



-pet

A world of liquid handling and automation

Π
Proteus
International

The history of π -pet instruments and software

Proteus International ideas started for more than 30 years ago, to develop automation and liquid handlers which could expand, like a building block system, that could be expanded according to the customers need.

Today where everybody are concerned for the resources and green manufacturing, makes this idea sense, think that you can invest in a small pipetting instrument and when the workload in the laboratory raise, simply add more tips, expand the worktable, add a robotic arm or other functionality. *This is the idea behind π -pet instruments.*



Expand capacity and walk away time with bigger worktable.

Extend the instrument with more channels and make it faster.

Add more functionality change the instrument into a production line like ELISA.

Therefore are both instruments and software modular and can be changed according to your need. Until now are systems installed from 50 cm wide to 300 cm wide as "desktop" instruments and 9 m² as robot and pipetting instrument.

Since all laboratory do not have the same need we decided to go all the way starting with manual pipetting, which at a later state can be mounted in our instrument for automate pipetting, f. ex. with one channel for sample and 8 channels for reagent. This of course have some limitation, so if needed this instrument can be converted to a flexible liquid handler robot by remove the manual pipets and mount electronic dispensers or pumps and now the laboratory have a fully automatic robot, which in total had cost less than, buying a small pipetting robot first, throw it away and by a new bigger one! **Simply upgrade!**

Think green!

But this is not the end of our ideas, because the laboratory could have a need for taking one step further to total automation and add one of our many building block options, for automation.

After many years in service, the instruments are coming to an end, and when that happens the π -pet instrument will easily be taken apart and end up in the recycling system., to save resources

Π-pet manual pipetting tools and tips.

Π-pet is the next generation of high precision manual pipetting designed for use with standard tips, this newest addition to the family features improved action forces and a nearly 20% reduction in overall weight. Every aspect of accuracy, reliability and user comfort has been carefully reviewed in designing these



high precision pipettes. The result is an advanced pipette that exhibits superior accuracy and ergonomics and is comfortable to use, even during prolonged and repetitive pipetting.

Cat. No.	Description	Quantity
P5200-2U	<i>Π</i> -pet 1-channel pipette, 0,2 to 2,0 µL	1
P5200-10U	<i>Π</i> -pet 1-channel pipette, 1,0 to 10,0 µL	1
P5200-20U	<i>Π</i> -pet 1-channel pipette, 2,0 to 20,0 µL	1
P5200-50U	<i>Π</i> -pet 1-channel pipette, 5,0 to 50,0 µL	1
P5200-100U	<i>Π</i> -pet 1-channel pipette, 10 to 100,0 µL	1
P5200-200U	<i>Π</i> -pet 1-channel pipette, 20 to 200,0 µL	1
P5200-300U	<i>Π</i> -pet 1-channel pipette, 30 to 300,0 µL	1
P5200-1M	<i>Π</i> -pet 1-channel pipette, 100 to 1000,0 µL	1
P5200-5M	<i>Π</i> -pet 1-channel pipette, 1000 to 5.000,0 µL	1
P5200-10M	<i>Π</i> -pet 1-channel pipette, 1000 to 10.000,0 µL	1
P5208-10	<i>Π</i> -pet 8-channel pipette, 1,0 to 10,0 µL	1
P5208-20	<i>Π</i> -pet 8-channel pipette, 2,0 to 20,0 µL	1
P5208-50	<i>Π</i> -pet 8-channel pipette, 5,0 to 50,0 µL	1
P5208-200	<i>Π</i> -pet 8-channel pipette, 20 to 200,0 µL	1
P5208-300	<i>Π</i> -pet 8-channel pipette, 30 to 300,0 µL	1
P5212-10	<i>Π</i> -pet 8-channel pipette, 1,0 to 10,0 µL	1
P5212-20	<i>Π</i> -pet 8-channel pipette, 2,0 to 20,0 µL	1
P5212-50	<i>Π</i> -pet 8-channel pipette, 5,0 to 50,0 µL	1
P5212-200	<i>Π</i> -pet 8-channel pipette, 20 to 200,0 µL	1
P5212-300	<i>Π</i> -pet 8-channel pipette, 30 to 300,0 µL	1



Accessories.

Cat. No.	Description	Quantity
P4280-CR	<i>JJ</i> -pet Carousel, for 6 universal pipettes for most brands	1
P4403	<i>JJ</i> -pet Surestand, 3-place, for up to one multi-channel pipette	1
P4405	<i>JJ</i> -pet Surestand, 5-place, for up to two multi-channel pipette	1
P4406	<i>JJ</i> -pet Surestand, 6-place, for up to four multi-channel pipette	1
P4408	<i>JJ</i> -pet Surestand, 8-place, for up to six multi-channel pipette	1
P5590	<i>JJ</i> -pet Sterilize-IT pipette caousel, w. 254nm, UV lamp, 6 pos.	1



Destroys 99% of stray DNA
Protects from cross contamination
UV-C emitting Hg-vapor lamp
Exposes 360° of pipette shafts
Fits virtually any 1-channel pipette



Robotic tips.

Since we have seen a growing demand for disposable tips, we decided to do our own high quality tips for Freedom EVO, Genesis RSP and *JJ*-pet robots.

These high quality DNase and RNase tips, fits also to other compatible instruments.

We know pipetting and automation and know that high precision and accuracy in the tips are needed for pipetting robots to get the best result as well as repetitiv precision and accuracy from tip to tip and batch to batch.



200 µL	Conductive tips	96 tips/rack	24 Rack/box
1.000 µL	Conductive tips	96 tips/rack	24 Rack/box
200 µL	Non Conductive tips	96 tips/rack	24 Rack/box
1.000 µL	Non Conductive tips	96 tips/rack	24 Rack/box

π -pet robots tailored to your need.

Adaptive instruments that follows the fast changes in life science research and routine work, is a new and **green** approach to the industry. We think possibilities, not limitations and that open a new set of possibilities in the way π -pet instruments and software are developed and build.

The instruments are also adaptive to other market segments, due to the flexible pipetting range (0.01 μ L to 30.000 μ L++), number of channels (0-12+ individual channels, 4, 8, 12, 96 fixed channels), robotic arms and functionalities, disposable tips, fixed tips and compitips, as well as liquid detection or not, air displacement or liquid filled systems. Combination is also a possibility.

The π -pet is a truly modular state-of-the-art robotic system, combining sophisticated and flexible liquid handling with robotic manipulation. The modular design allows the hardware to be configured to suit a very wide range of applications.

The modular π -pet is a perfect platform for OEM applications, and simplifies both system integration and stand alone robotic automation. The flexible, uncomplicated design integrates robotic and liquid handling functionality into the robotic arm, which glides on an X-rail to access the large flexible deck and integrate modules to the deck or surrounding modules outside the deck.

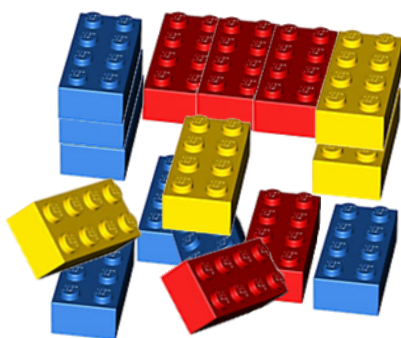
STAND-ALONE WORKSTATION

Your needs for automation may change during the long lifetime of your π -pet robot.

The unique modular design means that you can select suitable elements and performance characteristics to make up the ideal workstation, and then upgrade later to increase throughput or to more fully automation of a protocol.

OEM

With all functionality housed in the arm, this entire module can be easily integrated into an instrument project. Our communication protocol simplifies integration. Alternatively, the π -pet workstation, including deck, can be customized and optimized as a private label platform to automate any pipetting protocol.



By selecting from a wide range of robotic modules, functional “Plug and Play” modules, options and accessories, you can customize your π -pet to suit the evolving needs of your laboratory. And in most cases you can change the configuration in the future by upgrading.

Design your own pipetting arm or robotic handler with for example:

Variable no. of tips pr. arm	Air displacement tips or hybrid setup
Independent move Y and Z, flexibility	Robotic handler fixed or rotate gripper
Liquid level detect or not	Stacking possibilities
Washable or disposable tips or mixed	Moving plates between accessoires
Liquid filled displacement, independent of tip size	Moving tubes between accesories

Get your pipetting instrument in "Color" or sterile.

As a special service we can offer the pipetting robot in a color that match your laboratory, or you can simply have it in our color.

It means that we can offer a color that make live to your laboratory, so it does not looks sterile, unless you want it to!

Get a happy colorfull laboratory.

RAL 1000	RAL 1001	RAL 1002	RAL 1003	RAL 1004	RAL 1005	RAL 1006	RAL 1007
RAL 1011	RAL 1012	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018
RAL 1019	RAL 1020	RAL 1021	RAL 1023	RAL 1024	RAL 1027	RAL 1028	RAL 1032
RAL 1033	RAL 1034	RAL 2000	RAL 2001	RAL 2002	RAL 2003	RAL 2004	RAL 2008
RAL 2009	RAL 2010	RAL 2011	RAL 2012	RAL 3000	RAL 3001	RAL 3002	RAL 3003
RAL 3004	RAL 3005	RAL 3007	RAL 3009	RAL 3011	RAL 3012	RAL 3013	RAL 3014
RAL 3015	RAL 3016	RAL 3017	RAL 3018	RAL 3020	RAL 3022	RAL 3027	RAL 3031
RAL 4001	RAL 4002	RAL 4003	RAL 4004	RAL 4005	RAL 4006	RAL 4007	RAL 4008
RAL 4009	RAL 5000	RAL 5001	RAL 5002	RAL 5003	RAL 5004	RAL 5005	RAL 5007
RAL 5008	RAL 5009	RAL 5010	RAL 5011	RAL 5012	RAL 5013	RAL 5014	RAL 5015
RAL 5017	RAL 5018	RAL 5019	RAL 5020	RAL 5021	RAL 5022	RAL 5023	RAL 5024
RAL 6000	RAL 6001	RAL 6002	RAL 6003	RAL 6004	RAL 6005	RAL 6006	RAL 6007
RAL 6008	RAL 6009	RAL 6010	RAL 6011	RAL 6012	RAL 6013	RAL 6014	RAL 6015
RAL 6016	RAL 6017	RAL 6018	RAL 6019	RAL 6020	RAL 6021	RAL 6022	RAL 6024
RAL 6025	RAL 6026	RAL 6027	RAL 6028	RAL 6029	RAL 6032	RAL 6033	RAL 6034
RAL 7000	RAL 7001	RAL 7001	RAL 7002	RAL 7003	RAL 7004	RAL 7005	RAL 7006
RAL 7008	RAL 7009	RAL 7010	RAL 7011	RAL 7012	RAL 7013	RAL 7015	RAL 7016
RAL 7021	RAL 7022	RAL 7023	RAL 7024	RAL 7026	RAL 7030	RAL 7031	RAL 7032
RAL 7033	RAL 7034	RAL 7035	RAL 7036	RAL 7037	RAL 7038	RAL 7039	RAL 7040
RAL 7042	RAL 7043	RAL 7044	RAL 8000	RAL 8001	RAL 8002	RAL 8003	RAL 8004
RAL 8007	RAL 8008	RAL 8011	RAL 8012	RAL 8014	RAL 8015	RAL 8016	RAL 8017
RAL 8019	RAL 8022	RAL 8023	RAL 8024	RAL 8025	RAL 8028	RAL 9001	RAL 9002
RAL 9003	RAL 9004	RAL 9005	RAL 9010	RAL 9011	RAL 9016	RAL 9017	RAL 9018

The instruments can be delivered as tabletop instrument or as "wheel in" instruments with the possibility of storage below, (hight adapted to a standard door) exhaust, HEPA filter, UV-sterilisation etc.

PRINCIPLES OF LIQUID HANDLING

The robotic pipetting arm module encloses everything necessary to perform the liquid handling, reducing the need for space consuming external pumps and extended lengths of feed tubing., depending on configuration *Π-pet* can use a principle of positive displacement of liquid in a fluid filled system, where the aliquots of sample and reagent are automatically separated by an airgap. *Π-pet* can pipette using all or only some of the individual channels together, either in single aliquots or by multi-dispensing except for systems with manifold or manual multi channel pipettes.

PUMP DESIGNS

Mini toothed wheel pump

Pipettes from 1 μ L, plus continuous system liquid dispensing up to 3 mL+

Any volume in principle so far 0,5 to 30.000 μ L are made.

Excellent precision

No maintenance, no replacement parts

Syringe pumps

Pipettes from <1 μ L until now up to 10mL (in one stroke) dependent of syringes

Excellent precision

Minor maintenance

”Manual pipettes”

Pipettes volumes according to the pipet handle, like in manual use

Channels dependent of single or multichannel pipettes

Excellent precision

Cheap spares, new handle

Tubing pumps

Volume according to tubes and motor unit

Single or multi

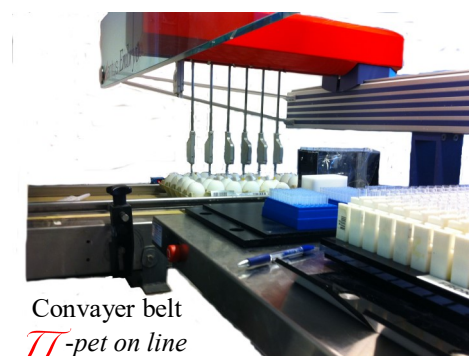
Good precision

Mainly dispensing, can be used as aspirate in some cases

Maintenance, calibration and tubing exchange

All round systems is often using Mini toothed wheel pump.

Π-pet instruments can be incorporated in almost any laboratory, as a stand alone instrument, automated system or even on-/in-line applications.



π -pet accessories and related items.

This part of the catalog show instruments and interesting accessories for the automated laboratorium. These produkts can eiter be used as a stand alone unit or be integrated of part of a bigger automated system.

Trace samples is a big job in many laboratories, therefore is labeling and scanning often a tideous job, even in small scale.

The new LABeler™ Lab Printer provides the convenience of a lab pen with the benefits of a large desktop printer. Simply type in the desired copy using the 50+ button key pad and press the print key... within seconds your label can be cut by pressing the cut lever and is then ready for application. With over 15 available sizes, colors & material combinations, the LABeler is ideal for label identification of any laboratory vessel for nearly any laboratory application. Standard label tapes can be autoclaved, boiled or even frozen to temperatures as low as -50°C. Special Ultra-Low label tapes are also available for storage in -196°C environments or for liquid nitrogen applications.

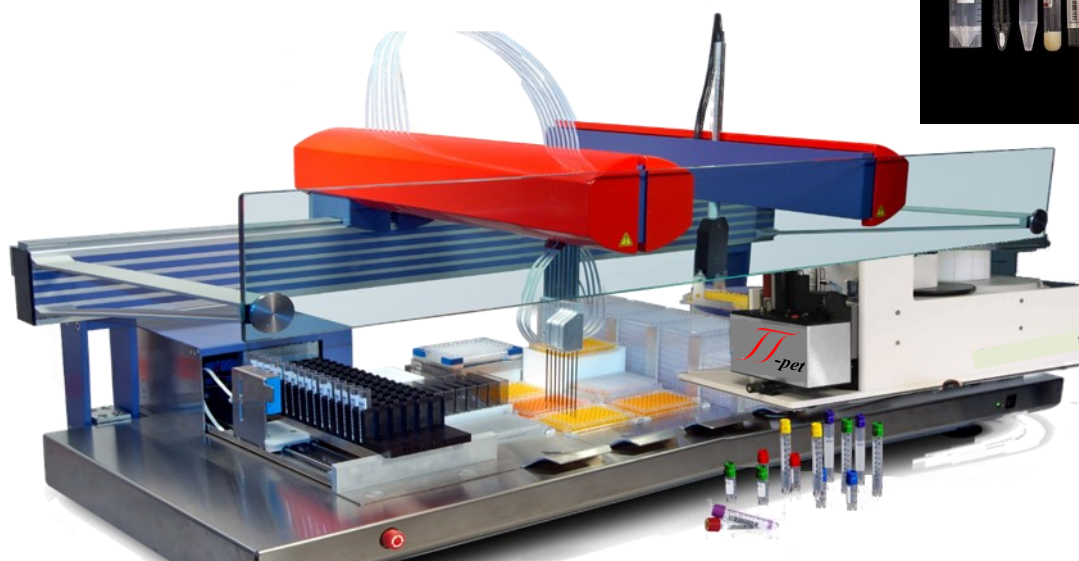


The new LinkLabel™ Lab Printer brings a new level of freedom to laboratory labeling. MTC's free downloadable LabelPro™ App allows users to endlessly customize and specialize their labels. Use the app to easily change text, font, positioning, size, and label length. The LinkLabel also has the ability to print batch no., serial numbers, and a variety of barcodes.



With 12 available label cassettes, the customization doesn't end on your cell phone. Choose from multiple colors of tape, including transparent. Three label heights are available for different sized vessels. 6mm tapes are great for tissue culture plates, 12mm tapes are ideal from microtubes, and the extra tall 24mm tapes are ideal for large tubes and flasks. Special "ultra-low" label tapes are also available for storage in -80°C environments or for liquid nitrogen applications.

Combine and create system, this instrument can combine labeling, barcode reading as well as filling and standard pipetting protocols. The instrument is based on *π* -pet building block pipetting platform and SchedEASY intuitive control software.



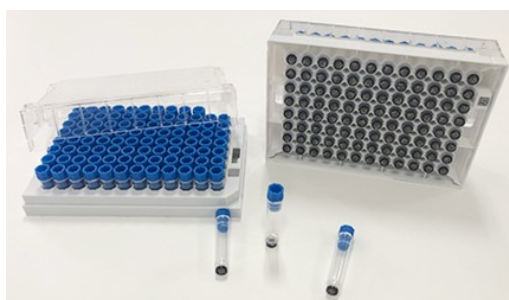
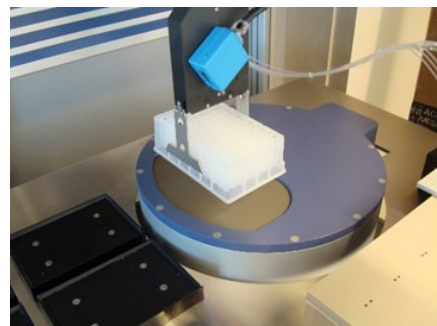
Traceability a benefit for the laboratory.

Traceability are a problem in many laboratories, but by combining labels and barcode readers, 1-, 2-, 3-D or RFI indicators. This can be a great help for many laboratories. If the information also are combined with a database, the users cannot only follow the sample, be sure where it is in the process as well as when the results are ready for digital processing.

The *Π-pet* instrument can label, read out of a database what to do with the samples, confirm validity of samples, secure out of date reagent and testkit is not used in a validated method. *Π-pet* instruments can be integrated readers reading vertical, horizontal and even wrapped around a vial,

If automatic reading/control is not needed also manual handscanners can be used as well as if the user just want to attached some notes to the samples via the keyboard!

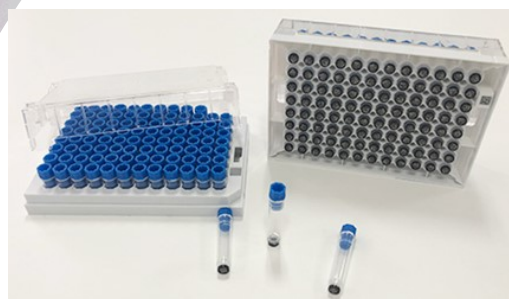
Scan Rack and 2 D vials with code in bottom in one operation or use optimized readers, at vital operations either of-line or build-in, into the instrument platform.



Π-pet lit, cap and cover handling.

Π-pet instruments has over the years been equipped with many different type of tools to open and close containers, vials or plates. These tools can handle screw caps, corks, foil, foil piercing and many othe type of seeling or closing of containers.

Categories: Agricultural Science, Animal Health, Biobanking, Clinical, Drug Discovery, Forensics, Pharmaceutical, Plant & Food Testing, Tube Handling, Tube Labeling.



The Variable Heat Sealer and the fixed temperatur Micro Sealer for manuel use and even versions for integration in the *Π*-pet pipetting robot. These type of instruments are needed for sealing plates for storage, avoid polution and evaporation.

Example of integrable components.

The *Π-pet* instruments can be expanded with a variety of functionalities, we have collected some, so if your laboratory use something else, our instrumentation could properly help you.

By incorporate a ELISA reader on the *Π-pet* instrument, it can be turned into an automatic ELISA system, but not only limited to this, it will also be able to do normalization on plate and tubes, as well as a Stacker reader, to read multiple plates. If installed with labeller, sealer and barcode reader, can all these functions be used together or independently. If it is a spectrophotometer instead of an ELISA reader, can sample preparation and automatically readings be made on it.

Installing a ELISA washer on the *Π-pet* instrument, also fully automatic plate wash can be made and if stacker is mounted it can also perform multiple washes of several plates. Up to 4 wash liquid can be attached to the system.

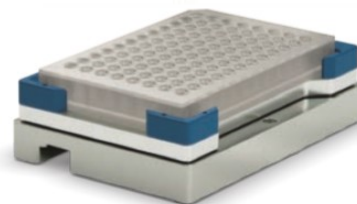
Mixing can be a problem in some assays even that many systems can do aspirate/dispense as mix, it is not always enough. *Π-pet* instruments is prepared for this type of mixing also, but additional can the instrument and software control a variety of shakers and thermo shakers for plates and tubes.

Temperature dependent assays can also be a challenge for many instruments, therefore are both software and hardware ready for these type of accessories. Cooling of reagents and samples is easily done with one of the different components in the *Π-pet* accessories assortment. If heating or incubating are a need for the automation, the range goes from simple heating/cooling chambers to more sophisticated shaker incubators and stacker incubators.

If the space on the instrument allow it, several of these functions can be present at the same time.

If freezer samples are used it is even possible to thaw on the instrument, pipet and freeze them again, to avoid expose to room temperature as little as possible.

These components as well as the whole instrument can be combined to work under sterile conditions by light or filters, to avoid contamination from the laboratory or to the laboratory.



In line PCR is a new functionality, that can be combined with other module. *Π-pet* instruments can perform both pre- and post PCR as well as the PCR itself, this unique possibility gives more walk away time for the operator to do other work at the same time.

CoolCaddy™ PCR WorkStation can be used as stand alone or integrated in *Π-pet* workstation.

The new CoolCaddy™ keeps your reagents and samples cool, on the lab bench, without using crushed ice. Simply store your CoolCaddy overnight in any standard freezer and it's ready to hold temperature between **2° and 4°C for up to 5 hours**. Tubes, plates, strips and multi-channel reservoir solutions can all be kept cool while you perform your experiments.

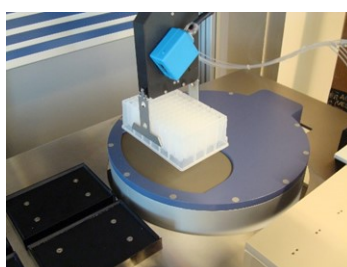
Capacity:

1.5/2.0mL	Microtubes:	9 Tubes
2.0mL	Cryotubes:	8 Tubes
0.5mL	Microtubes:	5 Tubes
PCR	Plates:	1 Plate
PCR	Tubes:	96 Tubes or 12 Strips
Reservoirs: 1 x 50mL Reservoir		

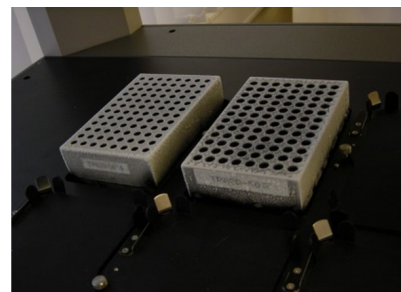
Sometimes the laboratory have use for alternative solutions as pH and Ion normalisation. In this area is *Π-pet* instruments and software unique, because it will be able to perform thes kind of processes and titrate them to desired value in parallel, if more than one channel are installed.

SPE is made easy with *Π-pet* instruments, which can handle SPE plates and columns with vacuum or pressure.

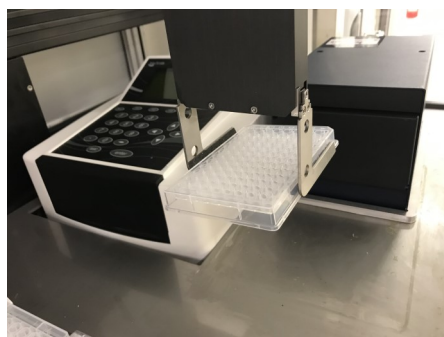
SPE is not the only separation tecnique that can be used, but also magnetic beads or centrifugation is possible.



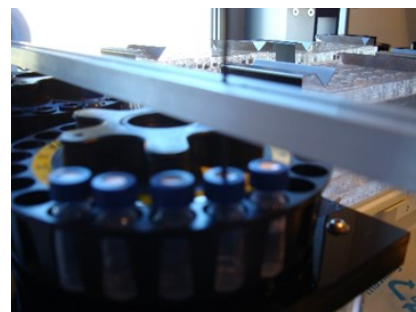
Example of special pipetting setup.



Freeze and unfreeze samples



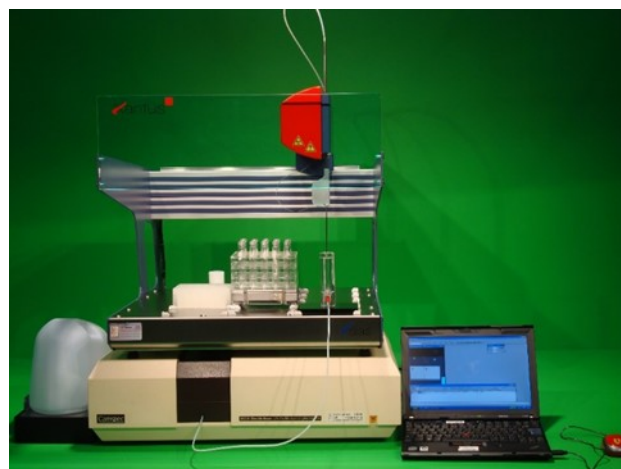
Reader and shaking incubator



Piercing example in LC racks



Ex. of setup of different flasks and vials in a compact instrument with under deck centrifuge, SPE and on-line evaporation.



Sample prep and direct injection on a UV/VIS-spectrophotometer

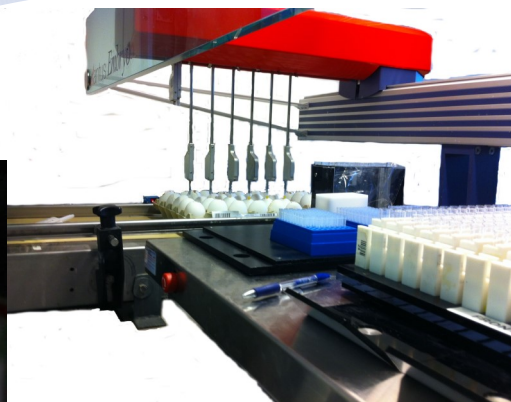
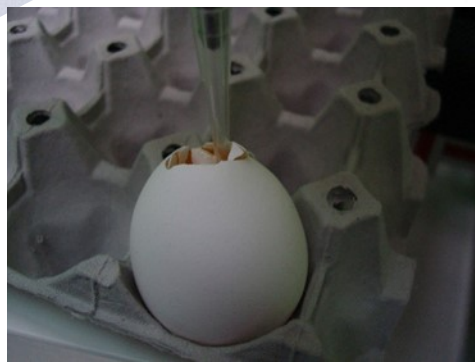


Barcode scanning of strip racks

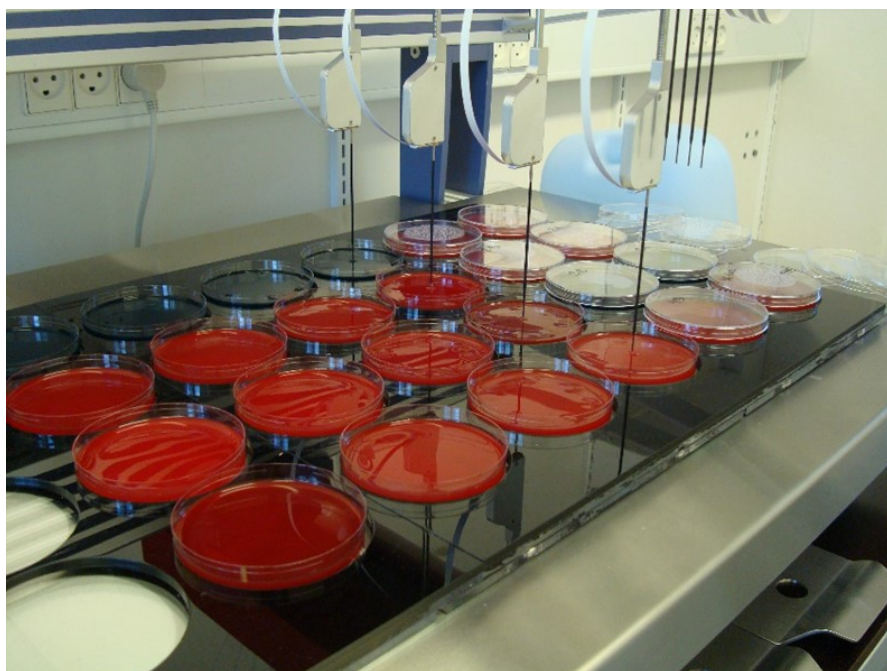
Instrument with shaker, washer and reader as well as ELISA software



Example of though and special pipetting.

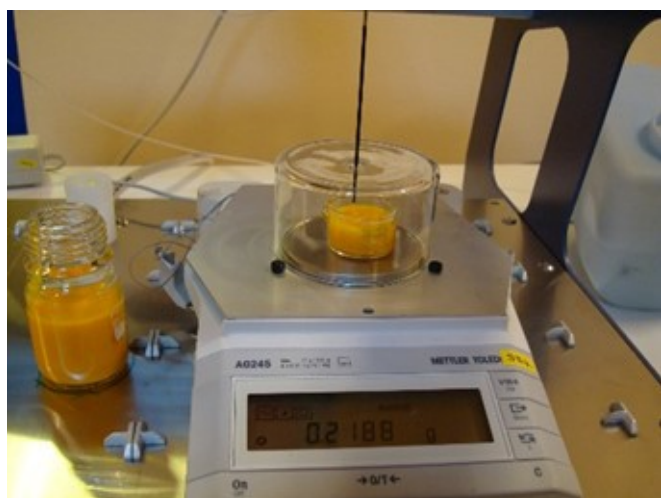


Sampling of egg in standard cardboard EU racks (30 egg) via a convayerbelt and with disposable tips.



Adding sample on the surface on agar plates, without scratching the surface.

Samples can also be added insite the gel.



Pipetting inhomogenius samples can be done repetitive with high accuracy, in this case juice with pulp.



Special racks to special tubes, in this case flip cap tubes, but also capillary tubes, SPE plates, columns, gel cards etc.

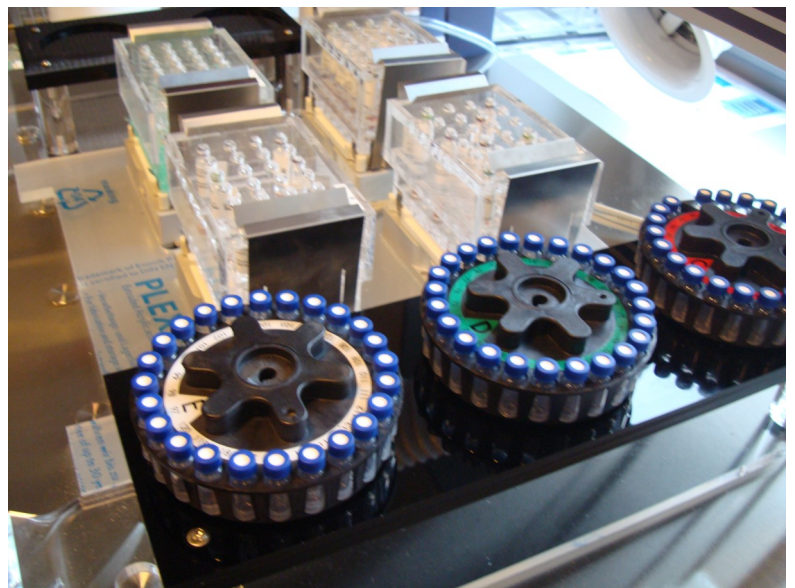


Piercing of vials and sampling into Agilent HPLC racks with sealed HPLC vials.

Shaking the sealed samples before the transfer to HPLC vials.



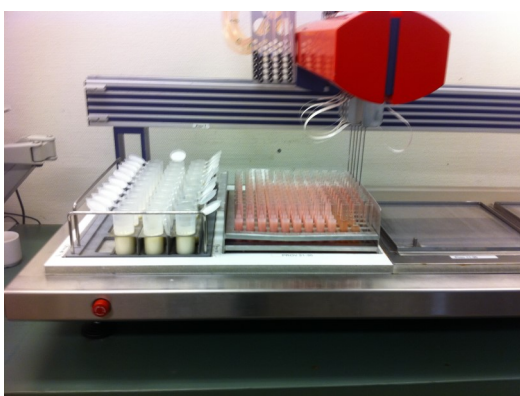
Extraction system into sealed Waters Wisp carousel.



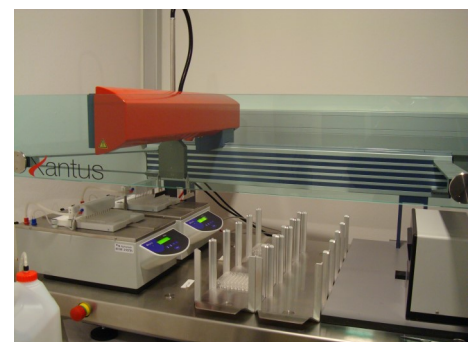
Sampling big 30 mL milk samples for biologically tests.

The system is able to run sample sizes 10 μ L to 30 mL in one asp.

Dispens can be all 30 mL or fractions down to 10 μ L pr. dispense cyclus.

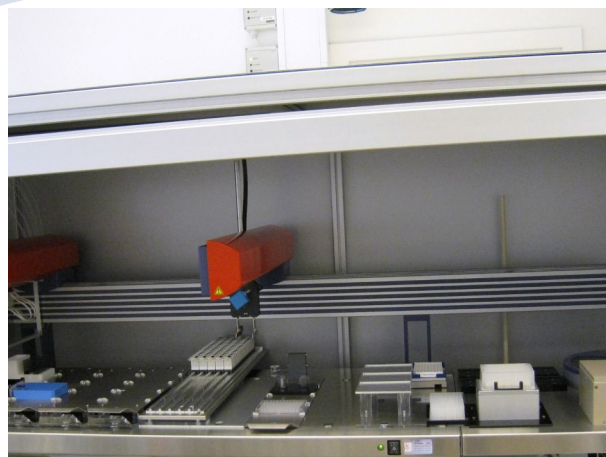


Stacking robot can serve several ELISA washer or combine it with ELISA readers. Capasity depend of size of instrument from 10 to several 100 plates.

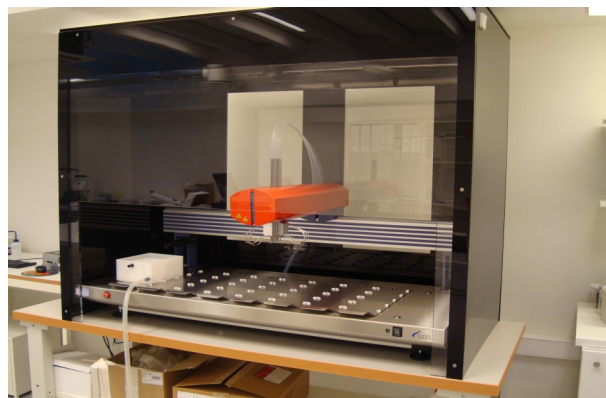




System for plasma extraction and ELISA kit, contain SPE system, Heat/Cool, shaker, centrifuge, evaporation, 8-channels pipetting and robotarm.



4-channels SPE system and standard sample preparation.



8-channels SPE system with robotic arm to move SPE plates to from positions and evaporation.

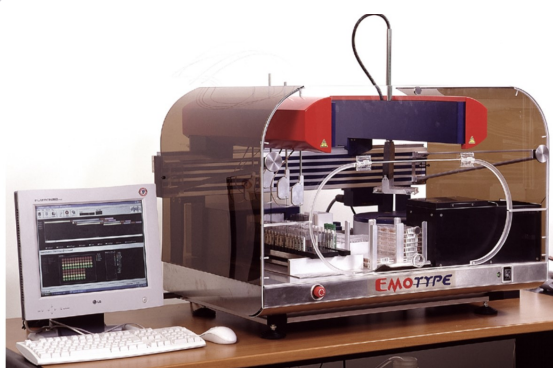
This system is ready for handling from one plat SPE to several plates. The enclosure can handle organic solvents and protect the laboratory personal as well as the hardware.



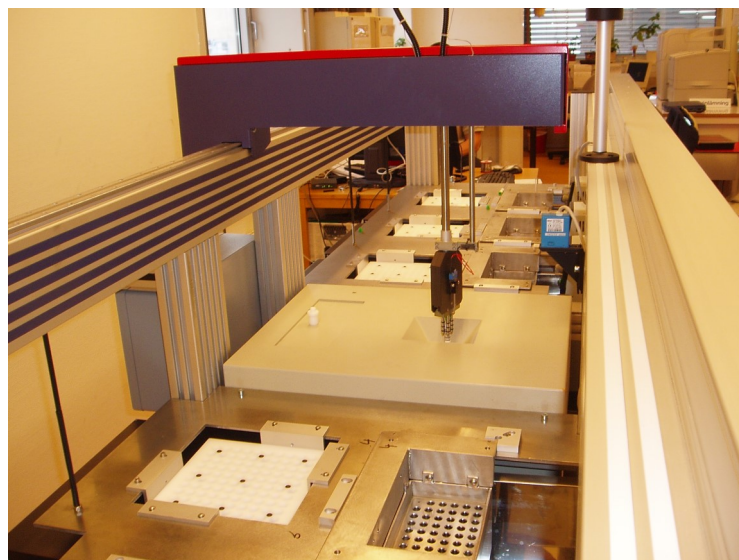
Being local also have it's benefit, the only space for an extraction system in this laboratory was between two fume hoods, and due to *pet* instruments building block technology it was made easy to adapt this extraction indtrument with centrifuge, robotic arm, pipetting arm and evaporation into the free space.



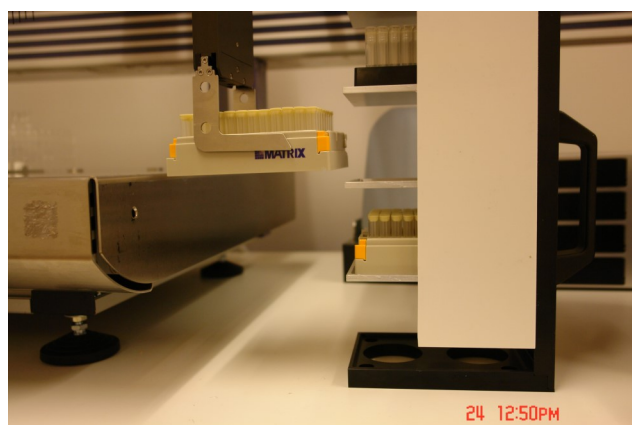
Adding substrate and milk to micro biologically test in a dairy laboratory.



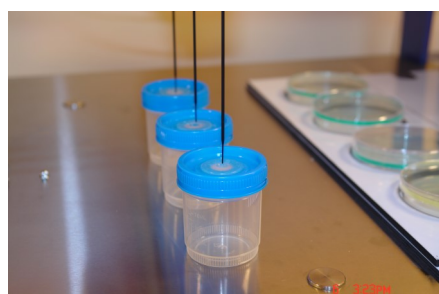
Compact pipetting system with stacking capability, only 80 cm wide excl. PC.



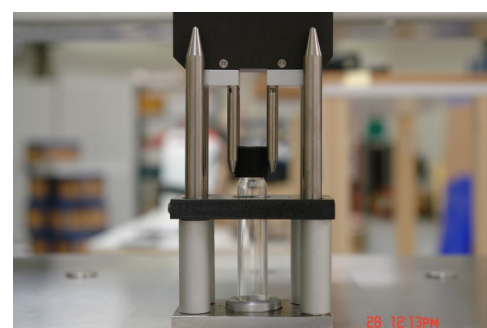
3 m long Sample preparation instrument for NMR detection of plant oils.



External stacking system reachable with the robotic arm.

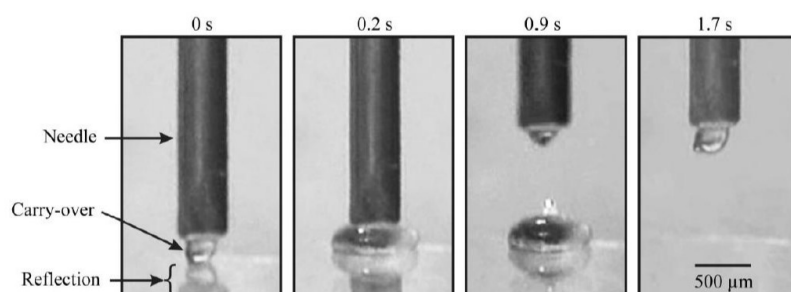
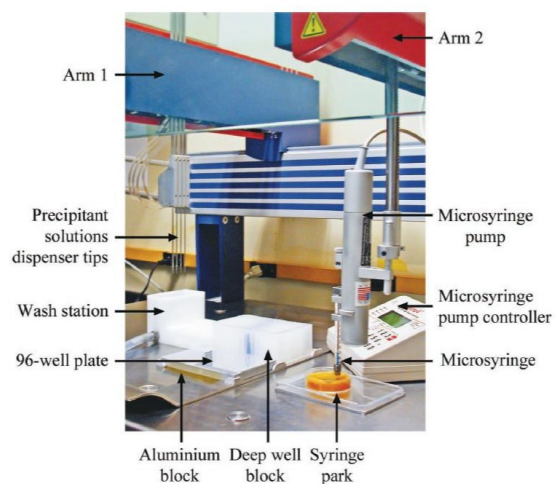


Piercing and sample preparation from urine cups.



Capping system for tubes.

Gel cart incubator and piercing station.

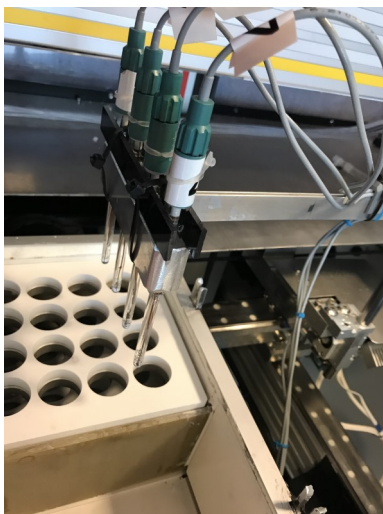
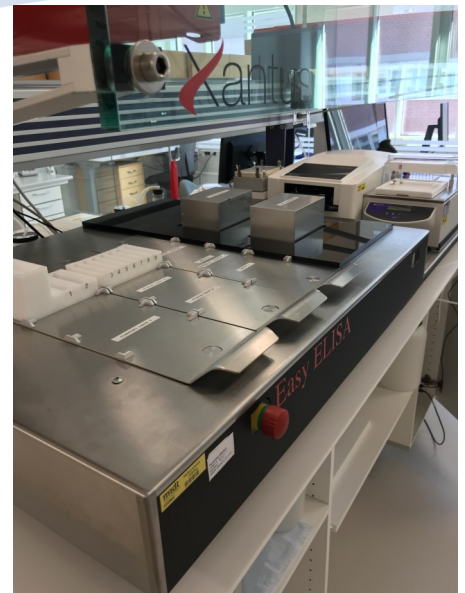


Protein crystallisation system for preforming protein crystals on the fly.

Instrument build in inclusion with storage below and exhaust on top for sample preparation tube to plate..



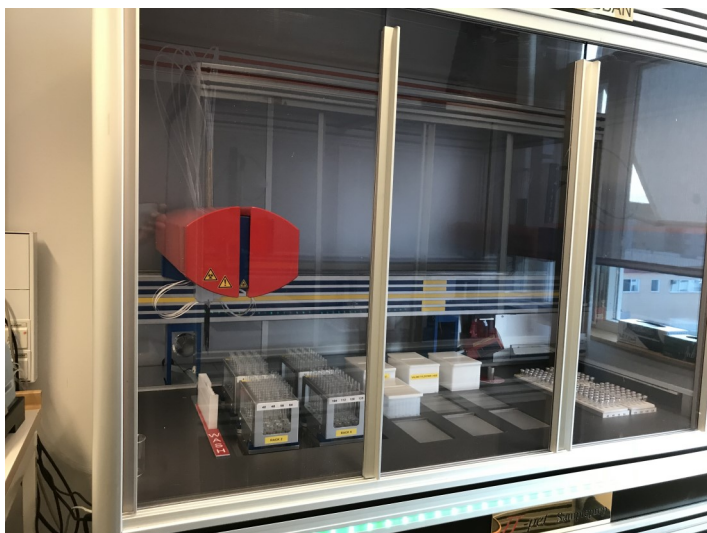
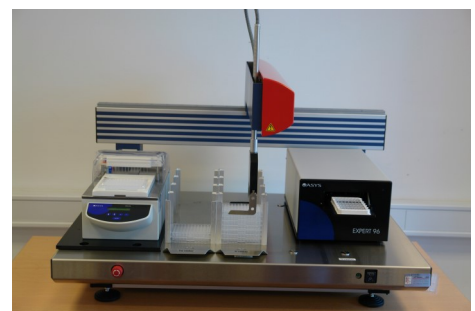
Typically ELISA system with incubator, shaker, ELISA washer and ELISA reader.



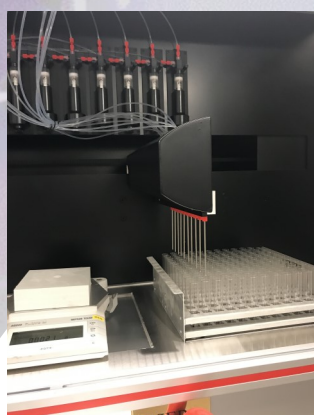
12 channels sample preparation system with ELISA and pH normalisation in parallel (4 at a time). Incl shaker, stirrer for 20 mL tubes, incubator and ELISA Reader.



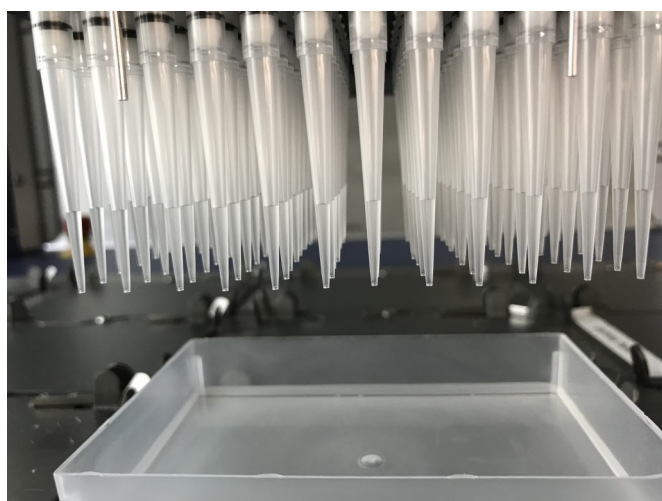
Stacker washer and reader for batch washing or reading of plates.



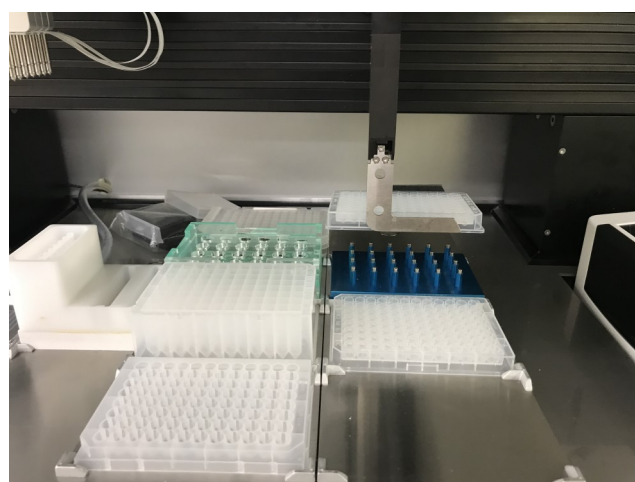
Liquid/Liquid extraction of drug samples and transferred to GC/MS closed sample vials.



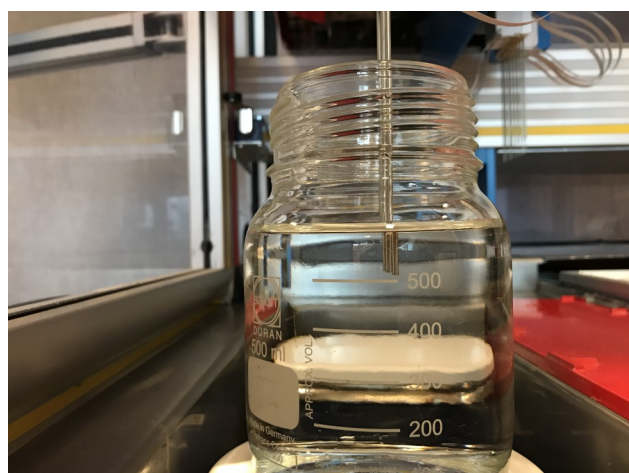
10 channels *Pi-pet Superdispenser* the ideal solution for multiple filling of vials, tubes, falsks etc. The instrument can be delivered with variable number of channels.



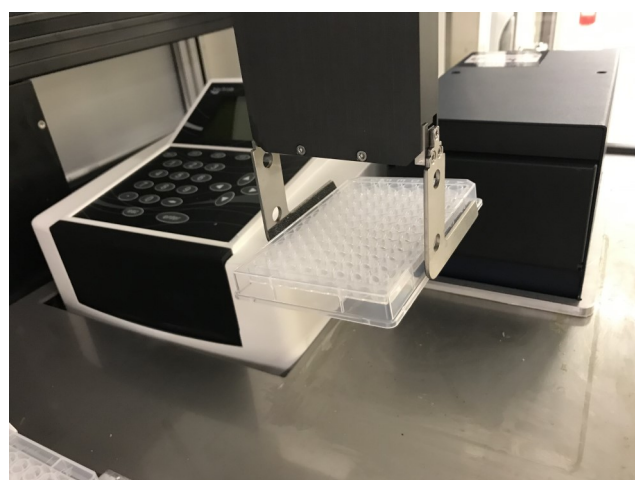
96 pipetting head as stand alone or in combination with pipetting arm, robotic arm and accessoires.



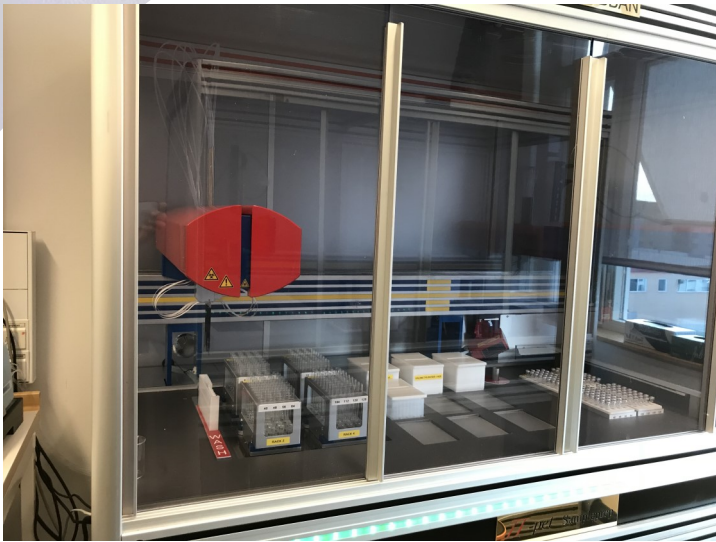
Magnetic beads extraction on line.



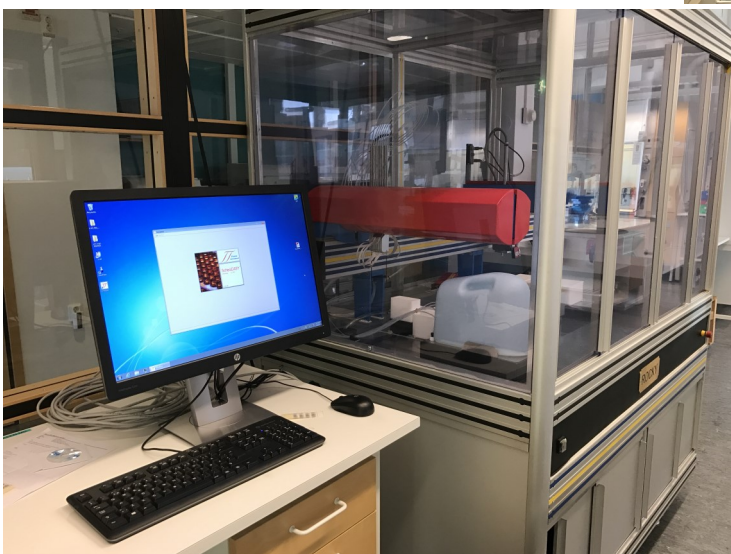
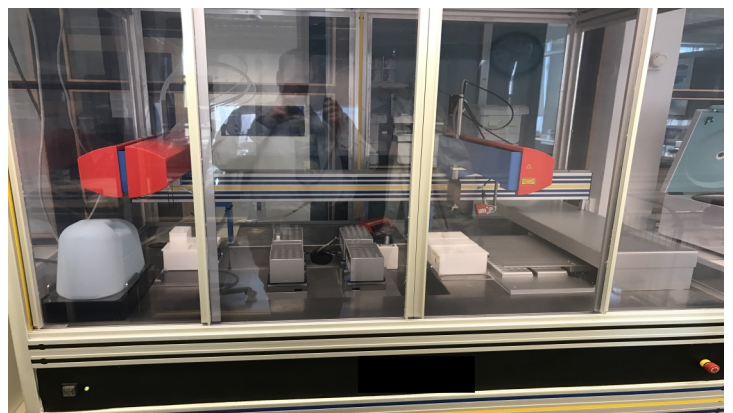
Parallel aspiration from flasks and transfer to different destinations with individual tips.



Shaker incubator for DeepWell, microtiter plates and UV/VIS reader.



Extraction systems with piercing options, barcode reader, shaker and other customer adapted accessories.



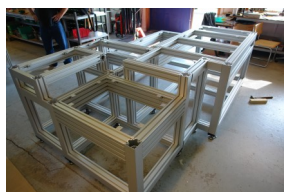
Building and montage in our facilities.

Since 1990 has the π -pet pipetting instrument been modified in Scandinavia and systems are today build in Scandinavia by skilled technicians within electronics and software, supervised by people with laboratory experiences within liquid handling.

Systems beeing build and testet in Scandinavia in close contact with the customers, made the building block concept ideel for instruments that just have that extra funktionaliti that give the extra help to the labortory, that many other systems don't.

The close contact between the customer, sales department, construction and software also made it possible to do changes to the instrument, if needed, while it is beeing build. This also means that it is easy to take the instrument in and rebuild or add functionality to the base instrument at a much lower cost than buing a new instrument in other words **Think Green!**

These instruments are build to be changed and upgradet and to adapt to the changes in a modern laboratory



π -pet instrumentation is not only complex systems but also state of the art pipetting hand held units, instruments and software.

Schedeasy instrument controlling software, was started to be developed in year 2000, to be a WYSIWYG-software, that filled in the gap on the market that could do both batch oriented methods (typically kit oriented tests) and sample oriented (typically for research and development in the industry).

So in other words the instruments controlling software are using the best of both worlds, can be mixed in the same method and run several different methods, at the same time as well as different tube sizes, plates, reagents etc.! Also a mixture of disposable tips and stainless coated tips in the same run can be done if needed.



Maintenance.



RoboClean

For pipetting robots.



Content 5L concentrate

**THINK
SAFETY**



A well working pipetting instrument need maintenance and tubing, filters, tip attachment need to be cleaned on a regular basis and therefore has **RoboClean** been on the market for more than 10 years. The cleaning is not only bactericid, fungicid etc but also cleaning proteins and other impurities. The detergent is harmless to most materials and in general harmless to materials in pipetting instruments.

Sterility made easy of manuel pipetting handles and area



*Destroys 99% of stray DNA
Protects from cross contamination
UV-C emitting Hg-vapor lamp
Exposes 360° of pipette shafts
Fits virtually any 1-channel pipette*

*Sterile surfaces around you, accessoires in small quantities are easily
steriled by handheld **PI-CleanAll** UV-C hand held unit.*



PCR Plates



PPE/Masks



MicroTubes



Dissection Tools

A-TEAM recoment automate now there is no plan B

to be more efficient and be in control with tracebility of your samples in your laboratory.



Extended warranty

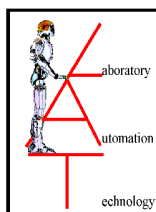
A world of liquid handling and automation

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