



DFL SYSTEMS

DUAL FACE PRECISION FLAT SURFACING MACHINES



- The Lapmaster DFL line of dual face lapping/polishing/fine grinding machines is based upon a 3-way planetary concept designed to yield precise and repeatable results at an economical price. Excellent results are obtained in the processing of a wide range of materials and components including glass, ceramics, crystals, and ferrous materials.
- The Lapmaster DFL series of dual face flat surfacing machines is a versatile unique solution for solving critical tolerance issues on parts requiring:
 - Excellent flatness Capabilities: < 1 micron
 - Part to Part Size Variance: < 4 microns
 - Parallelism: < 3 microns
 - Surface Finish: < 0.25 mm Ra
 - Typical Material Removal: 0.6 mm
- Lapmaster DFL machines are built in modular fashion, capable of dual face fine grinding, lapping or polishing. Equipped with three independent drives, a standard programmable controller storing up to 20 routines, a servo motor and ball screw down pressure system and pressure controlling load cell, the DFL series of machines incorporates complete, simple, repeatable and accurate process controls.



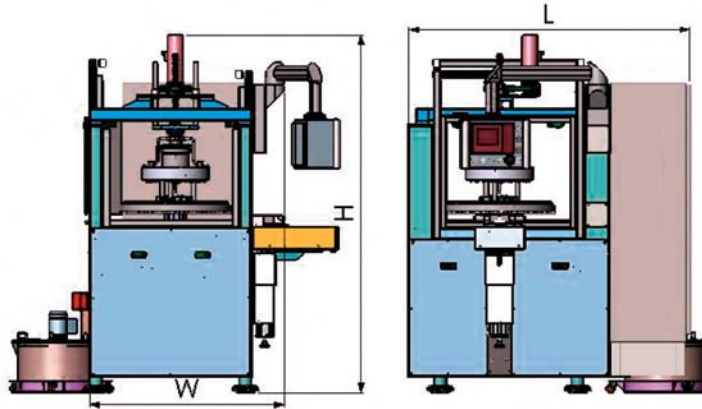
DFL SYSTEMS

STANDARD FEATURES

- 3 Independent Variable Speed Drives.
- Programmable Controller.
- Ball Screw/Servo /Load Cell Down Pressure System.
- Coolant System/Slurry Feed System
- Heavy Duty Fabricated Base Construction.
- Interlock Guarding.
- Fast/Easy Wheel Change.

OPTIONAL FEATURES

- Vertically Adjustable.
- Parts Load/Unload Table.
- In-Process Sizing Control.
- Wheel Options
(Fine Grinding, Lapping, Polishing).



SPECIFICATIONS

| | DFL 400 | DFL 700 | DFL 1000 |
|---------------------------|-------------------|--------------------|-------------------|
| GRINDING WHEELS (NOMINAL) | 420 mm O.D. | 684 mm O.D. | 1050 mm O.D. |
| NO. OF CARRIERS | 6 | 6 | 6 |
| CARRIER PITCH/DIA. | 140mm | 229mm | 345mm |
| DIMENSIONS (MM) | 1000 x 1300x 2200 | 1200 x 1700 x 2200 | 1500x 2100 x 2500 |
| MAX DOWN FORCE (KG) | 300 | 800 | 1200 |
| NET WEIGHT | 1800 kgs | 2050 kgs | 3888 kgs |

DRIVE OUTPUT

| | | | |
|--------------|-------------------------|------------------------|-------------------------|
| UPPER WHEEL | 1.5/3 kw (20-200rpm) | 3/5 kw (10-100rpm) | 7.5/10 kw (8-80rpm) |
| LOWER WHEEL | 1.5/3 kw (20-200rpm) | 3/5 kw (10-100rpm) | 7.5/10 kw (8-80rpm) |
| SUN GEAR | 1.1/1.5kw (10-100rpm) | 2.2/3kw (8-80rpm) | 5.5/7.5kw (8-80rpm) |
| POWER SUPPLY | 200-500V 3ph 4.1/7.5 kw | 200-500V 3ph 8.2/13 kw | 200-500V 3ph 20.5/25 kw |



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Lapmaster has a policy of continued development and the specifications outlined above are subject to change without notice.