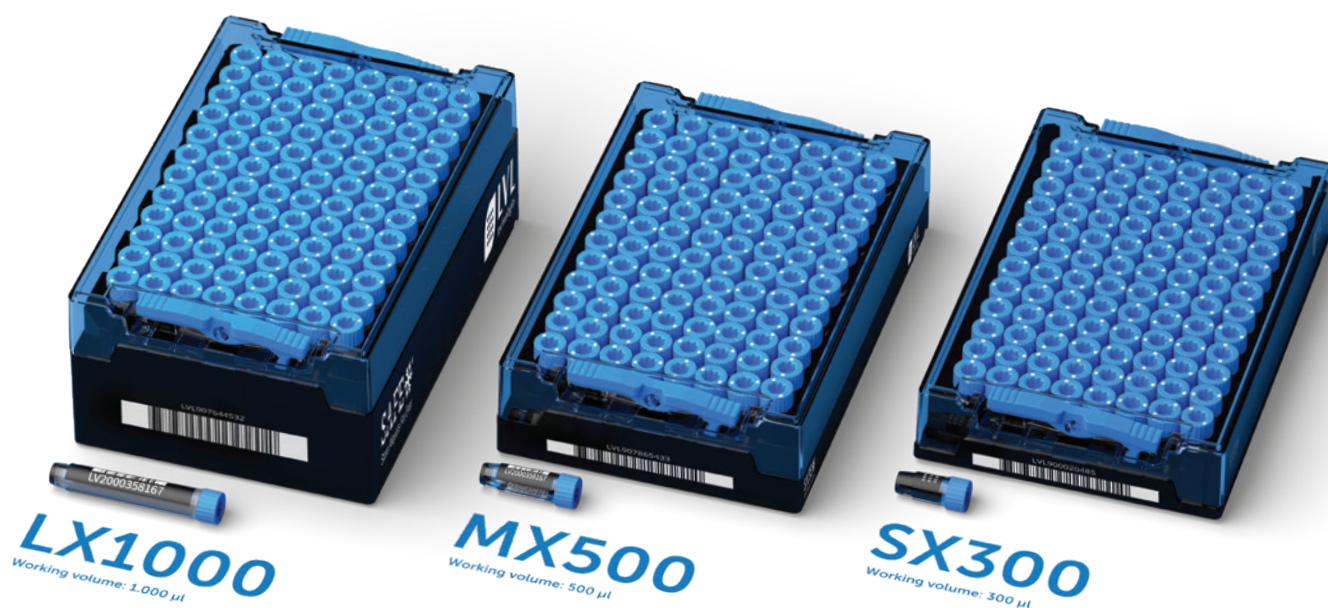


# Sample Storage Range

Available from Pathtech



Phone 1800 069 161  
Email [info@pathtech.com.au](mailto:info@pathtech.com.au)  
[pathtech.com.au](http://pathtech.com.au)

 **Pathtech**<sup>™</sup>  
First Choice In Science

 **LVL**  
technologies

**SAFE**   
Store Aliquots For Ever

# What really matters

Biobanking, compound management, cryopreservation, population studies and transfusion medicine are just some of the possible applications for high-quality, long-term storage of biomaterials in the microlitre scale.

If you store large quantities of small samples in the medium to long terms for purposes of research and diagnostics, you generally have to deal with various requirements regarding the sample container to be used, from handling to storage through to the follow-up of the respective sample. The overriding priority must be the best possible conservation of sample quality and quantity,

This means that three things need to be guaranteed for the samples to be stored:

1. Security
2. Identifiability
3. Space saving storage

In addition, if automated processability is used in the laboratory, there is no better alternative for modern storage.



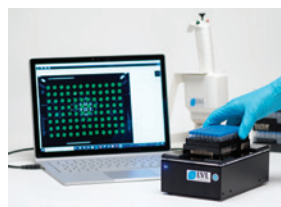
## Handling

- › Easy removal of sample container
- › Problem free aliquoting, even when using automated laboratory systems.
- › Minimum risk of cross-contamination
- › Rapid opening and closing of containers
- › Samples reliably assigned without the need for labelling
- › Quick and error free identification of the specified coding



## Storage

- › Thermostability of the containers and receptacles
- › Space-saving storage
- › Problem-free transfer to stores even with automated storage systems



## Traceability

- › Maximum code security
- › Unique coding
- › Optimal legibility even at cryo temperatures
- › Optional code redundancy



## Sample Quality and Quantity

- › Best possible sealing of the selected closure option at cryo temperatures and room temperature
- › Best possible sealing during transport under negative pressure
- › High purity of the sample containers
- › Lowest possible concentration of bioactive compounds in the plastic used

## SAFE® – Store Aliquots For Ever

SAFE® 2D tubes from LVL technologies offer the greatest possible safety, automation capacity, flexibility and efficiency. Customers worldwide rely on SAFE for long term storage in:

- › Biobanking
- › Epidemiological studies
- › Clinical trials
- › Cohort studies
- › Transfusion medicine
- › Compound management
- › Forensics
- › Kit manufacturing
- › Food industry
- › Leak tightness

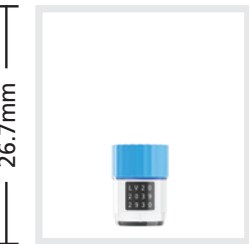
# Explore our 2D tubes

Custom 2D coding options are available to meet your laboratory's individual database or tracking requirements. Please contact us to discuss your biobanking needs.

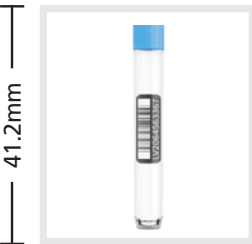
## SAFE® 24 XT

Tubes with external thread (24 per rack)

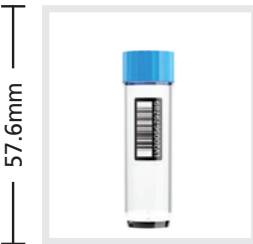
XXLX 2000



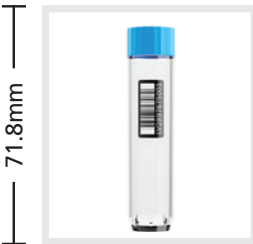
XXLX 4000



XXLX 6000



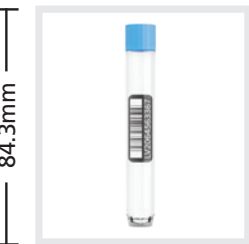
XXLX 8000



## SAFE® 48 XT

Tubes with external thread (48 per rack)

XLX 4000



XLX 2000



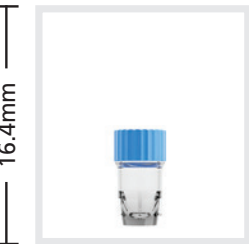
XLX 500



## SAFE® 96 XT

Tubes with external thread (96 per rack)

XSX 200



SX 300



MX 500



LX1000



## SAFE® 96 IT

Tubes with internal thread (96 per rack)

LI 1000

With tissue collection cap



LI 1000

With push cap



MI 500



# SAFE® Capper / Decapper

Easily cap and decap our tubes

## Manual 1 Channel Capper/Decapper/Picker



- › Can be used as a picker
- › Enables end to end handling without direct contact with hands, minimizing the risk of contamination and heat transfer



Find out more  
on our website

## LVL Automated 4, 6 and 8 channel Capper/Decapper



- › Cap 4, 6 or 8 tubes at once
- › Ergonomic design
- › Reliable capping / decapping
- › Power-saving mode

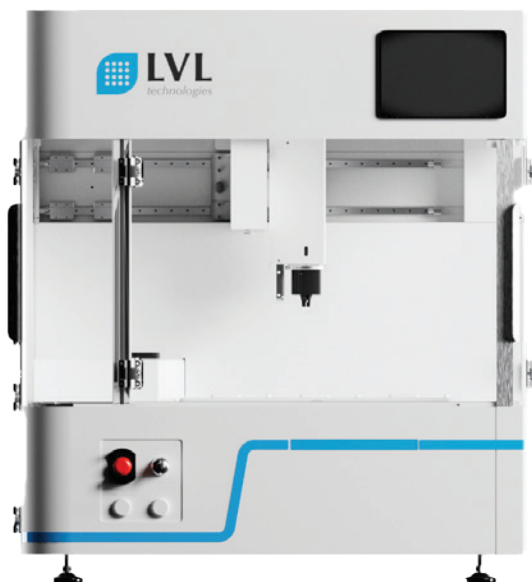
## LVL Automated 96 Channel Capper/Decapper Quickly cap / decap one rack at a time



- › Fully automated
- › Standalone or integrated
- › Processes a full rack

# Say Goodbye to Tag & Pen

## The LVL Tube Laser Marker TLM 864



Although the automation-friendly data matrix code on the bottom of storage tubes has now been standard for many years – and has considerably simplified the handling of samples, many users still want to mark tubes with their own specific information. At the same time, they want to get away from time consuming and non-secure methods of labelling and lettering.

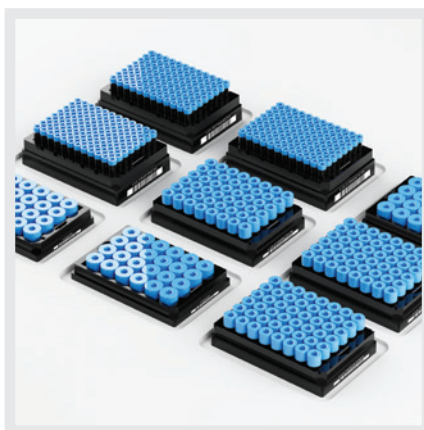
To meet precisely this need, LVL has developed a fully automatic tube laser marker. The TLM 864 can automatically laser-code SAFE® tubes in SBS 96, SBS 48 and SBS 24 formats from two sides and link the information in a database to the 2D code that was previously lasered-on during production. Up to 500 tubes per hour can be coded from nine SBS/ANSI positions.

The information to be applied is created and transmitted from an external PC, and the device is configured via an integrated touch screen.

### Customer double-sided laser coding



### Label up to 9 racks at once



### Key specifications

- › Affixing of labels no longer necessary
- › Flexible for three SBS/ANSI formats: SBS 96, 48 and 24
- › Can laser code tubes from two sides
- › Up to 500 tubes per hour
- › Convenient CSV data exchange format

#### Technical data laser marker

Dimensions	910 mm x 815 mm x 720 mm (H x W x D)
Weight	120 kg
Power supply	100-240V, 50/60Hz max. 16A at 230V
Noise level	< 72 dB (A)
Rack Positions	9
Rack types	SAFE® SBS 96, 48, 24
Speed	approx. 500 tubes per hour
File exchange format	CSV

#### Technical data suction device

Dimensions	880 mm x 350 mm x 350 mm (H x W x D)
Weight	55 kg
Noise level	< 62 dB (A)



Interested in the TLM?  
Scan to learn more.



Check out our new

# GEN3

- Automation friendly
- Protective rim against mechanical influences
- 1D side code / HR side code
- Open space for customized coding
- SAFE® low leachables medical polypropylene



**2D coded** tube bottoms

## Working Volume

with Screw Cap  
with Push Cap

## Storage Temperature

with Screw Cap  
with Push Cap

## Outer Diameter

## Tube Height

without Cap  
with Screw Cap  
with Push Cap

## Side code

barcode 1D  
human readable

## Screw Caps

pre-capped  
on Cap Rack  
Bulkware

## Optional Sterilization

## Availability

## Rack Height

non capped Tubes  
screw capped Tubes  
with Rack Lid

**SX 300**
**MX 500**
**LX 1000**
**MI 500**
**LI 1000**

**GEN3**

300 µl  
300 µl


**GEN3**

500 µl  
500 µl


**GEN3**

1,000 µl  
1,000 µl



**Tissue Collection Cap** (middle)  
available for MI 500 & LI 1000

480 µl  
550 µl

1,000 µl  
1,070 µl

- 196°C

- 80°C

9.00 mm

18.5 mm  
20.3 mm  
19.8 mm

26.4 mm  
28.2 mm  
27.8 mm

46.8 mm  
48.6 mm  
48.2 mm

27.0 mm  
33.4 mm  
28.5 mm

45.1 mm  
51.3 mm  
46.6 mm

n/a

Optional

Optional

Optional

Optional

Optional

Yes

Yes

Yes

Yes

Yes

Yes

Beta / ETO

Beta / ETO

Rack, Bulk

Rack, Bulk

18.8 mm  
20.6 mm  
24.6 mm

26.8 mm  
28.6 mm  
32.5 mm

47.1 mm  
48.9 mm  
52.6 mm








27.6 mm  
34.2 mm  
38.6 mm

45.6 mm  
52.3 mm  
54.5 mm



SAFE® 48 XT

SAFE® 24 XT

XLX 500			XLX 2000				XLX 4000			XXLX 2000		XXLX 4000		XXLX 6000		XXLX 8000	
																	
<b>GEN3</b>			Gen 2				Gen 1			Gen 2		Gen 2		Gen 2		Gen 2	
500 µl			2,000 µl				4,000 µl			2,000 µl		4,000 µl		6,000 µl		8,000 µl	
n/a			n/a				n/a			n/a		n/a		n/a		n/a	
- 196°C			- 196°C				- 196°C			- 196°C		- 196°C		- 196°C		- 196°C	
n/a			n/a				n/a			n/a		n/a		n/a		n/a	
13.00 mm			17.80 mm				17.80 mm			17.80 mm		17.80 mm		17.80 mm		17.80 mm	
16.1 mm 18.3 mm			44.0 mm 45.6 mm				82.9 mm 84.4 mm			25.0 mm 26.7 mm		39.4 mm 41.2 mm		55.7 mm 57.8 mm		69.9 mm 72.0 mm	
n/a			n/a				n/a			n/a		n/a		n/a		n/a	
n/a			Optional				Optional			Optional		Optional		Optional		Optional	
n/a			Optional				Optional			Optional		Optional		Optional		Optional	
Yes			Yes				Yes			Yes		Yes		Yes		Yes	
Yes			Yes				Yes			Yes		Yes		Yes		Yes	
Yes			Yes				Yes			Yes		Yes		Yes		Yes	
Beta / ETO			Beta / ETO				Beta / ETO			Beta / ETO		Beta / ETO		Beta / ETO		Beta / ETO	
Rack, Bulk			Rack, Bulk				Rack, Bulk			Rack, Bulk		Rack, Bulk		Rack, Bulk		Rack, Bulk	
16.7 mm 18.9 mm 23.7 mm			44.5 mm 46.0 mm 50.2 mm				83.7 mm 85.4 mm 87.3 mm			25.5 mm 27.2 mm 29.9 mm		39.8 mm 41.8 mm 43.8 mm		56.0 mm 58.2 mm 60.6 mm		70.8 mm 72.8 mm 74.5 mm	

All tubes are represented true to scale | Effective 2022/10/17 | Subject to change



# SAFE® 2D tubes

High performance fiber laser coding for unmatched contrast and readability.

1. 2D bottom code
2. 1D side code / HR side code
3. Open space for customized coding
4. SAFE® low leachables polypropylene

- › Protection rim against mechanical influences (scratches)



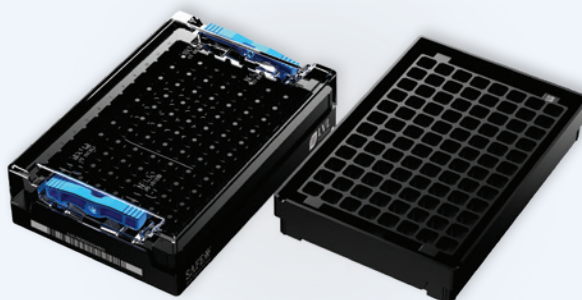
## New Cap Design

- › Excellent sealing (100% IATA and CO2 test)
- › Easy manual handling
- › Automation friendly cap

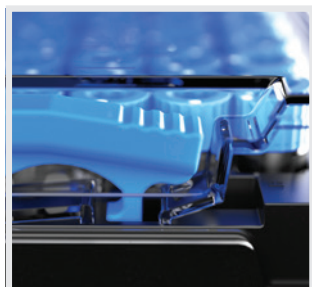
## SAFE® SBS Racks

Fitting 24, 48 or 96 tubes

- › Durable and clear polycarbonate lid
- › Orientation Code

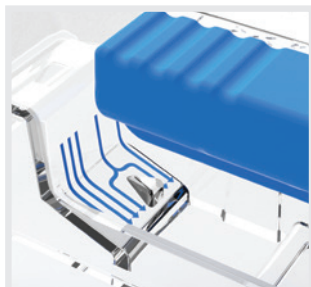


## Key Features:



### Easy Lock

One simple move to open and close



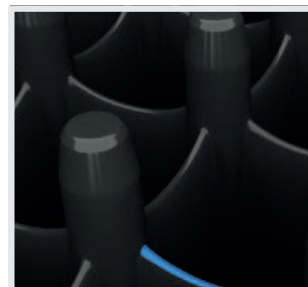
### Anti-freeze Gradient

Prevents ice formation



### Tube Centering

Automation friendly beveled domes



### Curved Well Rim

Safely guides tube and reduces collisions



# SAFE® Accessories

Simple accessories that make life easier

## Accessories Available:

### Manual Tube Presenter

Product code: 114-TP96



#### Find your test tube at the first go

It is not unknown, under the busy everyday conditions in the lab, for the wrong tube to be inadvertently removed from the tightly packed SBS rack. D5 quickly turns into E6. Even if the error is detected during the scan, the process flow is interrupted. However, even the careful selection of the tube to be removed can become strenuous in the long run.

The use of the manual tube presenter overcomes all of these possible errors in the lab.

### Manual Defrost Roller SBS

Product code: 114-DFR2-SBS



The formation of ice on the bottom of the tubes can make the reading process difficult. This is especially true, if the samples are stored in the nitrogen gas phase. So that the 2D codes can be read quickly in such cases, it not only requires a good reader but also the rapid removal of ice from the bottom of the tube.

The defrost roller is the perfect accessory for this purpose. Three rollers revolutionize the optimal application and usability.

### Semi Automated Tube Picker

Product code: 114-TPI96



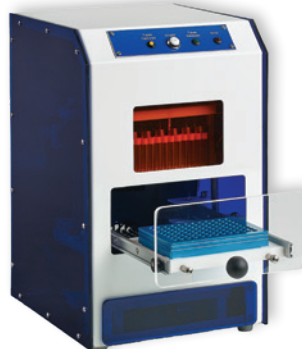
Fast and reliable tube picking from 96 SBS racks.

Works with frozen and thawed tubes, generates picklists externally in other software applications, or create a template using the own software.

Can be connected to a 2D barcode scanner for tube confirmation and for generating picklists directly from the tube barcodes.

### Automated Tube Carrier

Product code: 114-RF96



Designed for mass transfer of sample tubes from a filled SBS 96 tube rack to an empty rack.

Rack contents (between 1 to 96 tubes) can be transferred to the same locations in the receiving rack at a rate of approximately one transfer per minute.

## Notes

[illegible]

## Notes

[illegible]

Phone 1800 069 161  
Email [info@pathtech.com.au](mailto:info@pathtech.com.au)  
[pathtech.com.au](http://pathtech.com.au)

