

Developing a Powder Feeding System for Tungsten Inert Gas (TIG) Cabling

Ajay Kumar Verma, MD Shahil Raza, Asraf Ansari, Kaushik Shekhar, MD Mustak Ansari,
Manzar Hasan and Md Sarfaraj
Department of Mechanical Engineering
K.K. Polytechnic, Dhanbad, India

Abstract: *With the TIG cladding process, materials of diverse characteristics can be deposited or coated onto any structural element to improve its surface characteristics, including corrosion resistance, wear resistance, and hardness. Such materials can be deposited through a method utilizing powder blowing. A powder feeding system for the TIG cladding process has been designed and built in this research. The operation of several components has been explored. Furthermore, with a proper setup, this powder feed system can also be utilized within a general-purpose TIG welding system to make a low-budget cladding system.*

Keywords: TIG cladding process

