

The Solution



A member of



**ALD Vacuum Technologies**

High Tech is our Business

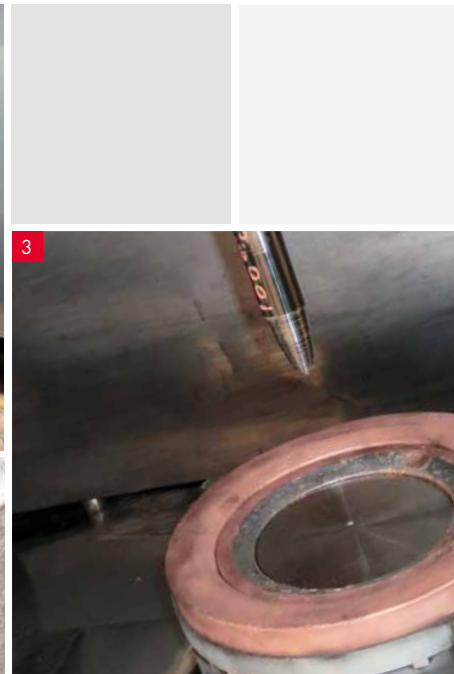
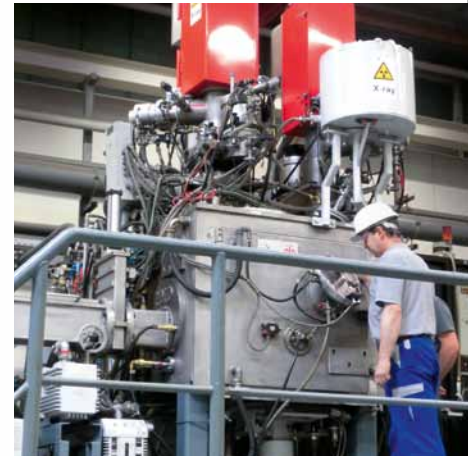
# Electron Beam Toll Melting Service

Competence & Quality in Electron Beam Melting



# Electron Beam Toll Melting Service

- Drip melting
- Cold Hearth Refining (EBCHR)
- Ingot withdrawal ( round or slab)
- Button melting
- Consolidation
- Casting
- Melting Power: 300 kW
- Vacuum pumping capacity 20.000 l/sec



1. Drip melting of electrodes or sidefeed bars into withdrawal crucible
2. Refractory metal ingot
3. Drip melting and casting into molds
4. Cold hearth refining (EBCHR)

For many years, ALD has been offering electron beam guns and EB melting and remelting furnaces and is a world wide market leader. Since 2001 ALD is also offering the "Electron Beam Toll Melting Service" as a service to our customers.

The Electron Beam Toll Melting Facility is located in our Technology Center in Hanau, Germany and is operated by experienced engineers.

## The following processes are available:

- Drip melting of electrodes or sidefeed bars into withdrawal crucible
- Cold hearth refining (EBCHR)
- Drip melting and casting into molds
- Button melting
- Consolidation

# Electron Beam Toll Melting Service

Always a step ahead

Precious  
Metals

<sup>22</sup>  
Ti

<sup>73</sup>  
Ta

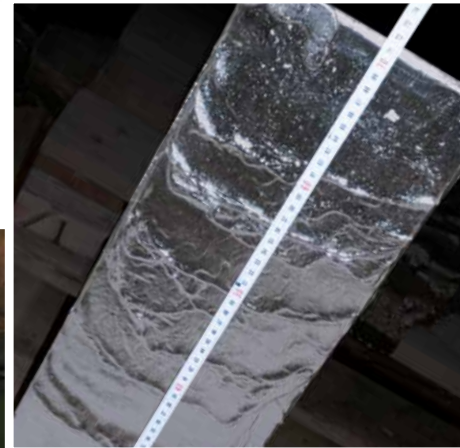
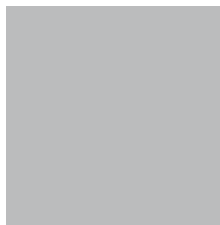
<sup>23</sup>  
V

<sup>72</sup>  
Hf

<sup>40</sup>  
Zr

<sup>42</sup>  
Mo

<sup>41</sup>  
Nb



## Materials:

- Tantalum
- Niobium
- Tungsten
- Vanadium
- Zirkonium, Hafnium
- Titanium
- Molybdenum
- Precious Metals

The following sizes of crucibles  
and slab-crucibles are available:

### Crucible diameters:

- ø 150 mm
- ø 126 mm
- ø 115 mm
- ø 110 mm
- ø 100 mm
- ø 80 mm
- ø 60 mm
- ø 50 mm
- ø 40 mm
- ø 35 mm
- ø 30 mm
- ø 25 mm
- ø 20 mm

### Slabcrucible dimensions:

- 125 x 35 mm
- 65 x 65 mm

### Plate crucible dimensions:

- 700 x 200 x 30 mm

## Typical dimensions

Max. ingot length (depending on material and ingot weight):	[mm]	600 - 750
Max. ingot weight:	[kg]	100
Max. bar dimension:	[mm]	800 x 110 x 110
Max. electrode diameter:	[mm]	150
Max. electrode length:	[mm]	600

Other dimensions available on request.

# EB Toll Melting Service



## Interested in more information?

We would be glad to provide you with more details of our Electron Beam Toll Melting Service. Please contact us!

### Your contact partner:

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EB Toll Melting Service

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