

## DOUBLE-SIDE HIGH-PRECISION PROCESSING MACHINE



PETER WOLTERS AC 1200<sup>eco</sup> double-side batch processing machine has been designed for high-precision series processing work pieces. Due to its construction, the AC 1200<sup>eco</sup> can be used as a lapping and polishing machine.

### MACHINE FEATURES

Like all machines of the AC microLine<sup>®</sup> series, AC 1200<sup>eco</sup> is based on tried and tested core components such as high-precision, pneumatic pressure system, non-contact micro measuring controller, powerful drive technology, and the PLC assisted machine control. Software has been developed by PETER WOLTERS which makes it possible to intuitively operate the machine entirely by menus. The swivel mounted upper base frame allows good access to the machine interior.

The machine is available with different epicyclic workholder drive systems, drive powers and wheel speeds to match the widest possible range of work pieces. This ensures optimum machine configuration for every application.

AC 1200<sup>eco</sup> is available with well-known, tried and tested accessories such as gap formation, alignment device, and dosing system for lapping or polishing compound.

Accessories such as measuring sensor and post-process measurement provide data for statistical process control and offer process security when processing critical work pieces. DataCare<sup>®</sup>, the proprietary analysis tool, captures all controller data and thus is the perfect platform for analytic process evaluation, optimization and fault analysis. AC 1200<sup>eco</sup> can load and process work pieces with a maximum diameter of 340 mm and a maximum thickness of 50 mm.

### CUSTOMER BENEFITS

- Adapts easily to customer's application requirements
- High degree of stiffness and precision
- Fast – ergonomic loading and unloading, as well as easy tool changing
- Optimum surface quality, flatness, thickness tolerance and plane parallelism with narrowest tolerances on the work piece
- Extreme temperature stabilization over the tool surface and therefore constant flatness of the working wheels
- Reduced cost per piece, shorter loading, unloading, non-productive times
- Comprehensive, clearly structured screens
- Excellent machining results due to compliance with freely programmable process parameters
- Fast response to load changes
- User friendly, intuitive operation
- Capable of storing 60 or more processing programs
- Low operating costs
- Individual process development, highest productivity
- Easy to maintain

### EQUIPMENT

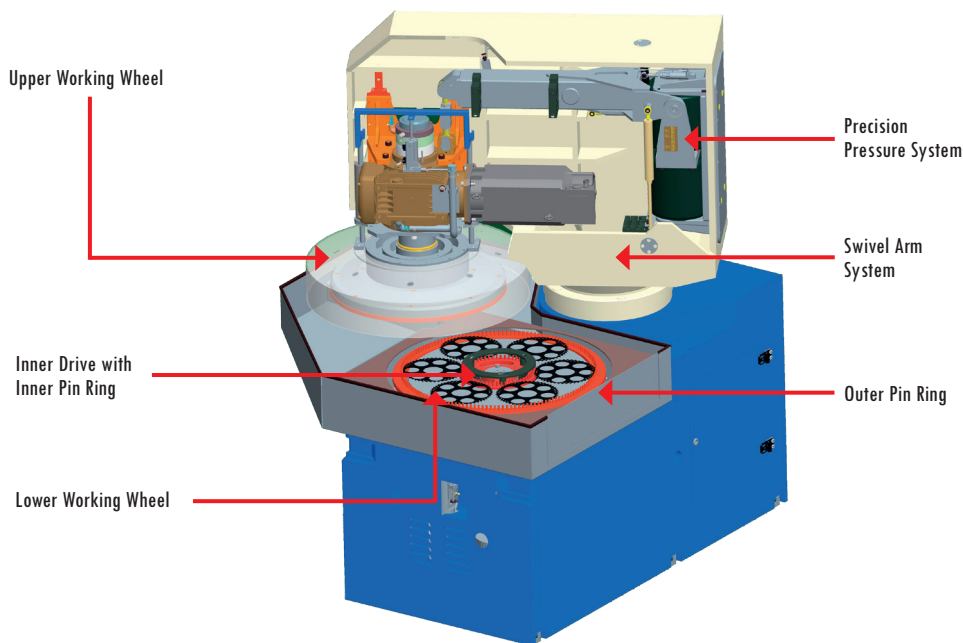
- AC 1200<sup>eco</sup> can be configured to the respective application and is suitable for lapping and polishing
- Top variant features constant-torque servo drives
- Size of the work piece to process is the basis for selecting the optimum epicyclic workholder drive system
- Machine comes with suitable filters and cooling components depending on the application
- Remote maintenance solution RangeCare<sup>®</sup> via mobile communications or VPN

## TECHNICAL DATA

## AC 1200<sup>eco</sup>

Version	P	L
Wheel diameter (mm)	1220	1180
Ring width (mm)	425	385
Max. load pressure (daN)	1000	1000
Upper drive power (kW)	12 / 18	12
Upper drive speed (rpm)	50 / 90	50
Lower drive power (kW)	12 / 18	12
Lower drive speed (rpm)	50 / 90	50
Center drive power (kW)	3.5	3.5
Center drive speed (rpm)	50	50
Working wheel cooling	Labyrinth	Labyrinth
Dimensions (H × W × D) (mm)	2500 × 3400 × 3400	2500 × 3400 × 3400
Weight (kg)	8000	8000
Max. work piece thickness (mm)	50	50

## FUNCTIONAL DRAWING OF THE PETER WOLTERS AC MICROLINE® RANGE



## PLC CONTROL WITH CONTROL PANEL



### Process oriented visualization (Human Machine Interface – HMI):

- Detailed graphic display of process data
  - Pressure and geometry
  - Rotational speed (rpm)
  - Torque
  - Temperatures
- Comprehensive, clearly structured adjustment of several machine options, i.e. process control, swivel mounted upper frame after process ends, countdown counter, etc.
- Temperature monitoring (working wheel, cooling lubricant)
- Monitoring of the cooling lubricant flow rate
- Language switch-over
- Touch-down monitor of upper working wheel

### Various error diagnostic functions through:

- Text display of error messages
- Error location display
- Error history

### Process-Data-Recording (DataCare®)

- Recording of process data (speeds, torques, etc.) and other meta data on external data media

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