

# MaterialMind - Material Recommendation Report

## General Recommendations:

Select materials with high strength-to-weight ratios to minimize material usage and reduce costs. Consider using materials with good thermal conductivity to dissipate heat generated by friction.

Material	Properties	Application	Rationale
Table Top	density: 7.9 g/cm <sup>3</sup> tensile strength: 100 MPa thermal conductivity: 10 W/mK	Top surface of the table	High strength, high thermal conductivity
Table Frame	density: 7.9 g/cm <sup>3</sup> tensile strength: 150 MPa thermal conductivity: 10 W/mK	Structural frame of the table	High strength, high thermal conductivity
Legs	density: 7.9 g/cm <sup>3</sup> tensile strength: 100 MPa thermal conductivity: 10 W/mK	Supporting legs of the table	High strength, high thermal conductivity