CLAIMS

1. A device (100) for producing foamed plastic parts, in particular sealing beads, comprising;

– at least one mixing device (17),

– an introduction device (19) for the at least one gas, that is connected to the mixing device (17) by way of a first line (18),

– a delivery device (21) for the at least one liquid plastic component, that is connected to the mixing device (17) by way of a second line (20),

– an intermittently operating forwarding device,

– a source (37) for the at least one liquid plastic component mixed with gas, wherein this source (37) is formed by a line which leads away from the mixing device (17), and

– a metering device (38),

wherein the intermittently operating forwarding device via the source (37) intermittently provides the at least one liquid plastic component mixed with gas for the metering device (38), characterised in that arranged between the source (37) for the at least one liquid plastic component mixed with gas and the metering device (38) is a buffer device (39) having a variable buffer volume (40) and connected to the source (37) by way of an inlet opening (41) and to the metering device (38) by way of an outlet opening (39).

2. A device (100) as set forth in claim 1 characterised in that the pressure prevailing between the buffer device (39) and the metering device (38) in the liquid plastic component is controllable by the buffer device (39) – preferably to a constant value.

3. A device (100) as set forth in at least one of the preceding claims characterised in that arranged on an outlet side of the metering device (38) is a pressure sensor (46) communicating with a control device (47), wherein the control device (47) controls the buffer device (39) by way of a control line (48) in such a way that the pressure on an inlet side of the metering device (38) tracks the pressure prevailing on the outlet side of the metering device (38).

4. A device (100) as set forth in at least one of the preceding claims characterised in that the source (37) of the buffer device (39) supplies or provides a liquid plastic component mixed with gas.

5. A device (100) as set forth in at least one of the preceding claims characterised in that the inlet opening (41) or the outlet opening (42) is disposed in a wall of a housing (43) of the buffer device (39).

6. A device (100) as set forth in at least one of the preceding claims characterised in that the inlet opening (41) or the outlet opening (42) is provided in a piston rod (44) of the buffer device (39), the piston rod being connected to a piston (45).

7. A device (100) as set forth in at least one of the preceding claims characterised in that the buffer device (39) is connected to a device (49) actuable by a control device (47, 50) for pressurizing the buffer device (39) that is preferably pneumatic.

8. A device (100) as set forth in at least one of the preceding claims characterised in that the device (36) is adapted to produce a physically foamed plastic part.

9. A device (100) as set forth in at least one of the preceding claims characterised in that the buffer device (39) has a piston (45) displaceable in a housing (43), wherein preferably a travel sensor is provided for determining at least selected positions of the piston (45) in the housing (43).

10. A device (100) as set forth in at least one of the preceding claims characterised in that arranged upstream of the inlet opening (41) is an inlet valve (51) and arranged downstream of the outlet opening (42) is an outlet valve (42), which valves are actuable by a control device.

11. A device (100) as set forth in claim 10 characterised in that the control device is adapted to close both the inlet valve (51) and also the outlet valve (52) and to

compress the liquid plastic component disposed in the buffer volume (40) and that there is provided a sensor, by way of which an irregular reduction in size or compression of the buffer volume (40) can be detected.