

# Herolab

*Manufacturer  
of Life Science*



*Spot Hunter*

**Proteomic Workstation**

**Robotic System with integrated fluorescence detection unit  
for automatic extraction of selected protein spots after 2-D electrophoresis**

The *Spot Hunter* is the new generation of proteomic workstations offering utmost flexibility, accurateness and reliability on minimal footprint.

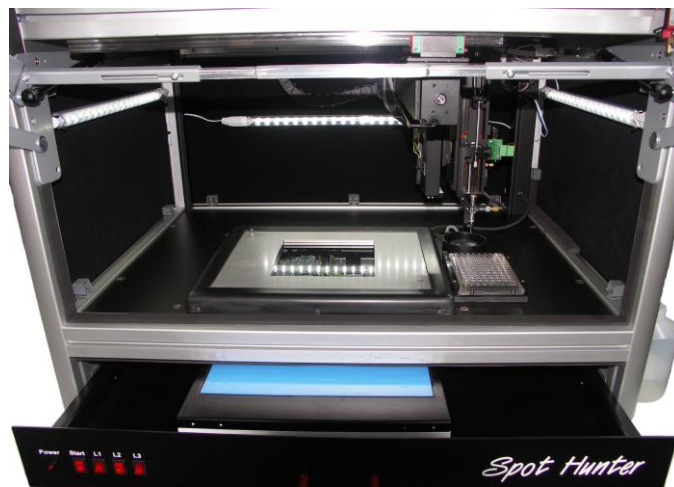
Three versions are available:

**Standard Type:** gel size up to 315 x 235 mm  
picking area: 285 x 205 mm

**Small Type:** gel size up to 280 x 220 mm  
picking area: 250 x 190 mm

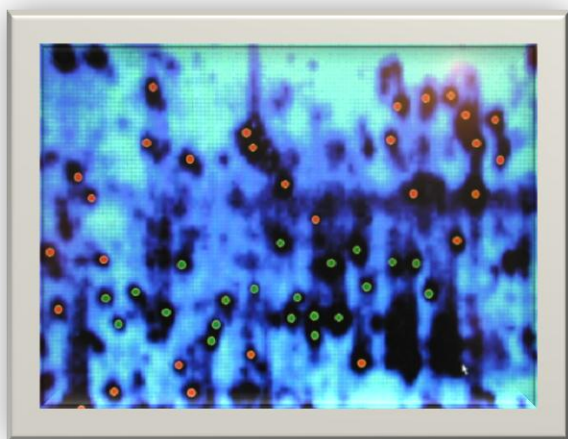
**High Throughput Type:** gel size up to 340 x 290 mm  
picking area: 300 x 250 mm

Contact us if other sizes are required.



The **combination of the three essential steps of proteomic analysis – image capture, selection and extraction – in one housing** provides a faster and more efficient work.

- The image is captured from 2D gels stained with all common methods like Coomassie Blue, Silver Stain or fluorescent dyes like SYPRO<sup>®</sup> Ruby with an application-specific configured high-resolution CCD camera. All Types are equipped with a White Light LED Transilluminator.
- The **easy4science** software detects interesting protein spots, creates a target list and transfers it to the picking unit.
- The selected spots will be automatically extracted under contamination free conditions and then transported into one – or with the High Throughput Type into four – standard microtiter plates (96 or 384 wells).



- Spots detected to be picked
- Spots already picked-out



Extraction needle

The light-tight housing enables the detection of fluorescent dyes. The gel supporting surface is illuminated and can be optionally cooled in order to avoid deformation of gels.

A unique feature of the *Spot Hunter* is the simultaneous and speed-conform suction of the spot during the downward movement of the needle. Depending on the gel quality, the cylindrical form of the punched-out spot will not be damaged. The software **easy4science** is supplied with a high performance Quad Intel computer system including Windows<sup>®</sup> XP Professional and 24" TFT-Monitor (Windows<sup>®</sup> 7 on request).

The GLP conform documentation of the process enables an exact backtracking of the spot.

🕒 For 96 picks the *Spot Hunter* needs no longer than 20 minutes.

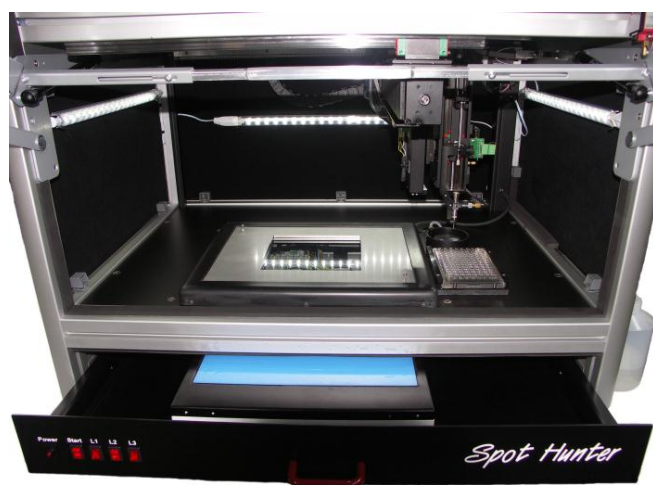
## Spot Hunter:

Catalog No.	Description	Picking Area	Gel Size
35 00 100	Spot Hunter – Standard Type	285 x 205 mm	up to 315 x 235 mm
35 00 200	Spot Hunter – Small Type	250 x 190 mm	up to 280 x 220 mm
35 00 300	Spot Hunter – High Throughput Type	300 x 250 mm	up to 340 x 290 mm

## Additional Picking Plates:

Every *Spot Hunter* is supplied with a Blue Light, 475 nm, Picking Plate. For faster changes we propose to buy additional plates.

Catalog No.	Description		Wavelength
35 10 147	LED Picking Plate Blue	for Spot Hunter – Standard Type	475 nm
35 10 247	LED Picking Plate Blue	for Spot Hunter – Small Type	475 nm
35 10 347	LED Picking Plate Blue	for Spot Hunter – High Throughput Type	475 nm
35 10 153	LED Picking Plate Green	for Spot Hunter – Standard Type	530 nm
35 10 253	LED Picking Plate Green	for Spot Hunter – Small Type	530 nm
35 10 353	LED Picking Plate Green	for Spot Hunter – High Throughput Type	530 nm
35 10 162	LED Picking Plate Red	for Spot Hunter – Standard Type	620 nm
35 10 262	LED Picking Plate Red	for Spot Hunter – Small Type	620 nm
35 10 362	LED Picking Plate Red	for Spot Hunter – High Throughput Type	620 nm



Side view top right

The Spot Hunter was extensively tested with high-end electrophoresis plastic-backed pre-cast gels from the manufacturer Gel Company, stained with LavaPurple™ and SYPRO®Ruby.

SYPRO Ruby is a registered trademark and the dye is manufactured by Molecular Probes, Inc. Eugene, OR / LavaPurple is a trademark of Fluorotechnics Ltd./GelCompany

## Optional Equipment Components (prices on request):

Feature	Description
UV Top Illumination	illumination from above for various fluorescent dyes 254 / 312 (302) / 365 nm – one or more wavelengths available
Transilluminators	UV, White-, Blue-, Green-, or Red-Light interchangeable in the lower drawer compartment. For UV Transilluminators with Short Wave (254nm) or MidWave (312nm) a special quartz glass bottom plate is required
Coolable gel supporting surface	for connection to a cryostat
Internal filter wheel	for precise adjustment to the different emission spectra of the various dyes
Cooled CCD camera	2-stage Peltier cooling, 1.4 mio. pixels, for long-term integration, binning feature for high sensitive "Super Pixel"; (identical camera from our Chemoluminescence System ChemoLum™)

## Specification

*Spot Hunter*

*Spot Hunter*

*Spot Hunter*

Catalog No.	35 00 100	35 00 200	35 00 300
Type	Standard	Small	High Throughput
Max. Gel Size	315 x 235 mm	280 x 220 mm	340 x 290 mm
Picking Area	285 x 205 mm	250 x 190 mm	300 x 250 mm

Imaging and picking unit      On-board; for one or four (High Throughput Type only) Microtiter Plates with 96 or 384 cavities (wells)

Working speed      Extraction of 96 spots in less than 20 minutes

Camera      High-resolution color CCD camera with at least 3.3 mio. pixels in application-specific configuration;  
Optionally available: monochrome 2-stage Peltier-cooled CCD camera with 1.4 mio. pixels with binning  
feature for high sensitive "Super Pixel" and short exposure times

Corpus      Aluminum corpus with leveling feature and computer controlled motors of all axes, including the intelligent  
picking device with easy to change syringe and needle

Housing      Light-tight housing for detection of fluorescent dyes with computer controlled CCD camera

Gel Plate      also works as Calibration Plate for adjustment of camera optics and picking unit

Transillumination      White light transilluminator or Blue light LED

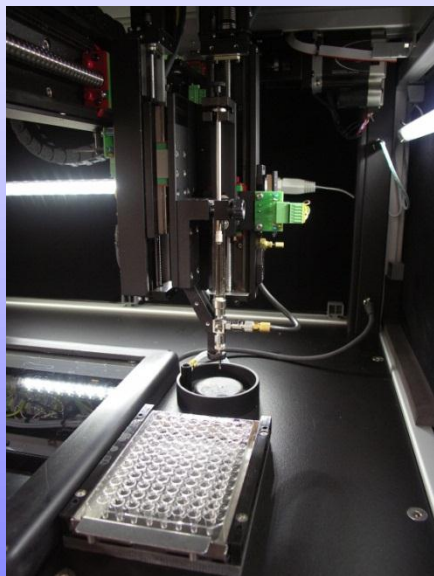
Computer      High-end Windows® PC with high-resolution monitor for control of the entire process

Software      Evaluation and Analysis Software **easy4science** for automatic spot detection and comparison of different  
gels for the creation of picking lists

Dimensions (W x D x H):      104 x 65 x 95 cm      96 x 62 x 95 cm      110 x 90 x 95 cm  
(41 x 26 x 38 inches)      (38 x 25 x 38 inches)      (44 x 36 x 38 inches)

maximum height with opened door: 115 cm (46 inches)

Options      other pickings areas / gel sizes / dimensions on request



# Herolab

Herolab GmbH Laborgeräte  
Ludwig-Wagner-Str. 12  
69168 Wiesloch  
GERMANY

Tel.: +49 (0) 6222 – 5802-0  
Fax: +49 (0) 6222 – 5802-34  
E-Mail: [info@herolab.de](mailto:info@herolab.de)  
Internet: [www.herolab.de](http://www.herolab.de)

All products built by Herolab carry the CE sign. Herolab  
is DIN EN ISO 9001.2008 certified.



WEEE-Reg. No.  
DE66734561

All prices without VAT, ex Works – Herolab reserves the right to change technical specification and prices without prior notice.

2013-02