

Title (en)

METHOD AND DEVICE FOR REMOVING A MANDREL DURING THE PRODUCTION OF A QUARTZ GLASS PIPE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTFERNEN EINES DORNS BEI DER HERSTELLUNG EINES ROHRES AUS QUARZGLAS

Title (fr)

PROCEDE ET DISPOSITIF POUR RETIRER UN MANDRIN LORS DE LA FABRICATION D'UN TUBE EN VERRE QUARTZEUX

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Application

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Abstract (en)

[origin: DE19850929C1] According to known methods for producing a synthetic quartz glass pipe, a porous SiO₂ blank is formed by deposition of SiO₂ particles on the cylinder jacket surface of a mandrel rotating about its longitudinal axis, after which the mandrel is removed and the blank sintered. The aim of the invention is to provide, on the basis of the above, an economical method for the production of quartz glass pipes which simplifies the use of economical, cylindrical mandrels. To facilitate the removal of the mandrel (22), the invention provides for a face end (25) of the blank (6) to be fixed in a recess (11) having a passage (15) and a fixed counter support (13) made of a deformable mass, and for said end to be aligned in such a way that the mandrel (22) extends through the passage (15). The mandrel (22) is subjected to a tensile or pushing force which acts in the direction of the longitudinal axis (23) of the mandrel and by means of which the end (25) of the blank (6) is pressed against the counter support (13). Said force is increased continuously until the mandrel (22) detaches from the blank (6). The invention also relates to a suitable device for removing mandrels from blanks, which comprises a holding device (11; 17) for fixing and aligning the blank (6). Said device has a recess (11) for receiving one of the ends (25) of the blank (6). The recess is provided with a counter support (13) made of a deformable mass and has a passage (15) through which the mandrel (22) is able to pass. The device also comprises a pulling or pushing device (5) which engages the mandrel (22) and acts in the direction of the longitudinal axis (23) of same. By means of said device the end (25) of the blank (6) connected to the mandrel (22) can be moved against the counter support (13).

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