

ALUMINUM SOLUTION HEAT TREATING



PYRADIA has developed the most advanced line of drop bottom ovens for aluminum and magnesium solution heat treating. These ovens incorporate a **state of the art** control system and hoist mechanism which make them the most **efficient** and **reliable** on the market.

The variable speed electro-mechanical hoist system permits a controlled acceleration/ deceleration of the load descent and has proven to be much more reliable and sturdy than the commonly used pneumatic systems.



State of the art indirect gas fired Drop Bottom Furnace is class II

- **EXCELLENT TEMPERATURE UNIFORMITY**
- **LONG LASTING EQUIPMENT**
- **LOW MAINTENANCE OPERATION COST**
- **VARIABLE SPEED ELECTRO-MECHANICAL HOIST SYSTEM**
- **FULLY AUTOMATED LOADING & QUENCHING SYSTEM**

We design our units using long lasting low power density tubular heating elements evenly distributed in the air ducts all around the working zone. The high efficiency fans located in the top plenum procure a powerful vertical airflow, which passes evenly through the working area. As a result, Pyradia's equipment can achieve a temperature **uniformity up to +/- 3°C (5oF) CLASS I.**

Pyradia's drop bottom furnaces are designed for an intensive and continuous use up to **1200°F/650°C.**



SPECIFICATIONS

Models	Width (IN/CM)	Length (IN/CM)	Height (IN/CM)	Air Flow (CFM/CMH) X 1000	Plug-fan Power (HP/kW)	Installed heating power	
						KW	(BTU/Hr) x 1000
036036042	36/91	36/91	42/106	5/8.5	1 X 7.5/3.7	96	327*
048048048	48/121	48/121	48/121	7.5/12.8	2 X 7,5/5.2	110	375*
048072048	48/121	72/182	48/221	10.3/17.5	1 X 10/7.5	120	410*
048096048	48/121	96/244	48/152	13/22.1	2 X 10/15	126	430*
060060060	60/152	60/152	60/152	10.5/17.9	1 X 15/11	132	450*
060080060	60/152	80/200	60/152	13.3/22.6	1 x 20/15	153	522*
048108060	48/120	108/275	60/152	14.5/24.7	2 X 10/15	162	553*
048132060	48/120	132/335	60/152	17.2/29.8	2 X 15/22	228	778**
048132072	48/120	132/335	72/180	17.5/29.8	2 X 15/22	234	799**
048156060	48/120	156/396	60/152	20/34	2 X 15/22	242	826**
048156072	48/120	156/396	72/152	20.5/34.9	2 X 15/22	264	900**

*Based on an hour recovery time /w 1000lbs payload

**Based on an hour recovery time /w 2000lbs payload

MEETS EQUIPMENT PYROMETRY STANDARDS AMS 2750 | NADCAP | CQI9
MEETS PROCESS QUALITY STANDARDS AMS 2768 | 2770 | 2771 | 2772

FEATURES

- Temperature uniformity of +/- 5oC (±10oF) Class II
- Choice of quench time in less than 5,7,10 or 15s
- Fastest ramp-up and lowest consumption
- Electric or gas heating (direct or indirect)
- Ceramic fiber module insulation
- Stainless steel air baffle
- Sliding or swinging door
- High volume recirculating stainless steel fan
- Fast acting pneumatically operated doors
- Tank mounted on electrical motorized cart with rails
- Belt driven circulating fan
- Parts are protected against element radiation
- Load capacity up to 2 000 lbs (900 kgs) for standard models
- Camera for OP assistance

OPTIONS

- Up to 6 500 lbs hoist capacity
- Temperature uniformity of +/- 3oC (±5oF)
- Quenching tanks cooling system
- Quenching tanks heating system
- Quenching tanks insulation
- Zone safety
- Glycol management system enabling water/glycol separation for regulating the concentration of the solution and recuperation
- Sand filtration/recuperation system
- Mezzanine for operating station
- Rinse tank(s)
- Additional quench tank(s)
- Additional dimensions available
- Quench media filtration
- CO2 atmosphere for magnesium alloys