

ALD Vacuum Technologies

High Tech is our Business

VIM02 - VIM70

Vacuum Induction Melting & Casting Furnaces



- High Flexibility & Versatility
- High Efficiency due to Desoxidation
- Close Compositional Tolerances
- Precise Temperature Control
- Low Dust Output
- Removal of Undesired Elements

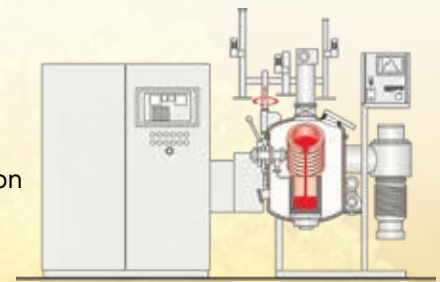


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Preventing Oxidation of Sensitive Alloy Elements through Vacuum

VIM Process Characteristics

Extremely precise Adjustment of the Alloy Composition & Melt Homogenization since Melt Temperature, Vacuum, Gas Atmosphere, Pressure & Kinetics can be adjusted independently. VIM Technology can be used in Conjunction with a number of Casting & Mold Treatment Processes.



Basic Single Chamber Design

		VIM02	VIM05	VIM2	VIM4	VIM6	VIM12	VIM20	VIM35	VIM50	VIM70
Crucible Nom. capacity (from...to...) Nom. capacity, max. (g St.=7.2 g/cm³)	[l]	0.1–0.2	0.04–0.5	0.5–1.95	1.95–3.5	3.5–5.8	5.5–12	12–21.4	18–35	21.4–50	50–70
	(kg)	1.5	4	14	25	40	85	150	250	350	500
Max. Size/Mold Setup Diameter Height	(mm)	100	180	180	220	320	380	500	800	550	1000
	(mm)	180	220	360	400	440	480	750	1000	1000	1100
Vacuum Range Medium-vacuum pumping system*	(mbar)	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²	x10 ⁻²
	(mbar)	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴	x10 ⁻⁴
Recommended Power Supply for Melting MF power at 250 V Frequency Coil voltage	(kW)	6	20	40	60	80	120	180	250	250	450
	(KHz)	20	10	4	4	4	4	2	1.5	1	1
	(V)	250	250	250	250	250	250	250	400	400	400
Electr. connected Loads incl. High-Vacuum Pumping Unit Line-voltage data	(kVA)	20	40	60	100	120	190	320	400	460	650
	(V/Hz)	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50	3x400/50
Space Requirement System height, with options	(mxm)	1.1x1.1	1x2.7	1x2.9	1.4x3	2.7x3.4	3.4x3.7	4.8x4.8	4.5x5.5	5.6x6.7	8.0x9.0
	(m)	2.0	3.0	3.1	3.2	3.5	3.9	5.3	5.7	5.9	6.4
Total Weights (approx.) Weight of furnace (approx.) Weight of MF power supply (approx.)	(kg)	475	1500	1750	1900	3150	4000	7000	9500	11500	15200
	(kg)	450	900	1050	1200	2400	2800	5200	7600	9500	13000
	(kg)	25	600	700	700	750	1200	1800	1900	2000	2200

*mechanical pumps only



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