

Implementation of BATC iron and steel in Germany

BREF Iron and steel production- IS

2013 Best Available Techniques (BAT) Reference

Document for Iron and Steel Production –BREF IS

2012-03-08 publication in OJ of the EU L 70/63

COMMISSION IMPLEMENTING DECISION of

28 february 2012 establishing the **best available techniques (BAT) conclusions** under directive

2010/75/EU of the European Parliament and of the Council on industrial emissions for iron and steel production

2014-01-09 publication in german Official Journal

2013-11 LAI recommendation for enforcement of BATC

Scope of BATC -IS

- activity 1.3: coke production
- activity 2.1: metal ore (including sulphide ore) roasting and sintering
- activity 2.2: production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour.
- **new** installation: **permit issued** (DE) after 08.03.2012
- **existing** installation: **introduced** (BATC) before 08.03.2012
- deadline for update and compliance of installation:
08.03.2016 (4years , IED Art. 21)

LAI recommendations for enforcement of BATC

sinter strand -act. 2.1 IED; 3.1 of 4.BImSchV
primary emissions from **sinter strand**

total dust, inclusive fine dust: 10 mg/Nm³

new installations: as of 08.03.2016

existing installations with ESP: as of 08.03.**2020**

total dust, inclusive fine dust: 40 mg/Nm³

existing installations with ESP: 08.03.2016 – 08.03.2020

justification: majority is fabric filters; modern ESP

LAI recommendations for enforcement of BATC

sinter strand -act. 2.1 IED; 3.1 of 4.BImSchV
primary emissions from **sinter strand**

Dioxines/Furanes: 0,2 ng/Nm³; limit value
0,1 ng/Nm³; target value

new installations: as of 08.03.2016

existing installations with ESP: as of 08.03.**2020**

Dioxines/Furanes: 0,4 ng/Nm³; limit value

existing installations with ESP: 08.03.2016 – 08.03.2020

justification: majority is fabric filters; modern ESP

LAI recommendations for enforcement of BATC

sinter strand -act. 2.1 IED; 3.1 of 4.BImSchV

secondary emissions from **sinter strand discharge, crushing, cooling, screening, conveyer transfer points**

total dust, inclusive fine dust; as of 08.03.2016:

10 mg/Nm³; new installations

30 mg/Nm³; existing installations with ESP

LAI recommendations for enforcement of BATC

coke production - act. 1.3 IED; 1.11 of 4.BImSchV

emissions from grading and handling of **coke**

total dust, inclusive fine dust; as of 08.03.2016

10 mg/Nm³;

Justification: setting emission value below BAT-AEL with measurement every three years is more practicable than measurement once a year (IED Art. 15/3)

LAI recommendations for enforcement of BATC

production of pig iron or steel (primary or secondary fusion)
including continuous casting, with a capacity exceeding 2,5 t/h
activity 2.2 IED; 3.2 of 4. BImSchV

Blast furnaces

emissions from **casting house** (tap holes, runners, torpedo
ladles charging points, skimmers)

total dust, inclusive fine dust; as of 08.03.2016

15 mg/Nm³

LAI recommendations for enforcement of BATC

production of pig iron or steel (primary or secondary fusion)
including continuous casting, with a capacity exceeding 2,5 t/h
activity 2.2 IED; 3.2 of 4. BImSchV

hot blast stoves

gaseous inorganic emissions from **hot blast stoves**

SO₂: 200 mg/Nm³

NO₂: 100 mg/Nm³

LAI recommendations for enforcement of BATC

production of pig iron or steel (primary or secondary fusion)
including continuous casting, with a capacity exceeding 2,5 t/h
activity 2.2 IED; 3.2 of 4. BImSchV

Basic oxygen steelmaking and casting

emissions from **secondary dedusting**, including the emissions from the following processes:

- reladling of hot metal from the torpedo ladle to the charging ladle
- hot metal pretreatment (i.e. the preheating of vessels, desulphurisation, dephosphorisation, deslagging, hot metal transfer processes and weighing)
- BOF-related processes like the preheating of vessels, slopping during oxygen blowing, hot metal and scrap charging, tapping of liquid steel and slag from BOF
- secondary metallurgy and continuous casting

total dust, inclusive fine dust; as of 08.03.2016

10 mg/Nm³; new installations

20 mg/Nm³; existing installations with ESP

LAI recommendations for enforcement of BATC

production of pig iron or steel (primary or secondary fusion)
including continuous casting, with a capacity exceeding 2,5 t/h
activity 2.2 IED; 3.2 of 4. BImSchV

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total dust, inclusive fine dust; as of 08.03.2016

10 mg/Nm³; new installations

20 mg/Nm³; existing installations with ESP