

ABSTRACT

INTEGRATED COLD SPRAY SYSTEM AND METHOD THEREOF

The invention relates to integrated cold spray system 100. The integrated cold spray system 100 includes spray booth 202 including cold spray gun 102 coupled to powder feed system 104 and gas supply system 106. The cold spray gun 102 includes nozzle 404 to supply mixture of powder and carrier gases to work piece 112 to be cold sprayed. The integrated cold spray system 100 includes robotic arm 204 including end effector to hold cold spray gun 102. Further, the integrated cold spray system 100 includes ventilation system including dust collector to capture dust, and airborne particles within spray booth. Further, the integrating cold spray system 100 includes radio frequency identification and detection (RFID) system 502 to collect information associated with work piece 112. The integrated cold spray system 100 includes human-machine interface (HMI) system in communication with spray booth 202, and RFID system 502.

FIG. 1