

Laser Cleaning Applications using The World's Smallest Portable Fiber Laser Cleaning System

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Laser Cleaning is a process of removing rust, oxide layers, weathering residues, paint and contaminants from surfaces with little or no impact to the original surface. It is simply a beam of light, with no electrical interference, aimed at a piece of metal. No air pressure, no chemicals or abrasive consumables are used during this process. Since no particles are propelled through a beam delivery system, there is little or no noise during the process and no mess to clean up afterwards. This process gently removes the contaminant material without harming the underlying substrate and can be performed wet or dry.

In this paper, we discuss the difference between the Low Power (LP) (50 – 100W) and the High Power (HP) (500 – 1000W) pulsed fiber laser cleaning systems. We also state what is required in terms of laser safety using manually hand-held laser cleaning systems. Finally we give some practical case study examples of what has been achieved recently using our range of fiber laser cleaning systems.