

CREATOR Project A1: Induction Motor

Shaft Steel Technical Specifications: Typical Values **Steel 1.7225 / 42CrMo4**

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The subsequent data is referenced from [1]. This table is also provided as a .csv file in the same directory.

Parameter	Value
Yield Strength	500 - 900 Mpa
Tensile Strength	750 - 1300 Mpa
Elongation at Break	10-14 %
Hardness	219
Module of Elasticity	164 - 217 Gpa
Electrical Conductivity	1.82 m.Ω/mm ²
Coefficient of Thermal Expansion	10.5 – 14.4
Specific Heat Capacity	423-587 J/ Kg.K
Density	7.85 g/cm ³
Thermal Conductivity	34.4 - 45.1 W/mK

[1] “1.7225 (42CrMo4) | 1.7227 (42CrMoS4) Material Data Sheet,” Xometry. [Online]. Available: <https://xometry.pro/wp-content/uploads/2023/09/Stainless-steel-1.7225.pdf>