BIMETAL HIGH-QUALITY ELASTIC BUSHING CONSTRUCTION

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The work refers to the bimetal high-quality elastic bushing construction for the hydraulic blocking mechanism of the drilling machine's worktable in GC 1000 coordinates. The functioning role of the elastic bushing consists in blocking the worktable in the right working position.

From the description of the functional role, it results that the material it is built of, that respective bushing must ensure a high elasticity as well as properties with an elevated level of lubrication, taking into consideration the fact that the piston's core bar slides through the bushing.

An example of work execution shall be presented thereafter, related to figures 1, 2.

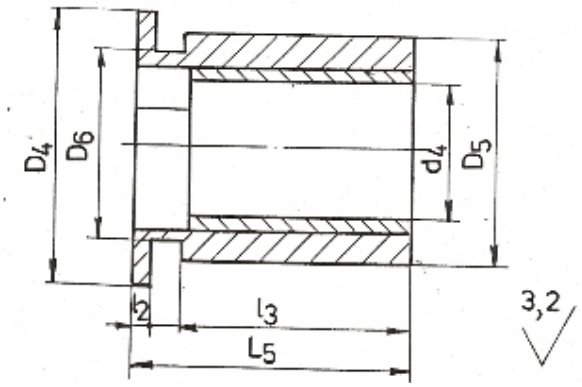

Fig.1

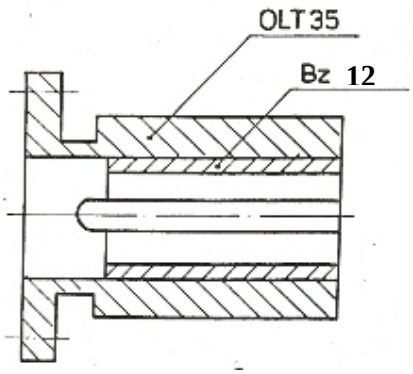

Fig.2

The application of this work assures the following advantages:

- doubling of elasticity and endurance properties to traction of this piece, having the steel elasticity and the endurance modulus far superior to that of the bronze;
- bronze consumption reduction with 90% from 5,4 kg/piece to 0,53 kg/piece;
- total elimination of waste;
- increase of safety and reliableness in operation;
- possibility of generalization to other hydraulic blocking mechanisms;

Bibliography

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