

Title (en)

DAMPING ELEMENT FOR TOOL CHUCKING SYSTEMS

Title (de)

DÄMPFUNGSELEMENTE FÜR WERKZEUGSPANNSYSTEME

Title (fr)

ÉLÉMENTS D'AMORTISSEMENT POUR SYSTÈMES DE SERRAGE D'OUTIL

Publication

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Application

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Abstract (en)

[origin: WO2015032996A1] The invention relates to damping elements for tool chucking systems for damping vibrations and shocks that occur, said vibrations and shocks occurring during machining in the case of force-fitting clamping of tools in a tool receptacle or on the tool itself, wherein at least one damping element (6, 13, 26) consisting of a shape memory alloy having a mechanical effect is provided in a tool chucking system or on the tool itself, such that the damping element (6, 13, 26) provided in the chucked state in the force flow of the chucked elements is present in a reversible and hysteresis-dependent state by way of a mechanical force action and the associated crystalline conversion via the pretensioning of said damping element and leads to dissipation of mechanical energy, wherein the mechanical energy to be damped is a cyclical vibration or represents a non-cyclical overload which is transmitted in the form of shocks.

IPC 8 full level

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