

MPF 20000 – Aircraft wing peening & peen forming Technical specifications



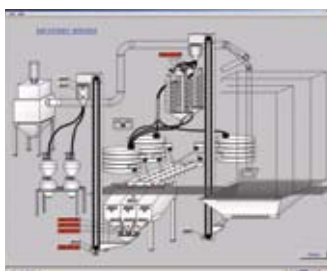
The **MPF 20000** wing peening machine is the ultimate solution for aerospace wingskin saturation shot peening and peen forming.

The CNC system high precision and flexibility, combined with a wide range of controlled peening power, allow for complex wing panel forming in a fully automatic mode without corrective peening in most cases.

Representing the state-of-the-art in peen forming technology, this 9-NC axis machine simplifies the peening process due to its supervision software.

Features

- Peen forming and saturation peening for wingskin and fuselage shell
- Max component size: 20000 mm length x 2500 mm width, weight 2000 kg
- 2 groups of symmetric 4-axis robots, each handling 6 pressure nozzles:
 - Vertical stroke 3000 mm
 - Horizontal stroke 800 mm
 - Wrist and Palm axis +/- 90°
 Symmetrical synchronization of the two robots is possible for saturation peening
- One accurate NC overhead fixturing frame (electrical hoists on board) and component location recognition
- Vision system with component position scanning camera and optional 3D measurement system
- 2 high precision generators with closed-loop air pressure and shot flow regulations, delivering up to 240 kg/min
- Recovery system with classification devices for 3 media sizes. Possibility to use steel balls up to 3.5 mm
- Large peening chamber made in strong construction, with easy access, and double lining for noise absorption
- Inlet and outlet passing through vestibules with retractable tightness brush & curtains for easy access and maintenance
- CNC control system: Fanuc 16i with double operator station and pendant
- Supervision software package including peening process tools, and production and maintenance utilities
- Predictive deformation analysis and special peen forming training available
- System and process control compliant with DMP 28, MIL S 1365 and AMS 2432



Supervision screen: main recovery



Supervision screen: overall view



Supervision PC and CNC board



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