

# Surface Preparation Solution for Gear Cutter Tools

MEC SHOT is a renowned name in Design, Development and Manufacturing Surface Preparation, Finishing, Shot Peening Machines, Media Conveying, Blast Room, Paint Booth and Dust Collectors and Accessories. MEC SHOT provides services of Air Operated Abrasive Blasting / Airless Shot Blasting and Shot Peening machines to various industries in India as well as globally since 1992. MEC SHOT provides various types of custom-built Automated or semi-automated machines, dust collectors and accessories to industries for achieving different substrate finishes, surface preparation, de-burring, de-flashing, peening with protection and safeguarding of working environment and human resource. The customers are finding that MEC SHOT machines are cost effective by way of purchase or in operation.

During manufacturing of gears, the gear cutters tools wear out. To reclaim or after manufacturing of cutters they do Physical Vapour Deposition (PVD) Coating process to enhance the life circle of gear cutters. Before PVD Coating process the cutter surface requires to removal of oxide layers and surface roughness.

PVD coating is a vacuum coating technique in which a film is created to maintain a harder surface on the target material. This film extends the life of the tool, lowers tool maintenance and improves overall part quality.



*SPL Micro Blasting Machines*

MEC SHOT has recently designed, manufactured, erected and commissioned Special Micro Suction Blasting Machines for removal of oxide layers from the gear cutters before PVD Coating. The motorized turn table rotates the job and the reciprocating blast guns blast cleans the gear cutter to preset required parameters. One manual operated air wash gun is also provided in the cabinet to manual touch up.

The machine provides for recovery and reclamation of used abrasive from blasting cabinet and cyclonic separation

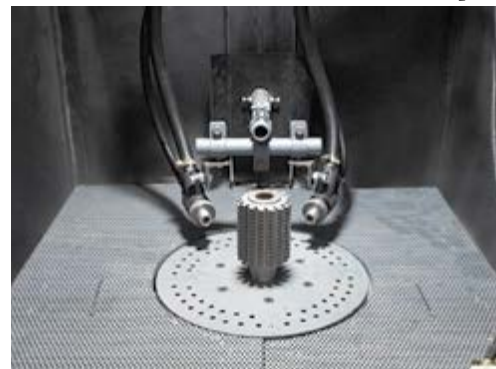
of dust and reusable abrasive. The very fine dust is trapped in cartridge bags filters and clean air is discharged in atmosphere, keeping the environment clean and eco-friendly.

Machine Features:

- Automatic PLC Controlled Machine
- Recipes facility for different jobs in auto / manual mode
- Provide Pressure Control Valve (Festo Make)
- Turn Table and Gun Reciprocation speed variable through AC Drive
- Spark Arrestor provide to avoid fire from sparking
- Fluidizing Sheet provide for Moisture Free Media Flow



*Gun Reciprocation*



*Cabinet Inside View panel*



*PLC-Controlled Electric Control panel*