

Innovative quality assured fayalite slag products (IQSLAG)

Research partners

Boliden Mineral AB

PEAB Anläggning AB

Xore AB

Nordkalk AB

Luleå University of Technology - project manager



Aim and scope

- To develop new circular use of the fayalite slag from base metal smelters and to assure the environmental quality of present and new slag products.

Planned activity

1/ to develop new uses of the fayalite slag from base metals extraction whereby a sustainable circular use of the slag can be ensured and

2/ to deepen the knowledge of the influence of process parameters on the environmental and product quality of new and existing slag products.

This will be done through studies within the following areas:

- New applications of the slag
- Modification of the slag chemistry
- Cooling methods of the slag
- Properties of the solidified slag; environmental, technical, economical
- Implementing new measurements techniques for improved quality assurance
- Effect of aging

Results/on going activity

1. Study pure slag minerals in order to understand their behaviour.
2. Test site is constructed
3. Influence of slag modification
 - leaching and reactivity behaviour.
4. Plant-scale trails
5. Develop a new method for online measurement (chemical analysis).

Future

- Well defined and attractive products from slag, produced in base metals industry is on the market
 - Construction materials
 - New innovative products