

# External Awards Received (since 1999)

## National Invention Award

- 2003 Invention Award  
Development of 3-channel polarized light steel sheet surface inspection equipment (Delta-Eye)
- 2001 Prime Minister's Invention Award  
Development of producing method of ultra-low carbon steel by combined blowing basic oxygen in RH degasser
- 2001 Invention Award  
Development of organic coated steel excellently resistant to corrosion after forming
- 2000 Japan Federation of Economic Organizations Chairman's Invention Award  
Environment-friendly regenerative low-NOx combustion technology
- 1999 Invention Award  
Development of high efficiency, multi-size rolling technology for high dimensional accuracy wire rod material and steel bars

## Okochi Prize

The prize given to companies and individuals who have made significant contribution to industrial production

- 2003 Memorial Production Award  
Establishment of waste plastic recycling technology for blast furnace feed
- 2002 Memorial Technology Award  
Development and industrialization of critical cooling rate on-line accelerated cooling technology (Super OLAC)
- 2002 Memorial Production Award  
Realization of ultra-short period blast furnace relining by innovative large capacity BF relining technology
- 2001 Memorial Technology Award  
3-channel polarized light surface inspection equipment (Delta-Eye)
- 2000 Memorial Technology Award  
Development of environment-friendly new steelmaking process by zero-slag BOF operation
- 2000 Memorial Production Award  
Development of world's first endless hot strip rolling process and commercialization of new products

## Iwatani Memorial Prize

- 2002 Development and industrialization of critical cooling rate on-line accelerated cooling technology (Super OLAC)
- 1999 Development and world's first commercialization of gradient high-silicon magnetic steel sheet

## Ichimura Industrial Award

- 1999 Contribution Award  
Development of endless rolling technology in hot rolling

## Energy Conservation Award

- 2003 Energy Conservation Center Chairman's Award  
Development of ETL and TFS base steel sheet detergent for degreasing
- 2000 METI Minister's Award  
Development and application of technology utilizing waste plastics as blast furnace feed
- 2000 Energy Conservation Center Chairman's Award  
Energy conservation through activities to maximize equipment efficiency of oxygen plant
- 1999 MITI Minister's Award  
Minimization of iron and steel making energy through development of new technology for measuring hot metal temperature
- 1999 Energy Conservation Center Chairman's Award  
Activities for reducing oxygen gas dissipation
- 1999 Energy Conservation Center Excellence Award  
Introduction of regenerative burners in Chita small-diameter seamless pipe rotary furnace

## Minister's Award for Global Warming Prevention (Environment Agency)

- 1999 Minister's Award  
Recycling of waste plastics for blast furnace feed

## Excellent Energy Conserving Equipment Award

- 2000 METI Minister's Award  
High-speed continuous annealing and heating system applying high-temperature rotary regenerative heat exchanger

## New Energy Award (award for new energy equipment for the 21st century)

- 2002 New Energy Foundation Chairman's Award  
Floating-type solar power generation system
- 2000 Resources & Energy Agency Director General's Award  
Project to produce fuel from wastes by gasifying & melting method in steelworks

## Resource Recycling Technology & System Award (Clean Japan Center)

- 2002 METI Industrial Technology & Environment Bureau Director General's Award  
Application of steel slag hydration hardening substance as materials for port & harbor construction
- 2001 Clean Japan Center Chairman's Award  
Technology for cascading & recycling of washing chemical fluorine nitric acid
- 2000 METI Industrial Technology & Environment Bureau Director General's Award  
Technology for recycling stainless steel making dust using smelting reduction method
- 1999 Clean Japan Center Chairman's Award  
Suppression of waste discharge in a casting plant (NIPPON KOKAN PIPE FITTING MFG. CO., LTD.)

## Japan Society of Mechanical Engineers Award

- 2002 Japan Society of Mechanical Engineers Award (Technology)  
Development and practical application of high-temperature waste gasifying & direct melting furnace
- 2001 Japan Society of Mechanical Engineers Award (Technology)  
Continuous rolling mill of steel bar, section, and wire rod
- 1999 Japan Society of Mechanical Engineers Award (Technology)  
Development of equipment for changing running direction of cold rolled steel sheet by air floatation

## Combustion Society of Japan Award

- 2003 Technology Award  
Development of next-generation stoker type waste incineration technology utilizing high temperature air combustion control technology
- 2000 Technology Award  
High-temperature waste gasifying & direct melting technology

## The Society of Materials Science, Japan Award for Technical Developments

- 2002 Development of hot rolled high strength steel sheet-780MPa grade NANO HITEN by controlling nano-size ultra minute precipitates

## The Society of Chemical Engineers, Japan Technology Award

- 2003 Development of waste polyvinyl chloride resin recycling technology

## Surface Finishing Society of Japan Award

- 2002 Technology Award  
Environment-friendly high-performance chromium-free steel sheet "Geo-Frontier Coat"

## Japan Coating Technology Association Award

- 2001 Technology Award  
Rust stabilization agent for weathering steel CUPTEN COAT M

## Japan Society for the Promotion of Machine Industry Award

- 2001 Chairman's Award  
Development of equipment for changing running direction of cold rolled steel sheet by air floatation

## Excellent Environmental Equipment Award

- (Japan Society of Industrial Machinery Manufacturers)
- 2003 Chairman's Award  
Fly-ash dioxin volatilizing and separating equipment (Hi-Clean DX)
- 2002 Chairman's Award  
Automatic sorting system for plastic bottles
- 2002 METI Industrial Technology & Environment Bureau Director General's Award  
Small-scale incinerator using carbonizing & gasifying method (Kawatetsu Machinery Co., Ltd.)

## Japan Institute of Energy Award

- 2002 The JIE Award in Technical Division  
Development of slurry bed dimethyl ether synthesis technology

## Japan Ozone Association Award

- 2002 Technology Award  
Practical high-flux filtration system using ozone resistant microfiltration module
- 2000 Recommended Technology Award  
Promotive implementation of U-tube ozone contact equipment

## Japan Society on Water Environment Award

- 2002 Technology Award  
Bio-tube system

## Competition for Specialized Greening Technology for Rooftops, Wall Facings and New Green Spaces (Organization for Landscape and Urban Greenery Technology Development)

- 2003 The Minister of Land, Infrastructure and Transport Prize  
The first prize for Rooftop Greening Technology  
ORTO YOKOHAMA

## Shinagawa Greening Award

- 2001 CITYWINDS SHINAGAWA GARDEN COURT

## The Japan Industrial Techniques Grand Prix

- 2003 The Special Award by The Examination Committee  
Development and practical application of new on-line accelerated cooling technology (Super OLAC)

## Recycling Award (NPO Recycle Solutions)

- 2001 First Planning Award  
Marine Blocks (carbonated large solid block of slag for use in artificial reefs for seaweed and fish farming)