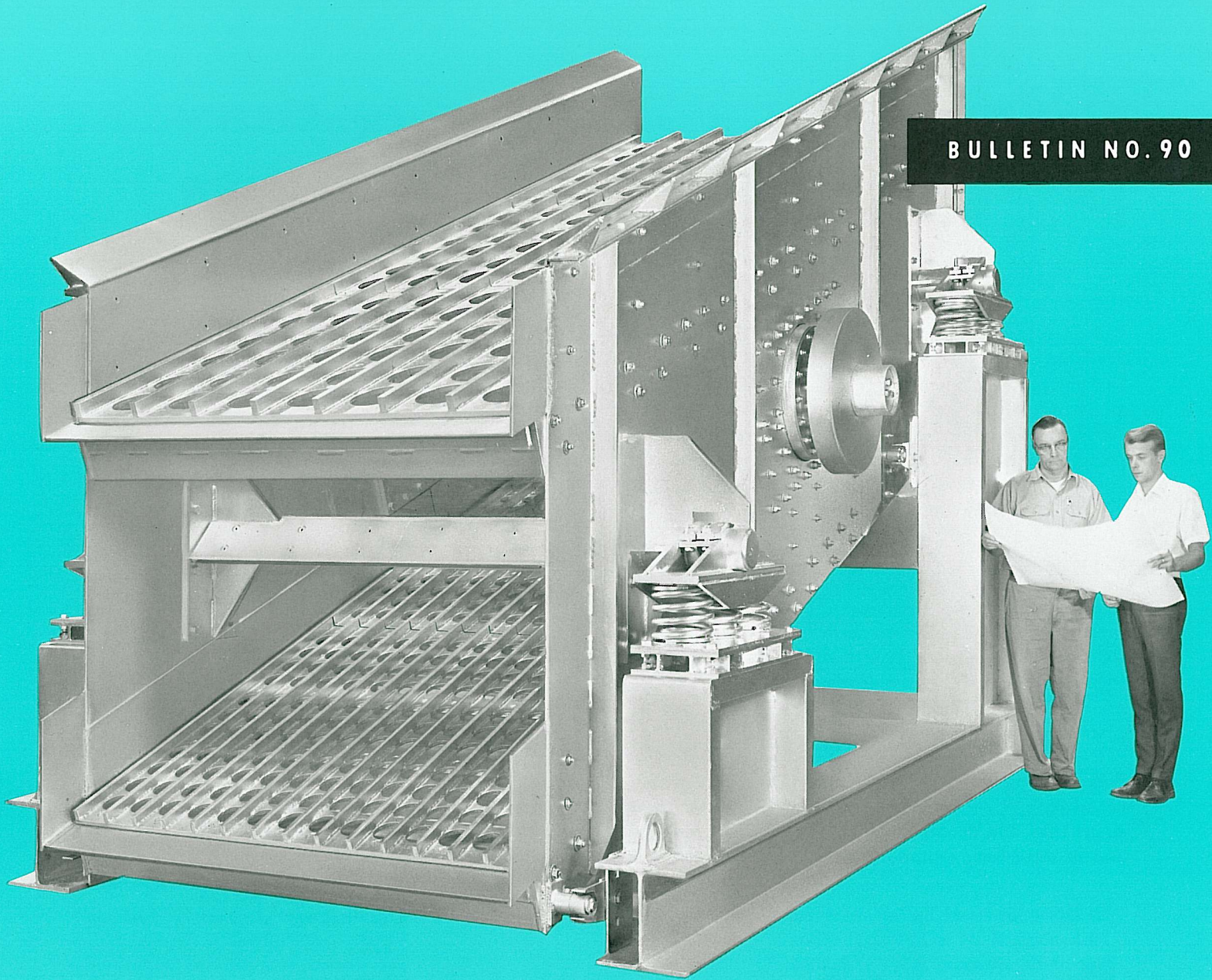


BULLETIN NO. 90



DEISTER

TYPE PS HEAVY-DUTY
PRIMARY SCALPER

Deister Type PS Heavy-Duty PRIMARY SCALPER

Deister Type PS Primary Scalpers are available as a complete line of extra heavy-duty scalping and rough sizing vibrating screens. They are designed for installation ahead of the primary crusher to handle "quarry run" or "mine run" material, or for scalping operations following the primary crusher. They can accommodate material up to 36 inches and are ruggedly built to provide long, dependable, service-free operation. Heavy-duty vibrating frame and heavy coil springs are designed to absorb tremendous impact and loading stress. Side plates are protected by replaceable wear plates.

Deister Primary Scalpers are available in a complete range of sizes and capacities and are available in both single deck and double deck models and in three basic types:

Type PSP are usually equipped with fabricated or cast perforated plate and skid bars on both decks. The bottom deck may be equipped with woven wire cloth for removing quarry fines.

Type PSG are designed with a stepped grizzly bar deck. In the double deck models the bottom deck may be equipped with perforated plate or woven wire cloth.

Type PSW are equipped with woven wire on the top deck. Bars may be welded on the wire cloth to act as skid rails.

Screen Supporting Panels

The screen panels or trays which support the perforated plate or woven wire cloth are of specially rugged construction. They are made of

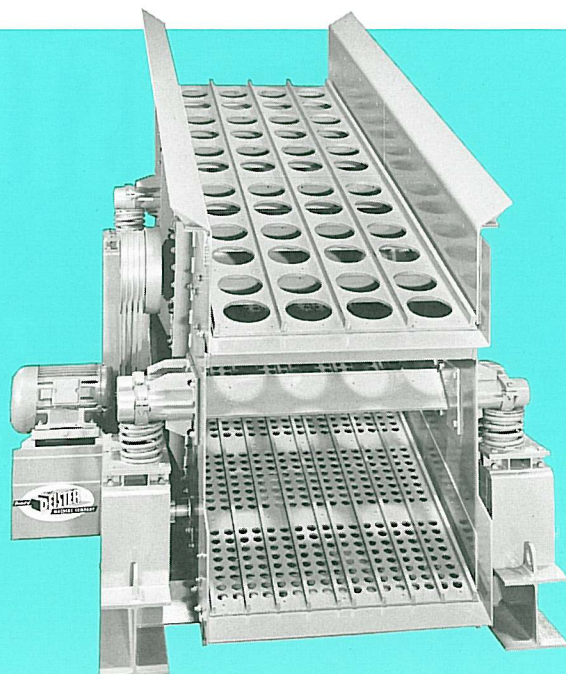
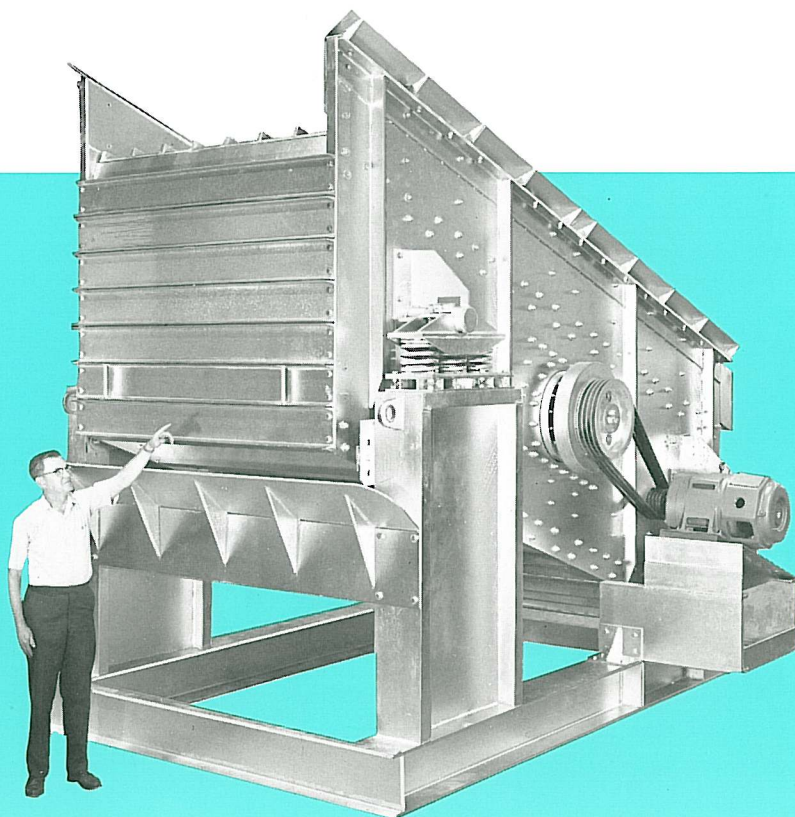
heavy-duty angles, flats and specially designed transverse members ruggedly braced and welded together. Side members of these panels are jig-drilled and are attached to the vibrating frame with body-bound bolts and special locknuts.

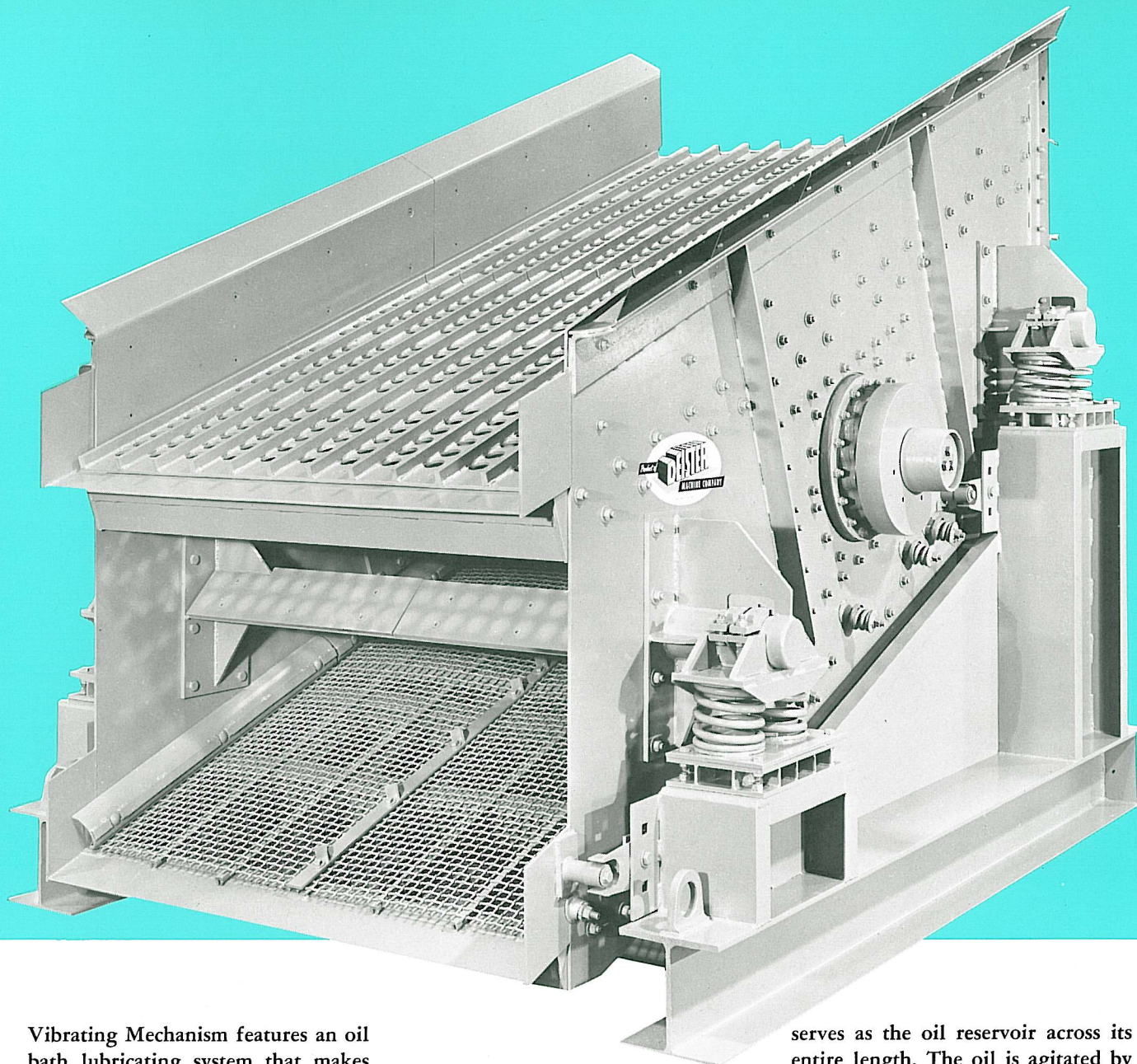
Vibrating Mechanism

The "power plant" of the Type PS Primary Scalper is a heavy-duty model of Deister's Unitized Vibrating Mechanism for inclined screens. This design is time-tested and has proven dependable under the toughest operating conditions. The exclusive Deister Unitized "Life-Time"

Cover illustration and far left below: These two views of a Deister Type PSP Double Deck 6' x 16' Primary Scalper illustrate the clean design and rugged construction of a typical unit. This particular unit weighs in excess of 28,000 pounds. It is designed to handle up to 1000 tph. Top deck is equipped with $\frac{3}{4}$ " plate with 8" openings, and 1" x 2" skid bars. The bottom deck is equipped with $\frac{5}{8}$ " plate with 4" openings, and $\frac{3}{4}$ " x 1 $\frac{1}{2}$ " skid bars.

Below: Type PSP double deck 4' x 12'. Top deck is $\frac{3}{4}$ " perforated plate with 8 $\frac{1}{2}$ " round openings. Bottom deck is $\frac{1}{2}$ " thick perforated plate with 1 $\frac{3}{4}$ " round openings. Skid bars are used on both decks.



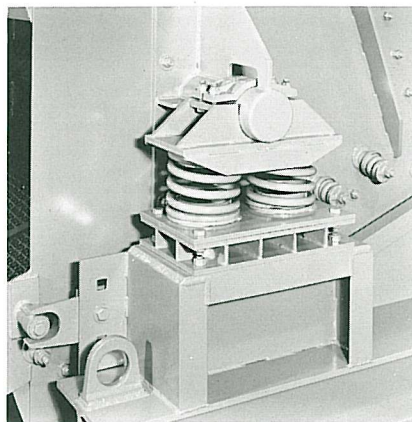


Vibrating Mechanism features an oil bath lubricating system that makes it possible for Deister screens to operate at higher speeds and at lower operating temperatures. The entire vibrating mechanism is a precision-constructed and jig-assembled unit. Renewable sleeves between the inner race and the shaft prevent wear on the shaft. Should wear occur, even after years of rugged service, the original close "factory tolerances" can be easily restored by the simple replacement of these renewable sleeves.

Virtually all maintenance problems have been eliminated by this advanced design. All moving parts run in a bath of oil with labyrinth seals to prevent lubricant loss and the entrance of dirt. The lower portion of the vibrating mechanism

Above: Type PSP double deck 6' x 12'. Top deck is equipped with $\frac{1}{2}$ " perforated plate with $2\frac{3}{8}$ " round openings and skid bars. 1" opening screen cloth is used on the bottom deck.

Below: Spring mounts showing the lower spring seat interchangeable pad for slope adjustment. Upper spring seat adjusts to equalize spring pressure.



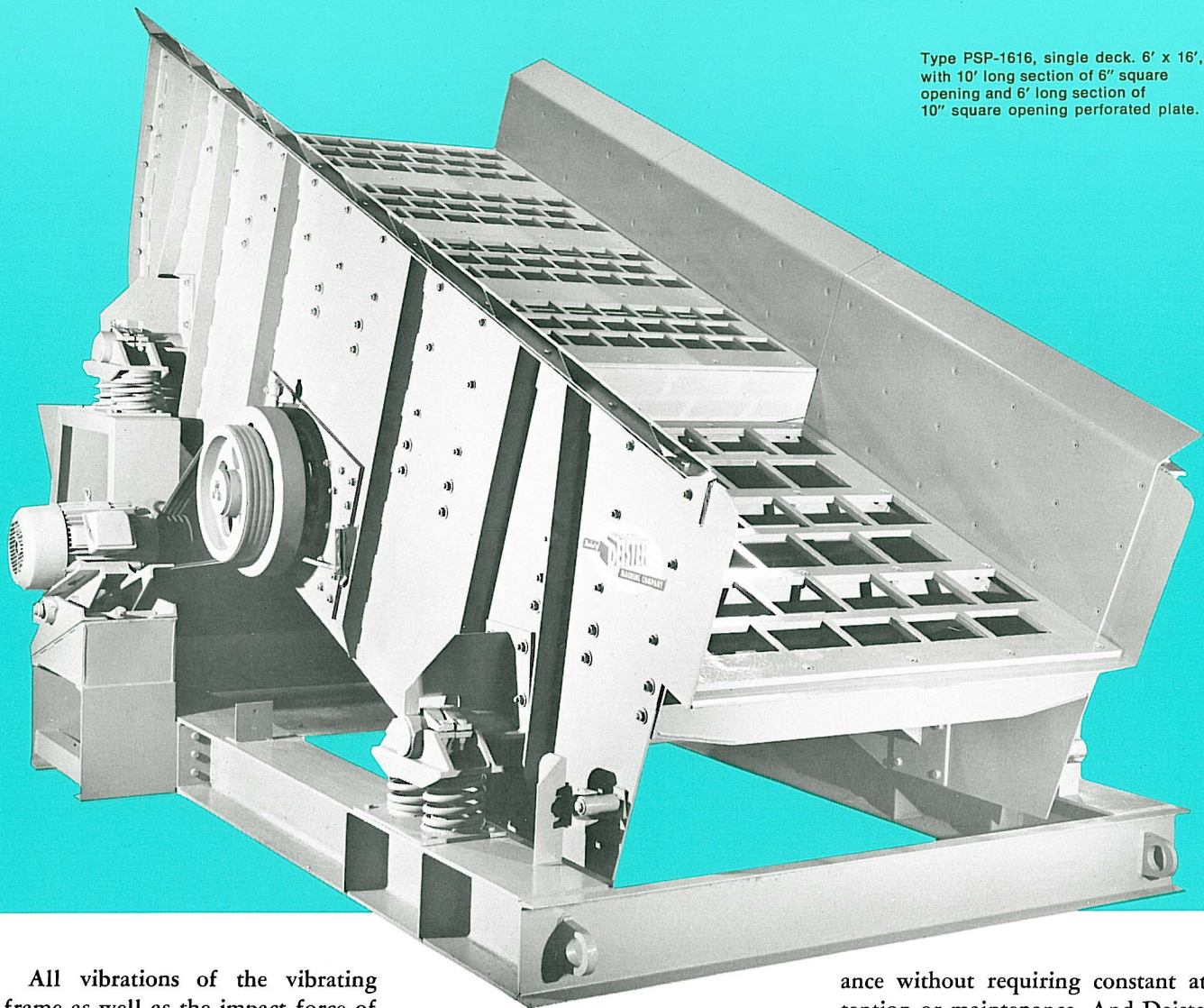
serves as the oil reservoir across its entire length. The oil is agitated by slingers on the eccentric shaft and constantly envelops the spherical roller bearings and all moving parts. It should never be necessary to add oil to the mechanism, with only one or two oil changes per year required.

The entire vibrating mechanism is fully protected from the abrasive action of the material being screened with a heavy replaceable steel shield.

Plant Vibration Control

The Type PS Primary Scalper is designed as a "package unit." It is mounted on a heavy horizontal stationary base which also carries the supporting springs. The motor which may be had as optional equipment is also mounted on the stationary H-beam base.

Type PSP-1616, single deck. 6' x 16',
with 10' long section of 6" square
opening and 6' long section of
10" square opening perforated plate.



All vibrations of the vibrating frame as well as the impact force of large chunks of material are completely absorbed by Spring Mounts. These Spring Mounts are located outside the side plates. The lower spring seat of each mount is carried on interchangeable pads to provide for slope adjustment.

Experience

Deister Type PS Primary Scalpers are the result of over 57 years of continuous experience in researching,

designing, producing, and applying sizing and separating equipment.

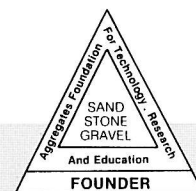
Today, Deister products are operating in major mining and aggregate producing areas throughout the world . . . are more than measuring up to the demands of the most difficult types of service and conditions.

Because of their rugged construction, all Deister Screens have a reputation for year-after-year perform-

ance without requiring constant attention or maintenance. And Deister Type PS Primary Scalpers are built to even more rugged specifications than any screen in the Deister line. Extra protection is provided at all vital points. Quantity-controlled oil lubrication assures long bearing life, and all Deister Screens are backed by a follow-through parts and service policy without equal, for Deister top management is personally interested in the continued profitable operation of every Deister Screen.



INC. 1912



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