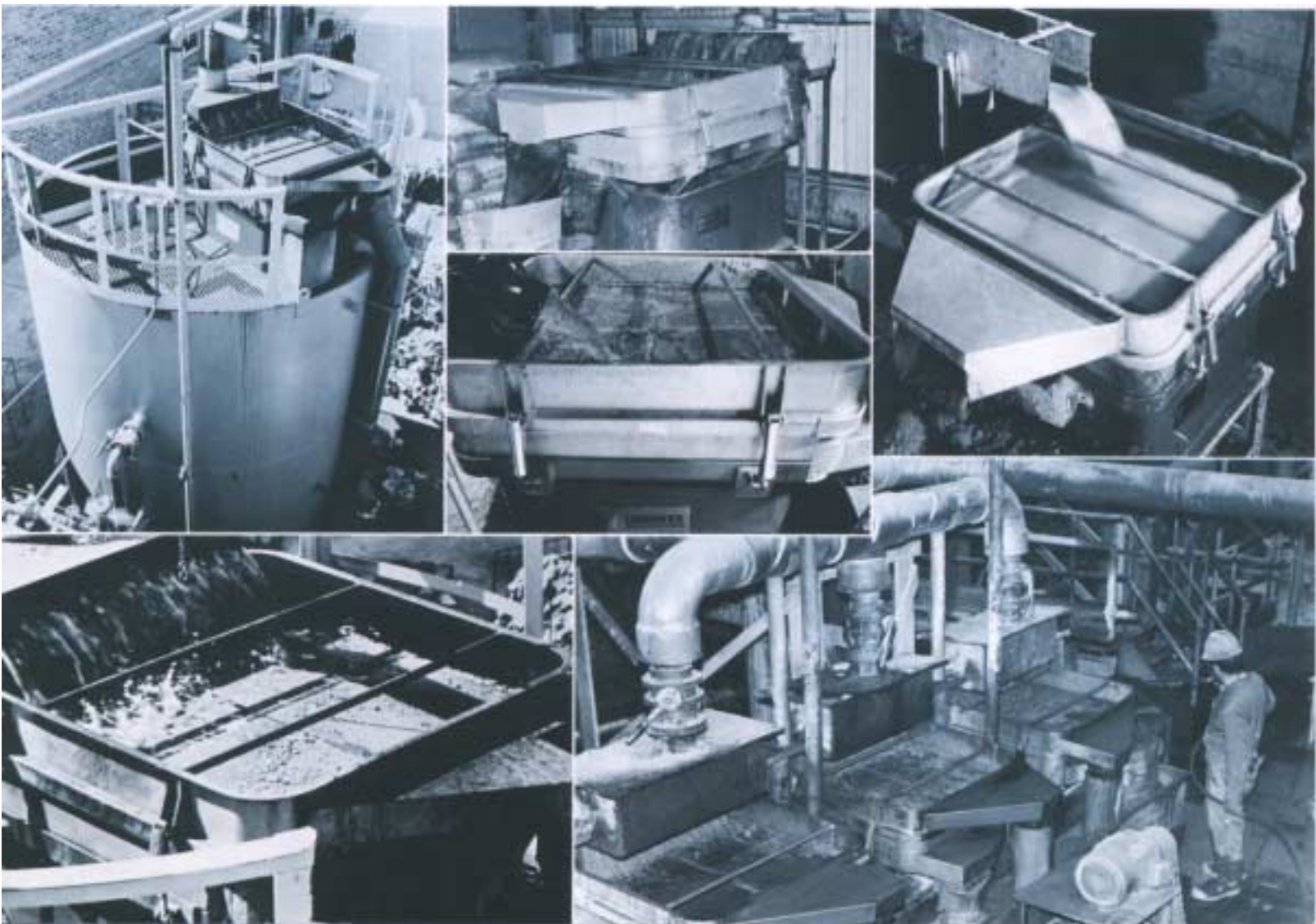
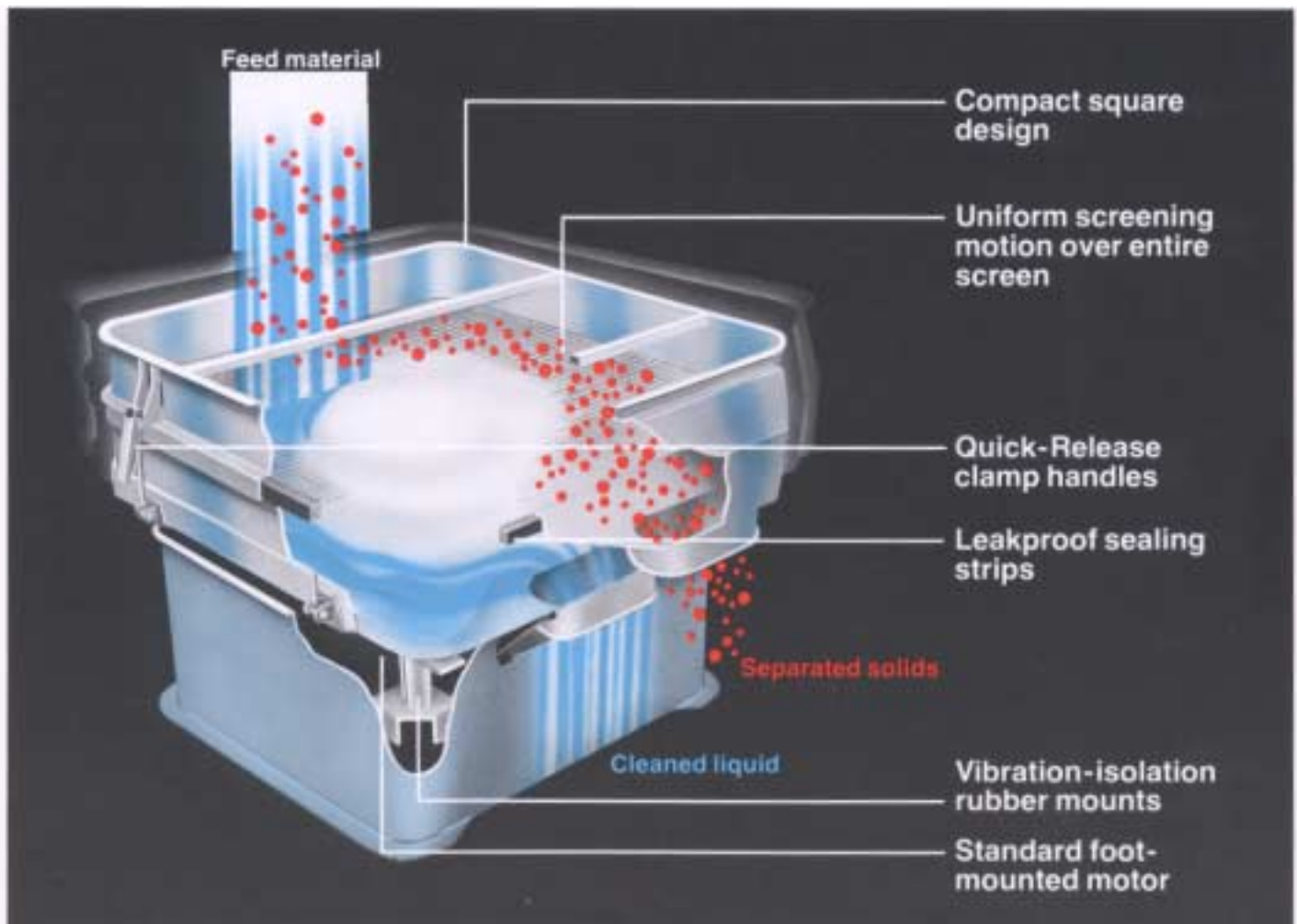


# LIQUATEX<sup>®</sup> SEPARATORS

CATALOG 108



# Simpler design, easier operation...



## Unique LiqueTex Separator motion provides the two essentials for high-capacity separations.

Two essential actions are required for efficient, high-capacity separations of liquid/ solids, and both are accomplished by the LiqueTex Separator motion.

### 1. Unrestricted flow of liquid through the screen.

The strong vertical component of the LiqueTex Separator motion accelerates the breakdown of liquid surface tension. This permits uninterrupted flow of cleaned liquid through the screen.

### 2. Rapid conveying of solids off the screen surface.

The positive horizontal conveying component of the LiqueTex Separator motion provides fast discharge of removed solids off the screen surface.

## Plus ... uniform motion over entire screen surface.

Equally important, the motion is uniform over the entire screen area, so that incoming material is immediately and continuously subjected to full screening action at any point on the screen ...without dead spots! This provides complete utilization of the entire screen surface for maximum capacity and efficiency.

## Adjustable speed, slope and amplitude

LiqueTex Separators are versatile. The slope of the machine is easily adjusted to change conveying rate and to control retention time of material on the screen surface. Stroke amplitude can be field-adjusted to provide positive conveying regardless of the solids concentration in the feed material. And speed changes are possible in order to optimize separations for liquids with different viscosities.

## Expressly designed for liquid/solids separations

LiqueTex Separators are designed specifically for liquid/solids applications. They utilize a unique vibratory motion that is produced by a rotating eccentric weight having its force line at the machine's center of gravity. This produces a circular motion parallel to the plane formed by the rotating weight, which is at a 30° angle below the horizontal. When the circular motion is projected onto the screen surface, it becomes an elliptical motion combined with a motion perpendicular to the screen surface. The perpendicular motion serves as a strong dewatering force, while the elliptical motion provides the primary conveying force for removed solids.



# Liquatex® liquid/solids separators



## Change screens in seconds.

Liquatex Separators utilize a patented clamp handle design which provides positive leak-proof locking between sections of the machine, yet always permits fast access to the interior. It takes less *than a minute* to disassemble and assemble Liquatex for inspection, screen changes or cleaning.

The *Quick-Release* clamp handle design is operated by hand, requiring no tools. Other advantages:

- Consistent, positive locking action with overthrow stops. Cannot vibrate loose.
- Clamps adjust easily to correct pressure, are simple to install.



## Uses standard motor, simple drive ... for minimum maintenance cost.

There are no costly special motors in a Liquatex Separator! Since the motor is stationary and not subjected to the screening motion, a standard foot-mounted motor is used ...for minimum cost and long service life. This feature is particularly important because many liquid/solids separating applications involve hostile, wet, hot or corrosive environments which can necessitate motor and drive replacement.

To reduce downtime and maintenance costs even more, Liquatex Separators are designed so that all drive components are readily accessible. The cover, screen frame and pan can be easily removed as a single assembly, exposing the entire drive for service and maintenance.

The Liquatex Separator screening action is provided by a simple, rugged motion generator incorporating a shaft, two easily replaceable, long life spherical roller bearings, and an eccentric weight. Adjustable weights are used to vary stroke amplitude.



## Compact square design saves space, cuts costs

This is the only liquid/solids separator using a space-saving square design. It fits easily into a plant layout, using less floor space than other types, and it requires only three feet of headroom, thus saving valuable vertical height in building structures.



## Reusable screen frames

The Liquatex Separator square configuration utilizes screen clothing more efficiently, because it minimizes the scrap charges typical with other configurations. Also, the screen frames are reusable and can be returned for credit when ordering a new mesh assembly. Replacement screens are available from stock for all commercial weaves.



## Leakproof sealing

Liquatex Separators incorporate continuous seal rings around the perimeter of each

screen frame, providing a positive seal between all sections of the machine. These continuous seal rings prevent leakage from the machine, and also prevent crosscontamination between product fractions. Seal rings may be removed quickly for cleaning or replacement, then easily reinstalled by hand. As an option, a closed top cover can be provided for totally enclosing the machine.



## Exclusive vibration isolation system

Liquatex Separators utilize a system of four heavy-duty rubber mounts, one per corner, providing 90% dynamic isolation. Consequently the machine may be installed in virtually any location without danger of transmitted motion. Experience has shown too that these rubber mounts provide longer life than conventional metal springs, and minimize sag problems, thereby reducing maintenance and downtime.



## Quick, easy-to-clean interior

In less than a minute, a Liquatex Separator can be disassembled for inspection or cleaning of the interior product flow zone. All surfaces are smoothly contoured, and permanent joints are continuously welded.



