

Claims

1. Modular system (30) for moulding electronic components, comprising at least three separate system modules, said system modules comprise at least two further system
5 modules comprising:
 - at least one press module (33, 34) for moulding the electronic components, wherein the at least one press module comprises a press structure; and
 - at least one loader module (32) for loading the electronic components to be moulded from a cassette to a press module (33, 34);
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characterized in that the system modules further comprise a separate service module (31) including an intelligent electronic control system, wherein the intelligent electronic control system is configured to at least partially control each of the other further system modules, **in that** the further system modules are provided with cooperating couplings (8) for
15 orientation and securing of the further system modules in-line, wherein the at least one press module (33, 34) comprises two horizontal couplings (8) on opposite sides thereof, **and in that** the cooperating couplings (8) of the at least one press module (33, 34) are an integral part of the press structure.
- 20 2. Modular system (30) according to claim 1, **characterized in that** the system (30) further comprises at least one off-loader module (35) for off-loading moulded electronic components from the press into a cassette, which off-loader module (35) is on at least one side provided with couplings (8) for mutual orientation and securing the off-loader module (35) to a press module (33, 34).
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3. Modular system (30) according to claim 1 or 2, **characterized in that** the system (30) further comprises at least one feed module for feeding encapsulating material to a press module (33, 34).
- 30 4. Modular system (30) according to any of the preceding claims, **characterized in that** the system (30) further comprises a FOUP-loader module (41) for loading wafers with electronic components to be moulded, from a FOUP-carrier to an adjoining module.

5. Modular system (30) according to any of the preceding claims, **characterized in that** the system (30) further comprises a FOUP-off-loader module (42) for offloading moulded wafers with electronic components from an adjoining module to a FOUP-cassette.
- 5 6. Modular system (30) according to any of the preceding claims, **characterized in that** the loader module (32) comprises a loader head (10), which loader head (10) is configured to extend into at least one press module (33, 34).
7. Modular system (30) according to any of the preceding claims, **characterized in**
10 **that** each press module (33, 34) is provided with a housing (37) of which the opposite sides are provided with coverable transfer openings (38).
8. Modular system (30) according to any of claims 2-7, **characterized in that** the off-loader module (35) comprises a cleaning and off-loader head (11), which cleaning and off-
15 loader head (11) is configured to extend into at least one press module (33, 34).
9. Modular system (30) according to any of the preceding claims, **characterized in that** the system (30) includes at least two press modules (33, 34).
- 20 10. Modular system (30) according to claim 9, **characterized in that** to the press modules (33, 34) are provided with cooperating guide parts (13, 14, 15, 16).
11. Modular system (30) according to any of claims 3-10, **characterized in that** the feed module is integrated into the off-loader module (35).
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12. Modular system (30) according to any of the preceding claims, **characterized in that**, to the extent that they are present, the press module(s) (33, 34), the service module (31), the loader module (32) and the off-loader module (35) have an identical width.
- 30 13. Modular system (30) according to any of the preceding claims, **characterized in that**, to the extent that they are present, the press module(s) (33, 34), the loader module (32), the off-loader module (35), the feed module, the FOUP-loader (41) and the FOUP-off-loader (42) module are at least partially controlled by the service module (31).

14. Modular system (30) according to any of the preceding claims, **characterized in that** the couplings (8) comprise male and female coupling elements.

15. Modular system (30) according to any of the preceding claims, **characterized in that** a press module (33, 34) comprises on opposite sides of the module two couplings (8), which two couplings (8) are horizontal.

16. Modular system (30) according to claim 15, **characterized in that** all couplings (8) of the system modules are located in one horizontal plane.

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17. Kit-of-parts for assembling the modular system (30) according to any of the preceding claims, comprising at least two further system modules comprising:

- at least one press module (33, 3) for moulding the electronic components, wherein the at least one press module comprises a press structure;
- 15 - at least one loader module (32) for loading the electronic components to be moulded from a cassette to a press module (33, 34);

characterized in that the kit-of-parts further comprises a separate service module (31) including an intelligent electronic control system, wherein the intelligent electronic control system is configured to at least partially control each of the other system modules,

20 **in that** the further system modules are provided with cooperating couplings (8) for orientation and securing of the further system modules in-line, wherein the at least one press module (33, 34) comprises two horizontal couplings (8) on opposite sides thereof,

and in that the cooperating couplings (8) of the at least one press module (33, 34) are an

25 integral part of the press structure.