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WHY NATURA SYSTEM

Natura System is an innovative process to purify wastewater from cleaning cycles, in order to make it reusable for an infinite amount of additional cycles.



A VALIDATED PROCESS

The Natura System functioning process has undergone validation testing by the Department of Environmental, Landscape and Infrastructure Engineering of the Turin Institute of Technology.

The positive lab test results have highlighted the possibility of infinite

Reuse cycles of the purified water



**POLITECNICO
DI TORINO**

Dipartimento di Ingegneria
dell'Ambiente, del Territorio
e delle Infrastrutture

Ricercatore in Ingegneria Sanitaria Ambientale

Barbara RUFFINO

**RELAZIONE FINALE DELL'ATTIVITÀ DI CONSULENZA FINALIZZATA
ALLA VERIFICA DELL'EFFICACIA DEL PROCESSO DENOMINATO
"NATURA SYSTEM"**

The study performed in the month of February has shown that:

1. The purification system named Natura System maintains its efficiency in removal of total suspended solids (TSS) even after a high number of work cycles. In all cases examined, the efficiency of TSS removal always reaches at least 90%;
2. The additional treatment and reuse cycles of water for surface cleaning in industrial contexts do not lead to a deterioration of the water's characteristics;
3. It is strongly recommended that, after the time necessary for treatment, the water be separated from the sludge and stored in a specific container until the following use cycle;
4. Based on real-life construction site results, the use of the Natura System purification process would allow a reduction in required clean water, and an equivalent volume of wastewater to dispose of, of about 16, 35, and 100 m³/year for small, medium, and large sites respectively. The wastewater to dispose of would be reduced to about 1, 2, and 5 m³/year.

ADVANTAGES



Water savings due to water reuse



Reduction in wastewater to under go treatment process

ADVANTAGES



Reduction of transportation to and from wastewater disposal facilities



Tangible cost savings in Euros for wastewater treatment



Reduction in pollution of public water (due to incorrect wastewater disposal)

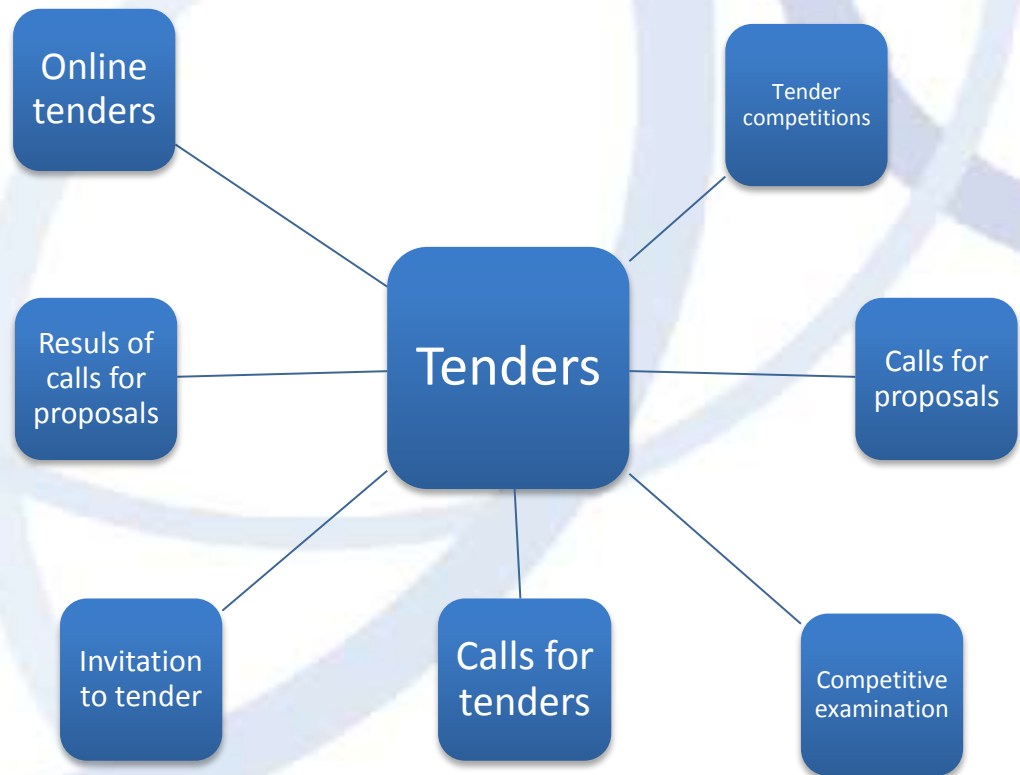


Reduction in CO₂ emissions due to a decrease in transportation towards purification facilities



ONE MORE GREAT ADVANTAGE

Natura System is an innovative process that allows its users to achieve high scores in Tenders for Company Service Providers



PROCESS COMPONENTS



Natural and
ecological
detergents



Scrubber
driers



Combined-
cycle waste
disposal



Combined-cycle
purification

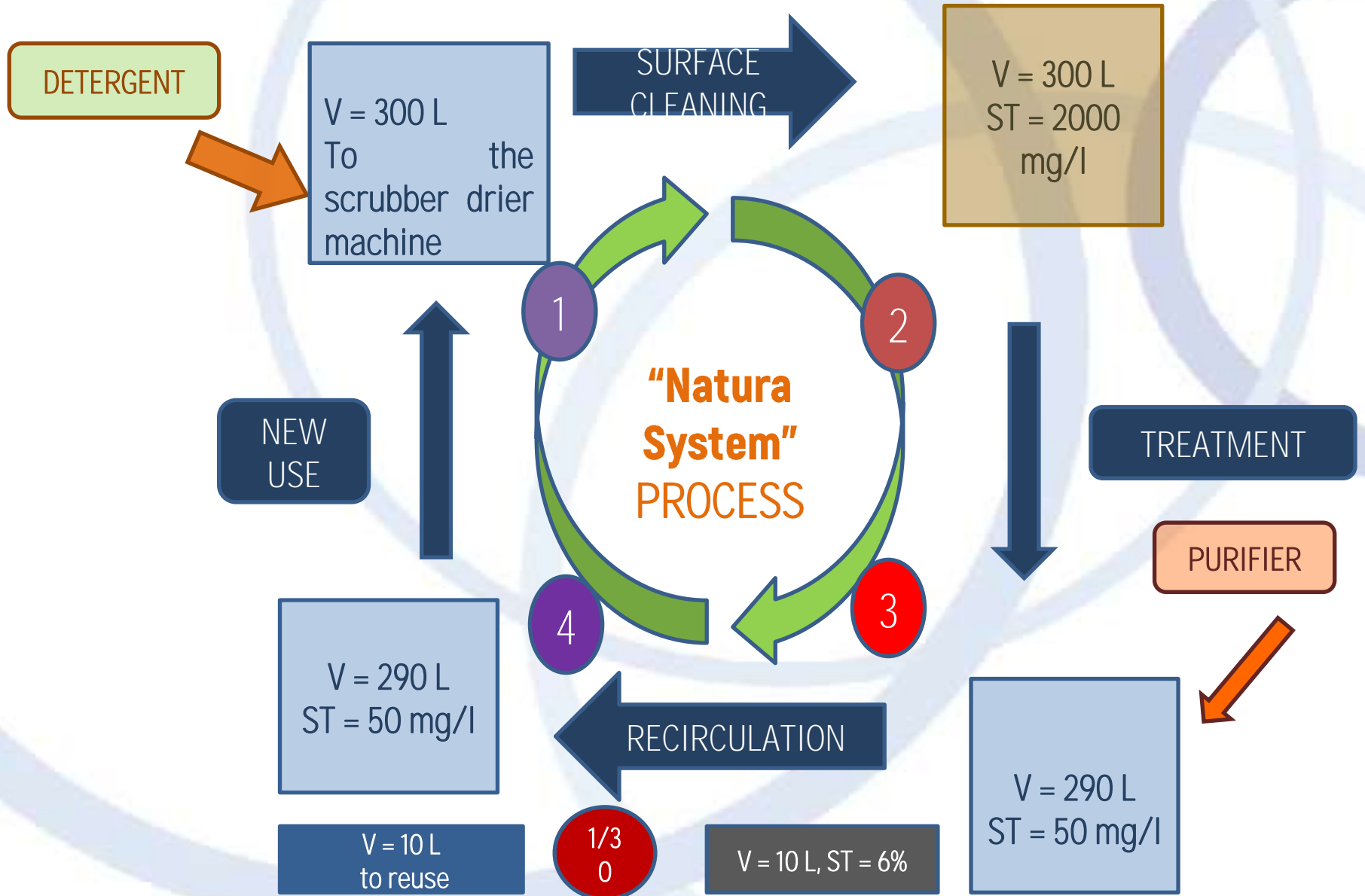
NATURA SYSTEM: **C**ombined cycle for disposal



COMBINED CYCLE FOR PURIFICATION



PROCESS FLOW CHART



EXAMPLE OF SMALL CONSTRUCTION SITE IN CALCULATION OF SAVINGS

| Quantity | Machine | Avg. daily consumption (liters) | | Avg. working days | | Annual project cycle (months) | Wastewater to dispose of with traditional system (liters) | % of wastewater dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | TOTALE Acqua reflua da smaltire con ciclo tradizionale (Litri) | TOTAL % of water dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | N° of 1000-liter water tanks to dispose of |
|----------|---------|---------------------------------|---|-------------------|---|-------------------------------|---|--|---|--|---|---|--|
| 1 | Onyx | 23 | x | 22 | x | 12 | 6072 | 303 | 5769 | 16632 | 831 | 15801 | 16 |
| 1 | RUBY 55 | 40 | | | | 10560 | 528 | 10032 | | | | | |

EXAMPLE OF MEDIUM CONSTRUCTION SITE IN CALCULATION OF SAVINGS

| Quantity | Machine | Avg. daily consumption (liters) | Avg. working days | Annual project cycle (months) | Wastewater to dispose of with traditional system (liters) | % of wastewater dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | TOTALE Acqua reflua da smaltire con ciclo tradizionale (Litri) | TOTAL % of water dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | N° of 1000-liter water tanks to dispose of |
|----------|----------|---------------------------------|-------------------|-------------------------------|---|--|---|--|---|---|--|
| 1 | Coral 65 | 100 | X 22 | X 12 | 26400 | 1320 | 25080 | 36.960 | 1.848 | 35.112 | 35 |
| 1 | RUBY 55 | 40 | | | 10560 | 528 | 10032 | | | | |

EXAMPLE OF BIG CONSTRUCTION SITE IN CALCULATION OF SAVINGS

| Quantity | Machine | Avg. daily consumption (liters) | Avg. working days | Annual project cycle (months) | Wastewater to dispose of with traditional system (liters) | % of wastewater dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | TOTALE Acqua reflua da smaltire con ciclo tradizionale (Litri) | TOTAL % of water dissipated throughout working cycle (5%) | TOTAL wastewater to dispose of with traditional system (liters) | N° of 1000-liter water tanks to dispose of |
|----------|--------------|---------------------------------|-------------------|-------------------------------|---|--|---|--|---|---|--|
| 1 | FLOORPUL 100 | 250 | X 22 | X 12 | 66000 | 3300 | 62700 | 109.560 | 5.412 | 104.082 | 104 |
| 1 | SAPPHIRE 85 | 120 | | | 31680 | 1584 | 30096 | | | | |
| 1 | RUBY 55 | 40 | | | 10560 | 528 | 10032 | | | | |

EXAMPLE TANKS SAVED IN 1 YEAR OF USE

With traditional system
104 wastewater tanks to dispose of



With Natura System
5 wastewater tanks to dispose of

