

Environmental considerations at the design and development stages

At Kubota, we are promoting the introduction of products assessment, in which we evaluate the environmental load of the products in their all life cycle such as procurement of raw materials and parts, manufacturing, distribution, using, and disposal at the design and development stages of the products, and the LCA (Life Cycle Assessment) that was internationally standardized in ISO14000 series. We are making an effort to reduce the load to environment.

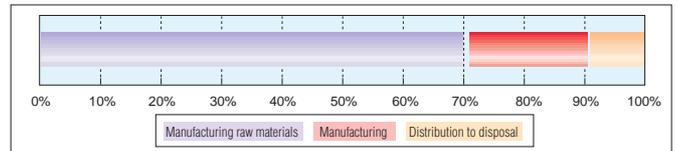
An Example of LCA implementation

This is an example of calculation of discharged amount of carbon dioxide in the whole life cycle of the thin flat roofing material "Colonial NEO." The discharged amount of carbon dioxide of the material is 37.6 kg per 3.3 m² in its whole life cycle, and approximately 70% of it is discharged at the manufacturing stage of the raw material. We are now tackling the selection of the ingredients with low environmental load and the reconsideration of the mixture ratio of them. And we are also intensively tackling recycling the residue material which generates at construction sites.



Colonial NEO

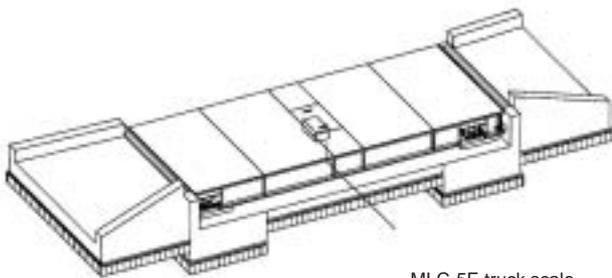
Discharged amount ratio of carbon dioxide by process from raw materials, gradients, manufacturing parts to disposal



Examples of lightweight design(Truck scale)

We have reduced the number of parts in our truck scales by improving the supporting method of deck. As a result, the steel materials in them decreased.

	Conventional type	New type	Reduction rate
Type	MLC-5C	MLC-5E	—
Weight	6034kg	5408kg	10.4%



MLC-5E truck scale

An example of light weight and saving energy design (Ticket-vending machine)

We have increased the number of select buttons, kinds of tickets, in our ticket-vending machines, reducing the weight and electric power consumption.

Item	Conventional type TV2500-40	New type TV2800-64	Reduction rate %
Width	650	600	7.7
Depth	250	250	-
Height	1650	1600	3.0
Volume	0.268	0.24	10.4
Weight	120	85	29.2
Number of parts (piece)	Approx. 5,000	Approx. 2400	52.0
Electric power consumption (W)	80	50	37.5
Maximum number of selection (number of buttons)	40	64	+35.0

Rice polisher

We have changed the layout inside our rice polisher by changing the structure of elevation and so on.

	Conventional type	New type	Reduction rate
Type	K-CR300IDS	K-CR3S/300TS	—
Weight	670 kg	455 kg	32%
Volume	5.2 m ³	2.0 m ³	62%



Conventional type : K-CR300IDS

New type : K-CR3S/300TS



Conventional ticket-vending machine TV2500



New ticket-vending machine TV2800