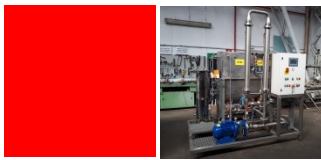




ULTRAFILTRATION
UNIT
MOD. ZEFIRO

WITH AN ATTENTIVE
EYE TO NATURE





ZEFIRO ULTRAFILTRATION UNIT

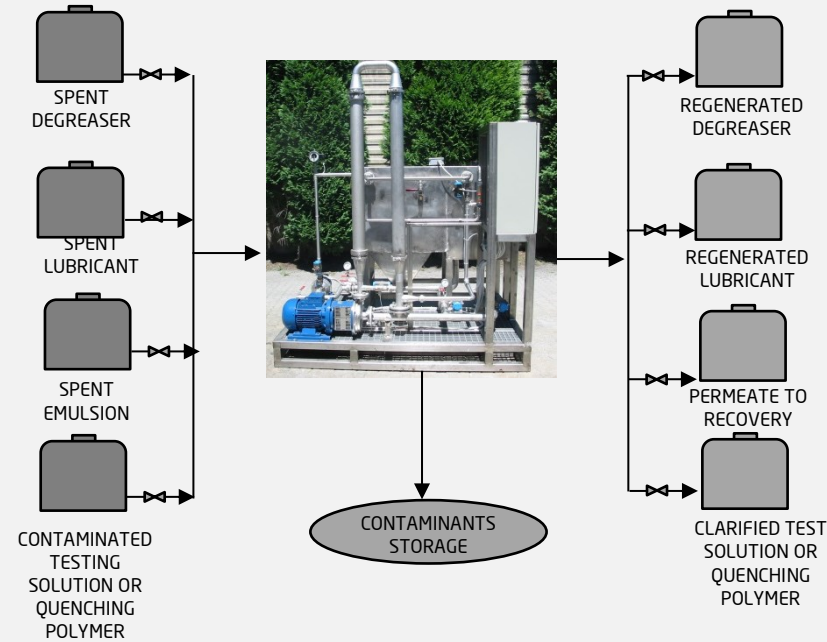
ZEFIRO UNIT MAIN APPLICATION IS THE REDUCTION OF COSTS, DERIVING FROM THE DISPOSAL OF CHEMICALS, IN MEDIUM SIZE METALLURGICAL INDUSTRIES.

THE UNIT HAS BEEN DESIGNED IN ORDER TO PERFORM SEVERAL FUNCTIONS, TRADITIONALLY PERFORMED BY SPECIFICALLY DESIGNED PLANTS WHEN JUSTIFIED BY THE VOLUMES, AS:

- DEGREASERS REGENERATION
- WATER SOLUBLE LUBRICANT REGENERATION
- WASTE EMULSION TREATMENT
- HYDROTEST SOLUTION CLARIFICATION

APPLICATION

TYPICAL CONFIGURATION



CHARACTERISTIC

MODEL	TREATMENT CAPACITY L/G	DIMENSIONS	ADSORBED POWER (KW/H)	SURFACE MEMBRANE (M2)
ZEFIRO Z100	1500	2200 X 1400 X 2500	5,20	1,05
ZEFIRO Z200	3000	2200 X 1400 X 2500	5,20	2,10

THE UNITS ARE AUTOMATIC, ARE STARTED WHEN THE SPENT STORAGE TANK IS FULL AND STOP AUTOMATICALLY AFTER THE REGENERATION AND CONCENTRATION OF POLLUTANTS PROCESS.

BEFORE STOPPING, THE UNITS PROCEED WITH THE TRANSFER OF THE CONCENTRATE AND THEN WITH A CHEMICAL AND MECHANICAL WASHING OF THE HYDRAULIC CIRCUIT AND MEMBRANES SO THAT THE UNIT IS READY FOR A NEW TREATMENT CYCLE.

THE CONSTRUCTION IS TOTALLY IN STAINLESS STEEL AND THE EQUIPMENT AND COMPONENTS USED ARE OF TOP QUALITY BRANDS.

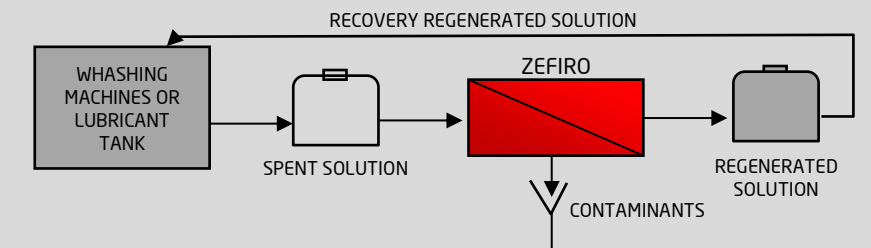
NOTE: IN CASE OF NEED, MODELS WITH HIGHER TREATMENT CAPACITIES ARE AVAILABLE. IN THIS CASE, HOWEVER, IT IS GENERALLY ADVISABLE TO GO TOWARDS DEDICATED MACHINES OPERATING CONTINUOUSLY SUCH AS MINERVA FOR THE REGENERATION OF DEGREASING, SEPAR FOR THE TREATMENT OF SPENT EMULSIONS AND ATHENA FOR THE REGENERATION OF WATER-SOLUBLE LUBRICANTS AND THE CLARIFICATION OF THE TEST TANKS.

THE MAIN OPTIONS ARE:

- TANKS FOR THE STORAGE OF SOLUTIONS TO BE PROCESSED, PURIFIED SOLUTIONS AND ACCUMULATION OF CONCENTRATES TO BE DISPOSED
- REALIZATION IN VERSION 4.0

OPTIONS

REGENERATION OF DEGREASERS AND WATER SOLUBLE LUBRICANTS



OPERATING PRINCIPLES

- THE SPENT DEGREASING (OR LUBRICATING) SOLUTION IS STORED IN A DEDICATED TANK OR IBC
- THE ZEFIRO UNIT REGENERATES THE SOLUTION BY CONCENTRATING THE CONTAMINANTS TO BE DISPOSED OF IN A VOLUME OF LESS THAN 10% OF THE INITIAL
- THE REGENERATED DEGREASING (OR LUBRICATING) SOLUTION IS REUSED IN THE PROCESS

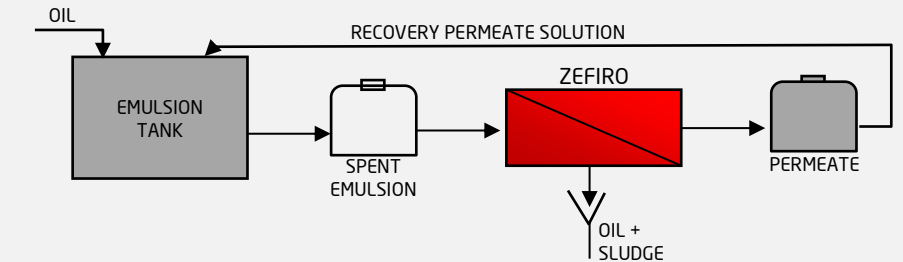
MAIN ADVANTAGES

- 70% REDUCTION IN DEGREASER / LUBRICANT CONSUMPTION
- 90% REDUCTION IN TREATMENT / DISPOSAL COSTS

PROCESSABLE PRODUCTS

- ACID, NEUTRAL AND ALKALINE DEGREASERS
- WATER SOLUBLE LUBRICANTS / TEMPER FLUIDS / SKINPASS / GRINDING

TREATMENT OF SPENT EMULSIONS



OPERATING PRINCIPLES

- THE SPENT EMULSION IS STORED IN A DEDICATED TANK OR IBC
- THE ZEFIRO UNIT PROCESSES THE EMULSION BY SEPARATING IT INTO TWO FLOWS, A PERMEATE AND AN OIL CONCENTRATE
- THE PERMEATE, ADDED BY THE LUBRICANT, IS REUSED

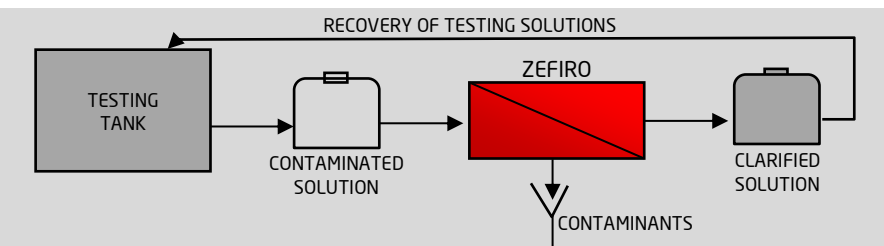
MAIN ADVANTAGES

- 90% REDUCTION IN TREATMENT/DISPOSING COSTS

PROCESSABLE PRODUCTS

- METALWORKING FLUIDS
- PIPE AND ROLLING MILL EMULSIONS
- DIE-CASTING RELEASE AGENTS
- HEAT TREATMENT FLUIDS
- COMPRESSOR CONDENSATE

CLARIFICATION OF TESTING SOLUTIONS OR QUENCHING POLYMER



OPERATING PRINCIPLES

- THE CONTAMINATED SOLUTION, NO LONGER TRANSPARENT, IS STORED IN A DEDICATED TANK OR IBC
- THE ZEFIRO UNIT CLARIFIES THE SOLUTION BY CONCENTRATING THE CONTAMINANTS TO BE DISPOSED OF IN A VOLUME OF LESS THAN 10% OF THE INITIAL
- THE REGENERATED CLARIFIED SOLUTION IS REUSED

MAIN ADVANTAGES

- 80% REDUCTION IN THE CONSUMPTION OF PRODUCT
- 90% REDUCTION IN TREATMENT / DISPOSAL COST