制设备、辅助设备

氧传感器 **Lambda-i™**、EBC³™自动空气比控制装置、1HTB型涡轮鼓风机、油燃烧用辅助装置、流量控制用辅助装置、点火用辅助装置

■ 其他设备

火焰内处理设备 INFLAZ[®]



Model RCB Low NOx Regenerative Burner Series (The equipment in this photo, left is Ladle Preheater, right is RCB-SF)
RCB型低NOx再生燃烧器系列 (左: 照片是钢包预热装置用、右: RCB-SF型)



Ammonia Burner
氨燃烧器



Hydrogen Burner
氢气燃烧器



RCB-ES High Speed Self-regenerative Burner
RCB-ES型高速蓄热式燃烧器



Easy & Eco. Burner Control Equipment (EBC³™)
EBC³™自动空气比控制装置



Oxygen Sensor **Lambda-i™**
氧传感器

Burner and Combustion Control Equipment

燃烧器 / 燃烧控制设备



Inflame Treatment Equipment "INFLAZ"
火焰内处理设备 INFLAZ®



Semi-self Regenerative Burner
半自助型蓄热式燃烧器



Model PLB™ Proportioning Oil Burner Series
PLB™型油燃烧器系列



Model TMG™ Throat Mix Gas Burner Series
TMG®型喉喷混合煤气燃烧器系列



Model SRMG™ Super Recu. Gas Burner
SRMG®型超级换热式燃烧器



Model FHC™-IIIc Low NOx Burner
FHC®-IIIc型低NOx燃烧器



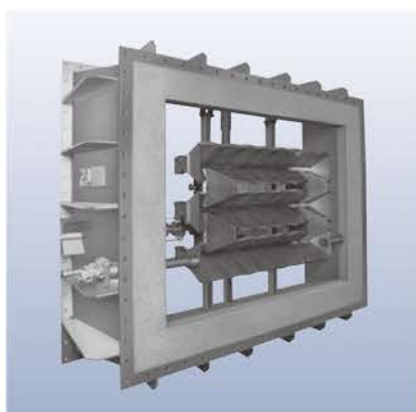
Model HMG™ High-momentum Gas Burner
HMG®型高速动力煤气燃烧器



Model DGB Double-cone Gas Burner
DGB型双锥口煤气燃烧器



Energy Saving Type Melting Pot Holding Furnace (AL-SREG)
节能型铝坩埚保持炉 (AL-SREG)



Burner for Co-generation System
回收发电及废热供暖系统用补充燃烧器



Model CTB Oxy-fuel Burner
CTB型氧气燃烧器



Model WRBG™ Radiant Tube Burner
WRBG®型辐射管燃烧器

Air Pollution Control System

大气净化设备

Air Pollution Control System

Multi-chamber Type Regenerative Thermal Oxidizer (RTO)
Rotary Regenerative Thermal Oxidizer (R-RTO)
Direct Fired Type Gas Combustion Equipment
Waste Gas Condensation and Treatment System
Waste Gas of Photogravure Printing Dryer Treatment System

大气净化设备

多塔式蓄热废气处理装置 (RTO)、旋转式蓄热废气处理装置 (R-RTO)、
直燃式燃气装置、浓缩废气处理系统、凹版印刷机烘干废气处理系统



2 Chamber type Regenerative Thermal Oxidizer (Tw-RTO)
2塔式蓄热废气处理装置 (Tw-RTO)



Rotary Regenerative Thermal Oxidizer (R-RTO)
旋转式蓄热废气处理装置 (R-RTO)



5 Chamber type Regenerative Thermal Oxidizer (RTO)
5塔式蓄热废气处理装置 (RTO)



Twin Rotary Regenerative Thermal Oxidizer (Twin R-RTO)
双转子旋转式蓄热废气处理装置 (Twin R-RTO)



Waste Gas Condensing and Oxidizing System
浓缩废气处理系统



5 Chamber Type Regenerative Thermal Oxidizer (RTO)
5塔式蓄热废气处理装置 (RTO)



Direct Fired Type Gas Combustion Equipment
直燃式燃气装置

Kiln and Environmental Equipment

窑炉、环保工艺设备



■ Kiln and Environmental Equipment
Multi-retort Rotary Kiln / Fluidized Bed Type Heating System

■ 窑炉、环保工艺设备
多筒回转窑 / 流化床加热设备



Multi-retort Rotary Kiln
多筒回转窑



Fluidized Bed Type Heating System
流化床加热设备

Substrate/Film Coating and Drying Equipment

基板／薄膜涂布干燥设备

High-precision Coating and Drying Equipment

Irregular Shape Coating System RS COATER™
 Irregular Shape Film Coating Equipment RS COATER™
 TABLE COATER™
 FLOLIA™
 FLOLIA 3000 Coater System
 Die Coater for Continuous Coating Line
 Continuous Coating and Drying Line

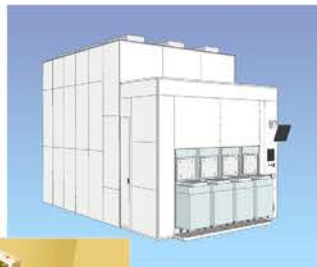
Substrate / Film Heat Treatment Equipment

Vertical Loading Type Clean Baking Furnace
 Continuous Frit Sealing Furnace
 Cart Type Frit Sealing and Exhausting Furnace
 Without Exhaust Pipe Exhausting,
 Gas Filling and Frit Sealing Furnace
 Vacuum/Atmosphere Heating Furnace for
 Research and Development

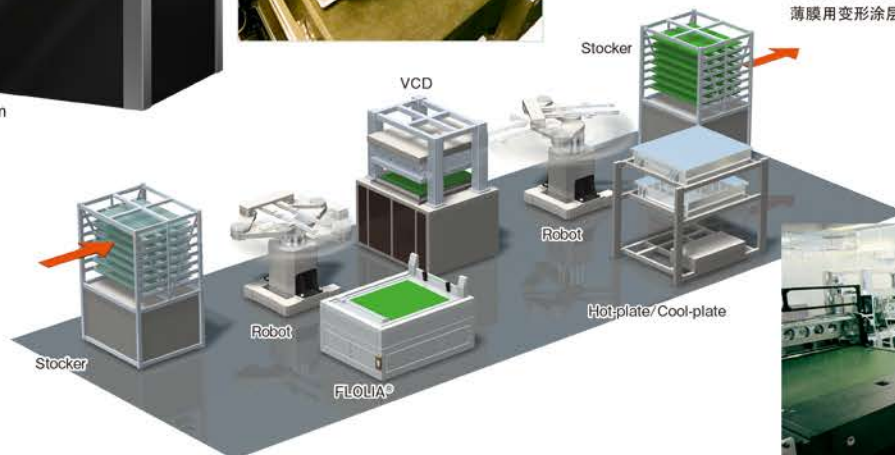


Irregular Shape Coating System
 RS COATER™
 异形涂布装置 RS COATER™

System visualization
 系统化示意图



Irregular Shape Film Coating Equipment
 Roll-to-Roll RS COATER™
 薄膜用变形涂层设备 卷对卷生产 RS COATER™



FLOLIA3000 Coater System
 FLOLIA3000 涂布系统



Continuous Die Coating & Drying Equipment
 连续工业胶水涂布、烘干装置

Overseas projects demonstrate Comprehensive technology

As an international enterprise, Chugai Ro's multidimensional line of products, technology exports and comprehensive engineering, has contributed to technological progress in both advanced and developing nations.

利用综合技术完成的海外项目

为了满足世界各国的尖端技术方面的需求，本公司与海外企业建立了紧密的合作关系。为工业化做出贡献的工程技术，是始于计划、构想，并综合设计、制作、建设、试运行等各程序的技术。

本公司从接受订货到完成为止的各阶段均全力以赴，其姿态也得到客户的认可，且完成的设备带来了超过预期的成果，技术能力也得到高度的评价。作为国际企业，本公司开展产品出口、技术出口及综合工程技术等方面的业务活动，为发达国家和发展中国家的技术进步做出了贡献。



- Chugai Ro and Overseas Associated Companies / 中外炉及关联公司事业所
- Our Main Technical Partners / 主要的海外合作伙伴
- Main Countries Supplied / 主要交付国

- UNITED KINGDOM
Continuous slab reheat furnace
(Technology exported)
Stainless steel strip bright annealing furnace
Continuous deoxidization annealing furnace
FLOLIA™
- BELGIUM
Combustion equipment
- SWITZERLAND
Combustion equipment
- FRANCE
Continuous slab reheat furnace
(Technology exported)
Catenary type annealing furnace
(Technology exported)
Walking beam type reheat furnace for aluminum billets (Technology exported)
Degreasing furnace
FLOLIA™
- CATALYTIC WASTE GAS TREATING EQUIPMENT
- SPAIN
Stainless steel strip annealing furnace
Stainless steel strip bright annealing furnace
- PORTUGAL
Combustion equipment
- ITALY
Stainless steel strip annealing furnace
Stainless steel strip bright annealing furnace
Roll coater
Atmosphere gas purification system

- CZECH
Atmosphere gas generator
- BULGARIA
Atmosphere gas generator
Combustion equipment
- EGYPT
Recuperator
Combustion equipment
- LIBYA
Continuous slab reheat furnace
- ALGERIA
Combustion equipment
- NIGERIA
Combustion equipment
- KENYA
Combustion equipment
- SOUTH AFRICA
Combustion equipment
- TURKEY
Continuous heat-treat furnace
Continuous deoxidization annealing furnace
Vacuum heat-treat furnace
- IRAQ
Vacuum heat-treat furnace

- BAHRAIN
Aluminum slab reheat furnace
Aluminum coil annealing furnace
- SAUDI ARABIA
Combustion equipment
- KUWAIT
Combustion equipment
- UNITED ARAB EMIRATES
Combustion equipment
- FINLAND
Continuous slab reheat furnace
Stainless steel strip annealing furnace
- SWEDEN
Continuous slab reheat furnace
Continuous annealing line for cold rolled steel strip
Stainless steel strip bright annealing furnace
- GERMANY
Stainless steel strip bright annealing furnace
"HI-SHIFTER"™ gas carburizing furnace
Atmosphere gas generator
FLOLIA™
- POLAND
Coiled strip annealing furnace
Continuous annealing furnace
Continuous deoxidization hardening and draw furnaces
Mesh belt type heat-treat furnace
- HUNGARY
Degreasing furnace
Sheet glass heat-treat furnace

- INDIA
Wire rod heat-treat furnace
Continuous gas carburizing furnaces
"HI-SHIFTER"™ gas carburizing furnace
Mesh belt type heat-treat furnace
- PAKISTAN
"HI-SHIFTER"™ gas carburizing furnace
Atmosphere gas generator
- BANGLADESH
Combustion equipment
- SRI LANKA
Combustion equipment
- MYANMAR
Combustion equipment
- THAILAND
Continuous slab reheat furnace
Heating system for thin slabs
Hydrogen atmosphere bell type annealing furnace
Continuous galvanizing line
Continuous steel strip coating line
Aluminum reheat furnace
Aluminum annealing furnace
Copper annealing furnace
Sheet glass heat-treat furnace
Continuous gas carburizing furnaces
"HI-SHIFTER"™ gas carburizing furnace
Catalyst baking furnace
Vacuum heat-treat furnace
Atmosphere gas generator
Regenerative thermal oxidizer

- ROMANIA
Stainless steel strip annealing furnace
Stainless steel strip bright annealing furnace
Tire cord heat-treat line
- RUSSIA
Continuous slab reheat furnace
Continuous annealing furnace for cold rolled steel strip
Continuous steel strip coating line
Continuous annealing furnace
Photographic paper making line
Neoprene drying oven
- VIETNAM
Continuous annealing furnace for cold rolled steel strip
Continuous galvanizing line
Continuous steel strip coating line
Vacuum heat-treat furnace
Burn off furnace
Combustion equipment
Regenerative thermal oxidizer
- CAMBODIA
Combustion equipment
- SINGAPORE
Coiled strip annealing furnace
Catalytic waste gas treating equipment
"HI-SHIFTER"™ gas carburizing furnace
Motor core heat-treat furnace
Heat-treat furnace for FPD

- 英国
连续钢片加热炉(技术出口)
钢带光亮退火炉
连续无氧化退火炉
FLOLIA®
- 比利时
燃烧装置
- 瑞士
燃烧装置
- 法国
连续钢片加热炉(技术出口)
不锈钢带退火炉(技术出口)
铝坯连续加热炉(技术出口)
脱脂炉
催化式废气处理装置
- 西班牙
不锈钢带退火炉
不锈钢带光亮退火炉
- 葡萄牙
燃烧装置
- 意大利
不锈钢带退火炉
不锈钢带光亮退火炉
辊涂机
气氛气体净化装置

- 捷克
气氛气体发生装置
- 保加利亚
气氛气体发生装置
燃烧装置
- 埃及
换热器
燃烧装置
- 利比亚
连续钢片加热炉
- 阿尔及利亚
燃烧装置
- 尼日利亚
燃烧装置
- 肯尼亚
燃烧装置
- 南非
燃烧装置
- 土耳其
连续淬火、回火炉
连续无氧化退火炉
真空热处理炉
- 伊拉克
真空热处理炉

- 巴林
铝板加热炉
铝线圈退火炉
- 沙特阿拉伯
燃烧装置
- 科威特
燃烧装置
- 阿拉伯联合酋长国
燃烧装置
- 芬兰
连续钢片加热炉
不锈钢带退火炉
- 瑞典
连续钢片加热炉
冷轧钢板连续退火炉
钢带光亮退火炉
- 德国
钢带光亮退火炉
气体渗碳炉HI-SHIFTER®
气氛气体发生装置
FLOLIA®
- 波兰
连续钢卷退火炉
连续退火炉
连续无氧化淬火、回火炉
网带式热处理炉
- 匈牙利
脱脂炉
玻璃板热处理炉

- 印度
线材热处理炉
连续气体渗碳炉
气体渗碳炉HI-SHIFTER®
网带式热处理炉
- 巴基斯坦
气体渗碳炉HI-SHIFTER®
气氛气体发生装置
- 孟加拉国
燃烧装置
- 斯里兰卡
燃烧装置
- 缅甸
燃烧装置
- 泰国
连续钢片加热炉
薄板工艺用加热设备
氢气气氛卷退火炉
连续镀锌线
彩色钢板连续涂布线
铝材加热炉、退火炉
铜、合金退火炉
玻璃板热处理炉
连续气体渗碳炉
气体渗碳炉HI-SHIFTER®
催化烧成炉
真空热处理炉
气氛气体发生装置
蓄热式废气处理装置

- 罗马尼亚
不锈钢带退火炉
不锈钢带光亮退火炉
轮胎帘布热处理线
- 俄罗斯
连续钢片加热炉
冷轧钢板连续退火炉
彩色钢板连续涂布线
粗材热处理炉
相纸制造设备
树脂干燥炉
- 越南
冷轧钢板连续退火炉
氢气气氛卷退火炉
连续镀锌线
真空热处理炉
燃烧炉
燃烧装置
FPD热处理炉
蓄热式废气处理装置
- 柬埔寨
燃烧装置
- 新加坡
钢卷退火炉
催化式废气处理装置
气体渗碳炉HI-SHIFTER®
电机铁芯热处理炉
FPD热处理炉



台湾中外炉
TAIWAN CHUGAI RO



中外炉設備技術
CHUGAI RO



CHUGAI RO
(THAILAND)
CO., LTD.



PT. CHUGAI RO
INDONESIA



中外炉熱工設備
CHUGAI RO THERMAL ENGINEERING



CHUGAI RO DE MEXICO,
S.A. DE C.V.

●MALAYSIA

Continuous slab reheat furnace
Copper annealing furnace
Aluminum fin coating line
Coiled strip annealing furnace
Continuous deoxidization
hardening and draw furnace
Vacuum heat-treat furnace
Functional material baking furnace
Combustion equipment for
thermal power plant
Ladle preheating equipment
Regenerative thermal oxidizer

●INDONESIA

Stainless steel strip annealing furnace
Aluminum casting equipment
Continuous gas carburizing furnace
"HI-SHIFTER"™ gas carburizing furnace
Mesh belt type heat-treat furnace
Continuous hardening and draw furnace
Vacuum heat-treat furnace

●PHILIPPINES

Continuous slab reheat furnace
Coiled strip annealing furnace
Aluminum slab homogenizing furnace
Continuous normalizing furnace
Vacuum heat-treat furnace

●NEW ZEALAND

Uniflowed annealing system

●AUSTRALIA

Combustion equipment

●CHINA

Continuous slab reheat furnace
Hydrogen atmosphere bell type
annealing furnace
Continuous annealing furnace for
cold rolled steel strip
Continuous galvanizing line
Continuous steel strip coating line
Aluminum fin coating line
Continuous copper strip annealing
furnace
Stainless steel strip bright annealing furnace
Continuous gas carburizing furnace
Continuous deoxidization hardening
and draw furnace
"HI-SHIFTER"™ gas carburizing
furnace

Gas nitriding furnace
Motor core heat-treat furnace
Mesh belt type heat-treat furnace
Vacuum heat-treat furnace
Wire rod heat-treat furnace
Hot press
in-flame treatment equipment "INFLAZ"™
Technical educational furnace
Regenerative thermal oxidizer
TABLE COATER™
FLOLIA™

Continuous Die Coating Equipment
Heat-treat furnace for FPD

●HONG KONG

Copper annealing and pickling line

●MACAO

Combustion equipment

●KOREA

Continuous slab reheat furnace
Heating system for thin slabs
Continuous annealing furnace for
cold rolled steel strip
Coiled strip annealing furnace
Steel pipe heat-treat furnace
Stainless steel strip annealing furnace
Stainless steel strip bright annealing
furnace
Continuous galvanizing line
Continuous steel strip coating line
Continuous gas carburizing furnace
"HI-SHIFTER"™ gas carburizing furnace
Mesh belt type heat-treat furnace
Vacuum heat-treat furnace
Wire rod heat-treat furnace
in-flame treatment equipment "INFLAZ"™
Regenerative thermal oxidizer
Sputtering equipment
TABLE COATER™
FLOLIA™
Heat-treat furnace for FPD
Various heat-treat furnace
(Technology exported)
Sewage sludge incinerator
(Technology exported)

●TAIWAN

Continuous slab reheat furnace
Forge furnace
Continuous annealing furnace for
cold rolled steel strip
Stainless steel strip annealing furnace
Stainless steel strip bright annealing furnace
Coiled strip annealing furnace
Continuous galvanizing line
Continuous steel strip coating line
"HI-SHIFTER"™ gas carburizing furnace
Vacuum heat-treat furnace
Gas nitriding furnace
Wire rod heat-treat furnace
Continuous deoxidization hardening
and draw furnace
Aluminum solution heat-treat furnace
Regenerative thermal oxidizer
Vacuum deposition system "SUPLADUO"™
TABLE COATER™
FLOLIA™
Heat-treat furnace for FPD
●PANAMA
Combustion equipment
●COLOMBIA
Combustion equipment
●PERU
Combustion equipment

●CANADA

Wire rod heat-treat furnace
Atmosphere gas generator
●U.S.A.
Continuous slab reheat furnace
Uniflowed annealing system
(Technology exported)
Heating system for thin slabs
Stainless steel strip annealing furnace
Sheet glass heat-treat furnace
Wire rod heat-treat furnace
Continuous gas carburizing furnace
Continuous deoxidization hardening and draw furnace
Photographic film manufacturing line
Various heat-treat furnaces (Technology exported)

●MEXICO

"HI-SHIFTER"™ gas carburizing furnace
Vacuum heat-treat furnace
Continuous gas carburizing furnace
Gas nitriding furnace
Atmosphere gas generator

●BRAZIL

Continuous slab reheat furnace
Coiled strip annealing furnace
Vacuum heat-treat furnace
●ARGENTINA
Hood and air system for paper machine

●马来西亚

连续钢片加热炉
铜、铜合金退火炉
铝翅片材涂布线
钢卷退火炉
连续无氧化淬火、回火炉
真空热处理炉
功能材料烘烤炉
火力发电用燃烧设备
钢包预热装置
蓄热式废气处理装置

●印度尼西亚

不锈钢带退火炉
铸铝厂设备
连续气体渗碳炉
气体渗碳炉HI-SHIFTER®
网带式热处理炉
连续淬火、回火炉
真空热处理炉

●菲律宾

连续钢片加热炉
钢卷退火炉
铝板精制炉
连续常化炉
真空热处理炉

●新西兰

连续式箱型钢板退火炉

●澳大利亚

燃烧装置

●中国

连续钢片加热炉
氢气钢卷退火炉
冷轧钢板连续退火炉
连续镀锌线
彩色钢板连续涂布线
铝翅片材涂布线
铜带连续退火炉
不锈钢带光亮退火炉
连续气体渗碳炉
连续无氧化淬火、回火炉
气体渗碳炉HI-SHIFTER®
气体软氮化炉
电机铁芯热处理炉
网带式热处理炉
真空热处理炉
线材热处理炉
热压
火焰内处理设备 INFLAZ®
技术教育用炉
蓄热式废气处理装置
TABLE COATER™
FLOLIA®
连续工业脱水涂布装置
FPD热处理炉
●香港
铜带连续退火线
●澳门
燃烧装置

●韩国

连续钢片加热炉
薄板工艺用加热设备
冷轧钢板连续退火炉
钢卷退火炉
钢管热处理炉
不锈钢带退火炉
不锈钢带光亮退火炉
连续镀锌线
彩色钢板连续涂布线
连续气体渗碳炉
气体渗碳炉HI-SHIFTER®
网带式热处理炉
真空热处理炉
线材热处理炉
火焰内处理设备 INFLAZ®
蓄热式废气处理装置
喷射装置
TABLE COATER™
FLOLIA®
FPD热处理炉
各种加热炉、热处理炉(技术出口)
下水污泥焚烧设备(技术出口)

●台湾

连续钢片加热炉
锻造加热炉
冷轧钢板连续退火炉
不锈钢带退火炉
不锈钢带光亮退火炉
钢卷退火炉
连续镀锌线
彩色钢板连续涂布线
气体渗碳炉HI-SHIFTER®
真空热处理炉
气体软氮化炉
线材热处理炉
连续无氧化淬火、回火炉
铝溶体化热处理炉
蓄热式废气处理装置
真空成膜装置 SUPLADUO™
TABLE COATER™
FLOLIA®
FPD热处理炉
●巴拿马
燃烧装置
●哥伦比亚
燃烧装置
●秘鲁
燃烧装置

●加拿大

线材热处理炉
气氛气体发生装置
●美国
连续钢片加热炉
连续式箱型钢板退火炉(技术出口)
薄板工艺用加热设备
不锈钢带退火炉
玻璃板热处理炉
线材热处理炉
连续气体渗碳炉
连续无氧化淬火、回火炉
胶卷制造设备
各种热处理炉(技术出口)
●墨西哥
气体渗碳炉HI-SHIFTER®
真空热处理炉
连续气体渗碳炉
气体软氮化炉
气氛气体发生装置
●巴西
连续钢片加热炉
钢卷退火炉
真空热处理炉
●阿根廷
造纸机盖及气体系统

Akira Ozaki
Representative Director,
Chairman
法人代表董事兼会长
尾崎 彰

Mamoru Sakata
Representative Director,
President & Chief Executive Officer
法人代表董事兼总裁CEO
阪田 守

A global company with unique thermal technology.
We provide value to customers through the evolution of technology
in ways that meet customers' requirements.

全球性热处理技术独有企业“中外炉工业”，将以先进的技术应对客户所需的“价值”。

■ Managerial Creed

Chugai Ro Co., Ltd. creates new value through its core of thermal technology, thus contributing to society while realizing the prosperity of the company and the happiness of its employees.

■ 经营理念

中外炉工业以热技术为核心创造新价值，并以此为社会做出贡献，带来企业的繁荣和员工的幸福。



Quality and Environmental Policy

In order to actualize Chugai Ro's managerial policy, Chugai Ro Co., Ltd., and its Japanese subsidiaries contribute to society with a firm fundamental stance of meeting customer and product requirements and promoting environmental preservation activities by observing the following policies, while focusing its next-generation thermal technologies on three business fields: energy, information/communication and environmental preservation.

1. Improve continuously its management system and strive to improve performance and prevent environmental contamination.
2. Comply with laws, legal regulations and other requirements agreed to by Chugai Ro Co., Ltd.
3. Strive to provide energy-saving products that contribute to greenhouse gas reduction.
4. Address the goal of zero emissions and promote waste prevention.
5. Implement education and publicity activities, keep all people working in or for the organization informed of the company's quality and environmental policies, and raise their quality and environmental awareness.
6. Inform the public of the above quality and environmental policies.

质量与环境方针

中外炉工业株式会社及其日本国内子公司为了实现经营理念，在能源、信息与通信、环境保护的3个事业领域汇集下一代的热技术，遵照以下方针，将满足顾客要求事项与产品要求事项、以及推进地球环境保护活动作为基本姿态，为社会做出贡献。

- 1 持续改善管理体系，致力于提高质量与预防环境污染。
- 2 遵守法律法规及本公司同意的其他要求事项。
- 3 致力于提供为削减温室气体做贡献的节能产品。
- 4 致力于零排放工作，控制废弃物的产生。
- 5 开展教育、宣传活动等，向本公司的全体员工及为本公司工作的所有人员宣贯质量与环境方针，力求提高质量与环保意识。
- 6 将以上的质量与环境方针向公众公布。

Carbon neutral, DX (digital transformation) ——— Pursuing greater innovation to create new value.

Since its founding in 1945, Chugai Ro Co., Ltd. has worked tirelessly as a technology-driven company to develop innovative technologies in the thermal technology field. Our chief strengths are development and design. However, a variety of challenges, such as climate change and a changing labor environment, are rapidly and dramatically altering the socioeconomic landscape for our corporate group and necessitating urgent adaptation on a major scale. We view these challenges as golden opportunities to create value, in line with our management philosophy, by actively undertaking the challenge of developing new markets centered on carbon neutrality, of further updating our existing products, and of cultivating a more rewarding and challenging work environment internally. Through the pursuit of innovation and change in all areas, including in our laboratories and facilities, in our organizations and in our human resources, we will continue to work to meet your expectations and to contribute to the sustainable growth of our customers and stakeholders, as well as society.

碳中和、DX（数字化转型）——— 实现更大的变革，创造新的价值。

中外炉工业自 1945 年创业以来，作为推出独创技术的技术导向企业，在热科技领域不断向前迈进。开发力量和设计能力是本公司最大的优势。然而，由于气候变化、劳动环境等各种问题，本公司集团面临的社会和经济形势正在发生急剧变化，这要求实现重大的突破。

我们将这些课题视为实现经营理念中“创造新价值”的难得机会，所以积极采取诸多举措，例如开拓以碳中和为中心的新市场，进一步改进现有商品，并在企业内部营造一种有回报的工作环境。

展望未来，我们将在以研究所为首的机构、组织、人才等各个方面实现前所未有的变革。不辜负大家的期待，我们将满足包括客户在内的利益相关者的要求，并且为社会的可持续发展做出贡献。

History 沿革

- 1945 Chugai Ro Co., Ltd. established.
- 1954 Manufacture of atmospheric heat treatment furnaces began. Establishes basis for high-quality, high-volume production methods that become key to development in the auto industry.
- 1955 Introduction of advanced industrial furnaces in fields such as steelmaking, non-ferrous metals, electrical machinery and glassmaking led to modernization of industry.
- 1961 Manufacture of industrial machinery such as coating lines and dryers began.
- 1962 Chugai Ro Co., Ltd. publicly listed on stock exchanges.
- 1973 Advanced into the environmental protection field, starting with sewage sludge incinerating systems.
- 1988 Advanced into the information and communications field, accepting orders for in-line sputtering systems.
- 1994 Developed and began accepting orders for regenerative combustion type deodorizing systems in response to stricter plant emissions regulations in Japan.
- 1996 Orders accepted for wide variety of manufacturing equipment for large color plasma display panels.
- 1997 ISO 9001 certification obtained.
- 2004 FLOLIA 2000 coater system, an ultra-high-precision coating and drying system for LCD and organic electroluminescent devices, released.
- 2005 Construction is completed on the Sakai Works Engineering Center.
- 2008 ISO 14001 certification obtained.
- 2009 Developed and began accepting orders for photovoltaic cell manufacturing equipment.
- 2012 Established a local subsidiary in Thailand and Indonesia.
- 2014 "HIFALCON™", a new system vacuum carburizing furnaces for mass production, developed and released.
- 2016 Established a local subsidiary in Mexico.
- 2018 Together with the Toyota Motor Corporation, developed the world's first general-purpose hydrogen burner for commercial use.
- 2019 Received an order for precision coating systems for flexible organic EL substrates.
- 2020 Developed a combustion technology that requires no fossil fuels and uses only ammonia as fuel (joint research with Osaka University).
- 2023 Integrated and reorganized research facilities within Sakai Works and opened the Thermal Technology Creative Center.
- 2025 A series of decarbonization technologies, including the hydrogen-fired afterburner furnace delivered by our company to DENSO Fukushima Corporation, has received the "Toyota Technology Development Grand Prize" in joint recognition with DENSO Corporation.

- 1945 公司成立。
- 1954 开始制造气氛热处理炉。确立汽车工业发展支柱——高品质、大量生产方式的基础。
- 1955 向钢铁、有色金属、电机及玻璃等产业领域交付最尖端的工业炉，为生产设备的现代化做出贡献。
- 1961 开始制造各种涂布线、干燥机等产业机器。
- 1962 股份在证券交易所上市。
- 1973 以下水污泥焚烧设备为起点，进军环保设备领域。
- 1988 接受在线溅射装置订单，进入信息、通信领域。
- 1994 开发蓄热式废气处理装置并获得订单，应对国内严格的废气处理需求。
- 1996 相继获得制造大型彩色PDP（等离子显示面板）的各种装置的订单。
- 1997 获得ISO9001认证。
- 2004 发表液晶、有机EL用超高精度涂布、干燥系统“FLOLIA2000涂布机系统”。
- 2005 堺事业所工程技术中心竣工。
- 2008 获得ISO14001认证。
- 2009 开发太阳能电池制造设备并获得订单。
- 2012 在泰国和印度尼西亚设立当地法人。
- 2014 开发量产型真空渗碳炉“HIFALCON”并获得订单。
- 2016 在墨西哥设立当地法人。
- 2018 与丰田汽车公司合作开发了世界上第一台工业通用氢气燃烧器。
- 2019 接到柔性有机EL基板用精密涂布系统的生产订单。
- 2020 开发无需化石燃料、仅以氨为燃料的燃烧技术（与大阪大学共同研究）。
- 2023 在堺事业所内对研究设施进行了整合和重组，并设立了热技术创造中心。
- 2025 本公司向株式会社电装福岛（DENSO Fukushima）交付的、包含氢气燃烧式后燃炉（Afterburner Furnace）在内的一系列脱碳技术，荣获了“丰田技术开发最优秀奖”。此次奖项是与株式会社电装（DENSO）共同获得的荣誉。

Looking for new answers to create more advanced technology.

All stages of a project, from the basic concept through design, manufacture, construction and maintenance, have to be responsibly coordinated to combine an array of technological strengths. Product development consists of many processes that must be coordinated for technology to advance. At Chugai Ro, we pay careful attention to the connections between processes. Collaboration between departments extracts their technological expertise and inherent abilities to the full, resulting in increased creativity and improved performance.

不断追求新的答案，不断发展独创性的技术。

工程技术企业根据一贯性的责任体制，在提案到设计、制造、建设、维护以及研究、开发的过程中，汇集各种技术以发挥其真正的价值。所有的工艺都是产品开发中所不可或缺的组成部分，如果没有各工艺的联动，则无法取得技术的进步。中外炉工业重视各工艺间的密切关联性，通过各部门的互相合作，充分发挥各自的技术能力和潜能，并由此凝聚出制造独创性高性能产品的力量。



Meeting the demands of customers with abundant experience and engineering insight.

通过积累的经验和技术员的感性来满足不同客户的需求

Consulting and Design 咨询、设计

We incorporate changes into the designs of our products in response to customer requirements, such as shorter delivery times, reduced operating costs and easier maintenance. Our thermal technology database compiled over many years and the insights of our engineers allow us to deliver products of the highest precision.

通过咨询服务了解客户缩短交货期、降低运营成本、维护简便等需求，并作为重要的设计课题进行解决。利用长年积累的丰富的热处理技术数据库、汇集技术员们的感性，制造出高精度的产品。



Providing superior reliability and quality through advanced manufacturing facilities and coordinated responsibility.

最尖端的制造基地和一贯性责任体制带来的可靠品质

Manufacturing and Construction 制造、建设

Manufacturing and construction work at the factory determines product quality. Chugai Ro delivers top quality through a partnership between the main production plant in Sakai and engineers assigned to major projects worldwide. On-site installation time is reduced by plant assembly to meet customers' production schedules.

工厂的制造和建设过程，是决定产品品质的关键所在。中外炉工业以拥有最尖端设备的堺工厂为核心，承担了多项世界主要项目的技术人员们创造出了高品质的产品。在工厂进行组装可大幅缩短现场的作业时间，从而可使客户的生产计划得以顺利实施。



Maintaining optimum functionality with inspection and maintenance services.

实施更高层次的维护、点检服务，以维持设备的高性能

Maintenance 维护

The maintenance engineering services of Chugai Ro go beyond mere inspection and repairs. We help customers attain a high level of functionality through rebuilding and upgrade work designed to boost productivity, reduce labor requirements and conserve energy. We can meet all customers' needs with specially crafted solutions.

中外炉工业的维护工程技术，并非单纯的修理或点检。为了保持设备的高性能，通过为强化生产力、节省劳力和节约能源的改造及设备更新等工程，认真应对客户的各种要求。



Developing new technology through basic and applied research.

从基础研究到应用研究，开展支持下一代的新技术的开发

Research and Development 研究、开发

Our innovative technology allows us to quickly determine our customers' requirements. The R&D process emphasizes a fresh approach to both basic and applied research. We contribute to technological advancement in industry, government, academe and society at large through joint research and participation in academic conferences.

独创性技术构想源自尽快洞察下一代之需求。我们在从基础研究到实践性的应用研究中，推进注重新的着眼点的研究和开发，并通过共同研究和学会活动等，与产业界、行政、学界以及社会紧密相联的同时达到发展技术的目的。



Domestic Business Locations

国内事业所

Head Office 总公司

Aioi Nissay Dowa Insurance Midosuji Bldg.,
3-6-1 Hiranomachi, Chuo-ku, Osaka 541-0046, Japan
Tel: +81-6-6221-1251 Fax: +81-6-6221-1411

Sakai Works 堺事业所

2-4 Chikko-Shinmachi, Nishi-ku, Sakai 592-8331, Japan
Tel: +81-72-247-2501 Fax: +81-72-247-2508

Sakai Center 堺中心

94-7 Ishizu-Nishimachi, Nishi-ku, Sakai 592-8332, Japan

Tokyo Branch 东京支社

Konan Bldg., 2-5-7 Konan, Minato-ku, Tokyo 108-0075, Japan
Tel: +81-3-5783-3360 Fax: +81-3-5783-3368

Nagoya Sales Office 名古屋营业所

Meieki Southside Square, 1-21-19 Meieki-Minami,
Nakamura-ku, Nagoya 450-0003, Japan
Tel: +81-52-561-3561 Fax: +81-52-561-3566

Kokura Factory 小仓工厂

2-2-1 Higashiminato, Kokura-Kita-ku, Kitakyushu
803-0802, Japan
Tel: +81-93-571-5788 Fax: +81-93-571-6268



Head Office
总公司



Tokyo Branch
东京支社



Nagoya Sales Office
名古屋营业所



Sakai Center
堺中心

Sakai Works
堺事業所



Kokura Factory
小倉工場





E-mail web_master@n.chugai.co.jp

Our Corporate Website
本公司官网



<https://chugai.co.jp>



Chugai Ro Co., Ltd. is part of the Zero Emissions Challenge.
中外炉工业是一家挑战零排放的企业。

