# The Brownell Company

ESTABLISHED 1855

**Dayton, Ohio**

**Representatives in Principal Cities**

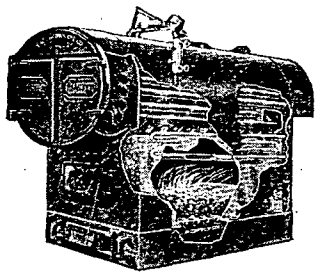
**Manufacturers of**

**B**

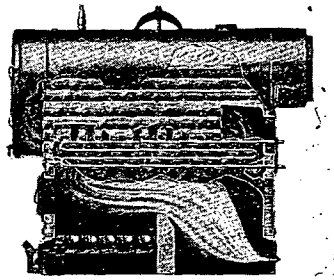
**Welded and Riveted Steel Heating and Power Boilers—Screw Feed Automatic and Heavy Duty Ram Type Stokers—Also Tanks and Open and Closed Feed Water Heaters.**

## MASTER ELECTRIC WELDED STEEL BOILER

**A superior quick steaming boiler occupying less space per unit of heating capacity**



*For Coal Hand Firing*

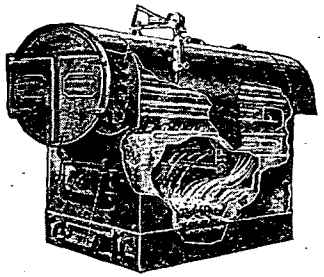


*For Stoker, Oil or Gas*

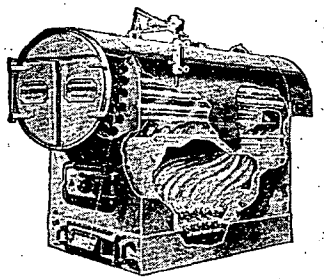
## EXCLUSIVE FEATURES OF THE BROWNELL MASTER BOILER

A noteworthy feature, particularly where available space and height is a consideration, is the relatively small amount of space occupied by this boiler per unit of rating. In the same amount of space, the MASTER boiler will deliver from 12 to 23 per cent over normal rating. This is possible by the use of water tubes in the furnace extending the entire length of the boiler. This construction also lends itself to a more efficient gas or oil installation in conjunction with the use of incinerator grates, forming a four pass boiler with the extra pass directed over the incinerator grates causing a rapid and odorless consuming of the refuse.

## STANDARD ELECTRIC WELDED STEEL BOILER



*Smokeless Type*



*Direct Draft Type*

The STANDARD boiler follows the same general lines as the MASTER, with the exception of the water tubes which have been omitted. The constructional advantages however, are the same for both. In designing these boilers, the principle thought was to insure free and unimpended circulation of the water and to increasing the structural strength beyond that generally found in boilers of this type. In our bulletins M-65 and S-65, which you probably have on file, full details of this construction are given.





## Brownell MASTER and STANDARD Electric Welded Steel Boilers

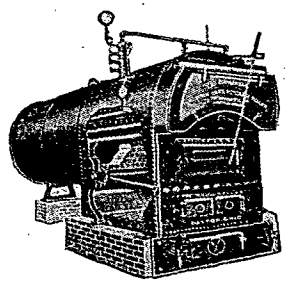
**Built for 15 lb., w.s.p.—A. S. M. E. Code**

**B**

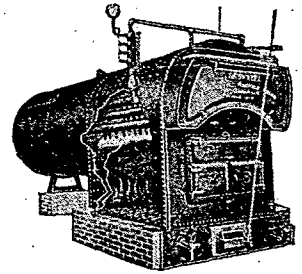
| MASTER BOILER RATINGS | | | | STANDARD BOILER RATINGS | | | | Domestic Water per Hr. Gals. | Grate Area Sq. Ft. | Height Water Line In. | OVERALL DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Boiler No. | Capacity Steam Sq. Ft. | Capacity Water Sq. Ft. | Heating Surface Sq. Ft. | Boiler No. | Capacity Steam Sq. Ft. | Capacity Water Sq. Ft. | Heating Surface Sq. Ft. | | | | Height In. | Width In. | Length In. |
| M-500-R | 750 | 1200 | 56 | ..... | ..... | ..... | ..... | 40 | 3.6 | 50½ | 56 | 24 | 49¾ |
| M-501-R | 850 | 1360 | 65 | ..... | ..... | ..... | ..... | 40 | 4.2 | 50½ | 56 | 24 | 54¾ |
| M-501 | 1100 | 1760 | 83 | S-1 | 900 | 1440 | 76 | 40 | 5.3 | 50½ | 56 | 24 | 62¾ |
| M-502 | 1350 | 2160 | 99 | S-2 | 1100 | 1760 | 90 | 40 | 6.4 | 50½ | 56 | 24 | 71¾ |
| M-503 | 1550 | 2480 | 118 | S-3 | 1350 | 2160 | 107 | 40 | 7.5 | 55 | 61½ | 27 | 72¾ |
| M-504 | 1850 | 2960 | 140 | S-4 | 1650 | 2640 | 124 | 40 | 8.9 | 55 | 61½ | 27 | 81¾ |
| M-505 | 2200 | 3520 | 162 | S-5 | 1900 | 3040 | 146 | 75 | 10.0 | 58 | 66 | 30 | 84¾ |
| M-506 | 2600 | 4160 | 191 | S-6 | 2200 | 3520 | 172 | 75 | 11.0 | 58 | 66 | 30 | 96¾ |
| M-507 | 3000 | 4800 | 228 | S-7 | 2700 | 4320 | 207 | 75 | 11.1 | 62¼ | 74 | 36 | 93½ |
| M-508 | 3550 | 5590 | 256 | S-8 | 3000 | 4800 | 232 | 75 | 12.3 | 62¼ | 74 | 36 | 102½ |
| M-509 | 4100 | 6560 | 288 | S-9 | 3500 | 5600 | 261 | 75 | 13.6 | 62¼ | 74 | 36 | 112½ |
| M-510 | 4900 | 7840 | 352 | S-10 | 4250 | 6800 | 322 | 125 | 14.9 | 69¼ | 81 | 42 | 103½ |
| M-511 | 5500 | 8800 | 395 | S-11 | 4800 | 7680 | 361 | 125 | 16.4 | 69¼ | 81 | 42 | 113½ |
| M-512 | 6100 | 9760 | 429 | S-12 | 5300 | 8480 | 397 | 125 | 17.4 | 72½ | 87 | 48 | 103½ |
| M-513 | 6600 | 10550 | 463 | S-13 | 5700 | 9120 | 428 | 125 | 17.4 | 72½ | 87 | 48 | 109½ |
| M-514 | 7200 | 11520 | 507 | S-14 | 6500 | 10400 | 469 | 125 | 19.1 | 72½ | 87 | 48 | 117½ |
| M-515 | 8200 | 13120 | 571 | S-15 | 7200 | 11500 | 539 | 125 | 19.9 | 79½ | 93 | 54 | 109½ |
| M-516 | 9100 | 14560 | 637 | S-16 | 7900 | 12600 | 592 | 125 | 21.9 | 79½ | 93 | 54 | 117½ |
| M-517 | 10000 | 16000 | 695 | S-17 | 8700 | 13920 | 646 | 125 | 21.9 | 79½ | 93 | 54 | 125½ |
| M-518 | 11500 | 18400 | 800 | S-18 | 10000 | 16000 | 746 | 175 | 22.4 | 83¼ | 100 | 60 | 120½ |
| M-519 | 13000 | 20800 | 906 | S-19 | 11300 | 17970 | 845 | 175 | 22.4 | 83¼ | 100 | 60 | 132½ |
| M-520 | 14300 | 22900 | 991 | S-20 | 12500 | 20000 | 929 | 175 | 24.8 | 93½ | 111 | 66 | 122½ |
| M-521 | 15250 | 24400 | 1058 | S-21 | 13500 | 21600 | 992 | 175 | 24.8 | 93½ | 111 | 66 | 128½ |
| M-522 | 16200 | 25900 | 1125 | S-22 | 14500 | 23200 | 1054 | 175 | 27.3 | 93½ | 111 | 66 | 134½ |
| M-523 | 18000 | 28800 | 1243 | S-23 | 16000 | 25600 | 1173 | 225 | 30.0 | 97¼ | 118 | 72 | 128½ |
| M-524 | 19000 | 30800 | 1320 | S-24 | 17000 | 27200 | 1245 | 225 | 32.7 | 97¼ | 118 | 72 | 134½ |
| M-525 | 21000 | 32800 | 1418 | S-25 | 18000 | 28800 | 1337 | 225 | 35.5 | 97¼ | 118 | 72 | 142½ |
| M-526 | 22500 | 36000 | 1539 | S-26 | 20000 | 32000 | 1460 | 225 | 35.8 | 105 | 126 | 78 | 140½ |
| M-527 | 24500 | 39200 | 1700 | S-27 | 22000 | 35200 | 1612 | 225 | 38.8 | 105 | 126 | 78 | 152½ |

For ratings on stoker, oil or gas firing add 15 per cent to above ratings, or see our bulletins M-65 and S-65. First eight sizes contain no bridgewall—grates completely fill base.

## PORTABLE FIREBOX HEATING BOILERS



*Smokeless Type*



*Direct Draft Type*

**Regularly constructed according to A. S. M. E. Code for 15 lb., and 100 lb., w.s.p.**

| SMOKELESS TYPE | | | | DIRECT DRAFT TYPE | | | | Grate Area Sq. Ft. | Height Water Line In. | OVERALL DIMENSIONS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Boiler No. | Capacity Steam Sq. Ft. | Capacity Water Sq. Ft. | Heating Surface Sq. Ft. | Boiler No. | Capacity Steam Sq. Ft. | Capacity Water Sq. Ft. | Heating Surface Sq. Ft. | | | Height In. | Width In. | Length In. |
| 307 | 3000 | 5000 | 313 | 407 | 2500 | 4100 | 278 | 12.9 | 71 | 84 | 48 | 101 |
| 308 | 3500 | 5800 | 361 | 408 | 2900 | 4800 | 326 | 14.6 | 71 | 84 | 48 | 114 |
| 309 | 4000 | 6600 | 407 | 409 | 3500 | 5800 | 373 | 16.4 | 71 | 84 | 48 | 130 |
| 310 | 4500 | 7400 | 462 | 410 | 4000 | 6600 | 416 | 18.7 | 77½ | 90⅝ | 54 | 120 |
| 311 | 5000 | 8300 | 513 | 411 | 4500 | 7400 | 472 | 18.7 | 77½ | 90⅝ | 54 | 132 |
| 312 | 5500 | 9100 | 564 | 412 | 5000 | 8300 | 519 | 20.7 | 77½ | 90⅝ | 54 | 144 |
| 313 | 6000 | 9900 | 612 | 413 | 5500 | 9100 | 614 | 20.8 | 83 | 98 | 60 | 150 |
| 314 | 6500 | 10700 | 666 | 414 | 6000 | 9900 | 665 | 23.0 | 83 | 98 | 60 | 162 |

*Continued at foot of next page*