



See the Sign  
in action



X-TubeProcessor®

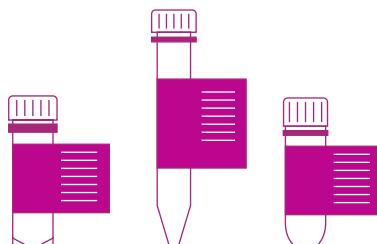
# Sign

Label any tube-type  
you want



# Don't waste time with inefficient processes

The perfect device for automated labeling of a wide variety of laboratory tubes without device adaptation. Benefit from error-free, accurate labeling with individual design.

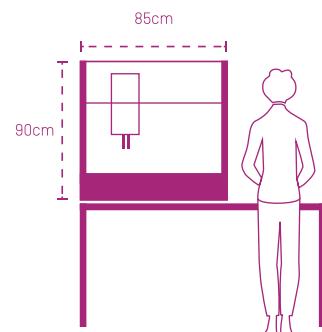
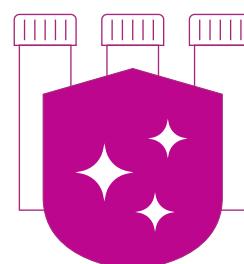


## Versatile labeling: One device for all tube types

Due to its design, the Sign enables labeling for a wide range of tube and vial types and all this in a single device without changeover times.

## Reduce errors and costs in your processes

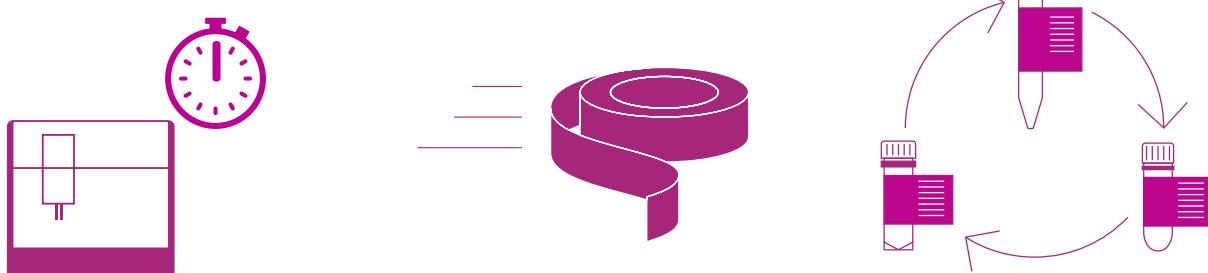
Save yourself and your employees manual labeling. This reduces sources of error, saves costs, increases safety and relieve your employees.



## Low space consumption due to compact design

The Sign is a compact benchtop unit with a footprint of only 90 cm x 73 cm [W x D] and a height of 85 cm. This saves valuable laboratory space.

Very small and very large tubes and vials in parallel labeling with the Sign.



#### Walk away time: Increase your capacity

Set the Sign and go about your work. It will do the rest while you can attend to more important tasks or take a break.

#### No more pre-printing different labels.

The Sign prints the required label and immediately applies it to the correct tube. For the best possible availability, we also supply you with labels and other consumables for your lab.

#### Fluent Processing

The device allows you to flexibly control the workflow. You can pause it, swap racks and add new ones even while other jobs are still waiting. The Alert Management informs you about job completions, so you can keep an eye on the process.

# What the Sign accomplishes for you

The Sign is extremely flexible when labeling. Thanks to its precise 4-jaw gripper arm and the intelligent software, it can label each tube accurately and individually. Ideal for demanding labeling tasks.

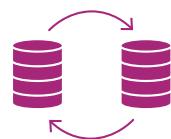
**»I'm excited about the freedom and combination possibilities we've achieved for our customers with the Sign. Layout, tube and data management interlock optimally.«**

Bernhard Kleynmans  
Development engineer at HTI

## Key functions of the sign



Labeling



Datamanagement

## Sign features

1

### Universal-Turning-Gripper

Thanks to its flexible 4-jaw gripper with grip control and its labeling module for precise label application, the Sign can handle both very small and very large tubes of different brands. This means that a different type of tube can be used in each of the 12 SBS racks.

2

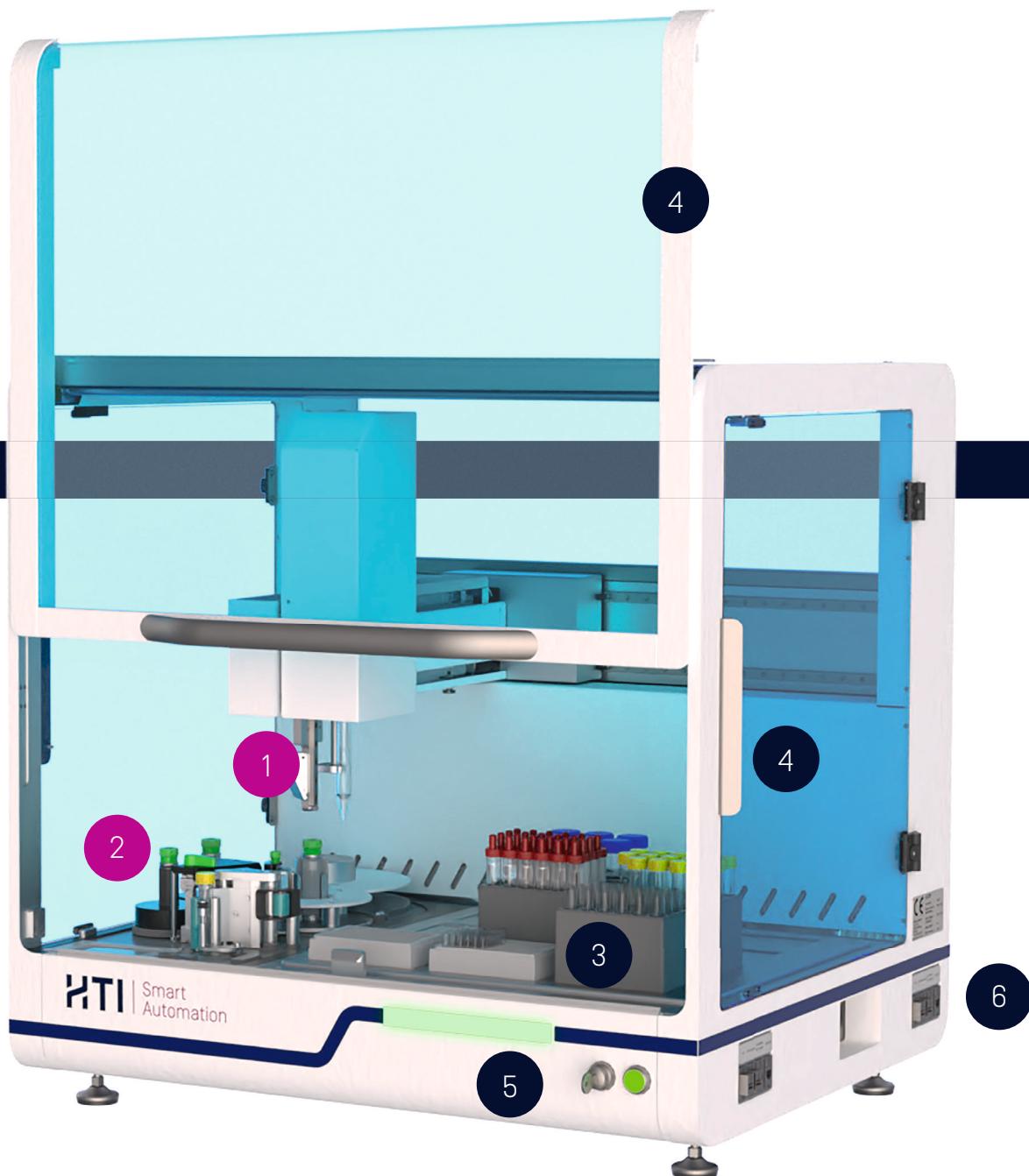
### Labeler

The Labeler module with 600 dpi thermal transfer printer, creates labels for your tubes and vials in a monochrome and scratch-resistant manner. As part of a customized solution, the Labeler can be connected to your Laboratory Information and Management System (LIMS).

3

### Rack storage made of anodized Aluminum

Stock up to 12 SBS racks for different tube types into storage or request individual rack storage for your racks from us. Add new racks or remove finished ones - all easy and cleanable with commercially available agents.



4

#### Access via plexiglass doors with UV filter

The Plexiglas doors allow you to access the unit from three sides and seal the unit interior to protect your tubes from UV radiation. Door sensors automatically stop operation when opened.

5

#### Status display and emergency stop function

The status LED signals the Sign operation and errors remotely. Receive email notifications of job end and errors for quick response. Use the emergency stop function for safe work interruption.

6

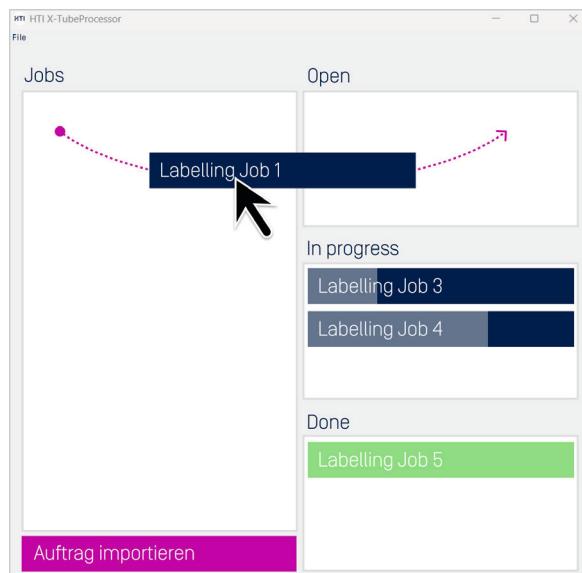
#### Connections

The device is purely electric and does not require a house air connection, so it can be integrated easily and flexibly.

# Become a power user in 15 min. with our smart software

Design labels effortlessly with our software.  
We also integrate your own software smoothly,  
thanks to our job manager for the sign.

Simpler and more  
flexible workflow with the  
Sign software



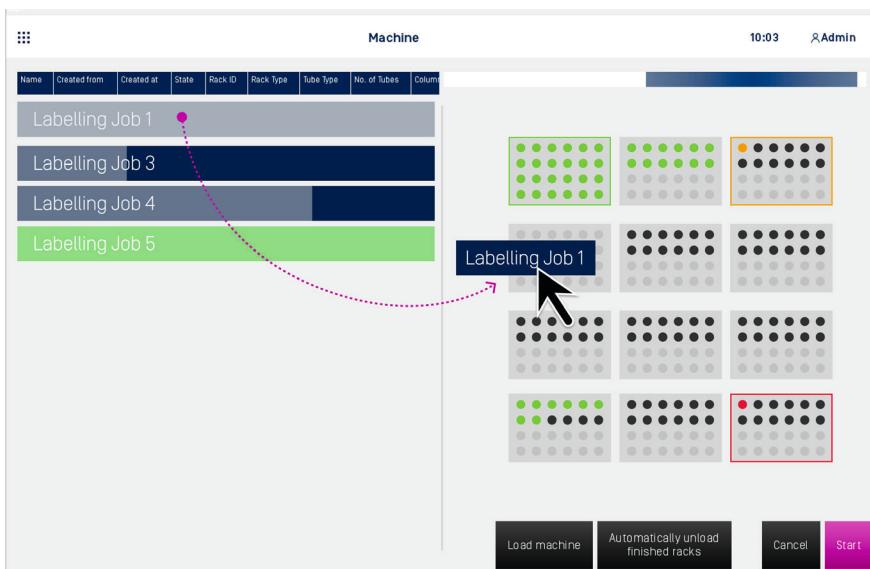
From the workplaces

## 1. Design a label

Start with the design of your labels, be it according to regulatory requirements or your individual wishes. Create your labels with the software of your choice, including cablabel, BarTender, NiceLabel and more.

## 2. Create jobs and send them to Sign

Create jobs from your imported tube data and send them to the Sign. Jobs can be sent to the Sign directly via Ethernet or managed and integrated via your LIMS.



At the sign device

### 3. Assign jobs to the racks and start them

Assign the jobs via drag and drop function to the desired racks or use the automatic positioning function.

Then start the labeling process, which you can monitor at any time via the color display for each tube.

## Key features of the sign software

### Simple troubleshooting

Instead of cryptic error codes, the user is informed in clear sentences about possible errors on the device. This simplifies operation and minimizes the training effort.

### Custom barcodes

With Sign, you can write your own barcodes on each tube, giving you full control over the labeling process. Each tube can be labeled individually.

### Easy integration

The software is compatible with various data formats such as Excel and CSV. The Sign can also be integrated directly into your LIMS and thus the jobs can be managed and controlled directly from your laboratory information system.

### User management

Our software provides efficient user management with role assignment and activity logging function to ensure security and control over access and actions performed.

# Service at HTI

To avoid operational downtime, we proactively maintain our devices on a regular basis both on-site and via remote maintenance. Moreover, in our training courses you will gain all the knowledge you need for a proper use of your device. These and other services can be part of your individual service contract.

## Your Benefits

- Service-Level Agreements
- Installation at a fixed price
- On-site maintenance and service
- International service-network

## DIN EN ISO 9001

Our DIN EN ISO 9001 certified quality management ensures the highest process forms of cooperation, planning and legal security. Regular audits form the basis for continuous improvement and for delivering the highest quality at all times.



# Book your live-demo

Ask all your questions and see the  
X-TubeProcessor®\_Sign in action



We would be happy to discuss your application and automation needs with you:

Phone: +49 8092 2092-70  
E-mail: [sales@hti-automation.com](mailto:sales@hti-automation.com)

# Technical data

\* Modules/Units might vary depending on the tubes/vial's configuration  
† Technical verification always required  
# Optional Module  
‡ Throughput might vary depending on the tubes/vials, racks & label configuration

## Device

### Dimensions:

Height x Depth x Width: 85 cm [33.5"] x 73 cm [28.86"] x 90 cm [35.4"] standard size;  
Height with open door: 130 cm [51.2"]

### Weight:

approx. 85 kg [187.4 lbs]

### Operating Data:

Voltage, Power consumption: 100 -240 VAC, 50/60 Hz, [1ph]; max. 820W  
Room temperature: 15 °C to 30 °C  
Humidity: 20 % to 80 %, not condensing

### Interfaces:

1 Ethernet port for connecting the device to the laptop/external network  
1 Ethernet port for service access, 1 USB A port for service access

### Housing:

Powder coated aluminum, anodized aluminum & Plexiglas.  
Cleanable with regular detergents [housing only]

### Software:

Integrated based control software [compatible with Windows, Linux or MacOS]

## Modules

### Robotic Arm Module:

Single robotic arm: Cartesian coordinate rob. arm with a universal rotating gripper [patent pending]

### Rack Module:

Capacity of 12 SBS format racks  
Aluminum racks or PP racks, depending on the user requirement  
[customer specific racks after technical evaluation]

### Labeling Module:\*

Printer types: Thermal transfer printers: CAB Axon 1.1 [ST22] or CAB Axon 1.2 [BT 35]  
Printing resolution: 600 dpi [for Axon 1.1 & Axon 1.21]  
Label design software: Cablabel S3 [other software after individual clarification]  
Label core diameter: mind. 76 mm [3"]  
Label roll diameter: max. 205 mm [8"]  
Label height: 12 mm - 25.4 mm\* [ST22] / 12 mm - 56 mm\* [BT35] - [0.47" - 1"] / [0.47" - 2.2"]

### Barcode Reader Module:#

Reader: di-soric ID-600 reader  
Supporting codes: 1D & 2D Codes / Read the bottom / body barcode on the tube / compare with provided data / store the read barcodes [after individual clarification]

## Configuration Tubes / Vials

### Tube Diameter:\*

### Sign ST22\*

### Tube Height:\*

7 mm - 22 mm [0.3" - 0.86"]

### Sign BT35\*

16 mm - 35 mm [0.6" - 1.37"]

### Tube conicity:

15 - 120 mm [0.59" - 4.72"]

50 - 120 mm [1.96" - 4.72"]

### Tube conicity:

Change in diameter max. 0.8 %

Change in diameter max. 0.8 %

### Typical applicable tube types:†

Micro screw tubes, cryo vials,  
HPLC vials, centrifuge tubes or  
similar up to 15 ml [and many more]

Centrifuge tubes from 15 ml up  
to 50ml [and many more]

## Throughput (Depending on procedure)

### Labelling:

Up to 360 tubes/hour‡

# X-TubeProcessor® Series

Our powerful and sustainable solutions for your laboratory processes.  
The right device for every need.



## X-TubeProcessor®\_Basic

Tube & cap handling  
Labeling & marking



See the Basic  
in action

## X-TubeProcessor®\_Smart

Tube & cap handling  
Label & marking  
Dispensing (Peristaltic pump)  
Sterile applications



See the Smart  
in action



## X-TubeProcessor®\_Flex

Tube & cap handling  
Label & marking  
Dispensing  
Identification  
Sterile applications



See the Flex  
in action

## X-TubeProcessor®\_Ultra<sup>v</sup>

Tube & cap handling  
Label & marking  
Dispensing  
Identification  
Sterile applications  
Sorting & Storage



See the Ultra  
in action

## Partnership-based. Competent and field-tested.

For more than 20 years, we at HTI have been regularly reinventing ourselves - for and with our customers.

With our engineering services and our solutions for laboratory and production automation, we are the reliable partner for your success.

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**+20 years**  
experience in  
laboratory  
automation

**+ 1100 devices  
and equipment**  
developed and  
produced

**Quality management**  
according to  
DIN ISO 9001

**Engineering  
Made in Germany –**  
International service  
network

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