

# 4000 SERIES RECIRCULATING OVEN



## SAFE, SIMPLE, & DEPENDABLE

General purpose recirculating ovens for tempering, drawing, annealing, and preheating steel, aluminum, glass, and ceramics in air atmosphere. Available at operating temperatures of: 42 Models: 1200°F, 44 Models: 1400°F, 46 Models: 1600°F, 49 Models 1800°F

All models are equipped with an alloy fan assembly and stainless steel liner, providing a horizontal air flow pattern and uniform temperature throughout the chamber. The liner directs the air flow and baffles the heating elements from the work area.

All models are completely wired to N.E.C., assembled, test-fired, and shipped ready for connection to the main power supply. Compact design, fast installation, and simple, safe, dependable operation. Available in over thirty standard sizes.

## STANDARD FEATURES

- Welded sheet metal shell construction with structural reinforcement.
- Heavy gauge coil wound low-watt density heating elements for longer life.
- Multi-layered energy efficient lightweight firebrick and mineral block insulation for maximum heat storage and minimum heat loss.
- Elements mounted in easy-to-replace holders located on side walls for uniform temperature.
- Stainless steel fan with motor and belt drive.



Model 42-V60

- Stainless steel liner forms work area and directs air flow.
- Hearth plate for load support and floor brick protection on Series 4055 models.
- Horizontal swing door with adjustable latch for positive seal.
- Safety micro-switch shuts off power to elements and fan when door opens.
- Eurotherm digital temperature controller with type K thermocouple and magnetic contactor.
- Controls operate on 115 volts mounted in front base on Series 42 models, and side mounted in a separate NEMA 1 panel on Series 4055 models.

## OPTIONS

- Different door styles,
- Programmable controllers,
- Recorders,
- Timers,
- Cooling options are available

## 42 MODEL SPECIFICATIONS

| Model  | Chamber Dimensions | Overall Dimensions | KW  | Voltage   | Weight (lbs) |
|--------|--------------------|--------------------|-----|-----------|--------------|
| 42-A9  | 6"H X 6"W X 9"D    | 53"H X 19"W X 37"D | 1.5 | 230/460/1 | 325          |
| 42-A12 | 6"H X 6"W X 12"D   | 53"H X 19"W X 40"D | 2   | 230/460/1 | 350          |
| 42-B9  | 9"H X 9"W X 9"D    | 56"H X 22"W X 37"D | 2.5 | 230/460/1 | 400          |
| 42-B12 | 9"H X 9"W X 12"D   | 56"H X 22"W X 36"D | 3   | 230/460/1 | 425          |
| 42-B18 | 9"H X 9"W X 18"D   | 56"H X 22"W X 42"D | 4   | 230/460/1 | 465          |
| 42-H12 | 9"H X 12"W X 12"D  | 56"H X 25"W X 42"D | 3.5 | 230/460/1 | 495          |
| 42-H18 | 9"H X 12"W X 18"D  | 56"H X 25"W X 48"D | 5   | 230/460/1 | 570          |
| 42-H24 | 9"H X 12"W X 24"D  | 56"H X 25"W X 48"D | 6   | 230/460/1 | 645          |
| 42-K12 | 12"H X 12"W X 12"D | 56"H X 25"W X 36"D | 4.5 | 230/460/1 | 490          |
| 42-K18 | 12"H X 12"W X 18"D | 56"H X 25"W X 48"D | 6   | 230/460/1 | 620          |
| 42-K24 | 12"H X 12"W X 24"D | 56"H X 25"W X 48"D | 8.5 | 230/460/3 | 710          |
| 42-K36 | 12"H X 12"W X 36"D | 56"H X 25"W X 60"D | 11  | 230/460/3 | 860          |
| 42-M18 | 12"H X 18"W X 18"D | 56"H X 32"W X 48"D | 9   | 230/460/3 | 730          |
| 42-M24 | 12"H X 18"W X 24"D | 56"H X 32"W X 48"D | 11  | 230/460/3 | 750          |
| 42-M36 | 12"H X 18"W X 36"D | 56"H X 32"W X 60"D | 13  | 230/460/3 | 915          |
| 42-O18 | 18"H X 18"W X 18"D | 62"H X 32"W X 48"D | 12  | 230/460/3 | 735          |
| 42-O24 | 18"H X 18"W X 24"D | 62"H X 32"W X 53"D | 13  | 230/460/3 | 840          |
| 42-O36 | 18"H X 18"W X 36"D | 62"H X 32"W X 65"D | 16  | 230/460/3 | 1050         |
| 42-O48 | 18"H X 18"W X 48"D | 62"H X 32"W X 72"D | 18  | 230/460/3 | 1115         |
| 42-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 14  | 230/460/3 | 1300         |
| 42-P36 | 18"H X 24"W X 36"D | 62"H X 39"W X 65"D | 17  | 230/460/3 | 1450         |
| 42-P48 | 18"H X 24"W X 48"D | 62"H X 39"W X 77"D | 20  | 230/460/3 | 1800         |
| 42-R24 | 24"H X 24"W X 24"D | 62"H X 39"W X 53"D | 15  | 230/460/3 | 1600         |
| 42-R36 | 24"H X 24"W X 36"D | 62"H X 39"W X 65"D | 20  | 230/460/3 | 1900         |
| 42-R48 | 24"H X 24"W X 48"D | 62"H X 39"W X 77"D | 28  | 230/460/3 | 2300         |
| 42-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 14  | 230/460/3 | 1300         |
| 42-S36 | 24"H X 36"W X 36"D | 62"H X 51"W X 53"D | 35  | 230/460/3 | 2200         |
| 42-V36 | 36"H X 36"W X 36"D | 68"H X 51"W X 65"D | 42  | 230/460/3 | 3200         |
| 42-V48 | 36"H X 36"W X 48"D | 68"H X 51"W X 77"D | 46  | 230/460/3 | 3600         |
| 42-S48 | 24"H X 36"W X 48"D | 62"H X 51"W X 65"D | 42  | 230/460/3 | 2700         |

## 44 MODEL SPECIFICATIONS

| Model  | Chamber Dimensions | Overall Dimensions | KW  | Voltage   | Weight (lbs) |
|--------|--------------------|--------------------|-----|-----------|--------------|
| 44-A9  | 6"H X 6"W X 9"D    | 53"H X 19"W X 37"D | 1.5 | 230/460/1 | 325          |
| 44-A12 | 6"H X 6"W X 12"D   | 53"H X 19"W X 40"D | 2   | 230/460/1 | 350          |
| 44-B9  | 9"H X 9"W X 9"D    | 56"H X 22"W X 37"D | 2.5 | 230/460/1 | 400          |
| 44-B12 | 9"H X 9"W X 12"D   | 56"H X 22"W X 36"D | 3   | 230/460/1 | 425          |
| 44-B18 | 9"H X 9"W X 18"D   | 56"H X 22"W X 42"D | 4   | 230/460/1 | 465          |
| 44-H12 | 9"H X 12"W X 12"D  | 56"H X 25"W X 42"D | 3.5 | 230/460/1 | 495          |
| 44-H18 | 9"H X 12"W X 18"D  | 56"H X 25"W X 48"D | 5.5 | 230/460/1 | 570          |
| 44-H24 | 9"H X 12"W X 24"D  | 56"H X 25"W X 48"D | 6.5 | 230/460/1 | 645          |
| 44-K12 | 12"H X 12"W X 12"D | 56"H X 25"W X 36"D | 5   | 230/460/1 | 490          |
| 44-K18 | 12"H X 12"W X 18"D | 56"H X 25"W X 48"D | 6.5 | 230/460/1 | 620          |
| 44-K24 | 12"H X 12"W X 24"D | 56"H X 25"W X 48"D | 8.5 | 230/460/3 | 710          |
| 44-K36 | 12"H X 12"W X 36"D | 56"H X 25"W X 60"D | 11  | 230/460/3 | 860          |
| 44-M18 | 12"H X 18"W X 18"D | 56"H X 32"W X 48"D | 9   | 230/460/3 | 730          |
| 44-M24 | 12"H X 18"W X 24"D | 56"H X 32"W X 48"D | 11  | 230/460/3 | 750          |
| 44-M36 | 12"H X 18"W X 36"D | 56"H X 32"W X 60"D | 14  | 230/460/3 | 915          |
| 44-O18 | 18"H X 18"W X 18"D | 62"H X 32"W X 48"D | 12  | 230/460/3 | 735          |
| 44-O24 | 18"H X 18"W X 24"D | 62"H X 32"W X 53"D | 14  | 230/460/3 | 840          |
| 44-O36 | 18"H X 18"W X 36"D | 62"H X 32"W X 65"D | 16  | 230/460/3 | 1050         |
| 44-O48 | 18"H X 18"W X 48"D | 62"H X 32"W X 72"D | 20  | 230/460/3 | 1115         |
| 44-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 15  | 230/460/3 | 1300         |
| 44-P36 | 18"H X 24"W X 36"D | 62"H X 39"W X 65"D | 20  | 230/460/3 | 1450         |
| 44-P48 | 18"H X 24"W X 48"D | 62"H X 39"W X 77"D | 22  | 230/460/3 | 1800         |
| 44-R24 | 24"H X 24"W X 24"D | 62"H X 39"W X 53"D | 18  | 230/460/3 | 1600         |
| 44-R36 | 24"H X 24"W X 36"D | 62"H X 39"W X 65"D | 22  | 230/460/3 | 1900         |
| 44-R48 | 24"H X 24"W X 48"D | 62"H X 39"W X 77"D | 30  | 230/460/3 | 2300         |
| 44-S36 | 24"H X 36"W X 36"D | 62"H X 51"W X 53"D | 42  | 230/460/3 | 2200         |
| 44-S48 | 24"H X 36"W X 48"D | 62"H X 51"W X 65"D | 40  | 230/460/3 | 2700         |
| 44-V36 | 36"H X 36"W X 36"D | 68"H X 51"W X 65"D | 44  | 230/460/3 | 3200         |
| 44-V48 | 36"H X 36"W X 48"D | 68"H X 51"W X 77"D | 50  | 230/460/3 | 3600         |

## 46 MODEL SPECIFICATIONS

| Model  | Chamber Dimensions | Overall Dimensions | KW  | Voltage   | Weight (lbs) |
|--------|--------------------|--------------------|-----|-----------|--------------|
| 46-A9  | 6"H X 6"W X 9"D    | 53"H X 19"W X 37"D | 1.8 | 230/460/1 | 325          |
| 46-A12 | 6"H X 6"W X 12"D   | 53"H X 19"W X 40"D | 2.5 | 230/460/1 | 350          |
| 46-B9  | 9"H X 9"W X 9"D    | 56"H X 22"W X 37"D | 3   | 230/460/1 | 400          |
| 46-B12 | 9"H X 9"W X 12"D   | 56"H X 22"W X 36"D | 3.5 | 230/460/1 | 425          |
| 46-B18 | 9"H X 9"W X 18"D   | 56"H X 22"W X 42"D | 4.5 | 230/460/1 | 465          |
| 46-H12 | 9"H X 12"W X 12"D  | 56"H X 25"W X 42"D | 4.5 | 230/460/1 | 495          |
| 46-H18 | 9"H X 12"W X 18"D  | 56"H X 25"W X 48"D | 6   | 230/460/1 | 570          |
| 46-H24 | 9"H X 12"W X 24"D  | 56"H X 25"W X 48"D | 7.5 | 230/460/1 | 645          |
| 46-K12 | 12"H X 12"W X 12"D | 56"H X 25"W X 36"D | 5.5 | 230/460/1 | 490          |
| 46-K18 | 12"H X 12"W X 18"D | 56"H X 25"W X 48"D | 7.5 | 230/460/1 | 620          |
| 46-K24 | 12"H X 12"W X 24"D | 56"H X 25"W X 48"D | 9.5 | 230/460/3 | 710          |
| 46-K36 | 12"H X 12"W X 36"D | 56"H X 25"W X 60"D | 13  | 230/460/3 | 860          |
| 46-M18 | 12"H X 18"W X 18"D | 56"H X 32"W X 48"D | 10  | 230/460/3 | 730          |
| 46-M24 | 12"H X 18"W X 24"D | 56"H X 32"W X 48"D | 13  | 230/460/3 | 750          |
| 46-M36 | 12"H X 18"W X 36"D | 56"H X 32"W X 60"D | 15  | 230/460/3 | 915          |
| 46-O18 | 18"H X 18"W X 18"D | 62"H X 32"W X 48"D | 14  | 230/460/3 | 735          |
| 46-O24 | 18"H X 18"W X 24"D | 62"H X 32"W X 53"D | 15  | 230/460/3 | 840          |
| 46-O36 | 18"H X 18"W X 36"D | 62"H X 32"W X 65"D | 18  | 230/460/3 | 1050         |
| 46-O48 | 18"H X 18"W X 48"D | 62"H X 32"W X 72"D | 22  | 230/460/3 | 1115         |
| 46-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 16  | 230/460/3 | 1300         |
| 46-P36 | 18"H X 24"W X 36"D | 62"H X 39"W X 65"D | 22  | 230/460/3 | 1450         |
| 46-P48 | 18"H X 24"W X 48"D | 62"H X 39"W X 77"D | 28  | 230/460/3 | 1800         |
| 46-R24 | 24"H X 24"W X 24"D | 62"H X 39"W X 53"D | 20  | 230/460/3 | 1600         |
| 46-R36 | 24"H X 24"W X 36"D | 62"H X 39"W X 65"D | 26  | 230/460/3 | 1900         |
| 46-R48 | 24"H X 24"W X 48"D | 62"H X 39"W X 77"D | 34  | 230/460/3 | 2300         |
| 46-S36 | 24"H X 36"W X 36"D | 62"H X 51"W X 53"D | 45  | 230/460/3 | 2200         |
| 46-V36 | 36"H X 36"W X 36"D | 68"H X 51"W X 65"D | 47  | 230/460/3 | 3200         |
| 46-V48 | 36"H X 36"W X 48"D | 68"H X 51"W X 77"D | 54  | 230/460/3 | 3600         |
| 46-S48 | 24"H X 36"W X 48"D | 62"H X 51"W X 65"D | 42  | 230/460/3 | 2700         |

## 48 MODEL SPECIFICATIONS

| Model  | Chamber Dimensions | Overall Dimensions | KW  | Voltage   | Weight (lbs) |
|--------|--------------------|--------------------|-----|-----------|--------------|
| 48-A12 | 6"H X 6"W X 12"D   | 53"H X 19"W X 40"D | 1.5 | 230/460/1 | 350          |
| 48-A9  | 6"H X 6"W X 9"D    | 53"H X 19"W X 37"D | 1   | 230/460/1 | 325          |
| 48-B12 | 9"H X 9"W X 12"D   | 56"H X 22"W X 36"D | 2   | 230/460/1 | 425          |
| 48-B18 | 9"H X 9"W X 18"D   | 56"H X 22"W X 42"D | 2.5 | 230/460/1 | 465          |
| 48-B9  | 9"H X 9"W X 9"D    | 56"H X 22"W X 37"D | 2   | 230/460/1 | 400          |
| 48-H12 | 9"H X 12"W X 12"D  | 56"H X 25"W X 42"D | 2.5 | 230/460/1 | 495          |
| 48-H18 | 9"H X 12"W X 18"D  | 56"H X 25"W X 48"D | 4   | 230/460/1 | 570          |
| 48-H24 | 9"H X 12"W X 24"D  | 56"H X 25"W X 48"D | 4.5 | 230/460/1 | 645          |
| 48-K12 | 12"H X 12"W X 12"D | 56"H X 25"W X 36"D | 3.5 | 230/460/1 | 490          |
| 48-K18 | 12"H X 12"W X 18"D | 56"H X 25"W X 48"D | 4.5 | 230/460/1 | 620          |
| 48-K24 | 12"H X 12"W X 24"D | 56"H X 25"W X 48"D | 6.5 | 230/460/3 | 710          |
| 48-K36 | 12"H X 12"W X 36"D | 56"H X 25"W X 60"D | 8   | 230/460/3 | 860          |
| 48-M18 | 12"H X 18"W X 18"D | 56"H X 32"W X 48"D | 7   | 230/460/3 | 730          |
| 48-M24 | 12"H X 18"W X 24"D | 56"H X 32"W X 48"D | 8   | 230/460/3 | 750          |
| 48-M36 | 12"H X 18"W X 36"D | 56"H X 32"W X 60"D | 10  | 230/460/3 | 915          |
| 48-O18 | 18"H X 18"W X 18"D | 62"H X 32"W X 48"D | 9   | 230/460/3 | 735          |
| 48-O24 | 18"H X 18"W X 24"D | 62"H X 32"W X 53"D | 10  | 230/460/3 | 840          |
| 48-O36 | 18"H X 18"W X 36"D | 62"H X 32"W X 65"D | 13  | 230/460/3 | 1050         |
| 48-O48 | 18"H X 18"W X 48"D | 62"H X 32"W X 72"D | 16  | 230/460/3 | 1115         |
| 48-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 12  | 230/460/3 | 1300         |
| 48-P36 | 18"H X 24"W X 36"D | 62"H X 39"W X 65"D | 16  | 230/460/3 | 1450         |
| 48-P48 | 18"H X 24"W X 48"D | 62"H X 39"W X 77"D | 18  | 230/460/3 | 1800         |
| 48-R24 | 24"H X 24"W X 24"D | 62"H X 39"W X 53"D | 14  | 230/460/3 | 1600         |
| 48-R36 | 24"H X 24"W X 36"D | 62"H X 39"W X 65"D | 18  | 230/460/3 | 1900         |
| 48-R48 | 24"H X 24"W X 48"D | 62"H X 39"W X 77"D | 25  | 230/460/3 | 2300         |
| 48-S36 | 24"H X 36"W X 36"D | 62"H X 51"W X 53"D | 32  | 230/460/3 | 2200         |
| 48-S48 | 24"H X 36"W X 48"D | 62"H X 51"W X 65"D | 30  | 230/460/3 | 2700         |
| 48-V36 | 36"H X 36"W X 36"D | 68"H X 51"W X 65"D | 34  | 230/460/3 | 3200         |
| 48-V48 | 36"H X 36"W X 48"D | 68"H X 51"W X 77"D | 40  | 230/460/3 | 3600         |

## 49 MODEL SPECIFICATIONS

| Model  | Chamber Dimensions | Overall Dimensions | KW  | Voltage   | Weight (lbs) |
|--------|--------------------|--------------------|-----|-----------|--------------|
| 49-A12 | 6"H X 6"W X 12"D   | 53"H X 19"W X 40"D | 3   | 230/460/1 | 350          |
| 49-A9  | 6"H X 6"W X 9"D    | 53"H X 19"W X 37"D | 2   | 230/460/1 | 325          |
| 49-B12 | 9"H X 9"W X 12"D   | 56"H X 22"W X 36"D | 4.5 | 230/460/1 | 425          |
| 49-B18 | 9"H X 9"W X 18"D   | 56"H X 22"W X 42"D | 6   | 230/460/1 | 465          |
| 49-B9  | 9"H X 9"W X 9"D    | 56"H X 22"W X 37"D | 3.5 | 230/460/1 | 400          |
| 49-H12 | 9"H X 12"W X 12"D  | 56"H X 25"W X 42"D | 5   | 230/460/1 | 495          |
| 49-H18 | 9"H X 12"W X 18"D  | 56"H X 25"W X 48"D | 8   | 230/460/1 | 570          |
| 49-H24 | 9"H X 12"W X 24"D  | 56"H X 25"W X 48"D | 9   | 230/460/1 | 645          |
| 49-K12 | 12"H X 12"W X 12"D | 56"H X 25"W X 36"D | 6   | 230/460/1 | 490          |
| 49-K18 | 12"H X 12"W X 18"D | 56"H X 25"W X 48"D | 9   | 230/460/1 | 620          |
| 49-K24 | 12"H X 12"W X 24"D | 56"H X 25"W X 48"D | 11  | 230/460/3 | 710          |
| 49-K36 | 12"H X 12"W X 36"D | 56"H X 25"W X 60"D | 14  | 230/460/3 | 860          |
| 49-M18 | 12"H X 18"W X 18"D | 56"H X 32"W X 48"D | 12  | 230/460/3 | 730          |
| 49-M24 | 12"H X 18"W X 24"D | 56"H X 32"W X 48"D | 14  | 230/460/3 | 750          |
| 49-M36 | 12"H X 18"W X 36"D | 56"H X 32"W X 60"D | 16  | 230/460/3 | 915          |
| 49-O18 | 18"H X 18"W X 18"D | 62"H X 32"W X 48"D | 15  | 230/460/3 | 735          |
| 49-O24 | 18"H X 18"W X 24"D | 62"H X 32"W X 53"D | 16  | 230/460/3 | 840          |
| 49-O36 | 18"H X 18"W X 36"D | 62"H X 32"W X 65"D | 22  | 230/460/3 | 1050         |
| 49-O48 | 18"H X 18"W X 48"D | 62"H X 32"W X 72"D | 24  | 230/460/3 | 1115         |
| 49-P24 | 18"H X 24"W X 24"D | 62"H X 39"W X 53"D | 18  | 230/460/3 | 1300         |
| 49-P36 | 18"H X 24"W X 36"D | 62"H X 39"W X 65"D | 26  | 230/460/3 | 1450         |
| 49-P48 | 18"H X 24"W X 48"D | 62"H X 39"W X 77"D | 30  | 230/460/3 | 1800         |
| 49-R24 | 24"H X 24"W X 24"D | 62"H X 39"W X 53"D | 24  | 230/460/3 | 1600         |
| 49-R36 | 24"H X 24"W X 36"D | 62"H X 39"W X 65"D | 30  | 230/460/3 | 1900         |
| 49-R48 | 24"H X 24"W X 48"D | 62"H X 39"W X 77"D | 37  | 230/460/3 | 2300         |
| 49-S36 | 24"H X 36"W X 36"D | 62"H X 51"W X 53"D | 48  | 230/460/3 | 2200         |
| 49-S48 | 24"H X 36"W X 48"D | 62"H X 51"W X 65"D | 46  | 230/460/3 | 2700         |
| 49-V36 | 36"H X 36"W X 36"D | 68"H X 51"W X 65"D | 50  | 230/460/3 | 3200         |
| 49-V48 | 36"H X 36"W X 48"D | 68"H X 51"W X 77"D | 56  | 230/460/3 | 3600         |