Claims

1) Method for incinerating carbon-containing dry metallic ash through

a) adding the metallic ash into a trough;
b) aerating from above with ambient air;
c) injecting air and/or oxygen through the trough hearth;
d) establishing the ignition temperature;
e) stirring of the metallic ash by means of a suitable tool;
f) whereby the carbon content is reduced to less than 3%; and

whereby steps b), c), and d) can proceed concurrently or in alternating order or pairs or all of these steps can proceed concurrently; and

steps b) and c) proceed concurrently, at least for part of the time;

step d) can just as well proceed selectively in partial quantities of the metallic ash characterised in that the reverse transport of ash through the trough hearth is prevented, whereas the supply of air and/or oxygen is maintained.

2) Device for implementing a method according to claim 1, comprising

a) a trough (a1)
b) having a level hearth (b2),
c) whereby hearth (b2) comprises openings (c3),
d) with metal fibres (d4) being arranged below hearth (b2) and forming a space (d4a), which is closed in downward direction through
e) another trough hearth (e5) that is arranged parallel to hearth (b2)
f) having further openings (f6) that are arranged at an offset from said openings (c3), whereby
g) hearth (e5) and hearth (b2) are connected by means of connecting means (g7) in such manner that metal fibres (d4) are firmly occluded, and
h) a space (h8) is provided below hearth (e5) to which
i) means (i9) for supplying air or/and oxygen are provided.

3) Device according to claim 2, whereby

j) flow guides for optimising the air circulation are provided in space (h8).

4) Device according to claim 2 or 3, whereby

k) the metal fibres (d4) are present as woven material, fabric, fleece or knitted material.

CLAIMS

1. Method for incinerating carbon-containing dry metallic ash, the method comprising the steps of:

a) adding the metallic ash into a metal fiber-containing double-hearth trough;

b) aerating from above with ambient air;

c) injecting air and/or oxygen through the metal fiber-containing double-hearth of the trough;

d) establishing the ignition temperature;

e) stirring the metallic ash by means of a suitable tool;

f) wherein the carbon content is reduced to less than 3%; and

wherein steps b), c), and d) can proceed concurrently or in alternating order or pairs or all of these steps can proceed concurrently; and

steps b) and c) proceed concurrently, at least for part of the time;

step d) can just as well proceed selectively in partial quantities of the metallic ash

wherein the reverse transport of ash through the trough hearth is prevented, whereas the supply of air and/or oxygen is maintained.

2. Device for implementing a method according to claim 1, comprising

a) a trough,

b) having a first level hearth,

c) wherein the first hearth comprises openings,

d) with metal fibres being arranged below the first hearth and forming a space, which is closed in downward direction through

e) a second trough hearth that is arranged parallel to first hearth

f) having further openings that are arranged at an offset from said openings of the first hearth, wherein

g) the second hearth and the first hearth are connected by connecting means in such a manner that the metal fibres are firmly occluded, and

h) a further space is provided below the second hearth to which

i) means for supplying air or/and oxygen are provided.

3. Device according to claim 2, wherein

j) flow guides for optimising air circulation are provided in the further space.

4. Device according to claim 2 or 3, wherein

k) the metal fibres are present as woven material, fabric, fleece or knitted material.