

Title (en)
EXTRUDER

Title (de)
EXTRUDER

Title (fr)
EXTRUDEUSE ET PROCEDE DE MELANGE CONTINU DE CAOUTCHOUC DE SILICONE

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Abstract (en)
[origin: WO03024691A1] The invention relates to a single screw extruder having a means for the introduction of additives and to a method of introducing additives into a silicone rubber composition in the aforementioned extruder. A single screw extruder (1) comprising an elongate barrel (100) having an inlet (7) for introducing a polymer into the extruder and an outlet (5) for discharging extruded polymer from the barrel (100), a rotatable screw (6) axially disposed within the barrel (100) for advancing polymer in the extruder from the inlet (7) to the outlet (5), one or more additive introduction means (2) for introducing one or more additives at one or more predefined positions along the barrel (100) of the single screw extruder (1) between the inlet (7) and the outlet (5). Immediately upstream of the or each additive introduction means (2) there is provided, on or around the screw (6), a plug (12) having a plurality of apertures (20, 20a) which is adapted such that, in use, the only way for polymer or polymer/additive mixture to move downstream of the plug (12) is by passing through the apertures and that, having passed through an aperture, the polymer or polymer/additive mixture is subjected to a reduction in pressure and is simultaneously mixed with an additive from the one or more additive introduction means (2), prior to transportation of the resulting polymer additive mixture to the outlet (5). The extruder is typically used for the addition of additives such as cross-linkers and/or coloured pigments into high consistency silicone rubbers.

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