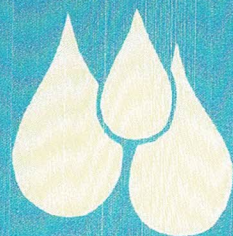


**TAYLOR
STILES**

**DEWATERING
SCREW PRESS**

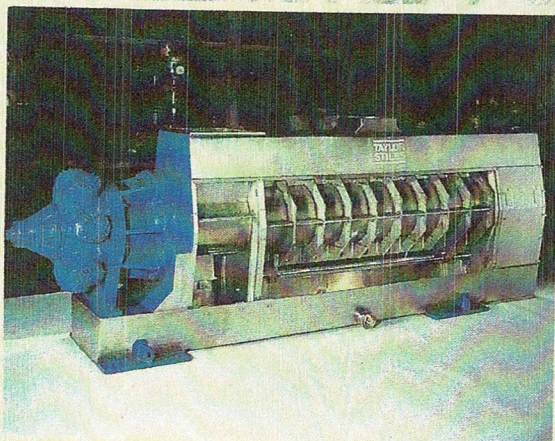


HORIZONTAL DEWATERING SCREW PRESS

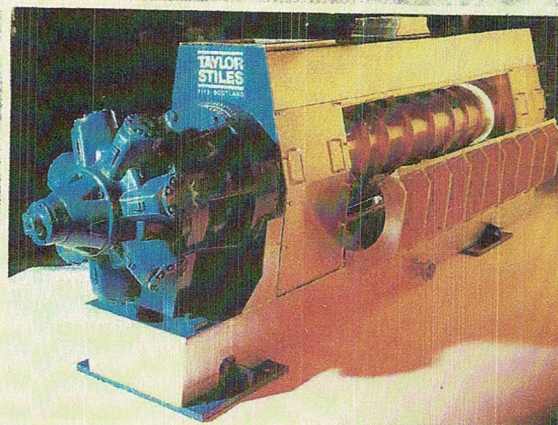
The Taylor-Stiles continuous Screw Press has been specifically designed to provide for low pressure dewatering of fibrous and chemical products. These Screw presses are therefore able to handle large capacities, and with their field record of large production runs without blocking, its maintenance and service costs are very low.

design features

- The horizontal design allows for minimum head room and readily accessible product discharge.
- Screw designs can be provided for either one, two or three stages of pressing with intermediate mixing and/or rinse stages in one continuous operation.
- Volume reductions as high as 8:1 can be achieved in some applications.
- When applied the special offset design pulls material into the best position for screw pick up.
- Throughput through the presses, governed by the speed of rotation, are catered for by the offering of a wide variation in operating speeds from 0 to 20 R.P.M.



- Screw Press screens are manufactured in either stainless steel or brass, drilled with conical holes, typically 1mm in diameter, or slotted, and in larger screen sizes punched hole screens are offered, depending on application.



operation

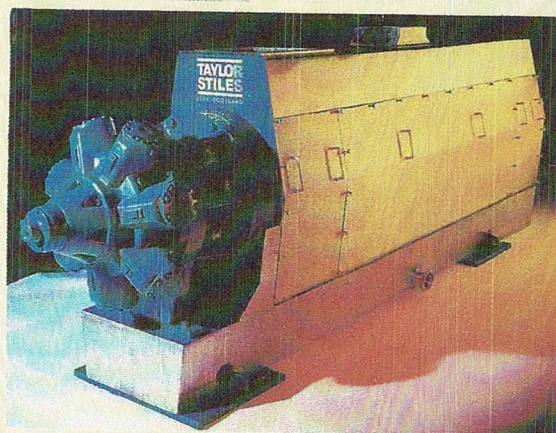
Operation of the Taylor-Stiles Screw Press is simple and trouble free. Wet product enters the unit, often through an off-set intake hopper designed to provide uniform feed to the constant diameter variable pitch screw. The combination of the uniformly decreasing pitch and conical shaft delivers gradually increasing pressure to the feed as it progresses through the press. Extracted liquid is continuously drained away from the perforated screw cylinder which surrounds the screw. The de-watered press cake is discharged from the end of the machine where it can conveniently be collected for further processing if desired. Hinges on the intake hopper and screens permit easy removal.

construction

- Product contact areas are constructed of highly polished stainless steel and there are no protusions or crevices to trap material being handled.
- Automatic cone setting adjustment is achieved either by the use of hydraulics or pneumatics, but the cone may also be set manually.
- Our divided grids make screen changes easier and quicker with the minimum labour requirements. The feed hopper is fitted with 180 degree screens to eliminate surplus water quickly.
- Heavy duty thrust bearings and precision radial bearing support shaft ensure no bearing troubles.
- Running seals prevent moisture from entering the bearing.
- Drives are offered either direct electrical or with hydraulic power units.

quality assurance

Our quality assurance programme is designed to allow us to fully conform to international Food and Hygiene Regulations.



INCLINED SCREW PRESS

The Taylor-Stiles Inclined Screw Press was originally designed for the Paper and Board Industry and since then it has been used in many other industries.

The prime objective of this equipment is to separate fluids from solids in various applications. Its dual function is to optimise concentration of solids, with the filtrate liquid being of secondary importance or vice versa.

design features

- Simple to operate
- Bearing and brushes easily replaced without specialist skills
- When more than one unit is supplied by a common feed each unit can be isolated for maintenance or cleaning purposes without disturbing the production of the associated units
- A wide selection of screen specifications are available with holes or slots in various configurations to suit appropriate open area requirements
- Minimum floor space requirements

construction

With the exception of the stand and drive, the unit is constructed entirely from Stainless Steel in a choice of 316, 304 and 321 grades. The standard construction is in 316.

versatility

Multi-barrelled units are readily available as each module is manufactured separately and mounted on single, double or triple support structures. Naturally this facility is particularly advantageous when additional units are required to extend existing plant capacity.



operation

The operating principle consists of an Archimedes type screw, inclined within a perforated screen, the whole assembly being enclosed within a "U" shaped trough incorporating the necessary access covers. The unit is mounted on a robust support stand. The screw is revolved via a heavy duty gearbox driven conventionally by a standard motor and V-belt drive. It is secured at the lower end in a self lubricating type bearing assembly. All the components have been designed for ease of maintenance and cleaning. The gravity fed medium is passed up the screw, creating a resistance of flow within screw and screen; thus liquid is extracted through the screen and the remaining solids are proportionally concentrated. The effectiveness can be further increased by back-pressurising the flow. This is achieved manually lowering the cone assembly located in the top discharge of the unit.

SCREW PRESS APPLICATIONS

paper and board industry

Thickening from low density to high density pulps
Reclamation of water from disposed rejects
De-inking operation for removal of Ash and Chemicals

tanneries

Removal of skin fragments and reclamation of water

breweries and distilleries

Separation of solid for animal feed stock from liquors used in Beer, Wine and Spirit making

effluent plants

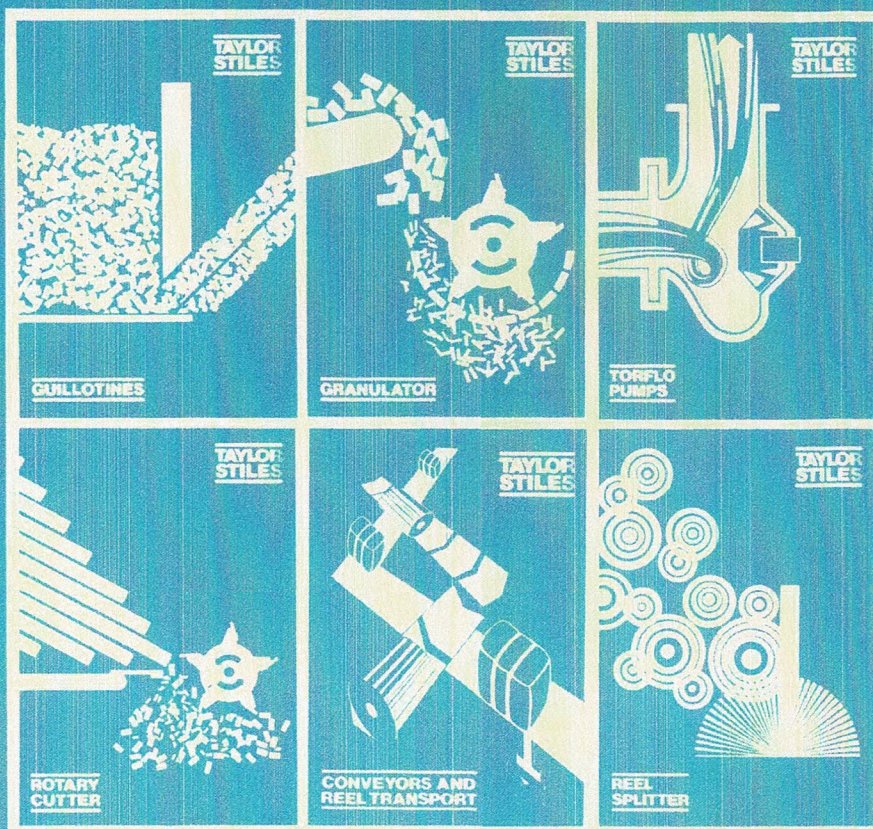
Used in many industries where the compacting of solids is required and the reclamation of liquids

food processing

Dewatering of Coffee Grounds
Extraction of oil from Fish Products
Extraction of liquors from Fruit eg. pineapples etc.

FACTS AND FEASIBILITY

If you would like more details, or wish to test your material in a Taylor-Stiles Screw Press, contact us.
We're ready to go to work on your requirements right now.



Taylor-Stiles (Process Equipment) Ltd, Methilhaven Road, Methil, Leven, Fife, Scotland KY8 3LA. Telephone 0333 23557 Telex 727741

A member of Scottish Electric Group

Fax 0333 23582

Bulletin No. 500 Screw Press