

ABSTRACT

An additive layer manufactured hot work tool according to the present disclosure includes a component composition of, by mass%, C: 5 0.3 to 0.5%, Si: 2.0% or less, Mn: 1.5% or less, P: 0.05% or less, S: 0.05% or less, Cr: 3.0 to 6.0%, 1 or 2 kinds of compounds of Mo and W, a relation between Mo and W being represented by a relational expression (Mo+1/2W): 0.5 to 3.5%, V: 0.1 to 1.5%, Ni: 0 to 1.0%, Co: 10 0 to 1.0%, Nb: 0 to 0.3%, and Fe and an unavoidable impurity as a remainder, and an area ratio of defects having an area of $1\ \mu\text{m}^2$ or more is 0.6% or less in a cross section parallel to the lamination direction. The present disclosure also provides a method of manufacturing an additive layer manufactured hot work tool according to the present disclosure includes additive layer manufacturing a metal powder 15 including the above component composition and then performing tempering. The present disclosure further provides a metal powder including the above component composition.

20 FIG. 1