

# LCM

## Products - Cast - Magnetostrictive Alloys...

LCM produces cast Tb-Fe-Co based alloys with extremely tight compositional tolerances and with very low impurity levels, as required by the producers of magnetostrictive devices. Furthermore, with a highly specified sampling and analysis regime, LCM is able to provide absolute assurance on the quality of all such alloys. Product shape can be delivered to enhance processing efficiency for our customers.

### Compositions and Purity:

(weight %)

Terbium plus Dysprosium	40 - 70%
Iron	Balance
Aluminium	<0.02
Silicon	<0.005
Calcium	<0.005
Magnesium	<0.005
Transition metal impurities, each	<0.01
Oxygen	<0.05
Carbon	<0.02

Individual compositions are usually set by the end-user, with alloys manufactured and supplied to specifications agreed between LCM and the customer.

### Form

Common forms include rods, slab or broken ingot. Other forms, to meet individual customer requirements may also be offered

### Quantity

Typical batch sizes for magnetostrictive alloys range from 50kg to 200kg

### Packaging

Inner: Aluminised laminates, vacuum-sealed to prevent oxidation.  
Outer: Steel drums, typically with 20-50kg alloy per drum.

### Quality assurance

Production processes are part of our quality management system – certified to ISO9001: 2000 standard. Each batch is supplied with a Certificate of Conformance detailing the results from chemical analysis according to specification.