

Nord Engineering

new waste collection system





EASY SYSTEM

Intelligent, innovative, responsible

Nord Engineering is an Italian Company with over 25 years of experience in the design and manufacturing of automatic collection systems which has eventually led to the development of the easy system.

It consists of an automatic bilateral one-man operated equipment, capable of collecting various types of over-ground and underground containers with low environmental impact.

Nord Engineering's containers represent an innovative concept of waste collection wherein the container units integrate into the urban landscape.

The container can be installed into any type of environment: town squares, streets, boulevards, hospitals, hotels, city centers or in suburban areas or in residential & commercial areas - encouraging recycling of waste.

Waste collection equipment vehicle NORD EASY system is an innovative creation designed to increase the collection productivity, while simplifying the collection process.

Unlike the existing which stops the traffic flow in congested city areas, Nord Easy equipment collects and empties the containers within the limited space, in shortest time and also reduces collection frequency.

This single operated system automatically identifies, collects, hauls and empties containers giving very little or no scope for damages and errors to the equipment or containers.

Ideal solution for a developing city.

Further benefits are, ability to have containers everywhere, reduction of maintenance costs by lowering the probability of unexpected errors and help streamlining of work time more efficiently.

OUR PHILOSOPHY

Nord Engineering has been directly present on the Italian market as well as on various foreign markets for years.

Nord Engineering addresses to Municipalities, consortiums among private, public and local authorities.



EASY UNDERGROUND

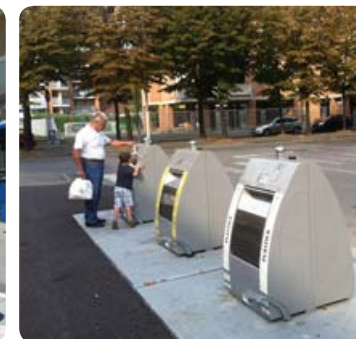
They are technologically advanced and innovative underground containers, for differentiated collection of all types of waste with a great capacity: 3 up to 5 cubic meters.

They are integrated into a prefabricated structure that is totally underground. They do not need any electric and/or oil hydraulics use.

Each container is composed of a turret for the waste and underground-prefabricated structure, to hide the unpleasant and perturbing aspects generated by traditional containers. Thanks to the particular structure, they integrate with the surrounding, improving the urban aspect.

By using an electronic system, it is possible to calculate the amount of waste introduced in each single container. The generation of bad smells and bacteria is notably reduced, as is the noise produced by introducing heavy waste such as glass. The container is modular and therefore can create waste depots according to necessity.

Their structure is particularly functional in neighborhoods with a high population density and/or vertical development. Pleasant, and modular, they do not generate architectural barriers, but favor accessibility in maximum safety for any category of user.



Easy SEMI UNDERGROUND

The semi underground containers, with quadrangular shape, are manufactured with the same design and modular concept of the underground ones with two fundamental differences:

- they don't have a turret for the introduction of waste ;
- they develop under the street surface for two thirds of their total volume

The external body of the container is usually in concrete but can be coated or treated with different materials in order to adapt it to the environment in which it's placed.

These containers, unlike the underground ones, allow the personalization of the mouths for the waste introduction and can be used as support to market places, stores, commercial centers or other business producing high quantities of waste.

Ideal for high density urban areas and/or vertical development, the semi-underground containers, thanks to their structure, are also suitable to the waste collection in parks, gardens and natural areas.





NEW CITY Easy

Represent the latest design project implemented in the Nord Engineering's EASY system, conceived expressly for the City and for domestic users: they have high volume (2250 lt., 3000 lt., 3750 lt.) and they are characterized for their openings for waste introduction which can be broadly personalized following customers' needs and according to the waste that has to be introduced.

Thanks to the high volumes, it is possible to reduce drastically the number of containers present in the streets. Moreover to move these containers strenuous and risky maneuvers by the operators from the ground are not needed anymore.

Some containers can be equipped with a controlled access introducing door, in order to reserve the use of the container only to a category of users (residents or particular customers) and it is also possible to close the containers on one side.

Special alignment bars ensure containers perfect positioning in the course of time.

The large dimensions of stickers on the containers contribute to a more effective and accurate communication to users.



Eco-point made with street containers NEW EASY CITY in Florence (at the top and in bottom right) and in Venaria Reale (Turin). Depending on their disposition, it is possible to minimize the surface area occupied by the containers. In case of disposal of containers along heavy traffic roads, it is possible to close them on one side avoiding any risk to users.



They are containers for big volumes: from 5000 to 7000 liters. Having large openings, they can simply and tidily collect production and packaging scraps in industrial areas and carry out selected collection (paper, cardboard, glass, plastic) in pre-urban areas or on the outskirts.

With particular cubic shape the lower part of the container prevents eventual leaks of liquids and allows the disposition of the containers in row forming dedicated Eco points.

Designed in function of the kind of material to be introduced, they allow a better optimization of the waste collection and of the consequent costs.





EASY EQUIPMENT

The future of your city is our present

It is an innovative lifting system at your city service, having a bilateral, automated, mono-operator process for collecting differentiated urban waste in stationary containers. One of the peculiarities of the mechanism is the coupling device, named "F-90", situated on the end part of the lifting system that grants the hooking and unload of all the range of containers manufactured by Nord Engineering. Collection operations are carried out under complete automation by the operator from the truck cab.

The cycle is continuously checked and the images are shown on a monitor to guarantee maximum control and maximum safety. for the operator, who is not exposed to danger. Thanks to the versatility and singularity of Easy System, any type of waste can be collected with different container models that are the most suitable to the urban use context. The benefits are evident: the possibility to be able to collect the containers from both sides of the vehicle, allows the containers to be placed strategically according to different urban requirements.

The efficiency of an automatic work cycle grants:

- the elimination of human error and hazards ;
- maintenance cost reductions ;



- perfectionism of the productivity with a rational and reliable method ;
- maximum care and rationality in tidy and efficient waste collection points.

It is also possible to realize reduced dimension equipment, that are required in some urban contexts, with narrow winding roads, where big capacity vehicles cannot pass.

The available widths are: mm 2500/2300/2100/1900.



Briefly EASY EQUIPMENT

Easy is:

- safety: no contact is required between operator and containers, all operations are made exclusively from the drive cab ;
- velocity and time saving: the working cycle stop & go is of about 60/40 seconds for the road containers and of about 90 seconds for the underground containers ;
- efficiency: the system allows high economic savings compared to the collection with traditional containers ;
- intelligence: the possibility of collection from both sides of the containers gives flexibility to the collection service, the containers can be placed following urban décor standards and no more as a result of the town needs ;
- innovation: with only one equipment it is possible to collect different kind of containers, road containers, underground and semi-underground, industrial ;
- responsibility: no risk of oscillation or displacement of the containers during the unloading operations.





EASY EQUIPMENT

Briefly

Easy is also:

- Automation and technology: the operations programming allows to prearrange a working program which optimizes running times ;
- ease: all operations are effected by means of a console and a joystick ;
- possibility: to unload also wheeled containers up to 1100 liters with the lateral bin tipper device and to operate also on sloping streets.



- Versatility: with the containers washing machine equipment it is possible to wash any kind of container.
- Personalization and flexibility: on the market different models are available : 2500/2300/2100/1900 with fixed chassis or roll-off and there are several possible combinations.

Ad hoc solutions can be studied for any requirement..

EASY model	1900			2100			2300			2500		
Type of box combined to the EASY	Compactor	Open box	Containers washing machine	Compactor	Open box	Containers washing machine	Compactor	Open box	Lavacontentori	Compactor	Open box	Containers washing machine
J2 EASY							✓	✓		✓	✓	
							✓	✓	✓	✓	✓	✓
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	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓



CONTAINERS WASHING EQUIPMENT

The containers washing machine equipment has been studied and realized for the Nord Engineering containers New Easy City 2250, 3000 and 3750 liters sanitation, both internal and external, and for the internal sanitation of Easy underground and semi-underground containers of 3 and 5 m³ and 5 m³ Cube containers.

The containers washing machine has been conceived as an automatic mono-operator equipment and can be fixed to the chassis or roll-off, allowing to work in total safety from the vehicle cab and with modalities very similar to those of the containers collection and unload.

The containers washing machine is available in the versions Easy J2S/2300/2500 roll off and FT 2100/2300.

All the hydraulic linkages are high pressure.

With these equipments the periodic sanitation for the waste containers is guaranteed, ensuring their preservation and avoiding bad smell diffusion.



Above: Venaria Reale (Turin) containers washing machine equipment operating by an Eco-point in a row composed by containers of the New Easy City model.

Photos at the top: other views of the equipment (model 2100 FT and J2S/2500).