CLAIMS

1. Device (1) for dosing an aqueous solution (2) of an additive into an amount of a particulate material, the device comprising a conveyor (4) for transporting the particulate material and one or more dispensers (5) arranged above the conveyor, the dispensers being connected to a supply for the aqueous solution of the additive, wherein the dispenser comprises at least one pouring outlet (10) extending over at least a part of the width of the conveyor (4).

2. Device according to claim 1 wherein the pouring outlet (10) extends over the width of the conveyor section transporting the particulate material.

3. Device according to claim 1 or 2 wherein the pouring outlet (10) comprises a row of evenly distributed pouring spouts (6).

4. Device according to claim 3 wherein at least a part of the pouring spouts (6) is in the form of gutters.

5. Device according to claim 4 wherein the gutters (6) have a V-shaped cross-section.

6. Device according to claim 4 or 5 wherein the gutters slant downwardly from a front wall of the device.

7. Device according to claims 4 or 5 or 6 wherein the gutters (6) project from a front wall (8) of the dispenser (5), the front wall inclining towards the belt conveyor (4).

8. Device according to any one of the preceding claims wherein the dispenser (5) is of a thermoplastic material.

9. Device according to any one of the preceding claims wherein the conveyor is a belt conveyor (4).

10. Device according to any one of the preceding claims wherein the one or more dispensers are supported by a Cardan suspension.

11. Device according to any one of the preceding claims wherein the supply of the aqueous solution opens into an inner space (14) of the dispenser (5), wherein the inner space comprises a weir (15) extending over the width of the inner space having a lower edge (16) at a distance from the bottom (17) of the inner space.

12. Method for dosing an aqueous solution (2) of an additive into a particulate material (3), wherein the solution is poured under the influence of gravity with a controlled flow velocity over at least a part of the width of a conveyor (4) transporting the particulate material.

13. Method according to claim 12 wherein the solution is dripped over the particulate material.

14. Method according to claim 12 or 13 wherein the solution is poured from a dispenser (5) having a row of outlets (11) inclined towards the belt conveyor (4).

15. Method according to claim 12, 13 or 14 wherein the particulate material is a salt, preferably sodium chloride or potassium chloride, and the additive is a non-caking agent and wherein the transport velocity of the salt and the flow velocity of the solution are coordinated to obtain a mixing ratio of 0.05 – 5 liters per ton of salt.

16. Method according to claim 15 wherein the non-caking agent comprises at least one compound selected from the group comprising iron ferrocyanide and iron mesotartrate.

CLAIMS

1. Device (1) for dosing an aqueous solution (2) of an additive into an amount of a particulate material, the device comprising a conveyor (4) for transporting the particulate material and one or more dispensers (5) arranged above the conveyor, the dispensers being connected to a supply for the aqueous solution of the additive, *characterized in that* the dispenser comprises at least one pouring outlet (10) extending over the width of the conveyor section transporting the particulate material.

2. Device according to claim 1 wherein the pouring outlet (10) comprises a row of evenly distributed pouring spouts (6).

3. Device according to claim 2 wherein at least a part of the pouring spouts (6) is in the form of gutters.

4. Device according to claim 3 wherein the gutters (6) have a V-shaped cross-section.

5. Device according to claim 3 or 4 wherein the gutters (6) slant downwardly from a front wall (8) of the device.

6. Device according to claims 3 or 4 or 5 wherein the gutters (6) project from a front wall (8) of the dispenser (5), the front wall inclining towards the belt conveyor (4).

7. Device according to any one of the preceding claims wherein the dispenser (5) is of a thermoplastic material.

8. Device according to any one of the claims 1-5 and 7 wherein the conveyor is a belt conveyor (4).

9. Device according to any one of the preceding claims wherein the one or more dispensers are supported by a Cardan suspension.

10. Device according to any one of the preceding claims wherein the supply of the aqueous solution opens into an inner space (14) of the dispenser (5), wherein the inner space comprises a weir (15) extending over the width of the inner space having a lower edge (16) at a distance from the bottom (17) of the inner space.

11. Method for dosing an aqueous solution (2) of an additive into a particulate material (3), wherein the solution is poured under the influence of gravity with a controlled flow velocity over the width of a conveyor (4) transporting the particulate material.

12. Method according to claim 11 wherein the solution is dripped over the particulate material.

13. Method according to claim 11 or 12 wherein the solution is poured from a dispenser (5) having a row of outlets (11) inclined towards the belt conveyor (4).

14. Method according to claim 11, 12 or 13 wherein the particulate material is a salt, preferably sodium chloride or potassium chloride, and the additive is a non-caking agent and wherein the transport velocity of the salt and the flow velocity of the solution are coordinated to obtain a mixing ratio of 0.05 – 5 liters per ton of salt.

15. Method according to claim 14 wherein the non-caking agent comprises at least one compound selected from the group comprising iron ferrocyanide and iron mesotartrate.