CLAIMS

1. A mold having a heat-insulating layer formed on an inner wall surface of the mold,

comprising a through-hole extending from the inner wall surface in a thickness direction, wherein, with a penetrating member being inserted through the through-hole, the heat-insulating layer does not make a contact with the penetrating member, and an end surface of the penetrating member at the side of a cavity coincides with a surface of the cavity.

2. The mold according to claim 1, comprising:

a mold body having a convex part on an inner wall surface of the mold body;

a through-hole penetrating the convex part in a thickness direction of the mold body; and

a penetrating member inserted through the through-hole,

wherein an outer periphery of the through-hole is present inside an outer periphery of a top surface of the convex part.

3. The mold according to claim 2, wherein a spacing between the outer periphery of the through-hole on the top surface of the convex part and the outer periphery of the top surface of the convex part is 0.5 mm or less.

4. The mold according to claim 2 or 3, wherein a side of the convex part is a sloped surface extending downward from the

top surface to the inner wall surface, and the heat-insulating layer is a heat-insulating layer formed by a spraying method.

5. The mold according to claim 2 or 3, wherein a side of the convex part comprises a perpendicular surface perpendicularly extending downward from the top surface to the inner wall surface and a sloped surface extending downward to the inner wall surface from a lower end of the perpendicular surface when a line of intersection between the top surface and the perpendicular surface is taken as an upper end of the perpendicular surface, and the heat-insulating layer is a heat-insulating layer formed by a spraying method.

6. The mold according to claim 4 or 5, wherein an exterior angle between the top surface of the convex part and the sloped surface is 45° or less.

7. A method for manufacturing a mold comprising:

a heat-insulating layer forming step of forming a heat-insulating layer on an inner wall surface of a mold body having a convex part provided on the inner wall surface;

a removal step of removing a portion of the heat-insulating layer or a portion of the heat-insulating layer and a portion of the convex part from a surface of the heat-insulating layer; and

a through-hole forming step of forming a through-hole penetrating from a top surface of the convex part in a

thickness direction of the mold body,

wherein the removal step is a step of removing the portion of the heat-insulating layer or the portion of heat-insulating layer and the portion of the convex part so that an outer periphery of an opening of the through-hole on the top surface is present inside relative to an outer periphery of the top surface.

8. A method for manufacturing a mold comprising:

a second through-hole forming step of forming a through-hole from a top surface of a convex part of a mold body having the convex part, in a height direction of the convex part, the convex part being provided on an inner wall surface of the mold body;

a second heat-insulating layer forming step of forming a heat-insulating layer on the inner wall surface, with a mask covering the through-hole and an outer periphery of the through-hole being placed on the top surface; and

a removal step of removing the mask after forming the heat-insulating layer;

wherein the second through-hole forming step is a step of forming the through-hole so that an outer periphery of an opening of the through-hole on the top surface is present inside relative to an outer periphery of the top surface.

CLAIMS

1. A mold having a heat-insulating layer formed on an inner wall surface of the mold,

comprising a through-hole extending from the inner wall surface in a thickness direction, wherein, with a penetrating member being inserted through the through-hole, the heat-insulating layer does not make a contact with the penetrating member, and an end surface of the penetrating member at the side of a cavity coincides with a surface of the cavity,

the mold comprising:

a mold body having a convex part on an inner wall surface of the mold body;

a through-hole penetrating the convex part in a thickness direction of the mold body; and

a penetrating member inserted through the through-hole,

wherein an outer periphery of the through-hole is present inside an outer periphery of a top surface of the convex part,

a side of the convex part is a sloped surface extending downward from the top surface to the inner wall surface or comprises a perpendicular surface perpendicularly extending downward from the top surface to the inner wall surface and a sloped surface extending downward to the inner wall surface from a lower end of the perpendicular surface when a line of intersection between the top surface and the perpendicular surface is taken as an upper end of the perpendicular surface, and

the heat-insulating layer is a heat-insulating layer formed by a spraying method.

2. The mold according to claim 1, wherein a spacing between the outer periphery of the through-hole on the top surface of the convex part and the outer periphery of the top surface of the convex part is 0.5 mm or less.

3. The mold according to claim 1 or 2, wherein an exterior angle between the top surface of the convex part and the sloped surface is 45° or less.

4. A method for manufacturing a mold comprising:

a heat-insulating layer forming step of forming a heat-insulating layer on an inner wall surface of a mold body having a convex part provided on the inner wall surface;

a removal step of removing a portion of the heat-insulating layer or a portion of the heat-insulating layer and a portion of the convex part from a surface of the heat-insulating layer; and

a through-hole forming step of forming a through-hole penetrating from a top surface of the convex part in a thickness direction of the mold body,

wherein the removal step is a step of removing the portion of the heat-insulating layer or the portion of heat-insulating layer and the portion of the convex part so that an outer periphery of an opening of the through-hole on the top surface

is present inside relative to an outer periphery of the top surface.

5. A method for manufacturing a mold comprising:

a second through-hole forming step of forming a through-hole from a top surface of a convex part of a mold body having the convex part, in a height direction of the convex part, the convex part being provided on an inner wall surface of the mold body;

a second heat-insulating layer forming step of forming a heat-insulating layer on the inner wall surface, with a mask covering the through-hole and an outer periphery of the through-hole being placed on the top surface; and

a removal step of removing the mask after forming the heat-insulating layer;

wherein the second through-hole forming step is a step of forming the through-hole so that an outer periphery of an opening of the through-hole on the top surface is present inside relative to an outer periphery of the top surface.