

A photograph of an industrial facility. In the foreground, there is a large white machine with a control panel on the left side. The control panel has several buttons and a small display. The machine has the ECOTEAM logo on its top right. To the left of the machine, there is a blue bucket and some hoses. In the background, there are more industrial equipment and a large tank. The ceiling has fluorescent lights.

USED EMULSIONS



ECOTEAM[®]
Environmental Technologies



RULES

The definition “used oils” means an oily solution with a maximum percentage of 15% water .

The oily emulsions (oil concentration 3-5%) produced in the mechanical works, due to the concentration process can be turned into “used oils” and therefore given for free to specialized companies for the disposal.



ECOTEAM solution

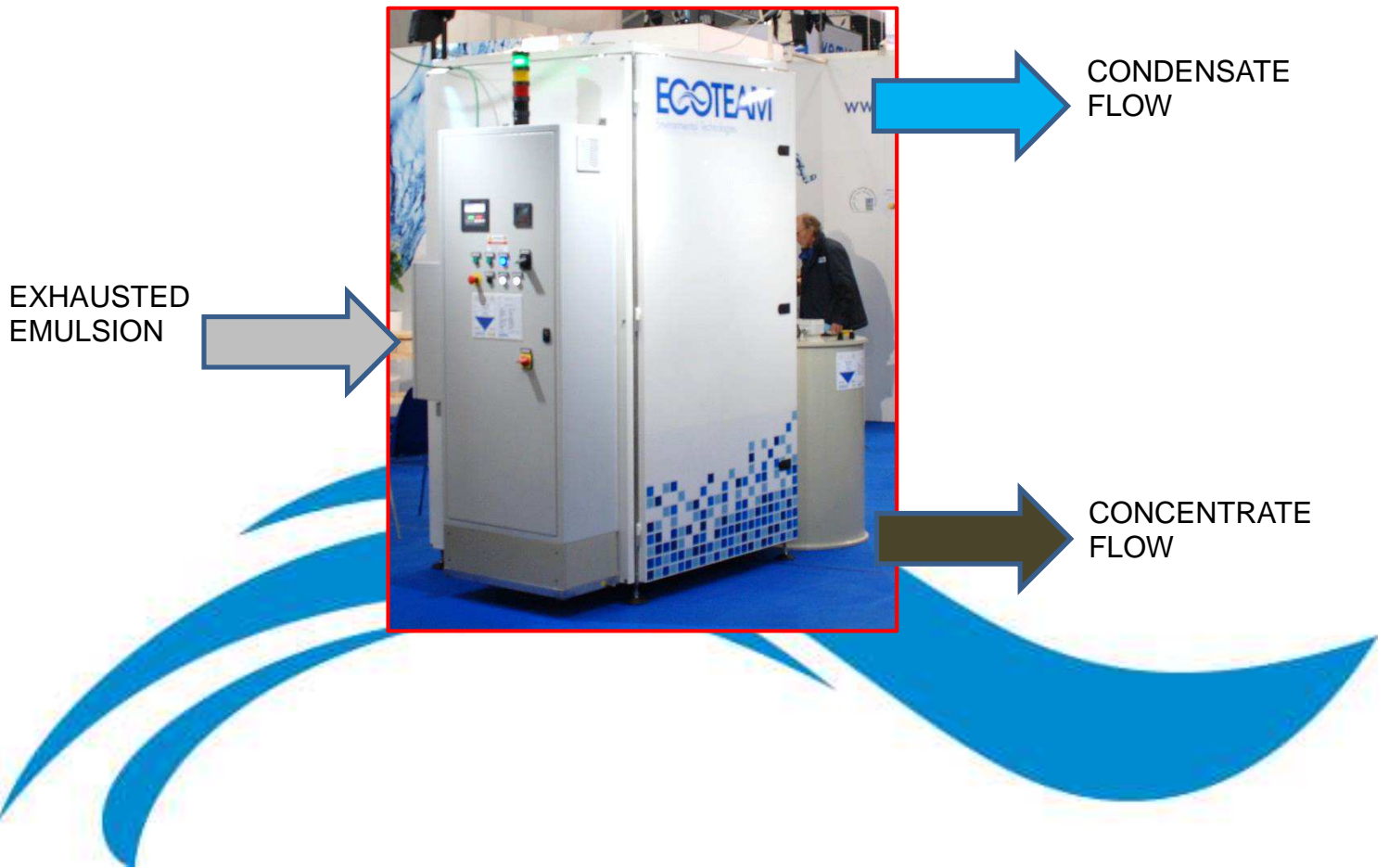
Our experience at your disposal for the best solution:

- **Primary separation section**
- **Primary separation section ECOIL lamellar packs**
- **ECOCV evaporation plant low energy consumption**
- **Secondary separation section ECOIL lamellar packs**
- **Storage and reuse of the condensate**
- **Storage and disposal of the concentrate**

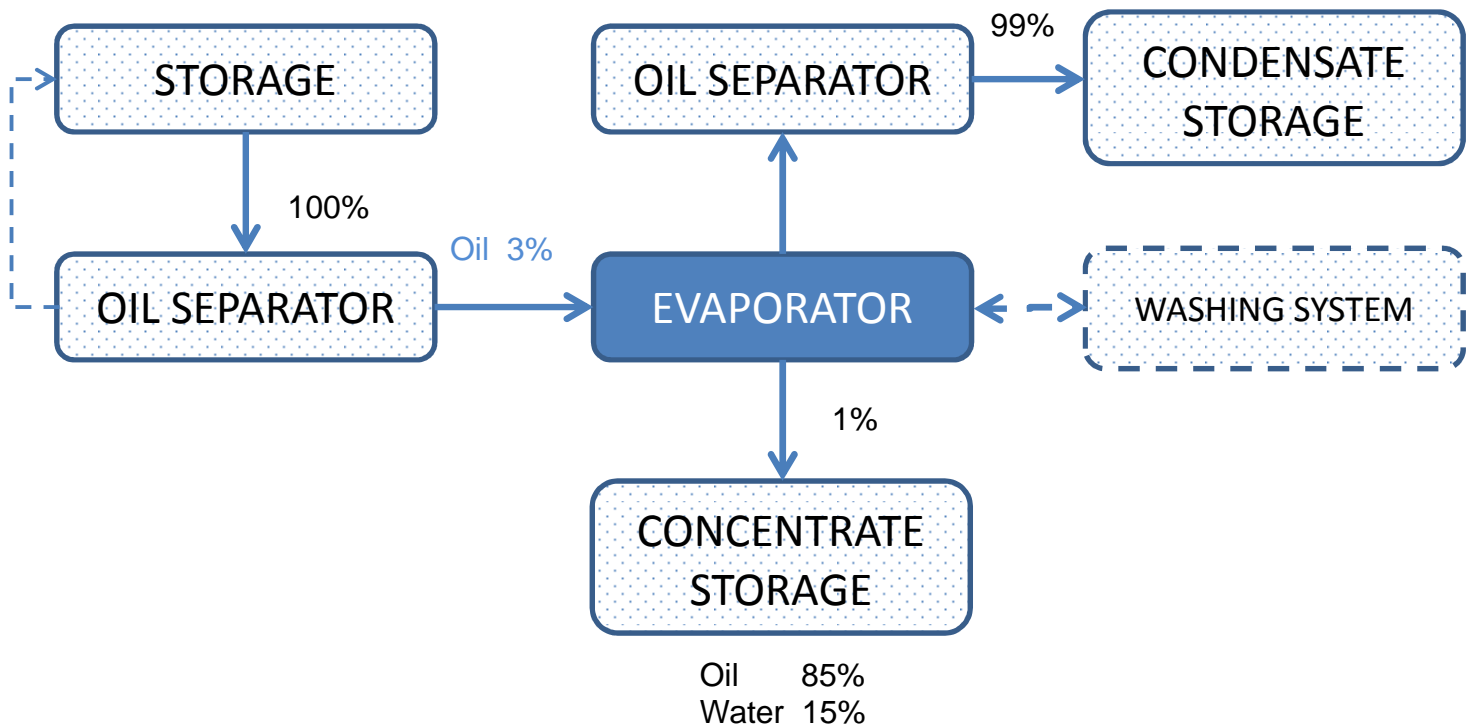
CASE 1	WASTE	CONDENSATE	CONCENTRATE
pH	6.4	7.6	7.0
Oil [%]	3	0	85
COD [ppm]	12.172	1.099	
Conductivity [μ S/cm]	3.220	496	

OUR WORK AT YOUR SERVICE

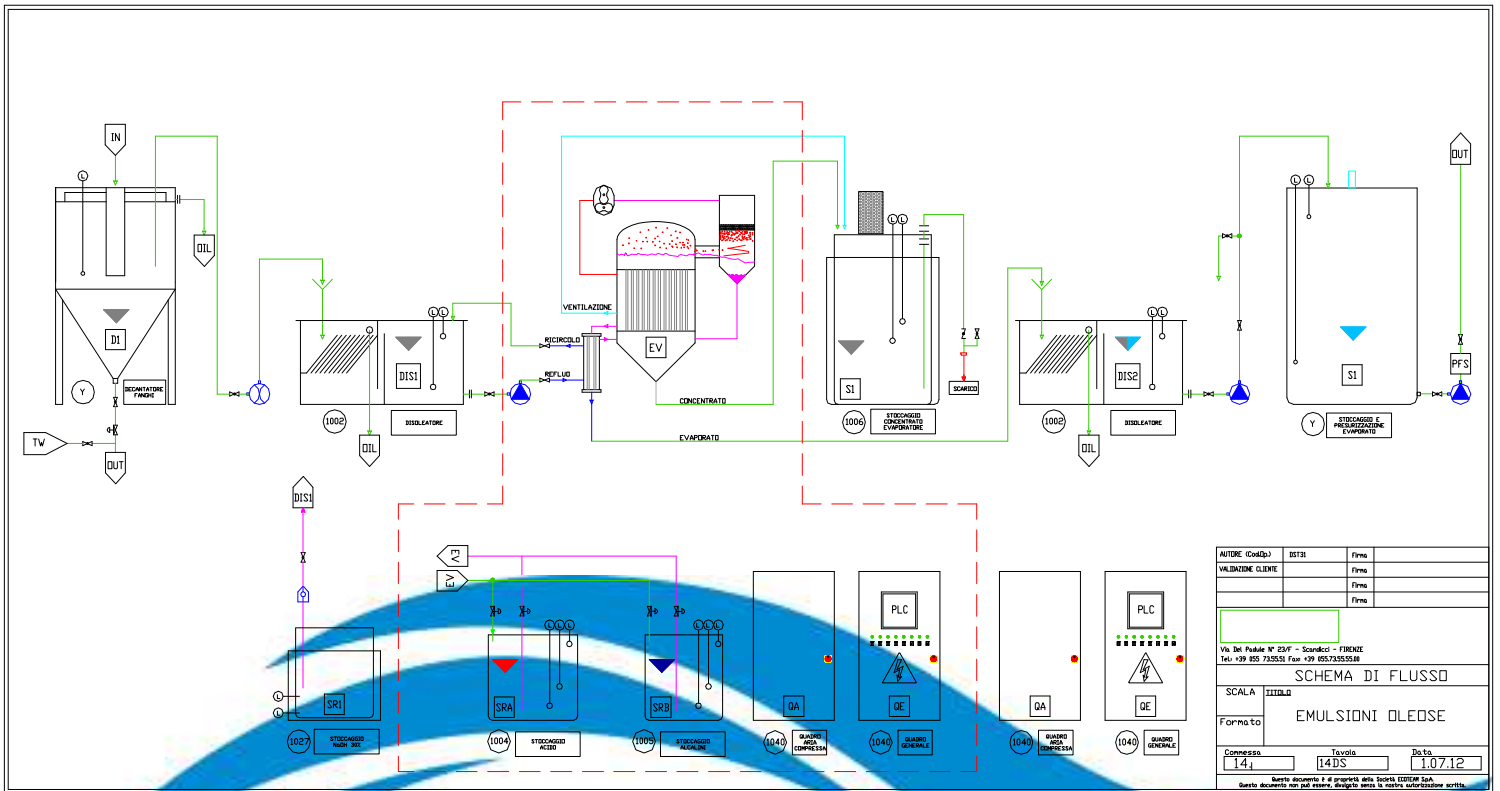
THE PART OF THE SYSTEM



BASIC SCHEME



FLOW CHART



THE HART OF THE SYSTEM



EVAPO-CONCENTRATOR

ECOCV is an evapo-concentrator for water based solutions, with Mechanical Vapour Recompression (M.V.R.) technology, whose operating cost is ≈ 50 kW/m³

SYSTEM MANAGEMENT

ECOCV functions are automatically driven by a PLC, thus minimizing the operator intervention. The automatic washing system allows to maintain the total efficiency of the production.

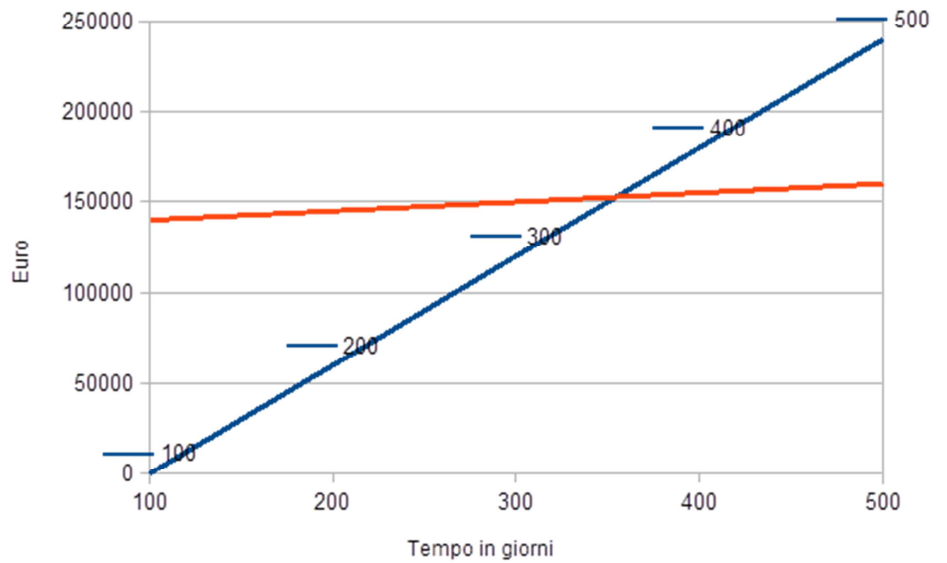
AUTORE (codEd)	EST3	Firma	
VALIDAZIONE CLIENTE		Firma	
		Firma	
		Firma	
Via De' Pulzelli N° 23/P - Scandolo - FIRENZE Tel. +39 055 733553 Fax +39 055 7335534			
SCHEMA DI FLUSSO			
SCALA	1:100		
Forma to	EMULSIONI OLEOSE		
Comessa	14	Tavola	14DS
		Da to	1.07.12

Questo documento non può essere, designato anche in nessun'autorizzazione scritta.

OUR WORK AT YOUR SERVICE

R.O.I.

Case 1
6.000 lt./day exhausted emulsion



LIQUID WASTE DATA		
Waste production	m3 / day	6
Actual disposal cost	€ / m3	80
Working day / year		220
Yearly disposal cost	€	105.600
MECHANICAL VAPOUR RECOMPRESSION (MVR) OUTPUT		
Distillated water	%	90
Concentrated waste (C.W.)	%	10
CONCENTRATED WASTE DISPOSAL COST		
Daily concentrated waste	m3	0,6
C. W. disposal cost	€ / m3	0
Yearly C.W. disposal cost	€	0
ECOTEAM MVR OPERATING COST		
		ECOCV
Daily evaporation capacity	m3	6
Kw cost	m3	0,12
Energy requirement x m3	Kw	50
Total year cost	€	7.920
Chemical costs	€/year	2.000
Maintenance cost	€/year	1.500
Yearly treatment cost	€	11.420
YEARLY SAVING	€	94.180
R.O.I.	Year	1,34



ECOIL

**Oil separation implant
lamellar packs**



**Exhausted oil storage
with safety tank and
emissions treatment**





Environmental quality in its purest form

The protection of the environment is a global project

Mission

We solve problems in a certain and definitive way

Vision

We have Italian roots and international perspectives

Research

We invest in the present as we believe in the future

Post sale

We are always on our customer's side

