

## 關於三和耐火 Company Profile

## 公司簡介

三和耐火工業股份有限公司Sunward Refractories Co. Ltd. 創立自 1968年,專業生產製造高溫耐火材料,行銷國內外市場。三和耐火工 業股份有限公司長久以來累積產品、技術、客戶、投資、品牌等五大 優勢。這五大優勢彼此交織共存,與三和核心競爭能力產生加乘效果 ,永續為全球高溫行業提供優質、專業的服務。



### 品質政策

品質第一:持續維護並不斷改善品質,以最適切的產品供應客戶。

技術領先:藉由製程自動化、作業標準化、管理合理化,並持續自主改善以精進生產技術。

服務至上:準時交貨、配合施工、技術交流,以滿足客戶的期望與需求。

### **About Sunward Refractories**

Sunward Refractories Co., Ltd. was established in 1968 which concentrates in producing high temperature refractory materials for both domestic and oversea markets. We have accumulated advantages in product, technology, client, investment and brand over the past years. By weaving these top five advantages together with our core competency, we are pleased to provide our best and professional services continuously in the field of global high temperature refractory.

### Best Quality Policy:

In order to continuously maintain and improve quality continually to supply the most suitable products for our customers.

#### Leading Technology

In order to enhance the level of production technology by means of automating manufacturing procedures, work standardization and humanizing management as well as continuous improvement.

#### Best Service:

In order to meet customers' expectations and requirements by punctual delivery, construction with requests and communication of technology.



## 營業項目 Products and Service

本公司供應鋼鐵、水泥、玻璃、石化、焚化爐及其他金屬、非金屬等行業所需耐火材料,係重工業之基礎工業,營業項目如下:

- · 各種耐火築爐有關工程承包業務。
- · 磁磚及陶器有關製品之製造買賣。
- 耐火器材製造及買賣業。
- 定型與不定型耐火物之製造買賣。
- 開採窯業有關原料及買賣。
- 有關前列業務之進出口代辦業務。
- · 上列有關業務之經營與投資。



Sunward Refractories Co., Ltd. is the foundation of the heavy industries to supply refractory materials for steel industry, cement industry petrochemical industry, incineration industry and other metal & non-ferrous industry.

Our business areas are listed below:

- · The engineering and design contracting of refractory furnaces
- · The manufacturing and trading of porcelain tiles and pottery
- · The manufacturing and trading of refractory equipment
- · The manufacturing and trading of shaped and monolithic refractories
- · The excavating and trading raw materials of kiln
- · Import/export and agency in the above business areas
- · Management and investment in the above business areas.

04 SUNWARD 品質/技術/服務



## 三和大事記 Milestones

2010年

無水泥冷熱間濕式噴漿材開發,中鋼試用成功。

2008年

設立資材廠,加工使用再生物資。

2007年

2800噸全自動壓磚機投產。

2006年1月

本公司秉持著永續經營的理念,繼通過IS09001:2000後,於95年01月經英國標準協會BSi驗證通IS014001:

2004 & OHSAS18001:1999管理系統,以落實環境、安全、品質並重的營運目標。

2005年5月

合資公司『張家港三和沙鋼高溫科技有限公司』正式投產。

2005年3月

成立工程部,整合設計、施工、材料供應等能力,提供客戶完整服務。

2003年10月

三和公司,與國立聯合大學材料系在陶瓷材料、耐火材料及玻璃等方面的卓越研究成果,於92年10月23日由董 建三董事長,與聯大校長金重勳共同簽署合作協定。未來將由三和提供聯大材料系學生獎學金及寒暑假實習機 會,聯大教師則在設備條件許可下,協助三和辦理在職員工講習與共同進行專題研究,作為三和改進技術的參 考。聯合大學表示,這次三和與該校材料系合作,希望共同帶動國內材料產業的進步、發展,創造出更大的研 究產值。

2002年9月

三采精密陶瓷股份有限公司通過IS09001:2000版之品質系統認證(含設計開發)。

BSMI

2001年3月

創設『三采精密陶瓷股份有限公司』,發展精密陶瓷事業。

2010

Development Non-Cement gunning material. It also passes the testing and applied of China Steel Co.

Founding Material factory processes, reprocess materials.

2007

2800MT Automatic Press Machine started producing.

2006-January

In order to create a safety, quality environment and sustainable development, Sunward Refractories Co., Ltd, was certificated by ISO9001:2000 in 2001, BSI (British Standards Institution) for ISO14001:2004 and OHSAS18001:1999 manage system.

2005-May

Our joint venture, ZHANGJIAGANG SANHE SHAGANG REFRACTORIES CO., LTD. officially started its operation and production.

2005-March

Establishing Engineering Technology Department provides our customers the most comprehensive services from integrating design, construction, and supplying materials.

2003-October

Sunward and National United University have excellent and successful cooperating research reports on ceramic, refractory materials and glass products. Our Chairman, Mr. Henny Tong has signed a cooperating contract with NUU, Sunward is going to offer the scholarship and internship opportunities to the students of NUU's Material college; the professors of NUU will help and cooperate thesis research with Sunward's engineers for the reference of technique improvement, NUU believes the cooperating scenario with Sunward will help the improvement and development of material industry in China and create great research value.

2002-September

Sunward Ceramic Corporation was approved by ISO 9001;2000 quality systems for quality assurance in design, manufacturing and production.

2001-March

Sunward Ceramic Corporation was established. We strive to develop the market of fine ceramic products.





## 安全衛生環保政策 S.H.E. Policy

本公司在生產過程中主要產生的環境議題有粉塵、廢氣與廢棄物。我們秉持著永續經營之理念,落實環境、安 全、品質並重之營運目標,致力營造安全衛生舒適之工作環境,讓每位員工在決策與行動中,都能落實環境安 全衛生要求,並承諾:

- · 落實源頭管制、預防污染發生、提高資源使用效率。
- ·加強溝通與訓練,提升全員環安衛認知。
- 符合環境及安全衛生法令之要求。
- ·持續監督、改善,提升環境安全管理成效。
- ·加強作業管制、強化操作技能、降低危害風險。

The mainly environmental issues may occur when producing our products are dust, exhaust gas, and rejection.Sunward holds the ideal of sustainable development, to put environment, safety, and quality into practice as our operation goals.

We aim at creating a safe, sanitary, and comfortable working environment. All the employees are personally

responsible for S.H.E at the workplace in their every decision-making and action. Below are our commitments:

· Carried head control into execution, preventing of pollution, improving the efficiency of resources recycling.

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

SUNWARD REFRACTORIES CO., LTD.

- · Enhanced communication and training for staffs in Safe and Sanitary knowledge.
- · Conformed with the government policy to the safety and sanitation.
- · Continued to supervise, improve, and promote the effect on Environment Safety Management.
- · Enhanced the process control, operating skills and reduced the risks of danger.

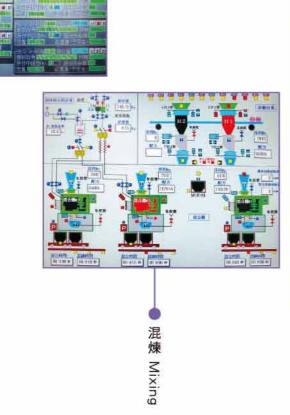




## 生產流程 Manufacturing Processes



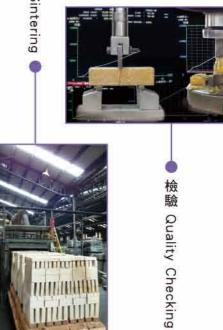






成形 Molding







# 全球化市場 Globalization Market





# 築爐工程 Furnace Construction

為滿足各行業客戶之需求,本公司積極研發全新之耐火材料且更優質之施工技術,全面朝機械化、自動化、 安全施工的目標邁進。並提供客戶經濟實惠的窯爐設計,以達到最省能源及延長爐齡之要求。

本公司提供客戶各式工業窯爐之耐火材料施工及設計,服務範圍包括:

- · 爐體耐火材料之設計、規劃及耐火磚之分割。
- · 各式窯爐耐火材料之配置、施工及監工管理。
- · 耐火材料設計選用及施工技術服務。
- 各式窯爐熱傳導現象模擬分析技術服務。
- 其他相關耐火材料產品應用服務。



→ 玻璃窯爐蓄熱室磚施工 Construction of the regenerator of glass furnace.



● 搗固材施工 Ramming.



Construction of furnace's arch bricks.



● 圓筒型窯爐施工 Construction of Cylinder furnace.



鋼鐵廠蓄熱塔施工 Construction of the heat accumulation Tower of Steel plant.

In order to satisfy the needs of our customers, our group progressively researches and develops whole new refractory materials and premium construction techniques. Our goals are that make our construction to be mechanization, automation and safe construction and offer inexpensive furnace designs to achieve the goal of save energy and expand the life time of furnaces.

Sunward provide our clients the designs and refractory materials of variety industry furnaces, which include;

- · The design, planning and refractories separating of furnaces.
- · The installation, construction, and supervise work of variety furnace refractories.
- · Refractories design and technical service of construction.
- · The analysis and technical services of furnaces' heat equation simulating.
- · The technical services relate to refractories.



● 保溫材料(棉毯)施工 Construction of Insulating Material (blanket).





→爐頂噴漿施工 The gunning of EAF Roof.



→ 電爐耐火材料施工 Construction of EAF Refractories.



● 砌磚與搗固施工完成圖 Brick Installing and Ramming Constructure.