

ALD Product Overview

Vacuum Metallurgy



VIM / VIDP

Vacuum Induction Melting Plants

1 - 30,000 kg
Melting, alloying and casting under vacuum of oxydation prone metals and alloys



VID

Vacuum Induction Degassing Plants

1 - 30,000 kg
Alloying and degassing of small batches of special steels casting under atmosphere or inert gas pressure



ESR

Electroslag Remelting Plants

200 mm - 2,300 mm ingot diameter
Remelting of tool steels, cold rolls, engineering steel as well as steels and super alloys for aircraft or energy application



VAR

Vacuum Arc Remelting Plants

70 - 1,600 mm ingot diameter
Remelting of reactive metals like Ti or Zr, engineering steel as well as steels and super alloys for aircraft or energy application



EB

Electron Beam Melting Plants

10 - 3,600 kW
Melting and refining of refractory and reactive metals as well as high performance metals



VIM-IC

Vacuum Investment Casting

Vacuum induction melting & casting with ceramic crucibles and (liquid metal) cooling devices for DS (directionally solidified)/SC (single crystal) solidification
Vacuum arc melting and casting



LEICOMELT

Induction Cold Crucible Melting

1 - 30 l copper crucible volume
For melting and casting of reactive materials such as Ti/Zr



VIGA

Vacuum Induction Plants for Melting and Gas Atomization

1 - 300 l crucible volume
Production of metal powder (brazing powder, hydrogen storage alloys, Ni-base alloy powder, plasma spray powder)



EIGA

Vacuum Induction-Melting Furnaces for Ceramic-Free Melting and Gas Atomization

Ceramic-free production of powders from reactive, refractory and precious metals (Ti, Zr, Hf, V, Cr, Mo, Nb, Pt, Pd, Ru) for MIM, rapid prototyping or sputtering targets



EB / PVD

Vacuum Turbine Blade Coating

Electron beam/physical vapor deposition (EB/PVD) of protective (MCrAlY) and thermal barrier coating (TBC)



SCU400plus

Vacuum Furnaces for Melting and Crystallization of Silicon Ingots

Production of directionally solidified ingots from polycrystalline solar-grade silicon for solar cells



HIF

Vacuum Plants for Hot Isothermal Forging

Up to 8,000 t press capacity for the production of large rotating components from Titanium or superalloys



IWQ

Induction-Heated Quartz-Tube-Furnaces

Quarz tube diameter up to 1,000 mm
Heat-treatment, melting, distillation and reduction of reactive materials



WI

High Vacuum Resistance Furnaces

For special high-temperature processes like annealing, sintering, impregnation and brazing