

ABSTRACT OF THE DISCLOSURE

METAL SURFACE TREATMENT METHOD AND A METALLIC MATERIAL
TREATED THEREBY

A metal surface treatment method in which unstable foreign matters such as an unstable burr produced during machining, a white layer and segregated alloy components are removed from the machined metal surface and surface defects such as microcracks and small holes are filled, asperities with sharp edge are leveled, and a metal surface which is suitable for coating can be produced, and a metallic material treated thereby are provided. A powder having abrasive properties such as Al_2O_3 and SiC having a size of $10\ \mu$ - $50\ \mu$ is mixed with compressed air, and blown against the target surface of a metallic material at a pressure of $0.3\ \text{kgf/cm}^2$ - $3\ \text{kgf/cm}^2$, then a spherical powder such as glass balls, iron balls, quartz balls or marble balls having a size of $10\ \mu$ - $50\ \mu$ is mixed with compressed air and blown against the above-mentioned metal surface at a pressure of $1.0\ \text{kgf/cm}^2$ - $3\ \text{kgf/cm}^2$. Then the same powder that was used in the first treatment step is mixed with compressed air and blown against the surface at a pressure of $0.2\ \text{kgf/cm}^2$ - $1.5\ \text{kgf/cm}^2$.

Figure 3