



Ablation

Wire Insulation Stripping

All About Wire Insulation Stripping

The technique of wire stripping is common practice in the electronics industry, involving the removal of the insulating material layer surrounding an electrical wire. This is performed in order to replace, repair or to re-connect a wire to other wires or terminals.

Current industry methods use mechanical stripping machines, which frequently damage the wire itself, and CO2 laser which often cannot completely remove the insulating layer, leaving a thin residue due to the lack of absorption in the conductor.

The process involved hot plasma being created by the laser between the material and the conductive wire. This evaporates the insulator from inside out; ensuring perfect contact capability with no post-processing required. The processing time of a 10mm x 10mm square is just 5.2 seconds with an additional 0.8 seconds for a cleaning pass for the highest quality finish possible and to prepare the material for further welding, soldering or other subsequent processing.

No Damage To Wiring With This Laser!

TRUMPF's TruPulse nano 4007 operates at a short processing wavelength, enabling the user to remove 100% of the material with no damage to the wiring, without using chemicals and with no limit on the thickness of the wire that can be processed (as there can be with mechanical stripping), this can increase efficiency



Application Parameters

Type	TP-070P-A-HS-H-B-Y
Power	70W
M ²	3-5
Input Beam Dia	10mm
Scanner/Lens	163mm/254mm