CLAIMS

1. Through-type furnace for substrates (3), comprising a furnace (1) with a channel (2) and a transport system for the transport of the substrates (3) through the channel (2), wherein

the channel (2) is bounded by a base (4), a front side wall (5), a rear side wall (6) and a top part (7),

the base (4) contains a plurality of first holes (8) which are connectable to a protective gas source (9) in order to supply protective gas during operation,

the front side wall (5) of the channel (2) comprises a longitudinal slit (11) which extends parallel to the passage direction (10) and is bounded by a bottom edge (12) and an upper edge (13),

the transport system comprises at least one clamp (15) for transporting the substrates (3) through the channel (2) and the longitudinal slit, and

the clamp is movable back and forth along the longitudinal slit (11) of the channel (2) and clamps the substrates outside the furnace.

2. Through-type furnace according to claim 1, wherein a plurality of second holes (18) which are connectable to the protective gas source (9) are arranged on a side of the bottom edge (12) of the longitudinal slit (11) facing the channel (2).

3. Through-type furnace according to claim 1, wherein the bottom edge (12) of the longitudinal slit (11) is formed by a narrow strip which is lowered by a predetermined distance in relation to the base (4) of the channel (2).

4. Through-type furnace according to claim 2, wherein the bottom edge (12) of the longitudinal slit (11) is formed by a narrow strip which is lowered by a predetermined distance in relation to the base (4) of the channel (2).

5. Through-type furnace according to claim 4, wherein a groove (14) is formed in the narrow strip of the bottom edge (12) of the longitudinal slit (11), and the second holes (18) open into the groove (14).

6. Through-type furnace according to claim 5, wherein the channel (2) is subdivided into at least two zones and the groove (14) is interrupted by a separating wall (19) at least at one transition point from one to the next zone.

7. Through-type furnace according to claim 2, wherein

the channel (2) is subdivided into at least two zones,

at least one zone is associated with a number of the second holes (18), and

the second holes (18) of the same zone are connected to each other and are connectable to the protective gas source (9) via a separate flow control valve (21).

8. Through-type furnace according to claim 4, wherein
the channel (2) is subdivided into at least two zones,
at least one zone is associated with a number of the second holes (18), and
the second holes (18) of the same zone are connected to each other and are connectable to the protective gas source (9) via a separate flow control valve (21).

9. Through-type furnace according to claim 5, wherein
the channel (2) is subdivided into at least two zones,
at least one zone is associated with a number of the second holes (18), and
the second holes (18) of the same zone are connected to each other and are connectable to the protective gas source (9) via a separate flow control valve (21).

10. Die bonder with a through-type furnace according to any of claims 1 to 9, wherein the through-type furnace comprises a heating zone and a cooling zone which are subdivided into several zones, and the die bonder is programmed for the input of parameters, which determine for each zone a temperature, and a transport speed and/or a dwell time, and for the transport of the substrates through the through-type furnace according to these parameters.