

7.3.9 PREPARING ANODE MOULD DRESSING MATERIAL

SPECIAL EQUIPMENT REQUIRED →

According to the local practice

INTRODUCTION

Dressing material eases the removal of the cast anode from the mould. During normal operation mould dressing is done at mould dressing section.

Typical features for the dressing material:

- makes good insulation between copper mould and anode
- does not react with molten copper
- does not consist of crystal water
- is easily washed out from anode in bosh tank
- cheap and fine grained material
- does not cause environmental problems

The following dressing material is used by Outokumpu Harjavalta smelter:

100 L Water
100 kg BaSO₄ x)
1 L Waterglass xx)

Density of the mixture is about 1,6 kg/dm³

x) Analyse of BaSO₄:

BaSO ₄	Min. 95%
Fe ₂ O ₃	Max. 0,25%
SiO ₂	1,25%
Al ₂ O ₃	0,3%
CaO	0,4-0,5%
Pb	0,15%
Cu	0,03%
Mn	0,05-0,06%

Handwritten notes:
P₅SO₂ ⇒ 3,96
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J. h. 1

Specific gravity: 4,25 kg/dm³
Soluble in water: 0,38%
Grain size: Mesh 400 Min. 82%

xx) Waterglass:

Water solution of Natrium Silicate consisting 35% of Na₂SiO₃ (the density of the mixture is 1,296 ... 1,396 kg / dm³ according to DAB 6.)