

# Moving Frames of Reference

3.044 February 28, 2005

- Vacuum Arc Remelting
- Phase Change and Heat Transfer
- Moving Body: "Solid Convection"

Mechanics:

- Problem Set 3 due Wednesday
- Test 1 next Wednesday March 9

## Vacuum Arc Remelting

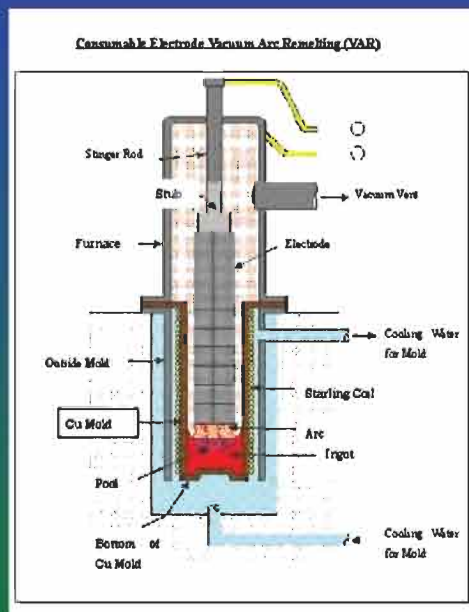


Photo of 30 ton VAR furnace removed for copyright reasons.

See: [http://www.ald-ag.de/bildarchiv/30ton\\_VAR.jpg](http://www.ald-ag.de/bildarchiv/30ton_VAR.jpg)

ALD Vacuum Technologies GmbH.

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# Vacuum Arc Remelting

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Goal: understand heat transfer, solidification, product structure

Today:

- Heat balance at interface with phase change
- Heat transfer in moving electrode