

**Ultrafiltration systems to regenerate the spent solutions  
from photoresist and soldermask processes**



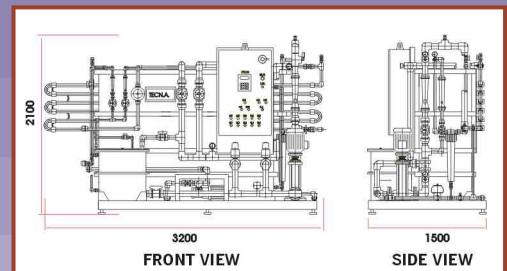
TECNA UF-DEV - mod. 10TA



Automatic rinses



Automatic spongeballs system



MODEL	CAPACITY
DEV 10TA	200 lt/h
DEV 2X10TA	400 lt/h
DEV 3X10TA	600 lt/h

**ULTRAFILTRATION**

Ultrafiltration is a physical filtration process with highly specialized membranes that allows to separate the dissolved photoresist from the developing solution.

**THE PROCESS**

The developing reaction may be represented as:  
 $Na_2CO_3 + R-COOH = NaHCO_3 + NaOOCR$

The Ultrafiltration membrane separates the molecule NaOOCR from the ions  $HCO_3^-/CO_3^{--}$  turning them available for a later reuse, and obtaining a recuperation of AT LEAST 90% of the chemical solution. The Tecna DEV system continually reconverts the bicarbonates in carbonates, keeping the developing solution concentration at constant values.

**ADVANTAGES**

1. A constant break point.
2. A higher definition of the board paths during the development.
3. A considerable reduction of the maintenance on the machine, because the developing solution is always clean (ultrafiltered).
4. Environmental advantages.



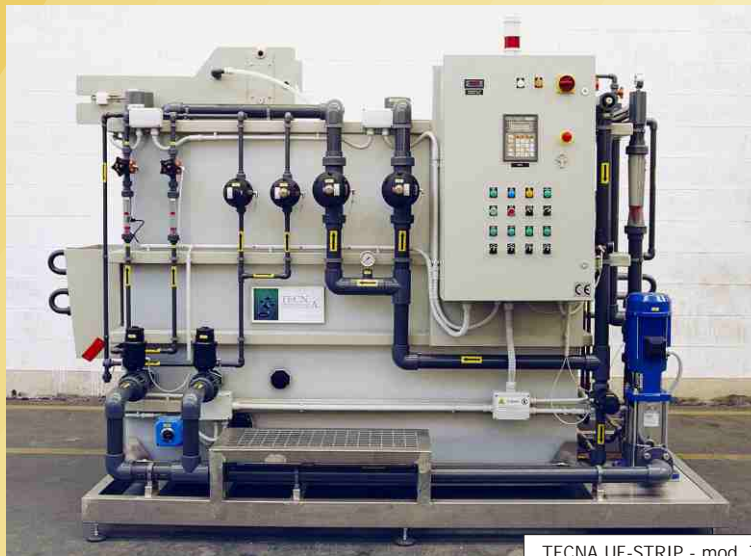
Direct connection  
UF-developing machine



**Stripping Process Ultrafiltration**



TECNA UF-STRIP - mod. RTA



TECNA UF-STRIP - mod. TA

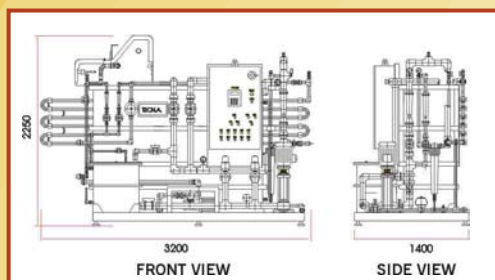
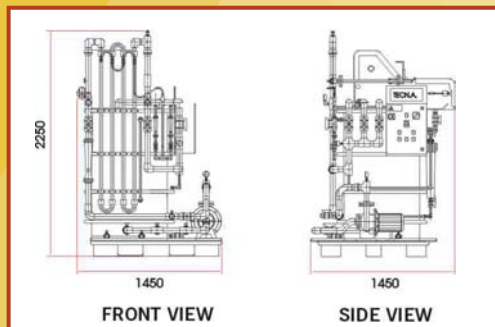
Tecna STRIP is a specialized Ultrafiltration System suitable for all processes of stripping carried out with a ready to use product which contains ethanolamine.

Ultrafiltration in reality represents the only way of use for these products, because of:

- High cost of the products themselves
- High level of pollution

On these solutions the quote of reuse is nowadays around 70%.

The very high ROI (Return On Investment) of this system (because of the recycling of very expensive industrial product) allows the price of the whole system to be recuperated in just a few months.



MODEL	2RTM	RTA	TA	DEV STRIP
Use	manual	auto	auto	manual
Capacity	25-50 lt/h	100-150 lt/h	100-400 lt/h	25-50 lt/h
Membranes	2-4	8-12	4-8-16	2-4
Membranes Length	1500 mm	1500 mm	3000 mm	1500 mm



TECNA Ultrafiltration  
mod. RTM DEV- STRIP

**TECNA DEV-STRIP**  
FLAKES SEPARATION  
(cyclon and paper)  
and  
ULTRAFILTRATION  
all on one system:  
the perfect  
economical solution  
for small  
productions.

**www.tecna-italy.com**

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