

**Handmade
quality**



Columns for FPLC

PP vessels

Solid-phase
synthesis reactors

Large-scale
synthesis vessels

Jacketed vessels and more

With PTFE
valves



Special
purpose



Many
variants



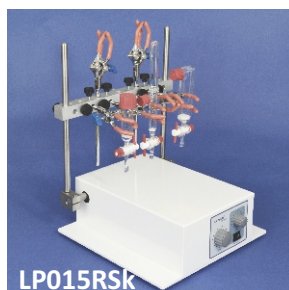
GLASSWARE AND LAB EQUIPMENT



LP30inc



LP254UV



LP015RSk



LP70ms1

Incubator shaker



Kamush LP30inc - Compact size – high capacity

Holds even 4 one-liter bottles

Dimensions: 300 × 365 × 440 mm

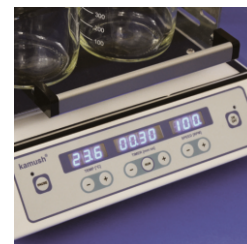
(w x d x h)

Working temp.: from ambient up to 50°C

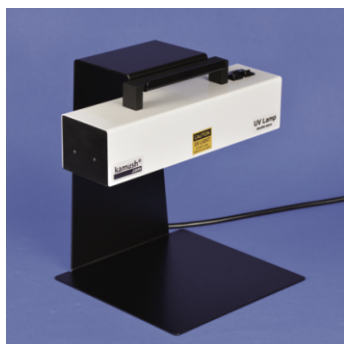
Weight: ca. 20 kg

Speed range: 0-200 rpm

Timer range: 0-100 h



Double-wave UV lamp



Kamush LP254UV

254 and 366 nm with separated switch for each wavelength

Compact and handy

Portable

With a dedicated stand

Now for 24V !

Available in stainless steel or a white coverage



Multipurpose shaker



Shaker/low-speed stirrer LP400SMd

Adjustable angle (15, 30, 45, 60, 90, 120, 180°) and full rotation (360°)

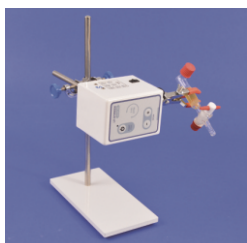
Max. cycl./min.: 15°- 360, 60°- 120, 180°- 40

Max. 400 rpm at 360°

LED function display

Max. vessel capacity: approx. 100 mL

Available also in stainless steel



Shaker/low-speed stirrer LP200SMd

Adjustable angle (15, 30, 45, 60, 90, 120, 180°) and full rotation

Max. cycl./min.: 15°- 360, 60°- 120, 180°- 40, max. 200 rpm at 360°

Max. vessel capacity: approx. 100 mL

Laboratory stand to mount the stirrers in option

Laboratory shaker LP360AMP and LP360AMPv



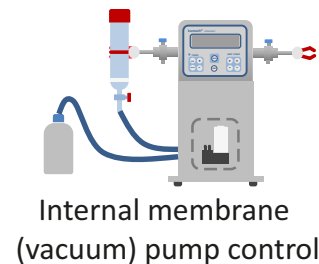
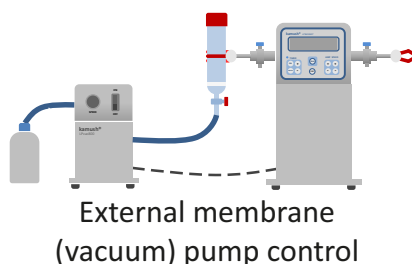
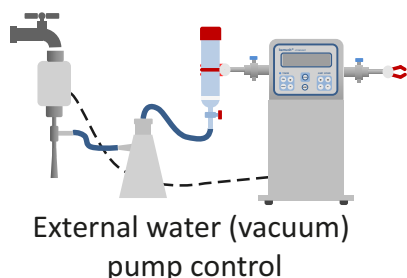
A unique equipment with integrated vacuum control for SPPS

Adjustable angle (15, 30, 45, 60, 90, 120 and 180°)
and full rotation (360°)
9 speed levels from 4 to 120 rpm
(depends on amplitude)
Timer: up to 24 h

Also available in a brushed
stainless steel casing

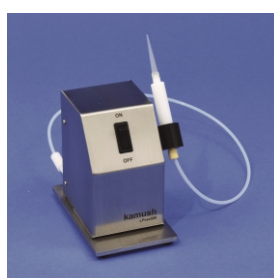


Control vacuum on request



Suction pump LP500MP

Flow rate 200-500 mL/min
PTFE membrane
Pump motor speed control
Stainless steel cover
Automatic start sensor



Suction pump LP250MP

Flow rate 250 mL/min
PTFE membrane
Light and compact
One switch button
Stainless steel cover



Our pumps

Vacuum pumps are
designed to work with
most Kamush shakers,
especially LP360AMPv
and LP120Fss shakers

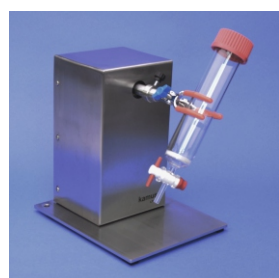


Water vacuum pump

With electromagnetic valve
Controlled with wired button
or by LP360AMPv lab shaker
Equipped with standard
connectors
Power supply 24V

LP120Fks

Suction caps



New and most affordable lab shaker

Designed for one solid-phase synthesis vessel
Made with stainless steel
Constant 120° rotation angle
Power button and speed regulator from the side
Removable clamp included
Optimum operation with our vacuum pumps
Works with high loading

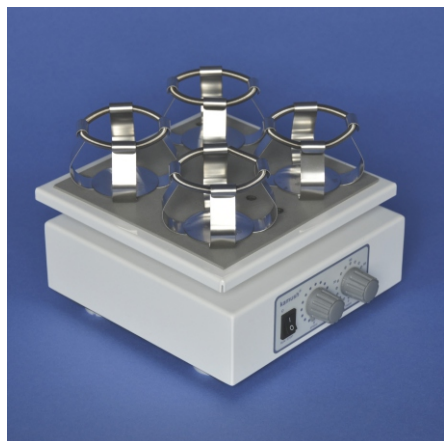


for GL45



for 29/32 joint

New horizontal shaker LP20PO



Kamush LP20PO

Orbital movement (amplitude 10 mm)

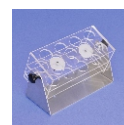
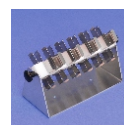
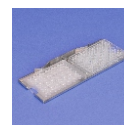
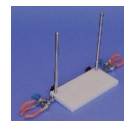
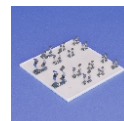
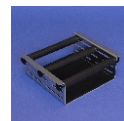
Adjustable speed (up to 200 rpm)

Built-in timer

Capacity: 2.0 kg

Compact size: 200 x 200 mm

**Several platform available
(see last page)**



LP360AMPk

Adjustable angle or
full rotation

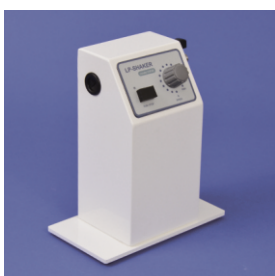
Digital speed control
by knob

Built-in timer



LP360PRO

Adjustable angle
and full rotation
Adjustable speed
and work direction
9 speed levels



LP180Fk; LP180Ak

Fixed 180° or adjustable
angle (15° - 360° - LP180Ak)

Digital speed control
by knob

One working arm



LP180F; LP180A

Fixed 180° or adjustable
angle (15° - 360° - LP180A)

Speed control by
button

One working arm



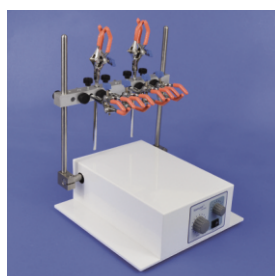
LP750Bk

Wrist action shaker,
Adjustable speed (up to
500 osc/min
Angle: 3° , built-in timer,
Max. cap. 4 bottles 0.5L



LP20PR

Rocking shaker,
Shaking angle: 30°,
Max. speed: 200 rpm,
Built-in timer,
Max. cap. 2.0 kg



LP015RSk

Working with 11 clamps
Dedicated bar
Shaking at 15°,
Max. speed: 120 rpm,
Built-in timer,
Max. capacity: 2 kg



LP30PR, LP30PO

Reciprocating or orbital
movement,
Adjustable speed
(up to 200 rpm)
Amplitude: 20 mm
Max. capacity: 5 kg

Chromatography



FPLC Lucjan isocratic

Flow rate: isocratic peristaltic pump 0-50 mL/min (in options 250 mL/min)

Detector: 254 nm (in option DAD 200 - 600 nm)

LP-chrom software (FPLC version)

FPLC Lucjan II gradient

Flow rate: two peristaltic pumps 0-50 mL/min (in options 250 mL/min)

Detector: 254 nm (in options: DAD 200-600 nm)

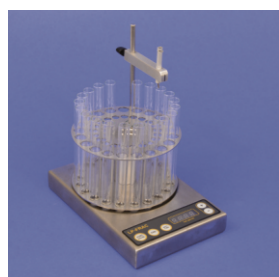
LP-chrom software (FPLC version)

Now operation from laptop!



Fraction collectors for chromatography

LP020FC



Small size, LED control panel. Rack for 20 fractions - standard glass tubes 12 mm and Eppendorf tubes (0.5 mL). Easy programming of the speed of fraction collection.

LP030FC



LED control panel. For 30 fractions - for tubes 12, 16 mm and Eppendorf tubes (0.5 mL). Collects 15 or 30 fractions (racks for 15 tubes on request). Programmable changing of speed position.

Additional racks for other tubes on request.
Compatible with our column ovens.

Chromatography column ovens

LP40CO



Adjustable temperature from RT +5 up to 80°C
(or 10-80°C - option with cooling)

LCD display

For even 4 HPLC columns up to 400 mm long

Manual or software control

LP25CO



Adjustable temperature from RT +5 up to 80°C
LED display

For HPLC column up to 250 mm

Set contains a rod and laboratory stand
(dedicated stand available)

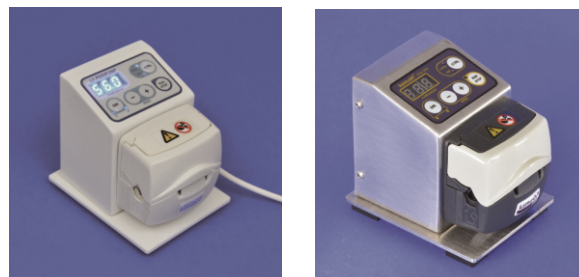
Dosing peristaltic pumps

LP020Peri



Adjustable flow of 0.002 - 20 mL/min
Hosing up to ID of 2 mm
Operated using a control panel or LP-control
Dedicated stands in options

LP250Peri



For commercially available hosing up to 4 mm in diameter and a wall thickness of 1.6 mm (1/16 inch), adjustable flow of 0 - 250 mL/min (adjustable fluent flow 0.035 - 250 mL/min)

LP350Peri



Adjustable flow (up to 350 mL/min)
Hosing up to ID of 4.8 mm
Operated by control panel

LP1200Peri



Adjustable flow (up to 1200 mL/min)
Hosing up to ID of 8 mm
Operated by control panel

Magnetic stirrers

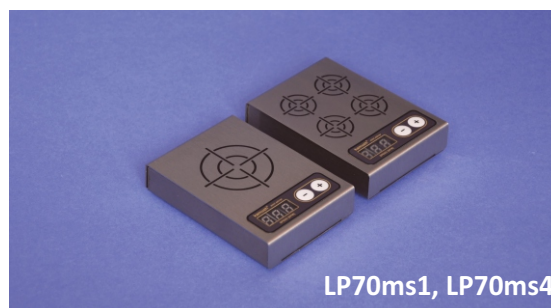
Motor-driven magnetic stirrers



LP120ms1, LP120ms4, LP120ms9

Finished with brushed stainless steel casing
Built-in digital LED display
Adjustable speed
Available with 1, 4, 9 (dimension 120 x 150 x 25 mm) or 6, 20 (dimension 200 x 270 x 30 mm) stirring plate
Power supply - 24V (110-240V adaptor included)
Battery in option

Motor-driven mini stirrers



LP70ms1, LP70ms4

Compact size

Speed range: 300-999 rpm
LED display
Small dimensions: 70 x 100 x 25 mm
Made from stainless steel
Power supply - 24V
Available with 1 and 4 stirring plates
Battery in option

Dip coater



Kamush LP100dip

Max. travel distance: 100 mm

Max. height of vessel: 200 mm

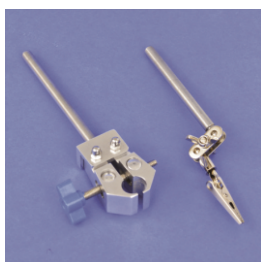
Max. vessel diameter: 100 mm

Lifting arm capacity: 300 g

Lowering/lifting speed: 1-200 mm/min

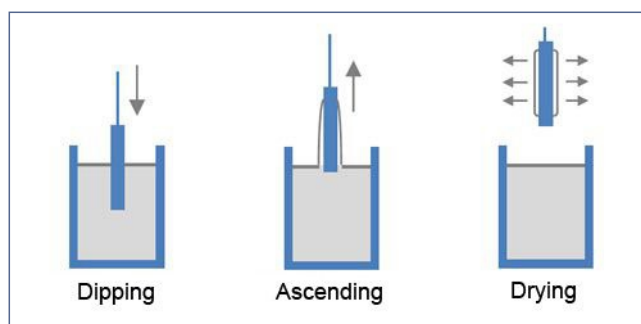
Adjustable platform for vessel (three diameters)

Dimensions: (w x d x h) 140 x 260 x 400 mm



Available
holders for
precise work

Typical working stages:



Hotplates

LP10HP, LP20HP, LP30HP



Adjustable temperature
from RT up to 60°C

Dimensions: 100 x 200 mm,
200 x 200 mm, 200 x 300 mm
Made from stainless steel

Based on a Kamush
mini controller (24V)

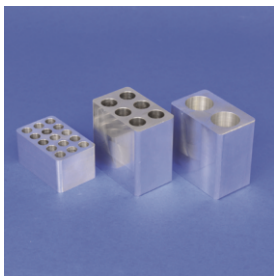
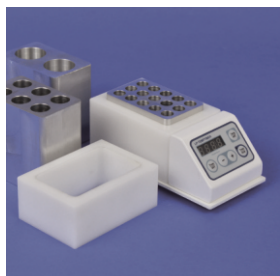
Controllers

LP60mc, LP60mc2, LP75mc, LP75mc2



Mini - with temperature
control and LED display
showing set and current
setting, 24V, max. 100W

Mini 2 - with temperature
control and LED display
showing set and current
setting and built-in timer,
24V, max. 100W



Plastic cover available

Thermoblocks LP75TB, LP105TB

Heating up to 75°C (option: 105°C)

Blocks: 50 x 80 x 40 (15 x 11 mm, 15 x 12 mm) or
50 x 80 x 80 (2 x 29 mm, 6 x 16 mm,
1 x 29 mm + 2 x 16 mm + 3 x 12 mm)

Heating blocks for any reaction vessel
(non-standard dimensions of blocks on request)
Based on a **Kamush mini 2** controller (24V)

Peptide synthesis accelerators



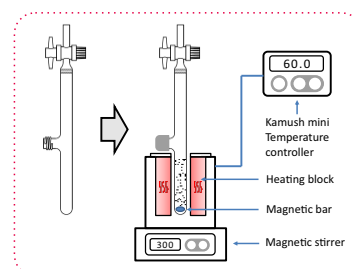
Kamush Skillers

The unique laboratory equipment. **Magnetic stirrer** and **heating block** incorporated. Heating element in plastic casing enables to observe the content of the vessel. The single- or multi-station magnetic stirrer in miniature size. **Small temperature controller** makes the device very compact. The device is used in **incubation/heating and simultaneous mixing**. It can be used in chemical and life science laboratories.



Kamysz vessel® (EUIPO nr 002753277-0001) using in the synthesis with the device Skiller

Kamush Skillers (EUIPO nr 005138799-0001, 005138799-0002) and the procedure of its use in the synthesis of peptides



Available models of Kamush Skillers:

Skiller 1



Compatible aluminium blocks:

With controller to 75°C
Standard diameter 40 mm
(attenuators for 16, 22 and 28 mm diameter)

Skiller 4



Compatible aluminium blocks:

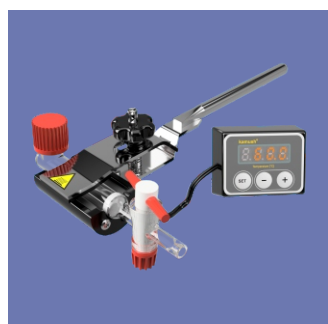
With 4 holes for 16 mm diameter
With 4 holes for 22 mm diameter
Mixed with 2 holes for 16 mm diameter and 2 holes for 22 mm diameter

Skiller 4e



Modular concentrator for sample concentration contains a gas supply head with four needles. The device is equipped with a rotameter and is available with an aluminum block for vessels / test tubes of 16 or 22 mm diameter.

Heating clamps Kamush LP60HC/LP75HC



See full specification at:
www.kamush.com

Laboratory clamp (utility model no. W.127550) equipped with an **aluminum heating block**. Enables thermostating or heating laboratory vessels.

Clamps are available with an aluminum block for **vessels / tubes** of 16, 22 or 28 mm diameter. For 60°C or 75°C.

Excellent temperature stability!
Heats up to 75°C in less than 3 minutes.

We recommend our peptide online mass calculator at peptideweb.com.

For android app just scan QR code below:

Sample concentrators (evaporators)



About our sample concentrators

Kamush evaporators allow to concentrate samples before further analysis. It is possible thanks to the use of evaporation under **gas atmosphere** and optional dry heating block. The solvent is removed by gas blowing and heating.

Our sample concentrators are made from **stainless steel** and **quality materials**. They come in many models.

Manual lowering of the gas supply needles contain system protecting against **uncontrolled needles bending**.

Every device is equipped with a rotameter with manual adjustment for **precise of gas dosing**.



Sample concentrators with heating block (temp. 75°C)

LPe mini25/33H



Compact sizes
Operating by mini controller
Kamush mini
Works with 15 vials or tubes 12 mm

LPe compact25/33 H



External heat control
(Kamush mini controller)
Works with 35 vials or tubes 12 mm and 96-well microtiter plate

LPe HB



Equipped with timer
(heat cut off function),
integrated control panel.
Can work as a thermoblock

LPe integral25/33



Integrated control panel
With gas flow and heat cut off, for 35 vials/tubes and standard 96-well microtiter plate

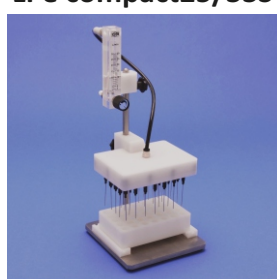
Sample concentrators without a heating block

LPe mini25/33S



Works with standard tubes 12 mm or HPLC vials (15 holes).
Low-budget version, perfect for small labs.

LPe compact25/33S



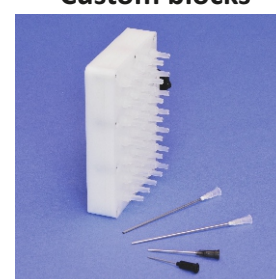
Dedicated for work with 35 vials or tubes 12 mm and 96-well plate (without heating).

LPe slim



Can work with 6 falcons 50 mL (single stand) or with eppendorfs (stand with 2 rows)

Custom blocks



Custom block at user demand may be developed.
Head compatible with 96-well plate or tubes 16 mm and 50 mL falcons also available.

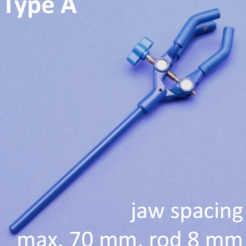
For all evaporators: The set includes the plastic insert (stand) or aluminum block with 15 or 35 holes (fi 12 mm). **More kinds of blocks are available 16 mm, falcons or GC vials on request.** 2 lengths of rods: 25 and 33 cm. Different sizes of needles also available (in standard needles 1.5" included). External rotameter with manual gas flow regulation in standard (flow 10 or 30 L/min).

Note: for 96-well plates, 16 mm or non-standard diameter of vessels dedicated head is required. For LPe mini the head is universal.

Laboratory accessories

Universal laboratory clamps

Type A



Type B



Type C



Type D



Type E



Type F



Lab stands



Mechanical shaker attenuators

Type A



Type B



Type C



Agitators



Connectors

Type A



Type B



Type C



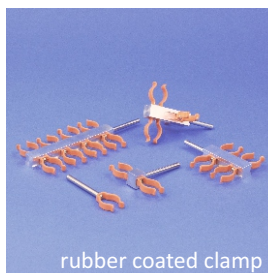
Hoses



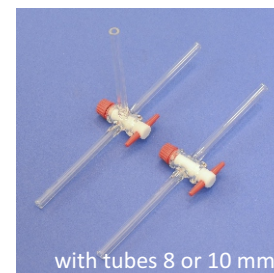
GL type caps



Falcone holders



PTFE Stopcocks



Laboratory glassware and reactors



All our laboratory vessels are handmade of high-quality borosilicate glass 3.3.

Our laboratory glass is perfectly matched to the equipment and accessories from our offer. We have spare parts for our vessels in stock, such as nuts and caps.

Our glassblowing workshop is located in Poland so we are able to quick delivering over Europe.

We are happy to help you advise in your choice of vessels and accessories.

Vessels designed for peptide synthesis



Simple solid-phase peptide synthesis vessel



Solid-phase peptide synthesis vessel, side thread



Solid-phase peptide synthesis vessel with ground glass joint



SPPS reactor for large-scale synthesis

Round flask for SPPS

For medium and large-scale synthesis: 0.5; 1; 2 L volumes

Optional accessories:

Stainless steel laboratory stand

Laboratory clamp with cross clip clamp holder



See also: Kamush laboratory overhead stirrer, blade stirrer with dedicated flask plug, laboratory ring with cross clip clamp holder, stirrer **LP400SMd/LP200SMd**

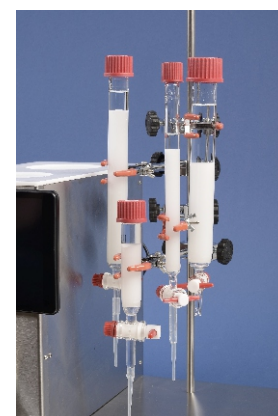
Columns for chromatography

3.3 borosilicate, wall thickness 1.8 mm

GL threads and glass G2 porous filter plate/disc

PTFE valve (stopcock)

Column volume from 10 to 500 mL



Dedicated stand, clamps and different sizes of columns are available
For customized vessels the delivery within 5-10 working days

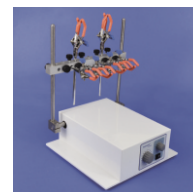
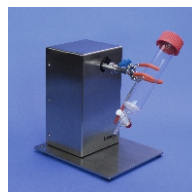
Laboratory glassware and reactors



Jacketed vessels

Jacketed vessels with two joints for water or air thermostat. They can be used with every Kamush® laboratory shaker. To prevent twisting of the tubing, the most recommended shakers are: LP015RSk with rods, Rocking shaker, Horizontal shaker and our new LP120Fks.

Shakers
recommended
for work with
jacketed
reactors



User defined vessel (glassblowing)



We have the ability to make custom laboratory glassware in our laboratory.

Services:

- custom volume of offering vessels
- additional stopcocks, joints and caps
- fixing of broken glassware from our offer
- designing custom glassware (also with transfer of copyright)
- glassblowing pricing and quotes available.

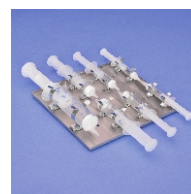
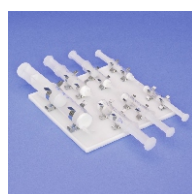
For custom glassware we can create dedicated holder for any of our laboratory shaker

Polypropylene vessels/reactors (PP) with porous filter

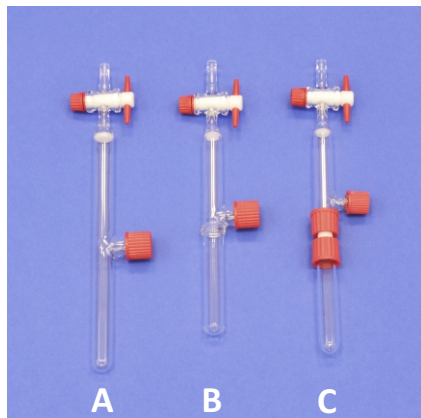


Can be used both once or multiple times. Perfect for synthesis where hard-to-wash reagents were used (eg. peptide synthesis)
Two types of caps available (see details see kamush.com)
Two types of luer available (luer and luer lock)
Available in many volumes (5,10, 20, 50 mL)

We recommend
our lab shakers
LP20 series with
matching holders
and platforms



Kamysz vessel® for solid-phase peptide synthesis



The Kamysz vessel is a modification of the Merrifield solid-phase reactor, designed for temperature-supported solid phase synthesis. The shape of the vessel allows to use it in a classic heating block (or devices of the Kamush Skiller series) without the need of transferring the content of the reaction time at an elevated temperature.

Placing the filling in the central part of the Kamysz vessel enables to work like in the classic Merrifield vessel (acylation, washing and draining reactions), while allowing the contents of the vessel to be heated in a conventional way (e.g. water bath, heating block) and microwave.

Kamysz vessel (EUIPO nr 002753277-0001) and a procedure of its use in the synthesis with the device Skiller

Available models of Kamysz vessels:

TYPE A (without ring) - 2x15 mL (16 mm), 2x30 mL (22 mm), 2x45 mL (28 mm), 2x70 mL (40 mm), 2x100 mL (40 mm)

TYPE B (with ring) - 2x10 mL (16 mm), 2x35 mL (30 mm)

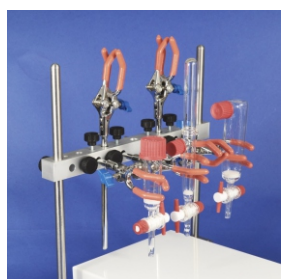
TYPE C New (modular) - can be adopted to different volumes of parts, from 15 mL to 100 mL

The patented reaction vessel under the name "**Kamysz vessel**" type B (with ring) is compatible with the CEM Discover and Discover SP microwave reactor. **Borosilicate glass provides microwave transmittance.**

As a standard, the **Kamysz vessels** have an inlet port with a **GL18 thread**, a **G2 porous glass filter** and a cap with a **PTFE coated membrane**.



Shake more vessels at a time with magic-bar



Magic-bar is an aluminium bar with holes and clips, for use with LP015RSk laboratory shaker with rods.

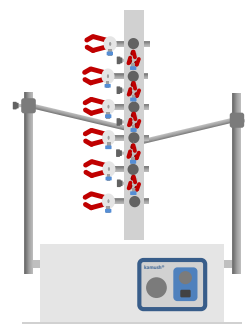
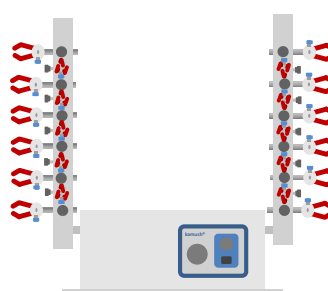
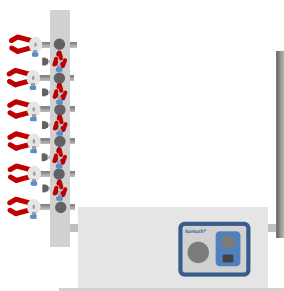
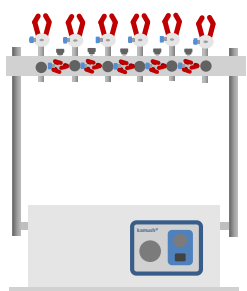
30 cm long bar to hold up to 11 laboratory clamps.

Mounting adapter for aluminum bar available.

It is possible to use 2 bars in the same time!

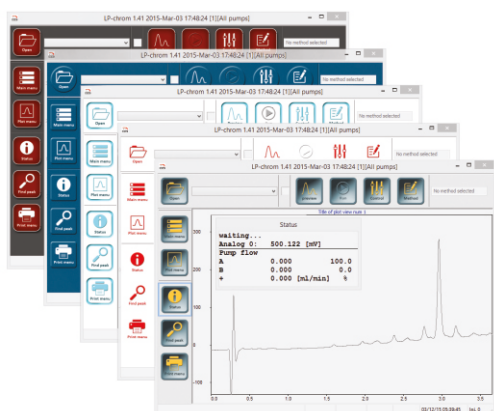
Possible placements of bar:

standard, single side, both sides and in the middle



LP-chrom® chromatography software

For old and new HPLC



Its key features:

Collecting data from almost any device with an analog output: UV, UV-Vis, ELSD, refractive index detectors and older GC systems

Controlling number of HPLC systems (detectors and pumps): Beckman, Kontron, Knauer, Gilson etc.

Easy learning and operating

Ability to combine HPLC components from different suppliers

A compact USB powered converter for collecting two analog signals (2 channels version), controlling of pumps with voltage input and receiving start signal from manual injector or autosampler

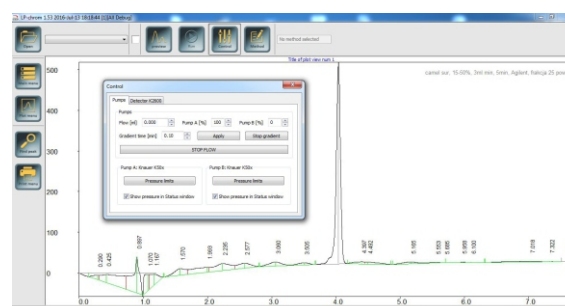
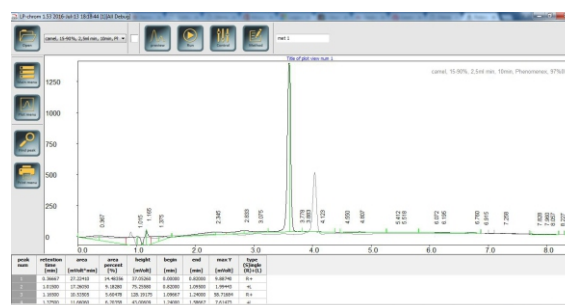
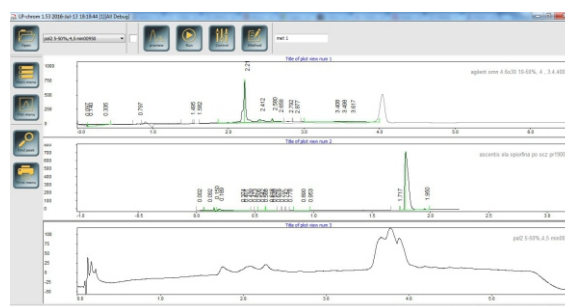
To High Performance Liquid Chromatographs, controlled by LP-chrom autosampler and fraction collector can be connected.

Compatibility with touchscreen of mobile devices, tablet or laptop

Adjustable size of icons and window appearance

Constantly expanded list of supporting devices

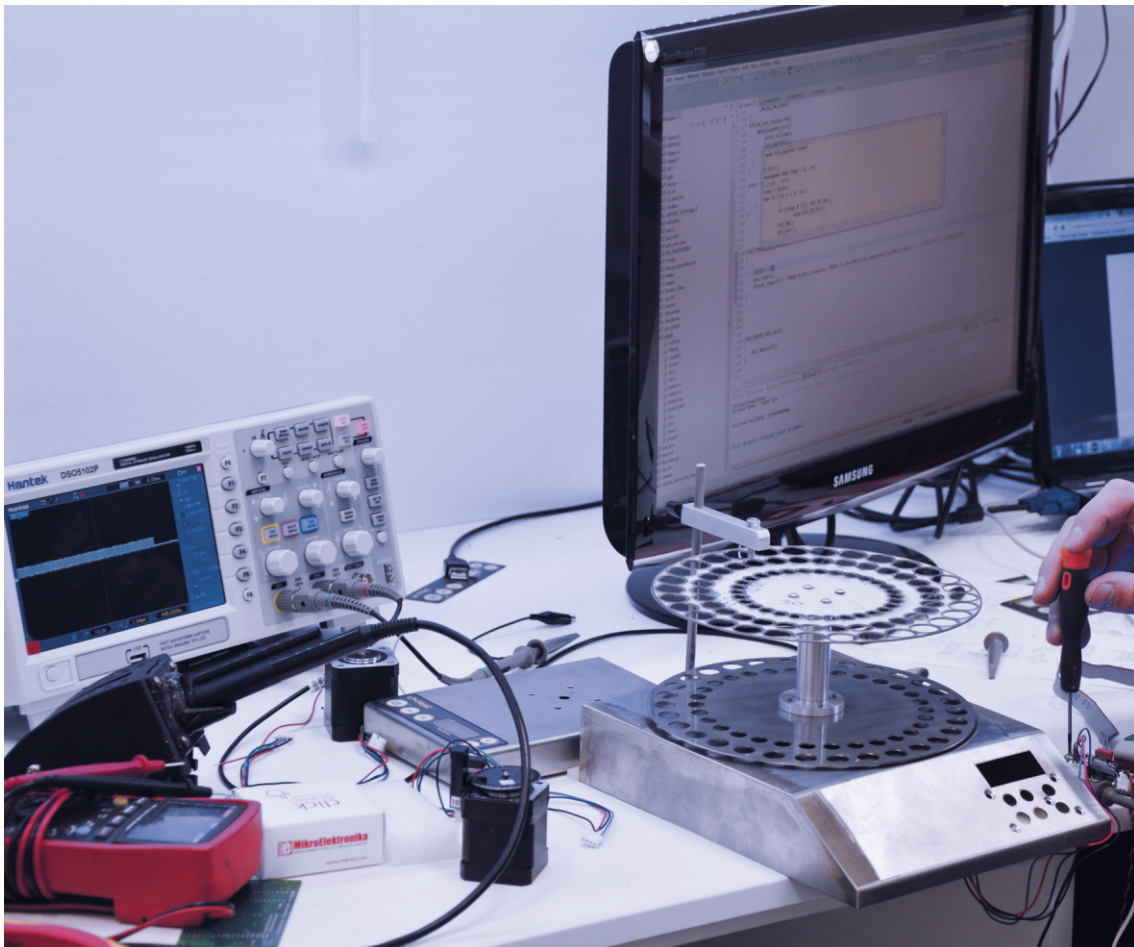
Screenshots:



Kamush prototyping

Didn't find what you were looking for?

We can create it!

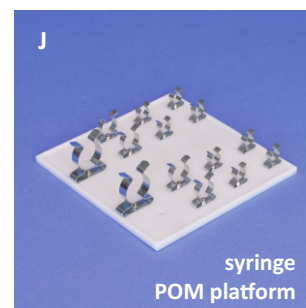
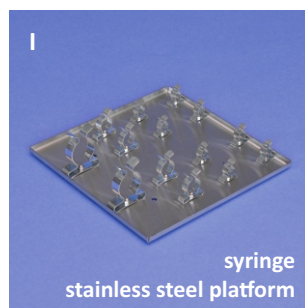
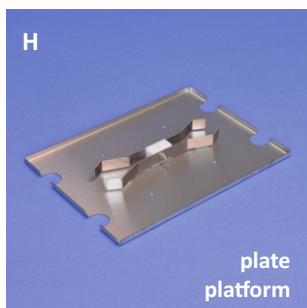
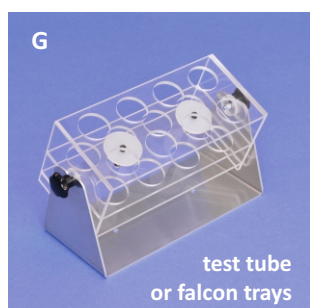
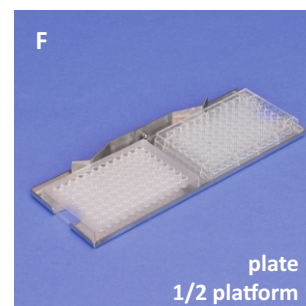
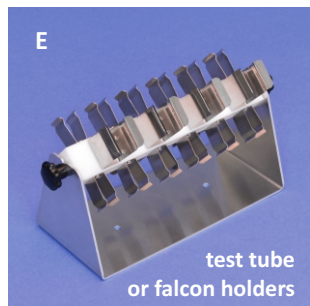
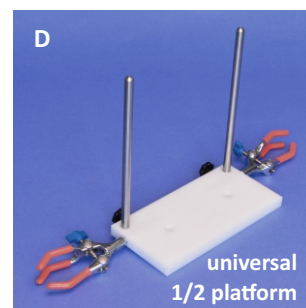
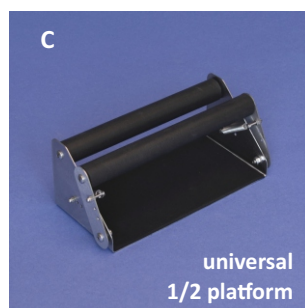
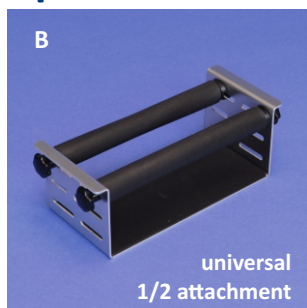
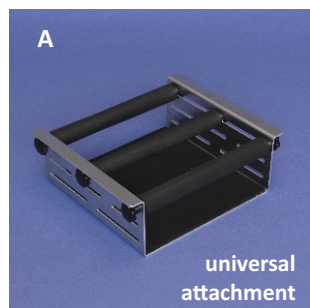


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