CLAIMS

1. Process for application of alcoholic derivative on heat treated pellets for inhibition of particulate emission, characterized by the fact of comprising the steps of:

a) weighing the amount of heat treated pellets discharged from furnaces;

b) measuring the temperature of the heat treated pellets discharged from furnaces;

c) application of cooling fluid on the heat treated pellets until they reach temperatures below 140º C; and

d) spraying the alcoholic derivative on the heat treated pellets.

2. Process according to claim 1, wherein the cooling fluid applied in step (c) consists preferably of water in the preferred proportion of 2% to 10% on the mass of heat treated pellets.

3. Process according to claim 1, wherein the spraying step respects a proportion of 500g of alcoholic derivative per ton of heat treated pellet.

4. Process according to claim 3, wherein the alcoholic derivative consists preferably in raw glycerin.

5. System for application of alcoholic derivative on heat treated pellets for inhibition of particulate emission characterized by the fact that comprises:

(i) a device for applying cooling fluid (100) capable of calculating a dosage of cooling fluid to be applied to the heat treated pellets;

(ii) a device for applying alcoholic derivative (200) capable of calculating a dosage of alcoholic derivative to be applied to the heat treated pellets already cooled; and

(iii) a carrier device (300) that continuously communicates with the device for applying cooling fluid (100) and with the device for applying alcoholic derivative (200).

~~6. System according to claim 5, wherein the carrier device (300) consists in~~ a conveyor belt interconnecting the device for applying cooling fluid (100) to the device for applying alcoholic derivative (200).

7. System according to claim 5, wherein the device for applying cooling fluid (100) comprises a scale, a temperature gauge, and a cooling fluid feeder associated to a PLC.

8. System according to claim 5, wherein the device for applying alcoholic derivative (200) comprises a scale and pump feeder associated to a PLC.

9. System according to claim 5, wherein it comprises equipment of aerated percolation for application of cooling fluid and application of alcoholic derivative on ~~the heat treated pellets.~~

Replaced by New Claims 1 to 8.

CLAIMS

1. Process for application of alcoholic derivative on heat treated pellets for inhibition of particulate emission, characterized by the fact of comprising the steps of:

a) weighing the amount of heat treated pellets discharged from furnaces;

b) measuring the temperature of the heat treated pellets discharged from furnaces;

c) application of cooling fluid on the heat treated pellets until they reach temperatures below 140° C;

d) spraying the alcoholic derivative on the heat treated pellets; and

e) the cooling fluid being water and the alcoholic derivative being an aqueous solution of glycerin.

2. Process according to claim 1, wherein the water applied in step (c) is applied on the preferred proportion of 2% to 10% on the mass of heat treated pellets.

3. Process according to claim 1, wherein the spraying step respects a proportion of 500g of glycerin per ton of heat treated pellet.

4. System for application of alcoholic derivative on heat treated pellets for inhibition of particulate emission characterized by the fact that comprises:

(i) a device for applying cooling fluid (100) capable of calculating a dosage of cooling fluid to be applied to the heat treated pellets;

(ii) a device for applying alcoholic derivative (200) capable of calculating a dosage of alcoholic derivative to be applied to the heat treated pellets already cooled;

(iii) a carrier device (300) that continuously communicates with the device for applying cooling fluid (100) and with the device for applying alcoholic derivative (200); and

(iv) the cooling fluid (100) being water and the alcoholic derivative (200) being an aqueous solution of glycerin.

5. System according to claim 4, wherein the carrier device (300) consists in a conveyor belt interconnecting the device for applying cooling fluid (100) to the device for applying alcoholic derivative (200).

6. System according to claim 4, wherein the device for applying cooling fluid (100) comprises a scale, a temperature gauge, and a cooling fluid feeder associated to a PLC.

7. System according to claim 4, wherein the device for applying alcoholic derivative (200) comprises a scale and pump feeder associated to a PLC.

8. System according to claim 4, wherein it comprises equipment of aerated percolation for application of cooling fluid and application of alcoholic derivative on the heat treated pellets.