

Title (en)
TRIBOLOGICAL SYSTEM COMPRISING A VALVE SEAT INSERT (VSI) AND A VALVE

Title (de)
TRIBOLOGISCHES SYSTEM UMFASSEND EINEN VENTILSITZRING UND EIN VENTIL

Title (fr)
SYSTÈME TRIBOLOGIQUE COMPRENANT UN SIÈGE DE SOUPAPE ET UNE SOUPAPE

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Priority

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Abstract (en)
[origin: WO2017012841A1] The invention relates to a tribological system, comprising a valve seat ring produced of sintered material and a valve, which is untreated or is hardened and/or plated at least in the seat region, said tribological system being characterized in that the sintered material can be obtained by pressing and sintering a powder mixture having a composition of 5 to 45 wt% of one or more Fe-based hard phases, 0 to 2 wt% of graphite particles, 0 to 2 wt% of MnS powder, 0 to 2 wt% of MoS₂ powder, 0 to 2 wt% of FeP powder, 0 to 7 wt% of Cu powder, and 0 to 4 wt% of Co powder, 0.1 to 1.0 wt% of a pressing aid, high-speed steel having a composition of 14 to 18 wt% of Cr, 1.2 to 1.9 wt% of C, 0.1 to 0.9 wt% of Si, 0.5 to 2.5 wt% of V, 0.5 to 2.5 wt% of W, 0.5 to 2.5 wt% of Mo, and the remainder Fe and impurities resulting from production, in particular of Ni, Cu, Co, Ca, and/or Mn having fractions < 1.5 wt%.

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