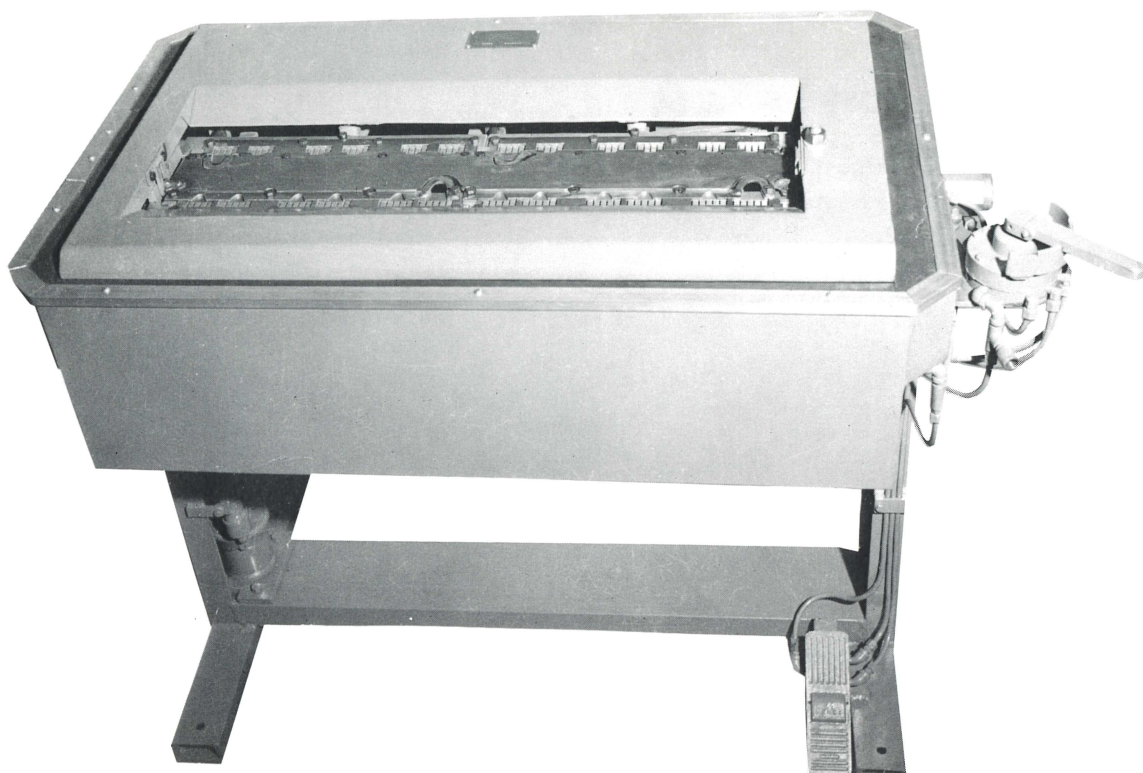


The World Leader
Over 1500 Sold

GROUP BURNING



TIEGEL JO GROUP BURNING MACHINE

The Tiegel Group Burning Machine has been a proven money-maker over the years due to its flexibility and efficiency. It is capable of burning all SLI automotive, as well as truck and bus batteries. With change-over time well under 15 minutes, short runs are economical on this machine.

The JO Group Burner comes equipped with 1 set of combs, 4 sets of post locators and 4 sets of dams. Additional tooling is available at a nominal charge.

This machine produces day in and day out with no warm-up time and little to no scrap (burned cells do not have loose plates). The Tiegel Group Burning Machine produces better batteries because there are no broken separators from assembly. The plates are in better alignment due to the novel upside down loading. More important, no lead run-downs are possible with proper tooling, because of our positive closure between combs and post locators.

Options that are available are the following:

“C” — Automatic turnover with program opening and closing of the combs.

“DMN” — Accommodation to different plate widths.

“B” — Automatic Burning (saving an additional 10% to 20% in assembly time).

Continuous research and development assures that your specific needs can be met. We invite inquiries on machines from your smallest electronic power cells to the largest of traction cells.

TIEGEL MODEL JO GROUP BURNER

ENGLISH:

Air Operated: 80 PSI
Floor space: 12 sq.ft.
Weight: 450 lbs.

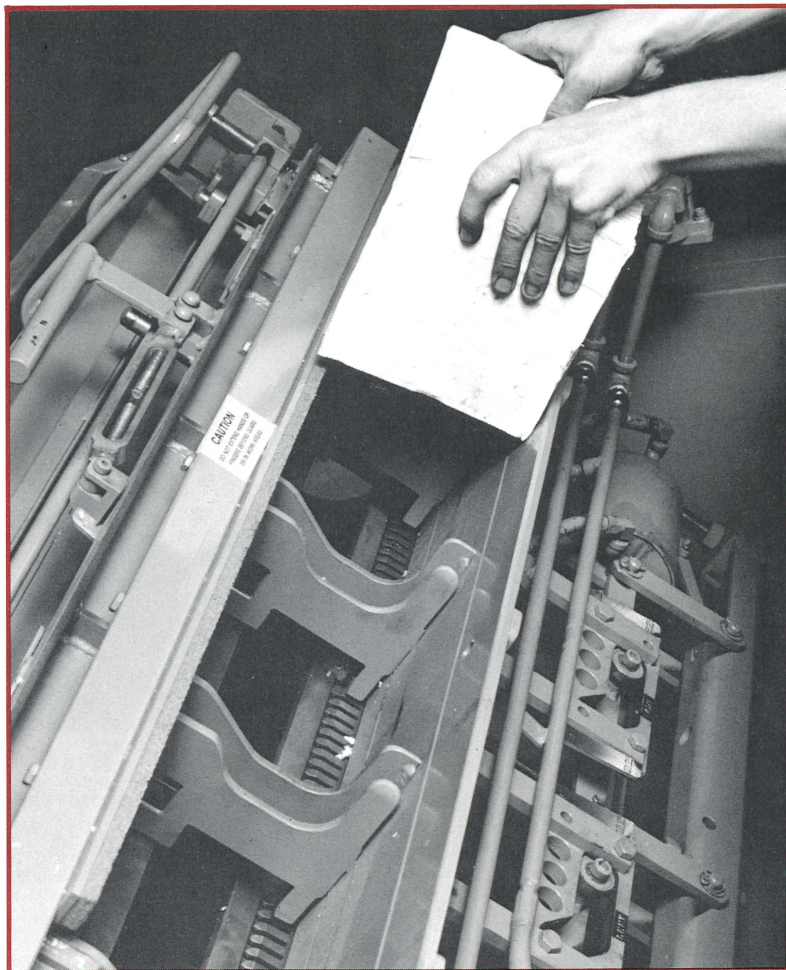
METRIC:

Air Operated: 6 ATM pressure
Floor space: 1.08 sq.m.
Weight: 204 kilograms



The LO Features:

- Automatic Cycle (Option)
- 45 Degree Loading And Unloading
- Exact Automatic Alignment Of Plates
- Clamping Close To Plate Lugs Keeps Lugs In Place During Comb Withdrawal
- Ideal For Heavy Elements



TIEGEL LO GROUP BURNING MACHINE

The Tiegel LO Group Burning Machine utilizes all of the proven qualities and features of the Tiegel air operated JO Group Burning Machine and adds several new features not possible on the JO Group Burner.

The LO Group Burning Machine loads and unloads at a forty-five degree angle. This feature has a twofold purpose. First, the angle makes loading and unloading the machine significantly easier. Second, the groups are better aligned because the plates and separators are lined up on their sides on one flat surface and on two points at the top, an ideal three point system.

An automatic clamp presses the group firmly against a flat side. The clamp is located close to the comb so that when the combs engage and withdraw better support is given to the groups, keeping the plates together.

Wide open pockets permit burning six elements with plates up to 6-1/8 inches wide and cell thickness up to 4-5/8 inches, with no

adjustment needed for smaller plates and cells. Larger comb opening allows easy unloading of normal or awkward groups with posts overhanging in both the X and Y axes.

The LO Machine automatically positions the groups and locks the plates into place before turning over into the horizontal burning position. These added features make the LO Group Burner the most precise group burner available.

The LO Group Burner can also be equipped with the standard Tiegel Automatic Burning.

TIEGEL MODEL LO GROUP BURNER

ENGLISH:

Air Operated: 80 PSI
Floor space: 12 sq.ft.
Weight: 450 lbs.

METRIC:

Air Operated: 6 ATM
Floor space: 1.11 sq.m.
Weight: 204 kilograms

TIEGEL WO GROUP BURNING MACHINE

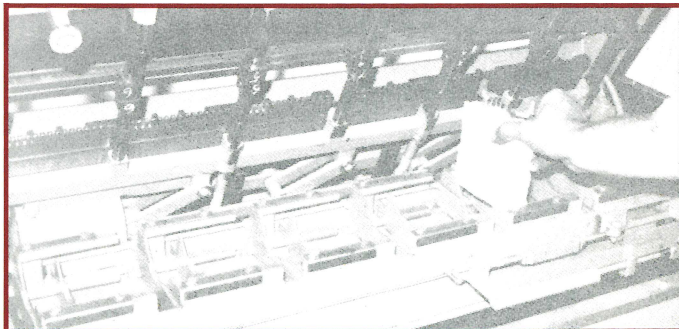
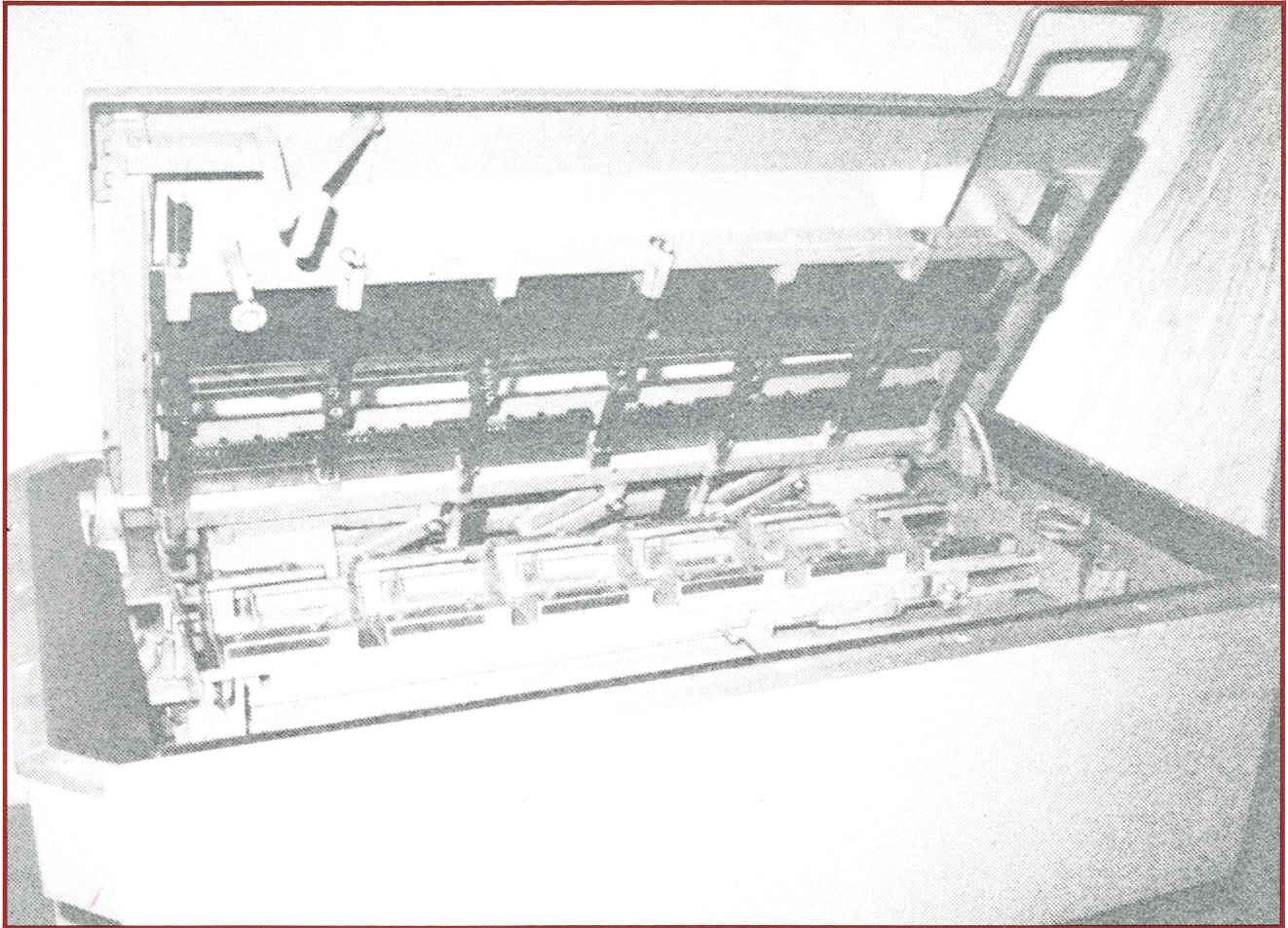
THE MACHINE BUILT TO TAKE ENVELOPE PLATES!

The Tiegel WO Group Burning Machine utilizes all of the proven qualities and features of the Tiegel air operated LO & JO Group Burning Machines and adds several new features. This machine has been specifically designed to burn envelope plates where the separators can not be shifted once the element has been burned. It is not recommended for loose type separators.

The WO Group Burning Machine is a top loading machine. Top Loading permits the operator to see the comb closure which helps

prevent jam-ups. The WO Group Burning tooling is completely interchangeable with our standard LO and JO tooling. Changeover can be accomplished within a five minute period.

Wide open pockets permit burning six elements with plate sizes of up to 6 inches wide and cell thicknesses of up to 4-3/4 inches. The comb is completely out of the way, allowing for easy loading and unloading of normal or awkward groups.



TIEGEL MODEL WO GROUP BURNER

ENGLISH:

Air Operated: 80 PSI

Floor space: 12 sq.ft.

Weight: 450 lbs.

METRIC:

Air Operated: 6 ATM

Floor space: 1.11 sq.m.

Weight: 204 kilograms

- 45 Degree Loading And Unloading
- Exact Automatic Line Up Of Plates
- Clamping Close To Plate Lugs
Keeps Lugs In Place During
Comb Withdrawal.
- Ideal For Heavy Elements

TIEGEL BL GROUP BURNING MACHINE

The Tiegel BL Group Burning Machine utilizes all of the proven qualities and features of the Tiegel hand operated BJ Group Burning machine and adds several new features.

The BL Group Burning Machine loads and unloads at a forty-five degree angle. This feature has a twofold purpose. First, the angle makes loading and unloading the machine significantly easier. Second, the groups are better aligned because the plates and separators are lined up on their sides on one flat surface and on two points at the top, an ideal three point system.

An automatic clamp presses the group firmly against a flat side. The clamp is located close to the comb so that when the combs engage and withdraw better support is given to the groups, keeping the plates together.

Wide open pockets permit burning three elements with plates up to 6-1/8 inches wide and cell thickness up to 4-5/8 inches, with no adjustment needed for smaller plates and cells. Larger comb opening allows easy unloading of normal or awkward groups with posts overhanging in both the X and Y axes.

Automatic sequencing insures consistently good groups. The BL Machine automatically positions the groups and locks the plates into place before turning over into the horizontal burning position.

These added features make the BL Group Burner the most precise group burner available.

An variation of this machine would be the BLL Group Burner which is designed for electronic backup power and for motorcycle batteries with plate widths from 1" to 4 1/2" widths.

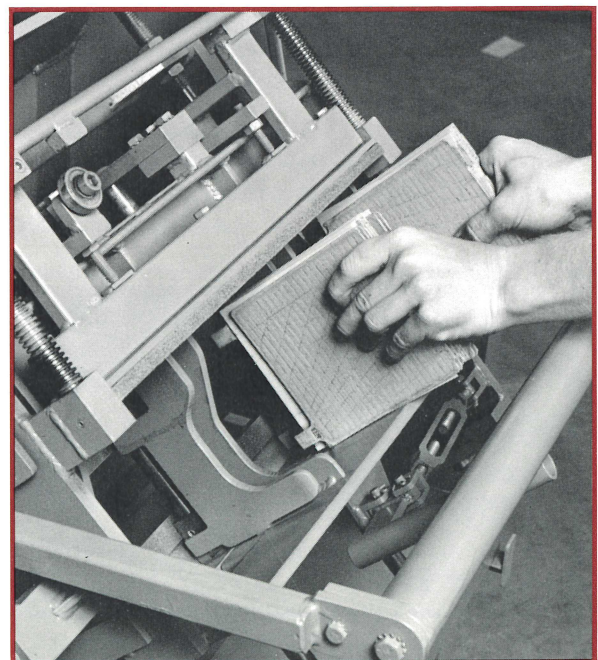
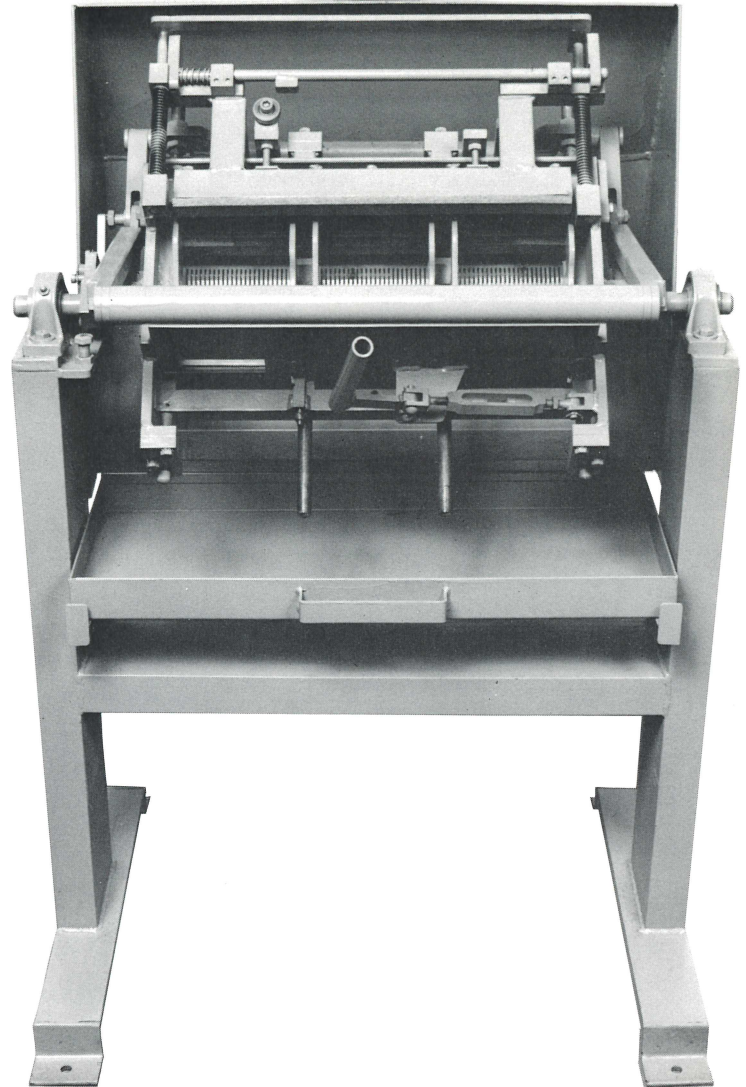
TIEGEL MODEL BL/BLL GROUP BURNER

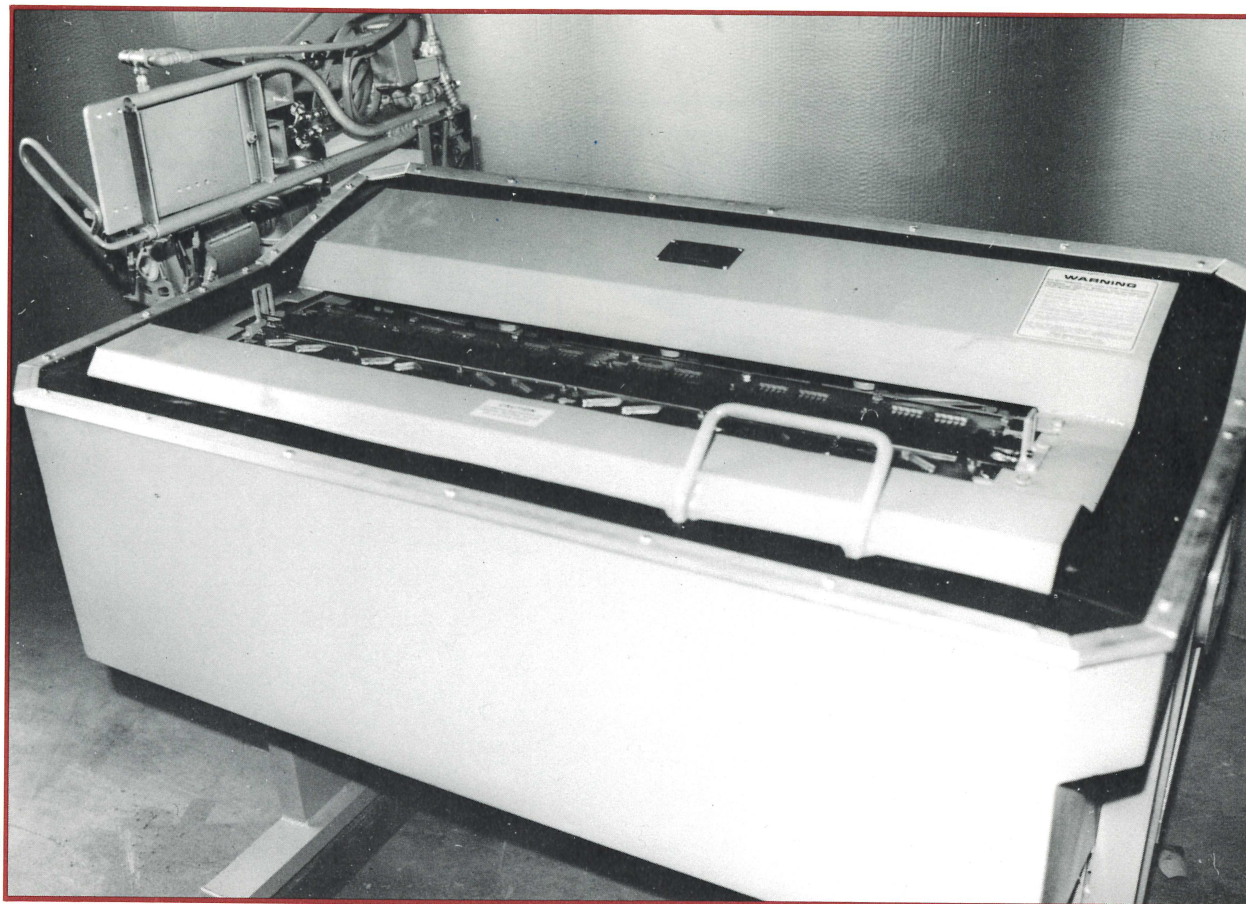
ENGLISH:

Hand Operated
Floor space: 5.2 sq.ft.
Weight: 200 lbs.

METRIC:

Hand Operated
Floor space: .48 sq.m.
Weight: 91 kilograms





AUTOMATIC GROUP BURNER TORCH ATTACHMENT

- Consistently produces uniform burns resulting in better elements.
- Gives exact puddle lead weight control.
- Labor savings up to 30%
- Utilizes city high gas pressure, propane or acetylene

The Automatic Burning Attachment is designed to fit any Tiegel Air Operated Group Burning Machine. It can be ordered with a new machine or installed on your present machine.

The unit has two burning heads that burn the negative and positive straps simultaneously. In normal operation the operator sets up the first half of the posts, starts the Automatic Burner and by the time he has finished setting up the posts, the burning has been completed. This saves about 20% in the overall operating time. Another method is the operator loads one machine, turns on the Automatic Burner, and then loads another machine. This method saves about 30% in overall operating time.

Automatic Burning permits a close control of lead used in the strap because the amount of lead is controlled by the amount available in the protruding lugs, or from crowfoot posts with standard lugs. With hand burning, considerable lead can be wasted by the operator adding lead indiscriminately from his burning stick.

Burning with the Tiegel Automatic Burner saves time and insures more uniform burns. With a little training, even an inexperienced man or woman can burn quality elements in quantity. When ordering, please specify what gases and what pressures are available as the unit will be designed for burning with acetylene-oxygen, liquid petroleum gas-oxygen, natural gas-oxygen, liquid petroleum gas-oxygen or coal gas-oxygen operation. Also, specify voltage and type of current available.

TIEGEL AUTOMATIC GROUP BURNER

ENGLISH:

Air: 60 PSI

Floor space: 12 sq.ft.

Weight: 670 lbs.

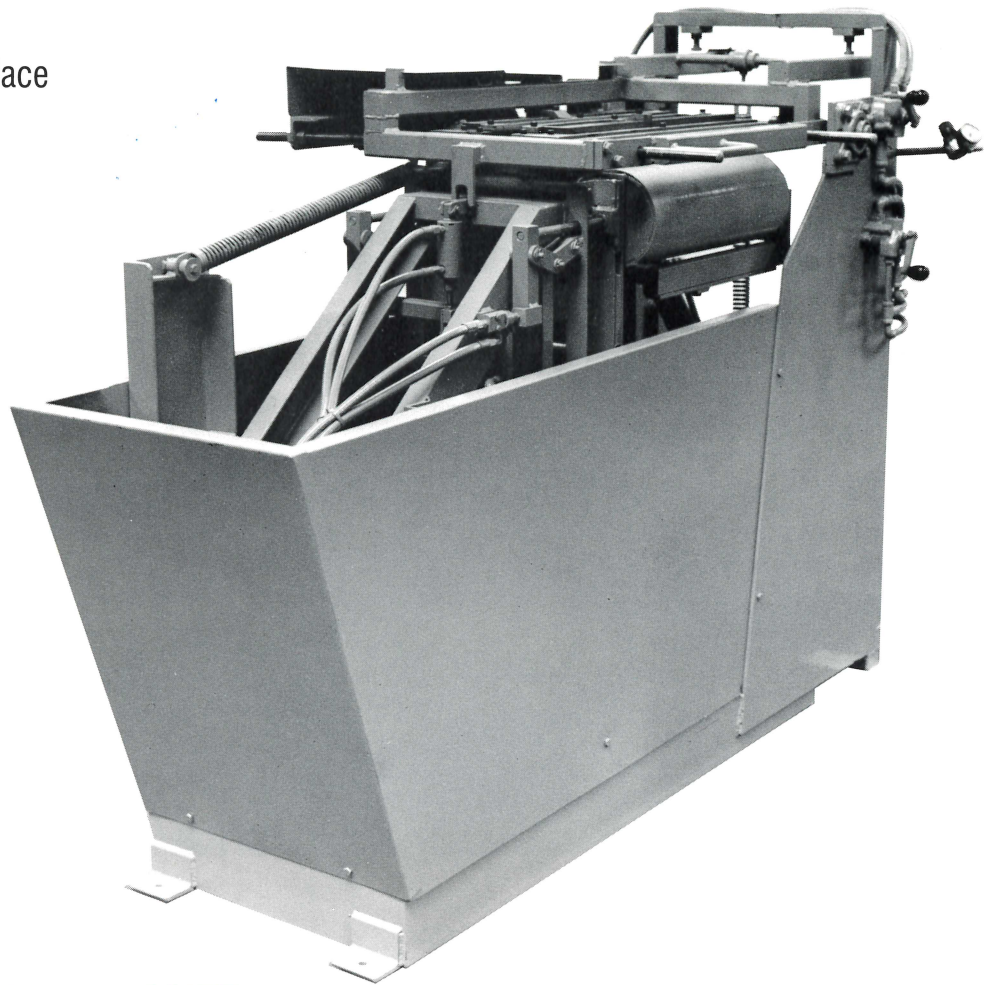
METRIC:

Air: 6 ATM

Floor space: 1.11 sq.m.

Weight: 259 kilograms

- Burning With Separators In Place
- Easy Angle Loading
- No Lead Rundowns
- Tight, Well Aligned Cells
- Air Operation



TIEGEL INDUSTRIAL GROUP BURNER

The TIEGEL INDUSTRIAL GROUP BURNING MACHINE incorporates several proven time-saving features into one machine.

The TIEGEL INDUSTRIAL GROUP BURNING MACHINE is designed to burn heavy plate industrial cells using both 5-5/8 inch (14 cm) and 8 inch (20 cm) wide plates. The machine is easily adjustable for different height and width plates. Cells of up to 16 inches (40 cm) can be burned or several different cells can be stacked together and burned at one time.

The machine is air operated to assist the operator and also to provide up to two tons of closing pressure on the combs around the lugs to insure no lead rundowns.

The Industrial Group Burner loads with the plates upright, on an angle. This not only makes loading easier and faster but insures that

the cells stack tightly and squarely with separators in place so that they drop easily into battery cases. Once the machine is loaded, the elements are securely held in position by an adjustable clamp. The stacked cells are then moved by air into the vertical burning position. The balanced burning head swings down over the cells, and the combs and post locators close tightly around the plates insuring no lead rundowns. The machine can be changed from one plate height to another in 2 minutes, changed to different plate numbers within 2 minutes and from 5-5/8 inch plates to 8 inch wide plates in 5 minutes. The burned elements are easily accessible after burning for insertion of mud guards and separator retainers. The finished elements are easily removed by hand or overhead crane.

THE TIEGEL INDUSTRIAL GROUP BURNING MACHINE is ruggedly constructed to insure long life and dependable operation.

ENGLISH:

Air: 80 PSI
Floor space: 9.2 sq.ft.
Weight: 650 lbs.

METRIC:

Air: 6 ATM
Floor space: .85 sq.m.
Weight: 432 kilograms



TIEGEL "CELL BUILDER"

For Assembling Industrial Battery Elements

1. Plates are stacked in a tilted position.
2. Groups are clamped and combs are rotated to burning position.
3. With burning completed, machine is returned to the starting position. The assembled cells are lifted to battery cases via overhead crane, with no strain or breakage.

Tiegel Group Burning Machines are turning out top quality batteries in factories all over the world, with greater profits to the Battery Manufacturers. These machines are simple machines, sturdily built, easy to maintain and backed by more than 25 years experience on the assembly lines.

For large Industrial Batteries, the Tiegel Cell Builder does an efficient assembling job. The assembly time is cut to about one half of the former hand method time and the operation of the machine requires

less skill and causes less fatigue. Good alignment of plates, no lead run-downs, and no damage to separators or plates, insure quality batteries.

Maximum cell dimension: 5-5/8" plate x 10" thick, or 7" plate x 10" thick.

Two 4-1/2" plates can be burned simultaneously.

Any plate height is accepted.

Larger machines are available on special order. Changeover in 2-5 minutes.

TIEGEL CELL BUILDER

ENGLISH:

Air: 60 PSI

Floor space: 6.25 sq.ft.

Weight: 550 lbs.

METRIC:

Air: 6 ATM

Floor space: .58 sq.m.

Weight: 205 kilograms