

Winners of the “Best Innovation 2013” awards

Best New Product Award

Project	Main reasons for awarding the prize	Department name
Ultra-low NOx Coal-firing Burner (M-PM Burner*1)	Achieving a 20 to 40% reduction compared to existing NOx reduction technology with original NOx reduction technology developed by MHI.	Energy & Environment / Technology & Innovation Headquarters
Steel 50IN/60IN Steam Turbine Exhaust End Blade	Improving the cost-competitiveness of the end product by manufacturing super-large sized 50 & 60 inch turbine blades using steel, which would normally be made out of titanium.	Energy & Environment / Technology & Innovation Headquarters
SAYAENDO - New Generation LNGC with Continuous Integrated Tank Cover -	Achieving lighter weight, together with reduced wind resistance, by employing a continuous tank cover constructed as a single piece with the hull of the ship, together with a 25% increase in fuel efficiency through the use of USTs.*2	Commercial Aviation & Transportation Systems / Energy & Environment / Mitsubishi Heavy Industries Marine Machinery & Engine Co., Ltd.
The Steering Bogie For AGT*3	Realizing weight reduction, together with improved handling characteristics and reduced noise with new steering system including shock absorbent guide ring construction.*4	Commercial Aviation & Transportation Systems / Technology & Innovation Headquarters
Type 12 Surface-to-Ship Missile System	Realizing one of the world’s best performance by applying the new missile guidance technologies.	Integrated Defense & Space Systems
SMASH system (Ash water treatment system)	Achieving a system to reduce and stabilize the amount of chlorine content in the ash from waste incinerator, which is the biggest bottleneck to use raw material for cement from recovered resources.	Mitsubishi Heavy Industries Environmental & Chemical Engineering Co., Ltd.

Best New Business Process Award

Project	Main reasons for awarding the prize	Department name
Cost Reduction of Steam Turbine Forged Blade with Advance Approach	Reducing the costs of manufacture and creating a rationalized manufacturing process by developing and employing a unified production simulation technology.	Energy & Environment / Technology & Innovation Headquarters
Achieving Uniform Quality by Chemical Milling and Cost Reduction by Productivity Improvement	Realizing productivity increases and decrease in the volume of waste fluids by subjecting them to recovery processes of chemical milling.	Commercial Aviation & Transportation Systems / Technology & Innovation Headquarters

Special Award for Best New Technology

Project	Main reasons for awarding the prize	Department name
Automation Technology Covering High Speed Drilling and Measuring Operation for CFRP*5 Aircraft Components	Contributing to increased productivity by establishing a method of automatic drilling and measuring in CFRP materials.	Machine Tool / Commercial Aviation & Transportation Systems / Technology & Innovation Headquarters
Noise Reduction Techniques and Dynamic Positioning Techniques for Ocean Research Vessels	Simultaneously achieving high positioning capacity and low noise, making it possible to conduct surveys in difficult environments, such as areas with rapid tides.	Technology & Innovation Headquarters / Commercial Aviation & Transportation Systems
Steel Strip Shape Measurement Technology for High Quality Hot Rolled Steel	Developing a high precision measurement technology of the shape of steel strips under dusty and high temperature environment.	Technology & Innovation Headquarters / Mitsubishi-Hitachi Metals Machinery, Inc.
Closed-cycle Compact and High-efficiency Fuel Cell System Technology	Marking world first passing trial operation in actual marine setting with closed-cycle fuel cell systems.	Technology & Innovation Headquarters / Integrated Defense & Space Systems / Commercial Aviation & Transportation Systems

Special Award for Best Company Image Enhancer

Project	Main reasons for awarding the prize	Department name
The Robot Family Which Supports Recovery from a Nuclear Hazard and Other Disasters	Achieving high popular recognition as a result of being widely publicized through media such as newspapers, television and magazines. Also actively participated in a successful example of a national project with industry, academic, and government collaboration that was highly regarded.	Energy & Environment / Corporate Communication Department
Increase Annual Production Capacity to 10 Million Units	Contributing to the improvement of the public image of MHI turbochargers due to outstanding technology and cost competitiveness. Also, high quality and responsiveness to customers have been reported in the media.	General Machinery & Special Vehicles

*1 M-PM Burner: Multiple Pollution Minimum Burner,

*2 UST: Ultra Steam Turbine,

*3 AGT: Automated Guideway Transit,

*4 Shock absorbent guide ring construction: Construction that reduces vibrations transmitted from guide rings,

*5 CFRP: Carbon Fiber Reinforced Plastic

###