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# *CASE HISTORY – Hotel Catering Services*

| STRUCTURE |
|---|
| Hotel Splendide Royal |

| CUSTOMER DATA | | |
|---|---|---|
| **Luogo** | **Dimensioni** | **Tipologia** |
| Lugano (CH) | big dimensions | luxury hotel with international clientele - Home to social events. (Restaurant awarded with a Michelin star, 16/20 GaultMillau points and becoming part of the exclusive selection of Les Grandes Tables de Suisse |




| PROBLEM |
|---|
| o It is of primary importance to eliminate bad smells from the waste collection and storage area (alternatively they had evaluated the purchase of a refrigerated cell, aborted due to lack of space and probable breakages and maintenance in high season)<br>o Improve the hygienic and sanitary conditions of the waste washing and storage environments (of primary importance)<br>o Reduce the use of staff for the frequent washing, conditioning and sanitization of bins dedicated to the collection of wet waste (large quantities of orange peel, various fruit scraps, fish and remains of stews, bones, etc.)<br>o Reduce the presence of insects and wild animals (mice, cats and birds) that nest near the organic waste containers<br>o Reduce costs due to the use of bags for the collection of wet waste. In Switzerland you pay X Francs per bag. ex. Lugano 3.45CHF for a 110L bag.<br>o Finding a sustainable solution in line with the policy of the hotel management which proposes itself as an Eco-sustainable structure capable of reducing the CO2 impact produced by its business such as the use of zero-kilometer vegetables grown in its own garden. |

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## STRUCTURE DESCRIPTION

Cosmopolitan and elegant structure, located on the lakeside of the beautiful Swiss city of Lugano. Hotel suspended between past and future, without forgetting its great tradition of hospitality but with a contemporary and avant-garde vision of hospitality.

I Due Sud is the gastronomic restaurant of the Splendide, born in 2018, in just two years this little gem of haute cuisine has conquered the hearts of the most prestigious international gastronomic guides, being awarded **the Michelin star, 16/20 GaultMillau points** and entering be part of the exclusive selection of **Les Grandes Tables de Suisse**.




The winning philosophy of the restaurant, the result of the talent and personal history of **chef Domenico Ruberto**, is based on a unique culinary concept: the meeting of the flavors of Southern Italy with those of Southern Switzerland

All the preparation activity uses first choice products with particular attention to vegetables, grown at zero km in the hilly land owned by the hotel itself.





All the daily preparation waste produced is collected in small bins and progressively loaded into the EFR100 RS machine equipped with a mincing chamber for large bones such as pork shank, ribs and Florentine bone, osso buco, etc.

The structure manages an average of 150-180 breakfasts and meals with an average daily deviation of just under 100Kg and sometimes higher on weekends, requiring the use of a second daily cycle of the machine.

- Type of organic waste — Significant amount of orange / lemon peel from breakfast and fish / shellfish / meat waste from meals
- Average daily amount of organic waste produced — 90-130 Kg

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## ORGANIC WET WASTE COLLECTION SERVICE

The collection is managed by the cantonal company according to the regulations in force in the Canton of Ticino (Southern Switzerland).




The frequency was bi-weekly with a cost imposed per bag of 3.45 CHF (about 3.2 €).

Average use of 4 bags / day, about 1,460 bags / year and an annual cost of CHF 5,037 (€ 4,600)

## SOLUTION ADOPTED

Purchase and use of a no. 1 EFR100 RS EcoSwiss machine to manage all the organic wet waste produced daily by the structure.

Installation of the machinery in the washing area, adjacent to the preparation area represented by the main kitchen of the hotel. The little condensed water produced is evacuated into the nearby drain of the professional dishwasher (see following photos).









Average daily quantity of resulting reusable product: 10-15 Kg

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## Impact on waste with use of EFR

- Kg of annual organic waste produced: 35'500 - 47'500 Kg
- **o Reduction of organic waste produced / year about 70%**
- **o Less kg of organic waste / year between 25,000 - 33,200Kg**

## List of Advantages and Economic Savings (quantifiable)

- Total elimination of bad smells around the entire structure **value that cannot be quantified but of great impact / image for the structure and its prestige; fundamental aspect for choosing the purchase of machinery**
- Total elimination of the need to use a refrigerated cell for the storage of organic waste (100%); **value of approximately € 10,000**
- Total elimination of the maintenance and repair costs of the refrigerated cell; **value equal to € 1,200 / year**
- Reduction of personnel costs for cleaning, reconditioning and sanitizing the refrigerated area **(about 80%)**; **value equal to € 1,200 / year**
- Improvement of the decor and general cleaning of the external and internal area of the structure; **value not quantifiable but of great impact / image**
- Almost total elimination of the costs of disposing of organic waste, thanks to the elimination of the purchase and use of municipal red bags in charge of collection (3.45 CHF / each) **for a value of approximately 4'500 CHF / year (4'100 €)**



One-off savings: **€ 10,000** (refrigerated cell)

Average-annual savings: about **€ 6,500-8,000** (and residual use as a mixed composted soil conditioner)

Clean working environment, free of leachate and unpleasant odors: **The image for the hotel towards its guests is priceless!**

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# Positioning and use of machinery: kitchen washing area













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## Use of standard waste loading chamber and shredding chamber for large bone waste (pork shank, osso buco, Florentine, etc.)





standard reject load (direct access

to the treatment / drying chamber)



to the bone load in the pre-shredding chamber
with direct transfer of the mince to the treatment / drying tank





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# Detail of operation of the shredding chamber of large-sized bone scraps such as pork shank, osso buco, fiorentina, etc..

**The duration of the grinding depends on the quantity and shape of the bones, it lasts from a few seconds to a couple of minutes if the chamber is filled to the maximum capacity.**







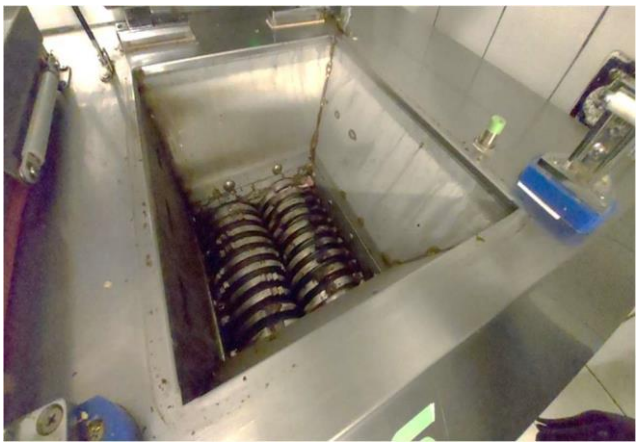



Note: the images were taken avoiding the safety of the machine for demonstration purposes (normally and for safety reasons, during the work and shredding cycle, obviously the machine only works with the door closed!)

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End of cycle and final residual discharge from the EFR100 RS tank







View of the inside of the tank at the end of the cycle

Beginning of draining of the tank into the collection container

The resulting dry solid residue is largely used as a valid mixed soil improver for the vegetable gardens cultivated at Km Zero in the hilly land owned by the structure itself and in the garden adjacent to the hotel.

**Eco-sustainable solution aimed at pursuing the reduction of CO2 emissions**.