

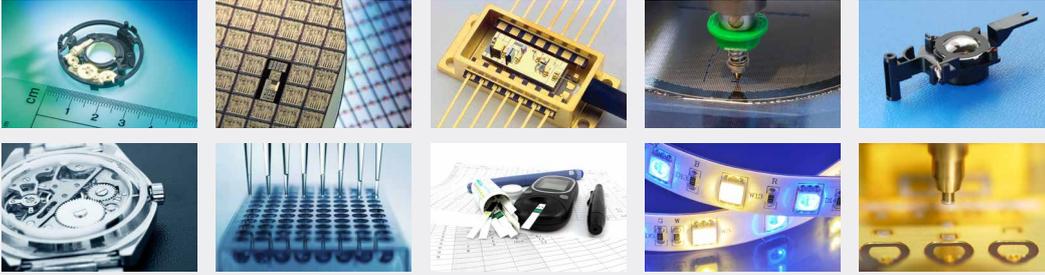
INFOTECH
automation



DESKTOP DISPENSER

Versatility without limits

APPLICATION RANGE



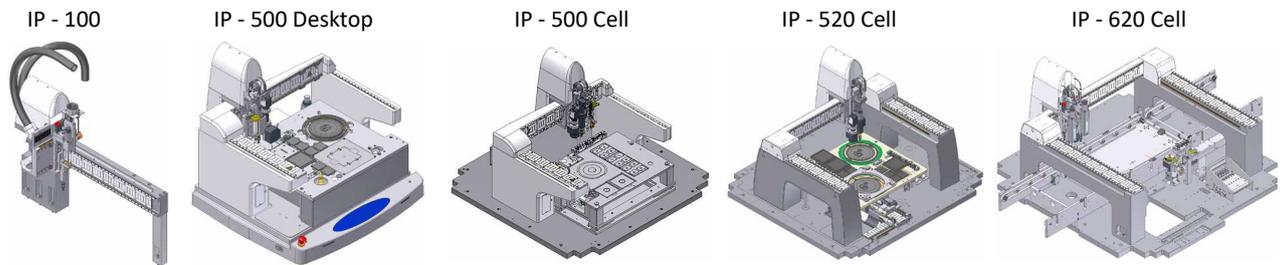
- Electronics
- Semiconductor
- Automotive Industry
- Watch Industry
- Micromechanics
- Optoelectronics
- Biotechnology
- Pharma

COMPONENT MATRIX

Due to major investments into the research and development of strategically needed peripherals, it was possible to build the Infotech Component Matrix. Based on these modules, reliable products can be realized as flexible as building special application machines, but with an extremely high quality level comparable with standard machines. Process specific, modular and nevertheless standardized:

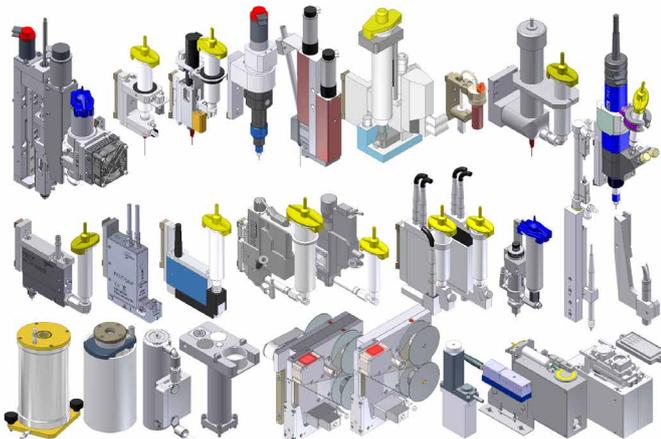
PRODUCTION CELLS - PLATFORMS - ASSEMBLING - DISPENSING - FEEDING

Component Matrix PLATFORMS



	IP - 100	IP - 500 Desktop	IP - 500 Cell	IP - 520 Cell	IP - 620 Cell
Travel range X	93 mm 148 mm	400 mm	400 mm	210 mm 270 mm 340 mm 400 mm 540 mm	210 mm 270 mm 340 mm 400 mm 540 mm
Travel range Y	440 mm 550 mm 680 mm	400 mm	400 mm	400 mm	540 mm 620 mm 710 mm

Component Matrix DISPENSING



- Dots, lines, geometric patterns 2D / 3D
- X-, Y-, Z-axis and valve synchronized with continuous motion path control
- Time/pressure dispensing units
- Archimedes screw dispensing units
- Precision micro screw dispensing units
- Jet dispensing units
- Slider dispensing units
- Piston dispensing units 1C- and 2C- adhesive
- Syringe and needle heaters
- Automatic amount (parameter) adjustments
- Automatic Z-needle length calibrations
- Automatic X- and Y-offset calibrations
- Purge, scale, and calibration stations
- Dispensing purge and cleaning tape units
- Dispensing needle cleaning stations

IP-Desktop dispensers are available as a base for easy dispensing applications. With options available from the Infotech dispensing component matrix, the systems can be up-scaled for any possible complex dispensing applications. Synchronized 2D dispensing patterns as well as 3D patterns can be easily processed. Vision process can be configured for easy setup and verification purposes.

Desktop DISPENSER

The ultimate multifunctional dispensing desktop system with a wide open application range for combined 2D (X, Y) and 3D (X, Y, Z) miniature fluid handling for manual, semi automated or fully automated operations:

- X-, Y-system with linear motors and linear encoders
- Distributed and synchronized closed loop motion system with optional GigE guided vision control system
- PC user interface with graphical dispensing pattern editor (optionally CAD-import and import based on Gerber-files)
- Vision support for teach operations, for fiducial reading, to calibrate needle positions or to verify dispensing results
- Time/pressure dispensing controller included in the base
- Purge station, strip off station and manual camera calibration unit included with the base package
- Automatic needle offset calibrations for X-, Y- and Z-directions
- Automatic viscosity change compensation
- Realtime parameter adjustments for manual setup of dispense processes
- Visual inspection, the dispensed pattern can be inspected directly after material deposition
- Optional needle cleaning unit, calibration and cleaning tape unit, up- and down-looking height probes or weight scale
- Optional flexible board or substrate carrier for single or multiple image support, easily adjustable for different dimensions
- Optional heating plate

Desktop Dispenser BASE and TIMEPRE CONFIGURATION



Desktop dispenser time/pressure base configuration:

The system is ready to dispense using an internal time/pressure control system. Both parameters time and pressure can be defined in the application program. The time/pressure valve is close to the syringe and includes hold back vacuum to prevent the syringe from dripping.

The following modules are included with this configuration:

- Desktop with X 400 mm, Y 400 mm and Z 150 mm
- PC-Control module incl. TFT-monitor
- SW-License VisualMachines™ (desktop application software)
- Time/pressure dispensing unit with internal controller
- Time/pressure dispensing interface centered on the Z-axis
- Dispensing purge station incl. strip off wire
- Up looking touch probe integrated within purge station
- Packaging for desktop system

Substrate holder as shown is application specific and is not included within the base configuration!

Desktop Dispenser DISPENSING HEAD OPTIONS

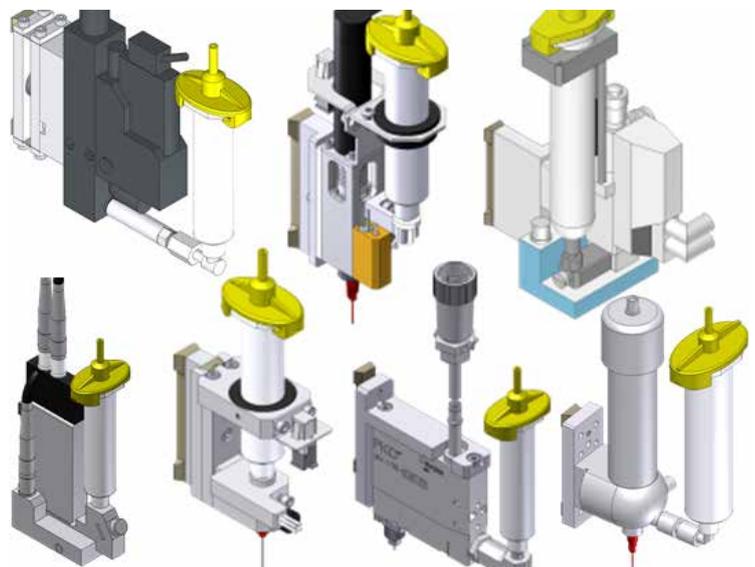
Desktop Dispenser - Dispensing head options:

The base configuration includes an internal time/pressure controller. This configuration can be upgraded with alternative dispensing head types:

- Precision micro screw dispensing unit with rotary drive
- Jet-dispensing heads P-Dot, P-Jet, P-Jet CT (Nordson Liquidyn)
- Jet-dispensing heads (Nordson Picodos, Vermes, Musashi)

Each dispensing head type can be configured application specific with multiple dispensing head options.

All dispensing valves use the standardized Luer-Lock® interface for the syringe and for the dispensing needles, where needles are used. Different needle types, diameters and lengths are available. Syringe sizes of 3 cc, 5 cc, 10 cc or 30 cc (55 cc) are supported. Third party dispensing controller can be adapted with an integrated special interface. Automatic calibration and compensation features available.





IP-Desktop Dispenser DISPENSING PERIPHERAL OPTIONS

VISION - Vision processing

The option VISION includes the Vision Cognex Vpro license and the down looking camera unit with 1296 x 966 pixels and a field of view of 16 x 12 mm:

- Automatic camera and offset calibrations
- Coaxial- and ring light illumination
- Moves into the correct focus height
- Can be used for teach in purposes
- Reads fiducials or shapes for orientation
- Inspecting dispensed patterns

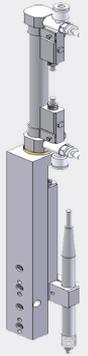
Camera configurations with different field of views or resolutions are available upon request



ZHEIGHT - Z-Height measurement

The option ZHEIGHT includes the single pneumatic Z-slide and the down looking touch probe which can be attached together onto the Z-axis:

- Automatic touch probe calibration
- Automatic Z-height calibration e.g. on substrates
- Height measurements including 2.5D processes
- Repeatable accuracy 0.003 mm @ 3σ
- Moves in Z-direction onto different heights
- Optimal when using dispensing needles to calibrate the difference in length automatically
- Automatically calibrated

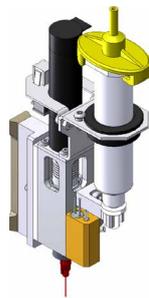


MICROSCREW - Micro precision screw dispensing unit

The option MICROSCREW allows the handling of dispensing medium with fillers. Volume based pressing through the needle results in precise repeatable dispensing results.

- Pump can be removed easily together with the syringe, fast and simple to clean
- With pump heating
- 3 cc, 5 cc, 10 cc or 30 cc cartridges
- 10 mm Luer-Lok® style needles (optional ¼", ½", 1" or ceramic precision needles)

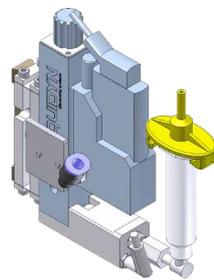
The option SCREW is using a plastic screw



JET - Jet-dispensing unit for micro dispensing

The option JET can be used to jet lubricants grease or oils, colors, silicones, gels, organic solvents, epoxies, adhesives and many other liquids. Allows touchless dispensing of any dispensing patterns.

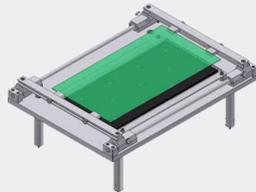
- Easy exchange of the valve together with the syringe, fast and simple to clean
- With nozzle heating
- 3 cc, 5 cc, 10 cc or 30 cc cartridges
- JET LIQUIDYN
- JET VERMES
- JET PICODOS
- JET MUSASHI
- JET PICOPULSE
- JET DELO PN3



CARRIER - Substrate holder / Circuit board holder

The option CARRIER includes a flexible support and clamping mechanism for different dimensions of substrates, circuit boards or other objects.

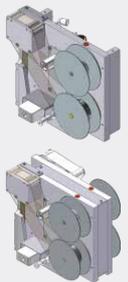
- Easy clamping of objects
- Supports sizes of 300 x 400 mm
- Spring loaded clamping
- PREHEATER module as option



CALIBETAPE - Calibration-, Purge- and Cleaning tape

The dispense calibration tape unit can be used for all dispense unit types as purge unit and as calibration unit

- 2D Dot or matrix measurement
- With automatic tape feed
- Optional CALIBTAPECLEAN with the cleaning tape for Jet-dispensing units with flat nozzles
- Easy removable to exchange tapes



NEEDLECLEAN - Dispensing needle cleaning station

- Cleans needles touchless
- Can be removed easily, fast and easy to clean
- Based on compressed air, no vacuum needed

SCALE - Dispensing process control weight scale

- Controls and regulates the dispensing quantity
- Wetted parts can be easily removed, fast and simple to clean
- Location protected from the environment

FURTHER OPTIONS - Infotech Component matrix

- IP-500 Desktop machine table
 - IP-500 Desktop workspace, with safety shields
 - SW-License Traceability
 - SW-License CAD-Data import
 - Different application plates
- Please ask for further options for your requirements!

INFOTECH automation

Exceeding your expectations

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