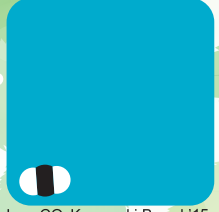


LOW CARBON



Low CO₂ Kawasaki Brand '15

Low CO₂ Kawasaki Brand'15



Developed in Kawasaki City



Manufactured, supplied in Kawasaki City

Decrease

No change

Increase



Low CO₂ Kawasaki Brand'15 Grand prize

Product & Technology Category



Developed in Kawasaki City

Ajinomoto Co., Inc. L-Lysine (Feed Grade)



Overview and features of product, technology

- Animal feed-use amino acid that enables livestock to intake necessary nourishment more efficiently by supplementing their feed with "lysine", an essential amino acid that tends to become especially insufficient.
- Improving amino acid balance in feed with use of lysine manufactured by applying our latest proprietary biotechnology; and contributing to a reduction in N₂O (nitrous oxide) originating from manure (greenhouse effect is 310 times that of CO₂) as the amount of livestock manure decreases because necessary nourishment can be taken in with less feed.
- Significantly contributing to avoided greenhouse gases reduction (certified rate of contribution to emissions reductions in 2014: 240,000 tons -CO₂ equivalent).

Life cycle CO₂ reduction effect

An approximate 5% reduction in CO₂ emissions in comparison with feed not using lysine



Low CO₂ Kawasaki Brand'15 Grand prize

Product & Technology Category



Developed in Kawasaki City

Sora Total Research Laboratories Co., Ltd Sora silver ion system for the cooling tower



Overview and features of product, technology

- New cooling water treatment system that controls circulating water of cooling towers handling large quantities of water (measures to prevent scales and Legionella bacteria) as installed in factories, offices, commercial facilities, and at other sites with pollution-free, safe silver ions, and so on used in place of chemicals.
 - Cutting down replacement of circulating water to approximately 50% because sterilization can be performed without water contamination.
 - Having expectations for not only a reduction in CO₂ emitted when tap water is made, but also making contributions in water-deficient countries and regions.
- * For example, approximately 12,000 tons of water can be saved in commercial facilities that consume 24,000 tons of water from cooling towers annually.
- Preventing deposition of algae, slime, etc., inside cooling towers, and facilitating control.
 - Low-cost in comparison with chemicals, significantly reducing water rates.

Life cycle CO₂ reduction effect

An approximate 30% reduction in CO₂ emissions in comparison with the conventional method using chemicals.



AXE Co., Ltd. SELBON

Product & Technology Category

Overview and features of product, technology

- Sliding reinforcement bar box that simplifies conventional on-site work processes of temporarily opening provisional floors for moving materials and then reinforcing and closing them during building construction.
- Reducing consumption energy and also realizing shortening of construction period and reduction in industrial waste as welding becomes unnecessary with use of this sliding reinforcement bar box, while usual slab opening work requires on-site welding, etc.



Life cycle CO₂ reduction effect

- An approximate 20% reduction in CO₂ emissions in comparison with the conventional construction method for closing openings by welding reinforcing bars.

Reduction in CO₂ emissions because on-site welding work becomes unnecessary

Reduction in CO₂ emissions involved in disposal because there are no materials to be incinerated



MDI Co., Ltd. BLACK BOX Compact Heat Pump / Chilling Unit

Product & Technology Category

Overview and features of product, technology

- Reducing weight, volume and the amount of refrigerant used, of machine for air-conditioning of buildings, by mounting heat exchangers in which an evaporator, condenser, and sub-cooler are integrated.
- Reducing transportation costs, travel expenses, construction costs, refrigerant gas quantities, and all other field costs as units can be delivered at the minimal costs due to compactness, having a simple structure.



Life cycle CO₂ reduction effect

- An approximate 5% reduction in CO₂ emissions in comparison with an air source chiller of a comparable capacity.

Reduction in CO₂ emissions by downsizing the main body and reducing the amount of refrigerant used



Sanodesign Cushionsan Leaves

Product & Technology Category

Overview and features of product, technology

- Reduction in CO₂ emissions as transportation efficiency is increased because a cushioning effect is produced by loosening one sheet of paper immediately before use.
- Not only cushioning the impact, but also dressing up gifts with a soft atmosphere, natural color, and design of paper.

Life cycle CO₂ reduction effect

- An approximate 15% reduction in CO₂ emissions in comparison with paper packing (finely cut paper).



Reduction in CO₂ emissions by improving the truck loading ratio

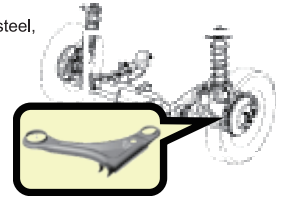


JFE Steel Corporation East Japan Works Keihin NANO-HITEN®

Product & Technology Category

Overview and features of product, technology

- NANO-HITEN® is not only high strength but also good formability to be used for suspensions, chassis and various parts of automotive. It is able to improve in fuel efficiency by reducing automotive weight.
- NANO-HITEN®, high strength and good formability steel, are produced by uniformly nano-size carbides at the steelmaking and the hot-rolling process.



Life cycle CO₂ reduction effect

- NANO-HITEN® is good formability which is easy to make suspension parts without welding and milling, so material wastes and CO₂ emissions are reduced. Life cycle emissions of CO₂ are reduced almost 20% than using the conventional steel.

Reduction in CO₂ emissions by decreasing the amount of steel sheets.

Reduction in CO₂ emissions by decreasing the fuel consumption as reducing the automotive weight.



Toshiba Corporation Komukai Complex C-band solid-state MP weather-radar

Product & Technology Category

Overview and features of product, technology

- Weather radar that realizes high accuracy observation of rainfall conditions, downsizing and light weight, using multi-parameter observation technologies and solid state transmitter technologies.
- Downsizing transmitter (1/3 size of conventional radar), extended lifetime and reduction of power consumption, utilizing solid state devices (electron tube to semiconductor).



Life cycle CO₂ reduction effect

- An approximate 40% reduction in CO₂ emissions compared to the company's previous models.

Reduction in the amount of raw materials by using solid state transmitter technologies.

Reduction in power consumption by using multi-parameter observation technologies and solid state transmitter technologies.



Toshiba Corporation Komukai Complex OCR Letter Sorting Machine "TT-210"

Product & Technology Category

Overview and features of product, technology

- Equipment to transfer collected mail one by one and sort them according to delivery destination.
- Power conservation by adopting low-power-consumption devices and improving efficiency through centralized control.
- Weight reduction by reducing the number of parts, downsizing the parts, and reviewing the structure.
- Reducing work for operators and maintenance personnel by improving the destination reading efficiency.



Life cycle CO₂ reduction effect

- An approximate 25% reduction in CO₂ emissions in comparison with an former product of the same company.

Realizing a reduction in raw materials by reducing the number of parts and downsizing the parts

Realizing power consumption by adopting low-power-consumption devices



Union Sangyo Co., Ltd. Eco-friendly resin "UNI-PELE"

Product & Technology Category

Overview and features of product, technology

- Plant-mixed resin manufactured by mixing pulverized bamboo in existing resin for household goods, daily commodities, and other uses, such as chopsticks, cups, and trays.
- UNI-PELE manufactured by proprietary mixing technology is not only eco-friendly but also exhibits a significant antibacterial function.



Life cycle CO₂ reduction effect

- An approximate 50% reduction in CO₂ emissions in comparison with an equivalently intended ABS resin.

Reduction by using bamboo powder, which is carbon-neutral, as a raw material



Wako Sangyo Co., Ltd. Green Cleaning Wax Recycle Floor Care System

Service Category

Overview and features of product, technology

- Water-scrubbing Floor Care service : Scrub off aged floor wax with just water which is "No Detergent & No Remover" and recover the waste water.
- Waste water Recycling System : Separate water and wax polymer in waste water by adding coagulant and filtration. Dry and sanitize filtrated wax polymer and process it to a raw material of other Cleaning products. Reuse the recovered water for Water-scrubbing Floor Care.
- Maintain "Long Life Facility" and Reduce "Life Cycle Cost of Facility"



Life cycle CO₂ reduction effect

- An approximate 90% reduction in CO₂ emissions in comparison with conventional floor wax management.

Reduction without using a removing agent

Reduction without need for incineration of waste oil and waste plastic



Contact

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