

ABSTRACT

A diamond sintered body having high wear resistance, chipping resistance, shock resistance and thermal conductivity is provided. The diamond sintered body includes sintered diamond particles and a sintering aid as the remainder. The content of the sintered diamond particles is at least 80 % by volume and less than 99 % by volume. The sintered diamond particles have a particle size in the range from at least 0.1 μ m to at most 70 μ m. The sintered diamond particles next to each other are directly bonded. The sintering aid includes at least one kind selected from tungsten, iron, cobalt and nickel. The percentage of the tungsten in the sintered body is in the range from at least 0.01 % by weight to at most 8 % by weight.