



# STOCK PREPARATION



*Since 1954*

# PULPING

## PRISMAPULPER (Delta Pulper)

- Low / Medium Consistency Pulper (3% - 6%).
- Used for disintegrating waste paper, cellulose and broke produced by the paper machine or converting.
- High-performance pulping and disintegration rotor with very low energy consumption.



## SPIROPULPER (Helico Pulper)

- High Consistency Pulper (12% - 18%).
- Essential for de-inking installations with a high degree of ink separation and favourable consumption of chemical products and steam.
- Good and efficient disintegration, producing flake-free stock.
- Successful applications in W.S., cellulose and O.C.C.



# PULPING

## DUMPULPER

- Auxiliary Pulper for batch operation pulpers.
- Contaminants like plastics, metallic pieces, etc. are removed without breaking them.
- Helps reduce or even avoid pulper cleaning process operation.
- Stabilizes discharge consistency and saves energy, increasing efficiency by between 20% and 25%.



# CLEANING

## HEAVYCICLON (HDC)

- A highly effective Thick Pulp Cleaner used for removing metals, stones, thick-grain sand.
- Usually installed at the beginning of the stock preparation line to protect deflakers, refiners and screen baskets.
- It operates at pulp consistencies between 1.5% and 5%.



## UNISCREEN (CH)

- Horizontal Pressure Screen for efficient screening and deflaking with low amount of pulp in the rejects.
- Efficient removal of contaminants from stock at consistencies between 2% and 3.5%.
- Very smooth and non-clogging equipment, equipped with an open-rotor and a drilled plate or closed-rotor and a slotted screen basket.
- Maximum screening efficiency.



# CLEANING

## MULTINET (ADS)

- Double Screening Machine with two different chambers:
  - First chamber: a perforated plate and a deflaking foil for prescreening.
  - Second chamber: a slotted basket for fine screening.
- Input consistency: between 3% - 5%.
- Output consistency: up to 4%.
- Possibility to run fine slots screening right after pulping.
- Makes simpler pulp circuit, reduces installation costs, and saves energy.



## TAILNET (Diabolo)

- High-efficiency Pressurized Auxiliary Rejects Screen.
- Very effective last stage screening with automatic washing cycles, which prevent fiber loss.
- Available with a drilled screen and possible deflaker, or with slotted basket.



# DEINKING

## FLOTTANK

- A highly efficient De-inking Cell where 1 or 2 cells are sufficient to obtain high levels of whiteness and cleanliness.
- Secondary cells are not necessary.
- Reduces space requirement.
- Low fiber loss.
- Low energy consumption.



# THICKENING

## DRUM THICKENER

- A Pulp-thickening Solution prior to the dewatering process.
- Thickening consistency: from 2% up to 4%.
- Low fiber content in white waters.



## INCLINED SCREW THICKENER

- Used for thickening all types of pulps, ranging from virgin to secondary furnishes.
- Input consistency: from 2%.
- Output consistency: up to 16%.
- Possibility of adjusting the outgoing consistency.
- Stable performance.
- Non-clogging.
- Little floor space needed.



## SCREW PRESS

- Used for the thickening of pulp, slurries, rejects like knots, shives, plastics, etc.
- Endless screw with double screen and double clothing.
- Pneumatic pressure regulation system.
- Input consistency: from 10%.
- Output consistency: up to 40%.
- High operation regularity.
- High resistance.



# STOCK APPROACH

## ● CYCLONIC CLEANERS

- For efficient separation of small contaminants from furnishes, where final sheet quality required is high.
- Very effective removal of ink specks, fine dirt, small clay flakes and shives with no fiber content in the rejects.
- A vital element in obtaining the cleanest possible pulp, especially when using contaminated secondary fibers.
- Available in banks, sized according to customer requirements.
- Rust-resistant structure.
- Stainless steel headers and troughs.
- Ceramic tips available for high-wear applications.



## ● ULTRANET (SP)

- A Pressure Screen, designed for final screening just before the Head-box.
- Centripetal operation with very low pulsations level in the accepted stock.
- This screen can operate with drilled or slotted screen baskets, depending on screening requirements.
- Reduced energy consumption thanks to the rotor design and speed.
- It can also be used in the stock preparation line for fine screening.





# REJECTS TREATMENT

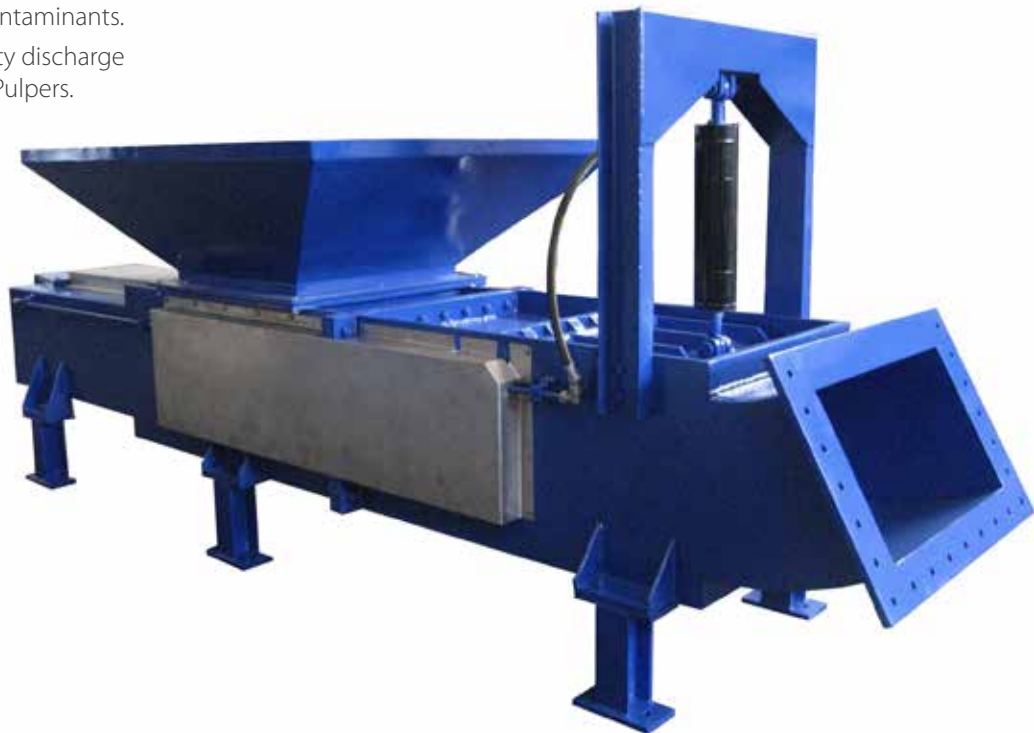
## VIBRATING SCREEN

- Recommended whenever it is necessary to recover the good fibers that are mixed with the rejects.
- Very reliable and efficient, thanks to its cylindrical-conical drilled screening plate and high vibration frequency.
- It operates with variable consistencies and throughputs.
- It guarantees excellent reject removal.



## COMPACTING PRESS

- Hydraulic press, used for dehydration and compaction of contaminants.
- Installed at the impurity discharge point of the Auxiliary Pulpers.



# OTHER

## PUMPS



- Horizontal and vertical mounting.



- Dry pit mounting.



- Submersible.



- Elbow propeller.

## HORIZONTAL AGITATORS

- Used in storage, mixing and machine chests.
- Wide range of diameters.
- Low energy consumption.



## OTHER

### SLUDGE SCREW PRESS

- Used for compacting sludge, all kinds of waste, chemical, recovery, rejects...
- Endless screw with wear resistant loops and a cylindrical perforated sieve.
- Pressure adjustment system by means of a pneumatic membrane.
- Compact, simple and very robust machine.



## SERVICES

- ☉ Advice on equipment design and line installation.
- ☉ Repair and refurbishment of second-hand or damaged equipment.
- ☉ Repair of all kinds of rotors and grilles, pumps...
- ☉ Spare parts.
- ☉ On-site maintenance service.



Pol. Usabal, 20 20400 TOLOSA Spain  
[www.licar.es](http://www.licar.es)