PACTA™ is a series of cabinets. PACTA is dedicated to provide uncompromized safety, to save space and energy, and to easy handling from specification through installation to operation and service. PACTA is for chromatography: UPLC HPLC GC. PACTA is for stacking lab equipment to save space: CO2-incubators, vacuum ovens, dish washers, lab instruments. PACTA serves pharmaceutical, biomedical, clinical and university laboratories, industry and science, R&D and QC. PACTA is for all LC-systems from all major chromatography manufacturers. PACTA is as simple as possible, but not simpler. Safety is inparallel. Ergonomics are best in class. Simply! OHS is applied according to corporate OHS guidelines. Pull-outs provide easy access from sides and rear, at all times, with no heavy lifts. Working height can be made adjustable. PACTA endorses housekeeping. Compared to mobile bench solutions, PACTA is lighter, smaller, better ventilated, easier to keep clean and provides better sound abatement. PACTA offers up to 50% savings in footprint and 60% in ventilation capacity per equipment, great when expanding capacity in existing facilities. Installed cost is reduced, lifetime operational savings are achieved. PACTA has a short time RoI. Last, but not least: it is stylish.

UNIQUE · COMPACT · MODULAR

PACTA®

Easy to configure. Fast installation.
Safe and easy to operate. Easy to service.

Left

- Disorganized. Not easy to overview
- Solvents and waste not vented; risk for exposures to gasses and vapours
- No or non-effective system ventilation to remove system heat. Room temperature is impacted
- Unsafe routing of tubes
- Data acquisition server takes up priority space, can be exposed to liquids and impacts room temperature

Right

- Bottles stand very high, only reachable from footstool

Both

- No immediate system access for maintenance
- Poor ergonomics; risk for back injuries; casualty risk when handling bottles. Heavy pull-outs (stainless steel roller table)
- Impossible to keep tidy and clean
- No proper space for housekeeping

PACTA-LC

- Well organized.
- Easy to overview. Backlit enclosures allow easy supervision
- Pull-outs provide easy system access,
- Operations made from front, service and maintenance from sides and back
- Bottles in adequate height, e.g. 5 liter bottles below shoulder
- Heat is ventilated efficently, out of room
- Solvents are ventilated safely, out of room
- Optimal ergonomics: No risk for back injuries. Minimum casualty risk when handling bottles. Cabinet is optionally height-adjustable to meet all ergonomical needs during operation, service and maintenance.
- Easy to keep tidy and clean.
- Stainless steel trays/plates where risk for solvent spillage
- Space for housekeeping; tool drawer also serves as PC-pad

PACTA-LC: Single cabinet for LC / GC

Optimal space utilization
Solvent bottles are above LC-stack. If this is too high, choose PACTA-Fly

Patents pending

PACTA-LC	PACTA-LC is a single cabinet. Solvent bottles are above the LC-stack [ventilated drawer]. Liquid waste is collected below the LC-stack [ventilated drawer].
Widths	PACTA-LC comes in three widths: 16,5” 25” 27,5” It accomodates space requirements for most common LC-manufacturers.
Socket mounted or height adjustable	The cabinet comes socket mounted, or height adjustable. Height adjustability is 0-20”, if not limited by top of cabinet reaching room height

PACTA-Fly: Twin cabinet for LC

Optimal space utilization when solvent bottles go low in the body.
Top compartments are for PC’s, but can be omitted for extra high LC-stacks.

PACTA-Fly	PACTA-FLY is two single cabinets attached to a centre cabinet. The centre (the body) has solvent bottles and drawers for solid waste. The LC-stacks can be very high. Solvent bottles are kept low, for ergonomical reasons.
Widths	The wings are singles, and come in single widths: 16,5” 25” 27,5”. They can be different. The centre, the body, is 16,5”.
Socket mounted or height adjustable	The cabinet comes socket mounted, or height adjustable operated as one cabinet. Height adjustability is 0-20”, if not limited by top of cabinet reaching room height

PACTA-LC is for chromatography		Dimensions	Load	How to proceed
UPLC	Ultra High Performance Liquid Chromatography; narrower; smaller volumes Units in 1-2 stacks, optionally a tower for oven or sample organizer	Depending on brand and no. of stacks Typically 14”-32”	Depending of type and brand Typically 130-250 lbs	Contact your local PACTA distributor to select the right PACTA regime for your purpose. 2016.11.30 2016.11.30 Brand, type, dimensions and load is needed for the specification. Corporate COHS rules are needed too.
HPLC	High Performance Liquid Chromatography; wider; larger volumes Units in 1-2 stacks, optionally a tower for oven or sample organizer	Depending on brand and no. of stacks Typically 18”-32”	Depending of type and brand Typically 130-250 lbs	
GC	Gas Chromatography; often connected units, produces more heat. MS solution may be integrated as a module	Depending on brand and no. of stacks 25”-50”	Depending of type and brand Typically 130-330 lbs	
MS	Mass Spectrometry; two-or-three stack system, LC/GC and a MS-detector. The detector has vacuum pump(s) and a gas supply	Depending on LC/GC and MS-detector. A big variety exists.	Depending of type and brand Up to 1.000 lbs (and more)	
FPLC	Fast Protein Purificatio; often has more eluents, and more frequent user interactions	Depending on brand and no. of stacks 25”-35”		

PACTA-Skyrise: Stacked equipment

Optimal space utilization
Stack the equipment you do not use simultaneously

Skyrise	PACTA Skyrise is one tower. The tower has two shelves. The shelves are operated up/down to obtain appropriate working height.
Widths	Comes in two widths: 27,5” and 50”. to accomodate space requirements for most common LC-manufacturers.
Only height adjustable	The cabinet comes height adjustable. No mobility, no socket installation,.
Outlets	Outlets to operate power and gasses are available on the front.

PACTA-Skyrise, also for Incubators

Equipment	Skyline holds equipment not simultaneously operated: - Ovens, vacuum ovens, sterilisers - Incubators, CO_2-incubators, in-vitro incubators - Climate chambers, humidity chambers - Undercounter Laboratory Washers, utensil washers, Underbench Washer Dryers - Table centrifuges, ... - Any equipment
Washers / Dryers	
Shelving	
High table	

PACTA is developed by end-users, facility managers and service engineers. PACTA comprises requirements and needs in one compact cabinet for daily operations, for lab support, for maintenance and for facility design. PACTA is a unique, compact and modular new standard.

Space / Footprint	Space utilization is crucial. Space optimization is the biggest contributor to cost savings in lab facilities. Facilities equipped with PACTAs have room for up to 50% more systems than comparable solutions.
Energy / CO2 footprint	Energy focus is crucial. HVAC is the second biggest contributor to cost savings in lab facilities. Due to integrated and focused ventilation, PACTA reduces HVAC needs with up to 60%- at time of installation and 24/7/365 thereafter. PACTA emits solvents in one exhaust, and system heat in another exhaust. The solvent exhaust is normally app. 20% of the total ventilation capacity.
Safety / OHS	Personal safety is paramount. Exposure to harmful substances, gasses and vapours, must be avoided. PACTA has local exhausts above bottles and above the waste bin. Air velocity matches requirements from fume cupboards. Venting is split into two: ducts to remove heat from the LC-systems heat, and ducts for harmful gasses. In case not needed, ducts are merged. Low air flow generates alarm.
Ergonomics / MMH	PACTA is safe and simple. During manual materials handling, occupational health injuries must be prevented. With PACTA, no heavy lifts are needed. No harmful liquids need handling above eye level. Pull-outs and adjustable height support create appropriate working positions.
Overview / Housekeeping	PACTA is focus and simplicity. The LC-system is accessible at all times, and all functions are easy to overview. PACTA provides sufficient and well-organized space for housekeeping. It is easy to clean and keep tidy.

FAQ: Planners & facility managers

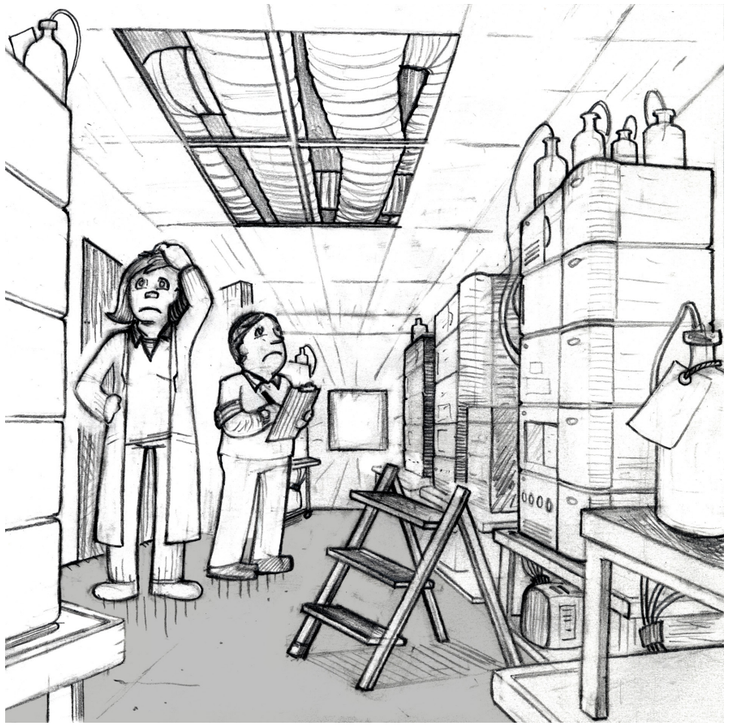
	SPACE	UTILITY CAPACITY	CONSTRUCT-ABILITY	PERMITS	RISK	COST
OWNERS CHALLENGE	• No room for new LC • Not room for LC's along both walls in a std 3 metre grid • Not sufficient handling space in front of LC's • No space for ducts for new HVAC (refurbish)	• HVAC capacity is limited • New HVAC capacity is too expensive for the LC case • EHS issues occur due to noise in existing and overloaded ventilation systems; air velocities are high	• Complex installation • 3D space management	• Fire permits • Limitations on allowed quantities of flammable liquids • Requirements dealing with EX conditions and enforced shut-downs	• Unexpected derived tasks during refurbishing may create more jobs, with no notice • Installation in QC-areas are restricted in time and frequency	• Space utilization is cost driver no. 1 in labs • Venting/ cooling is cost driver no. 2 in labs • Designers do expensive tailored solutions • Few standard products on the market
PACTA RESPONSE I	• Minimum footprint • ONLY the footprint required by EHS and LC-system is needed	• Ventilation can be less than 60% of what is used in comparable solutions • Depends on case	• Off-the-shelf PACTAs for most LC-systems • Few and simple interfaces	• Request for information • A PACTA-Fly can be specialy configured with the body being a fire cabinet	• PACTA comes, pre-tested and as knock-down solution	• Cost
PACTA RESPONSE II	• Or less! As focused heat venting reduces the installation depth needed. • This may open for LC-system installations along both walls in the same room, the safety corridor is place	• 25% is for ventilating solvents • 75% is for ventilation of heat exhaust from LC-system • Ventilation can be split into two, and the heat can be cooled and recirculated	• KD Knock down installation • Refer to PACTA Site Preparation Guide. Note floor load requirements	• Cooperation with fire authorities are needed prior to final design and approval		• "First time right" by upfront alignment w. Corporate Health and Safety • Space & HVAC savings makes TIC favourable • Use of std solution reduces design costs
	• Install two-for-one = two PACTAs - one for new LC and one for existing LC. • No extra HVAC may be needed!		• Easy to configure • Easy to install	• Complies to rules and standards	• The simplicity reduces overall risk	• Depends on case and alternative

FAQ: Scientists & technicians

	SAFETY	OHS	DAILY USE	GMP HOUSE KEEPING	QC	R&D
OWNERS CHALLENGE	• Exposure to solvents	• Unsafe handlings • Noise • Heavy lifts • Manual Material Handling, MMR	• Easy overview of all operations • Immediate access • Ergonomics • Space for tools • Access for service and maintenance	• Spills • Dust	• GMP • Up-time • Reliability • Disconnects cause recalibration	• LC's are changed over time • Flexibility
PACTA RESPONSE I	• Safety is paramount	• OHS priorities are aligned with Corporate Health and Safety Organisation	• Easy to overview • Close-by room for tools, kits and commodities	• Cleanliness • Focus • Simplicity	• Unique LC-System service and maintenance functions	• PACTA is not mobile, due to safety reasons and utility interfaces
PACTA RESPONSE II	• OEL: No exposures to harmful vapours • Focused ventilation of solvents • Flow alarm • No dangerous handlings needed above eye level	• Lifting column • Easy access to all units • Sound abatement • No heavy lifts needed • MMH made simple and easy • No unit needs to be removed for service access	• Solvent bottles are angled for complete emptying • Drip trays where needed • Pull-out shelves for LC-units where needed for access • Optional glass front • LC PC / Data server where appropriate	• Metal, no wood • Easy to keep clean • Easy to clean • Easy to keep tidy	• Full side access after rack pull-out • Full rear-access due to pull-out of all racks • LC-units may need access where hindered by another unit (top, side): PACTA gives access by use of shelves and hinges	• PACTA cabinets can hold very high and very wide LC-systems and still offer all qualities
	• Unparalleled safety	• Occupational Health and Safety concerns mitigated	• Efficient use	• GMP compliant • Lean initiatives supported	• Minimum downtime	• Modular • Standard • Flexible

01 | 02 | 03

01 PACTA-MS. Left: Work place; Centre: LC-Cabinet; Right: MS-Cabinet with vacuum drawer below.
02 PACTA LC-70. HPLC with detector located on separate shelf for top HPLC access. Oven is hinged for HPLC side access.
03 PACTA-Fly with combination of LC-40 and LC-70. The LC-70 is equipped with a twin stack UPLC with Autosampler right of UPLC stack.



01 02 03

01 PACTA-LC in Danish Pharma Lab
02 Lab Planners often suffer space for equipment, for additional HVAC ducts and other utilities. PACTA is a nice and convenient response to most constraints.
03 PACTA-LC


PDA
CH-A
SM-FTN
QSM

PACTA® - +100 sold in Europe
When Personal Safety is Paramount.
When Space is Key.
When HVAC capacity matters.
When Cost is important: TIC / lifetime running costs.
Short-term RoI.
For QC and R&D Labs. For new-build and retrofit.
Safe and simple.
Simply.

PACTA® History

PACTA® is developed by PACTALAB ApS. PACTALAB is an innovative lab development company, founded in 2014. PACTALAB portfolio also holds a modular furniture system PORTA, a reservation and UseAnalysis tool TRACKLOG. PACTALAB focuses on safety, ergonomics, optimization in configuration, in installation, in user operation and in facility management.

PACTA as MTO

PACTA is manufactured as MTO – Make-To-Order. Manufacturing starts after a customer's order is received from the local distributor.

PACTALAB

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PACTA®