

Claims

1. Press part (1, 20, 30, 40) for supporting a mould part for encapsulating electronic components mounted on a carrier, comprising:
- 5 - a press block (2, 42), which press block (2, 42) comprises a contact surface (3), a side (4) facing away from the contact surface (3) and at least one side wall (5) connecting the contact surface (3) and the side (4) facing away from the contact surface (3),
- wherein the press block (2, 42) comprises at least two opposed elements (6a, 6b, 10 21a, 21b, 31a, 31b, 31c, 31d, 44) protruding from the side wall (5),
- characterized in that** the side wall (5) transposes via only a recess (7) into each of the protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d, 44).
2. Press part (1, 20, 30) according to claim 1, **characterized in that** the press 15 block (2) comprises at least four side walls (5), wherein each of two opposed first and second side walls (5a, 5b) comprises at least one of the elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d), preferably two of the elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d), protruding from the side wall (5).
- 20 3. Press part (1, 20, 30) according to claim 1 or 2, **characterized in that** a with respect to the contact surface (3) upright side (8, 22, 32) of each of the protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d) connects to a third and/or fourth side wall (5c, 5d).
- 25 4. Press part (1, 20, 30) according to any of the preceding claims, **characterized in that** the recess (7) comprises a slit adjacent to the protruding element (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d), wherein the slit extends to the third and/or fourth side wall (5c, 5d).
- 30 5. Press part (1, 20, 30) according to any of the preceding claims, **characterized in that** a side (9, 24, 33) of each of the protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d) facing away from the contact surface (3) connects to the side (4) of the press block (2) facing away from the contact surface (3).

6. Press part (1, 20, 30) according to any of the preceding claims, **characterized in that** the recess (7) comprises a slit adjacent to the protruding element (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d), wherein the slit extends to the side (4) of the press block (2) facing away from the contact surface (3).
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7. Press part (40) according to claim 1 or 2, **characterized in that** the recess (7) comprises a closed slit adjacent to and enclosing the protruding element (44).
8. Press part (30) according to any of the preceding claims, **characterized in that** the recess (7) comprises a first slit (7a) adjacent to a side (34) of each of the protruding elements (31a, 31b, 31c, 31d) facing the contact surface (3) and a second slit (7b) adjacent to the upright side (32) of each of the protruding elements (31a, 31b, 31c, 31d).
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9. Press part (30) according to claim 8, **characterized in that** the depth of the second slit (7b) is greater than the depth of the first slit (7a), which depth of each slit (7a, 7b) is measured from the side wall (5a, 5b) the elements (31a, 31b, 31c, 31d) protrudes from.
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10. Press part (1, 20, 30, 40) according to any of the preceding claims, **characterized in that** the side (10, 23, 34) of each of the protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d, 44) facing the contact surface (3) is situated at a distance from the contact surface (3).
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11. Press part (1, 20, 30, 40) according to claim 10, **characterized in that** the distance from the side (10, 23, 34) of each of the protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d, 44) facing the contact surface (3) to the contact surface (3) of the press block (2) is at least 30% of the total height of the press block (2, 42), preferably at least 40%, preferably at least 50%, more preferably [60 , 75]% of the total height of the press block (2, 42).
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12. Press part (1, 20, 30, 40) according to any of the preceding claims, **characterized in that** the width of the recess (7) is [60 , 100] millimetre, preferably [65, 80] millimetre.
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13. Press part (1, 20, 30, 40) according to any of the preceding claims, **characterized in that** the depth of the recess (7) is at least 60 millimetre, preferably [65 , 100] millimetre.
- 5 14. Press part (1, 20, 30, 40) according to claim 12 or 13, **characterized in that** the width and/or depth of the recess (7) is scaled using the following formula:
- $A * (B / 400),$
- 10 wherein:
- A is the width according to claim 12 or the depth according to claim 13; and
B is a number representing the dimensions of the press block (2, 42) used.
- 15 15. Press part (1, 20, 30, 40) according to any of the preceding claims, **characterized in that** the press part (1, 20, 30, 40) is symmetrical.
16. Press part (1, 20, 30, 40) according to any of the preceding claims, **characterized in that** the press part (1, 20, 30, 40) is formed by the same material, preferably made of a solid block of steel.
- 20 17. Press part (1, 20, 30) according to any of the preceding claims, **characterized in that** the contact surface (3) comprises a rectangular contact surface (3).
- 25 18. Press part (1) according to any of the preceding claims, **characterized in that** the side (4) of the press block (2) facing away from the contact surface (3) comprises a recess (11), wherein the centreline of the recess (11) coincides with the centreline of the press part (1) that runs through the contact surface (3) perpendicularly.
- 30 19. Press part (1) according to claim 18, **characterized in that** the recess (11) comprises a cylindrical cavity.

20. Press part (1) according to claim 18 or 19, **characterized in that** the recess (11) comprises a through-opening through the press block (2).
21. Press part (1) according to claim 18 or 19, **characterized in that** the recess (11) comprises an end surface at a distance from the contact surface (3).
22. Press part (1) according to claim 21, **characterized in that** the end surface is situated in one plane with a side (10) of each of the protruding elements (6a, 6b) facing the contact surface (3).
23. Press for encapsulating electronic components mounted on a carrier, comprising:
- a first press part and a second press part situated above the first press part, wherein both press parts are displaceable relative to each other for supporting at least two cooperating mould parts; and
 - a drive system for driving the relative displacement of the press parts,
- characterized in that** at least one of the press parts comprises the press part (1, 20, 30, 40) according to any of the preceding claims and wherein the at least two protruding elements (6a, 6b, 21a, 21b, 31a, 31b, 31c, 31d, 44) are connected to the drive system.
24. Press according to claim 23, **characterized in that** the second press part comprises the press part (1, 20, 30, 40) according to any of claims 1-22.
25. Press according to claim 23, **characterized in that** the first press part comprises the press part (1, 20, 30, 40) according to any of claims 1-22.