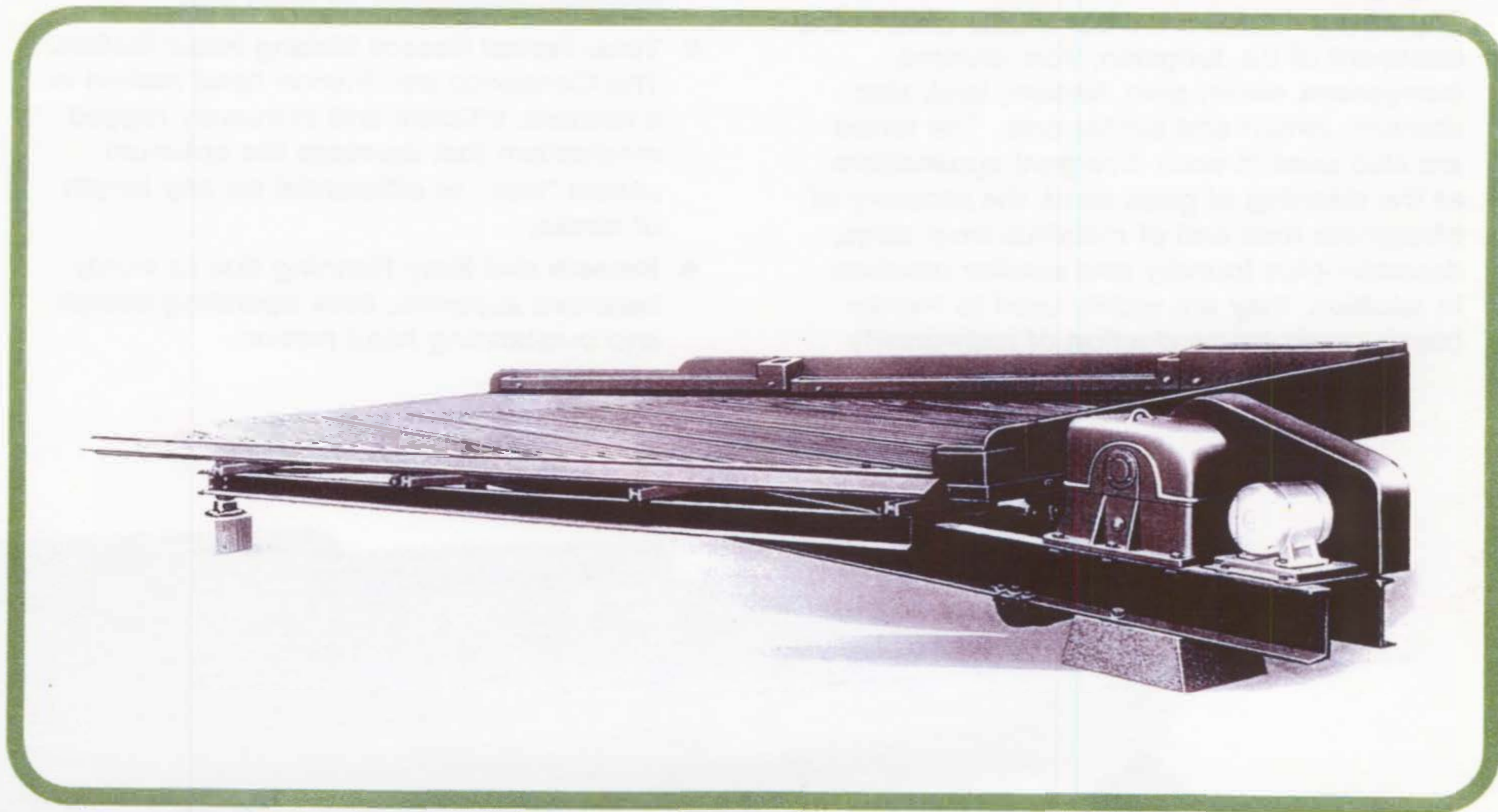


SuperDuty[®]

Diagonal-Deck No. 6 and No. 14 Concentrating Tables

- Higher Recoveries
- Higher Grade Concentrates
- Greater Capacity
- Better Profits
- Lower Maintenance



DEISTER CONCENTRATOR

Concentration of ores and other materials

Since 1906, the Deister Concentrator Company has specialized in Separating and Sizing Equipment. With constant refinement and improvement, **SuperDuty** Tables are recognized the world over as the most highly developed single deck, wet concentrating tables available.

Within their feed size ranges, these tables efficiently, economically and continuously separate particulates of different specific gravities, whether the feed materials are ores, minerals, crushed slags and drosses (as found in foundry residues)—or other mixtures of light and heavy materials.

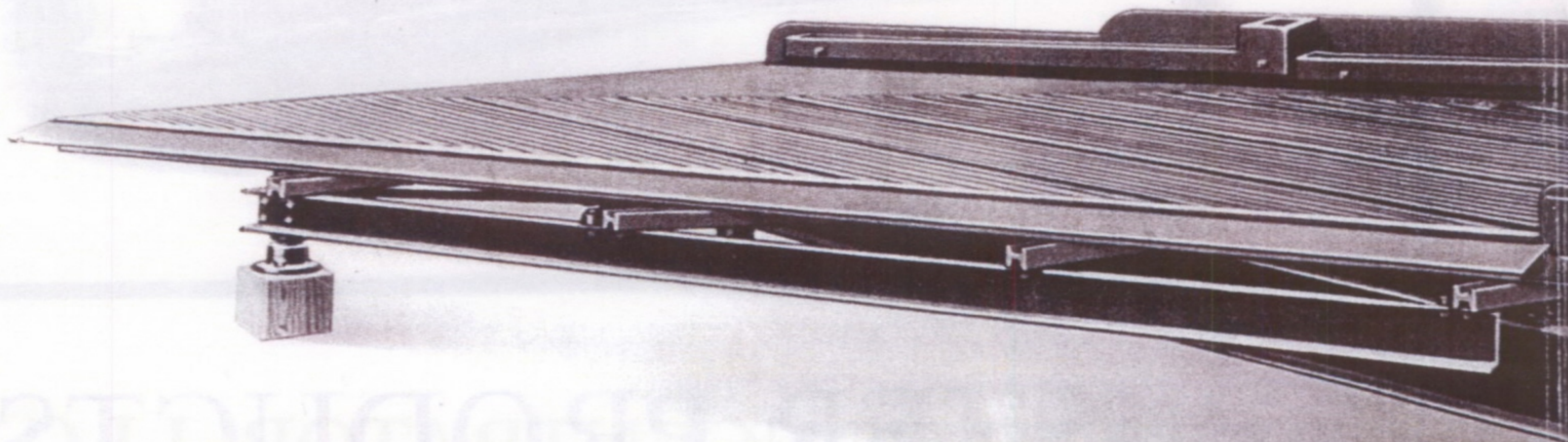
Applications

SuperDuty Tables are most widely used in the treatment of tin, tungsten, iron, chrome, manganese, silver, gold, barium, lead, zinc, titanium, zircon and similar ores. The tables are also used in such divergent applications as the cleaning of glass sand, the recovery of phosphate rock and of metallics from slags, drosses—plus foundry and smelter residues. In addition, they are widely used to handle beach sands for production of high-gravity

bulk concentrates and for tabling bulk flotation concentrates.

Money-making benefits

- **Higher Recovery** than any other single-deck concentrating table built. Maintains comparable or higher feed capacity.
- **Higher Grade Concentrates** because the diagonal-deck table's "fanning out" action permits more accurate cutting of the concentrate products.
- **Greater Capacity.** Small circulating middling load, a result of diagonal-deck design—plus greater efficiency of Concenco Head Motion means more actual tons new feed per day, per table.
- **Better Profit** thru overall efficiency and low operating and maintenance costs.
- **Requires only** 1½ to 2 hp to start and operate—depending on table size.
- **Time-Tested Record Making Head Motion.** The Concenco anti-friction head motion is a modern, efficient and extremely rugged mechanism that develops the optimum usable "kick" or differential for any length of stroke.
- **Smooth and Easy Running** due to sturdy balanced supports, deck operating design and outstanding head motion.



SuperDuty Diagonal-Deck No. 6 Concentrating Table. Smaller No. 14 has half the deck area and half the capacity of the full-size No. 6. No. 14 is used as either a half-size commercial unit or a large size lab table.

Diagonal-Deck

The Diagonal-Deck produces maximum benefits from deck area and riffling through the response of the natural tendencies of the pulp traversing the table. Motion of the table in conjunction with the component forces exerted by the side tilt and cross flow of water, assisted by the riffles, acts continuously upon the pulp as it moves along the path of longest travel possible on any table deck. The results are highest possible metallurgical efficiency, and maximum single-deck capacity per unit of floor space.

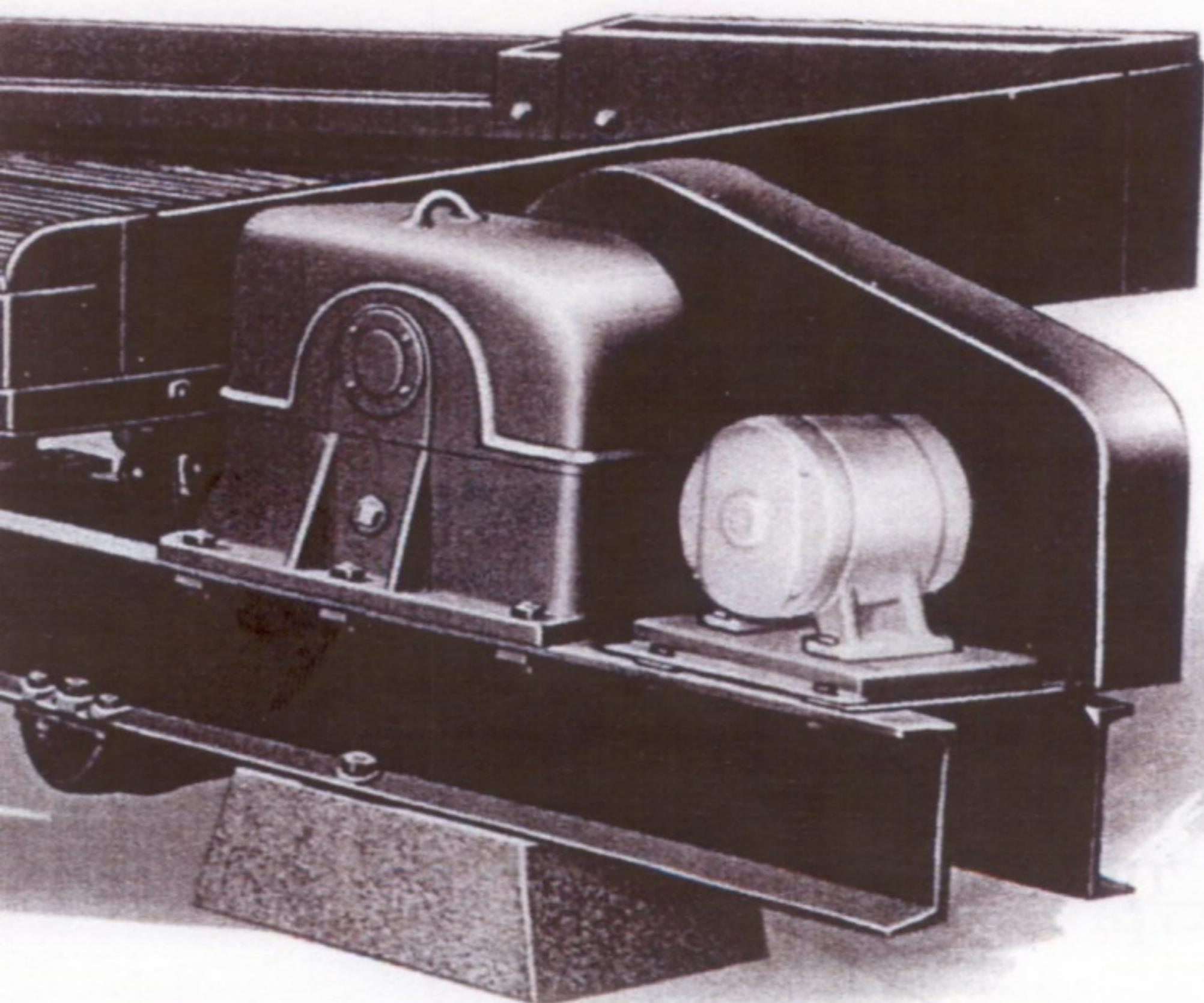
Covers and riffles

The deck is normally furnished with a one-piece Concenco ultra-smooth rubber cover and cemented-rubber riffles for high-resistance to abrasion, long life and low cost.

The pool riffling system is the basis of all good riffling systems and is the result of years of research and experience in the ore dressing field. It's the most efficient available for the recovery of values. We provide the proper pool riffling system to meet your exact operating conditions.

Head motion

The Concenco Head Motion, enclosed and running in oil, is regularly supplied with



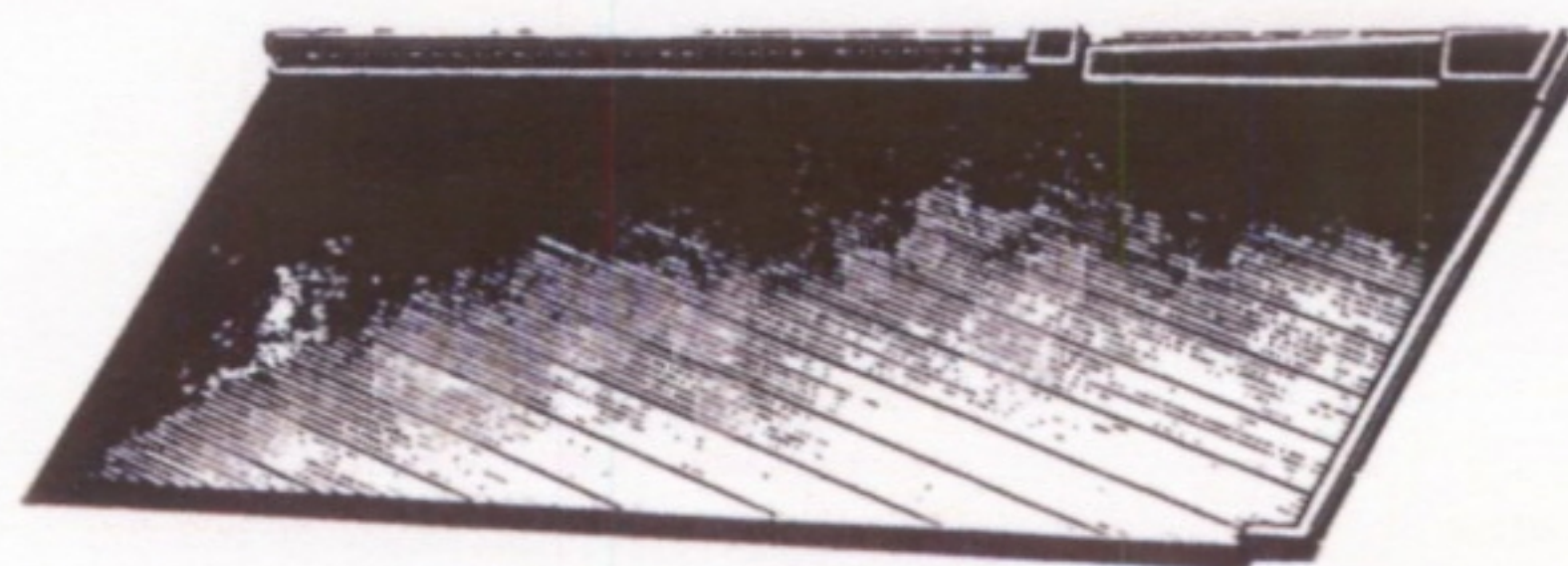
SuperDuty Diagonal-Deck Concentrating Tables. It is self-oiling and splash-proof. Simple and rugged, it's equipped with anti-friction bearings for utmost dependability. This head motion coordinates stroke and differential for optimum results at any setting. Stroke may be changed with table in operation.

Underconstruction

Absolute smoothness of deck action is imperative to maintain **high recovery along with high capacity**. So the **SuperDuty** deck is supported on an extra rigid, heavy, all-steel, sub-frame, mounted on a 9" heavy steel channel main frame base. Deck weight is equally distributed over slide bearings mounted on the sub-frame. In tilting, the deck turns around its centerline which is also the line of drive. This construction eliminates deck warping so prevalent in tables of older design.

The time-tested and improved, record-making **CONCENCO** anti-friction head motion, integrally mounted on the main frame, complements inherent advantages of the diagonal-deck table. Designed primarily for heavy-duty service, and equipped with heavy, anti-friction, self-aligning bearings, the smoother operation contributes to greater deck efficiency and its greater "kick" to higher tonnages. The Concenco anti-friction motion is readily adjustable and completely self-oiling.

Right Hand **SuperDuty** Deck with pool riffling for sand



Also furnished with pool riffling system for slime

Main and sub-frame assemblies
Right Hand—With Deck Removed



The **CONCENCO DRIVE**—shown at right above, in combination with the Concenco Motion—is a simple, compact, rugged and trouble-proof driving means for all types of single-deck, diagonal-deck tables. It embraces double-grooved motor and flat motion sheaves, flexible "V" belts, motor, switch, fully enclosed guard and special mounting bracket, which makes the entire assembly an integral part of the table structure.

Capacity

The **SuperDuty** Diagonal-Deck No. 6 Concentrating Table, equipped with pool sand riffing, handles from 20 to 50 tons of fine sand feed, and 30 to 150 tons of coarse sand per 24 hours—depending on character of ore and operating considerations. Feed may be classified or unclassified as metallurgical considerations indicate. Sand feed is normally considered as being in the $\frac{1}{8}$ " to 100 to 150 mesh range.

The **SuperDuty** Diagonal-Deck No. 6 Concentrating Table, when equipped with slime riffing, is normally used for handling material in the minus 100 to 150 mesh range. Capacity varies between 10 and 24 tons per 24 hours—depending on ore and operation considerations.

The smaller No. 14 **SuperDuty** Table has half the deck area and half the capacity of the full-size No. 6. It utilizes the same head motion and other parts—only the deck is smaller. The No. 14 is used as either a half-size commercial unit or a large size laboratory table.

Deister will help you

Deister engineers will be glad to analyze your needs and discuss them with you. Call today.

Typical setting arrangements

While requiring no more space than rectangular tables of equivalent deck area, **SuperDuty** Diagonal-Deck Tables, measured by performance per square foot of occupied area, are actually more economical of floor space than rectangular deck tables.

SuperDuty

DIAGONAL-DECK TABLES come equipped with all items specifically engineered for final installation.

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