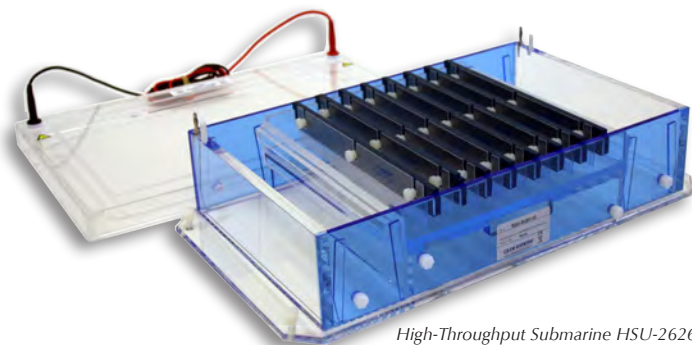


# High-Throughput Systems

Run up to 816 samples simultaneously with these versatile units



High-Throughput Submarine HSU-2626


## High-Throughput System


HSU-2614, HSU-2626, HSU-2640

Complete System:

- Electrophoresis unit with cooling chamber
- Platinum electrode cassettes
- UV transparent winged gel tray
- Tapered baffles for gel formation
- 4 adjustable height combs with aluminum backing
- Buffer recirculation ports
- Leveling base with bubble level
- Interlock safety cover with thread-on power leads

## FEATURES

- **Removable Electrode Cassette Design**


Platinum electrode cassettes provide rapid sample velocity and clear focused bands without smearing. These cassettes are easily removed for replacement or cleaning.
- High quality, heavy duty construction, 3 year warranty with vast array of accessory options.
- Three sizes of High-Throughput Systems are offered with the following gel bed sizes:
  - 26cm (w) x 14cm(l)
  - 26cm (w) x 26cm(l)
  - 26cm (w) x 40cm(l)
- **Gel Tray Specifications:**
  - 1) All gel trays are winged for easy handling - no more sticking fingers into slippery buffer to extract gel tray.
  - 2) Made from sturdy 6.4mm thick UV transparent acrylic.
  - 3) Grooves in gel tray corners create agarose anchors to prevent gel flotation during electrophoresis.
  - 4) Gel tray configuration allows single run or multiple simultaneous short runs. (See Gel Tray Profiles).
- 3 options for gel casting; tapered baffles, external gel casters or continuously adjustable gel caster as shown on page 53.
- All combs are adjustable height and have an aluminum backing to keep the combs perfectly straight during gel casting with hot agarose.
 
- All combs come with microtitre format to allow multi-channel pipetting for accuracy and speed. Comb profiles are diagrammed at right to show the many configurations, with or without markers. PTFE-coated combs allow faster well formation and are recommended when using low percentage or low melt agarose.
- Buffer recirculation ports allow maintenance of uniform pH and ionic strength and reduce frequency of buffer changes necessary during long runs.
- Tight-fitting safety cover reduces condensation during electrophoresis.
- Coolant can be recirculated beneath gel bed to provide constant temperature runs.
- Combs are printed with catalog # and thickness for easy identification.

## DESCRIPTION

Three different sized High-Throughput Submarine Systems are designed for the rapid screening of samples from microtitre plates. Analyze high numbers of cloning products, restriction fragments, synthetic oligos or PCR products simultaneously.

## APPLICATIONS

- Rapid screening of cloning products
- Rapid screening of restriction fragments
- Rapid screening of synthetic oligos
- Rapid screening of PCR products

COMB OPTIONS, 26cm wide, adjustable height					
material: Polycarbonate/aluminum backing or PTFE-coated aluminum*					
overall length: 24.7cm					
Cat. #	Tooth Depth (mm)	# of Teeth	Thickness of Teeth (mm)	Width of Teeth (mm)	Recommended Max. Sample Vol./Well (µl)*
SGC26-0725*	10	25	0.75	7.1	40
SGC26-0726*	12	26	0.75	7	47
SGC26-0751*	10	51	0.75	3.5	19
SGC26-07102*	10	102	0.75	1.45	8
SGC26-1025*	10	25	1.0	7.1	53
SGC26-1026*	12	26	1.0	7	63
SGC26-1051*	10	51	1.0	3.5	26
SGC26-10102*	10	102	1.0	1.45	11
SGC26-1525*	10	25	1.5	7.1	80
SGC26-1526*	12	26	1.5	7	95
SGC26-1551*	10	51	1.5	3.5	39
SGC26-15102*	10	102	1.5	1.45	16
SGC26-2025*	10	25	2.0	7.1	107
SGC26-2026*	12	26	2.0	7	126
SGC26-2051*	10	51	2.0	3.5	53
SGC26-20102*	10	102	2.0	1.45	22
SGC26-3025*	10	25	3.0	7.1	160
SGC26-3026*	12	26	3.0	7	190
SGC26-3051*	10	51	3.0	3.5	78
SGC26-30102*	10	102	3.0	1.45	32

\*Multi-channel pipettor compatible

\*Maximum loading volume is calculated by taking 75% of the total tooth volume.

\*To specify PTFE-coated aluminum add "TF" to end of cat. #.

## SPECIFICATIONS

Horizontal System Cat. #	Overall Dimensions W x L x H (cm)	Gel Bed Size W x L (cm)	Buffer Volume (ml)	Compatible Gel tray	Gel Tray I.D. W x L (cm)	Agarose Solution Required* (ml)	# of Slots in Gel Tray	Pathlength/Slot	Maximum # of Samples
HSU-2614	28 x 38 x 10	26 x 14	2200	WGT-2614	24.7 x 14	173ml	5	2.5cm	510
HSU-2626	28 x 48 x 10	26 x 26	2600	WGT-2626	24.7 x 26	320ml	8	2.5cm	816
HSU-2640	28 x 64 x 10	26 x 40	3400	WGT-2640	24.7 x 40	494ml	8	4.25cm	816

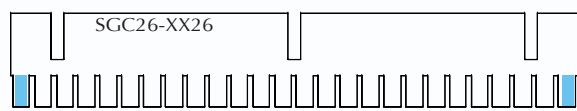
\*Gel tray agarose required was calculated using a gel thickness of 0.5cm

## Microtitre Comb Profiles

Possible loading strategy for microtitre compatible combs are listed below.

**M**= marker lane and is shaded in blue

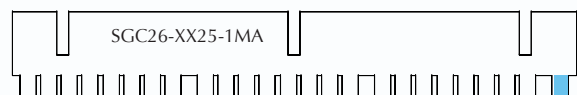
**12 & 8** = number of wells loading capability for microtitre compatible spacing



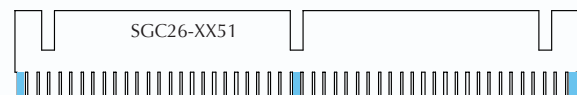
### Loading options

M-12-12-M

M-8-8-8-M



8-8-8-M



M-8-8-8-M-8-8-8-M

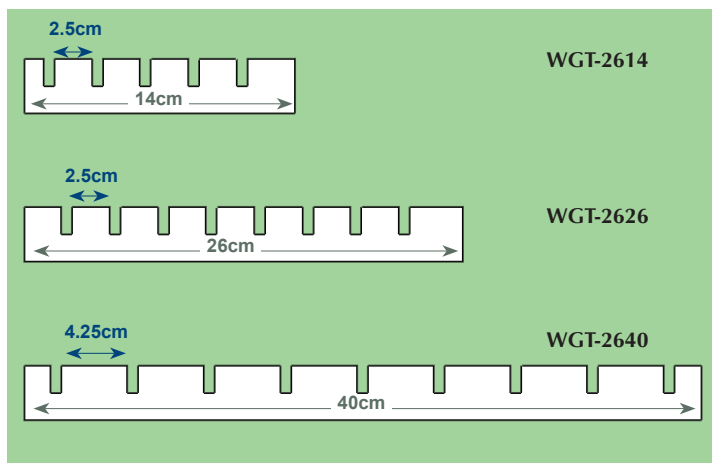
M-12-12-M-12-12-M



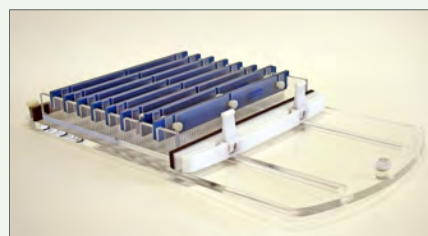
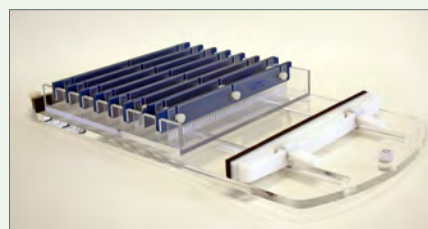
M-8-8-8-M-8-8-8-M-8-8-8-M-8-8-8-M-M

M-12-12-M-12-12-M-12-12-M-12-12-M-M

## Gel Tray Profiles



## Continuously Adjustable Gel Caster



Continuously Adjustable Caster, cat. # AGCT-27940 is adaptable to any gel tray between  $\leq 27\text{cm}(w)$  and from  $9\text{-}40\text{cm}(l)$ . The gel tray friction fits between 2 rubber gaskets using two finger cams.

## ORDERING INFORMATION

CAT. #	DESCRIPTION
<b>HIGH-THROUGHPUT SUBMARINE SYSTEMS</b>	
HSU-2614	<b>High-Throughput Submarine System, CE</b> , gel bed dimensions 26cm(w) x 14cm(l)
HSU-2626	<b>High-Throughput Submarine System, CE</b> , gel bed dimensions 26cm(w) x 26cm(l)
HSU-2640	<b>High-Throughput Submarine System, CE</b> , gel bed dimensions 26cm(w) x 40cm(l)
<b>Related Products</b>	
AGCT-27940	Continuously Adjustable Gel Caster, fits gel trays $\leq 27\text{cm}(w)$ and from $9\text{-}40\text{cm}(l)$
GCT-26-141	External Gel Caster, fits one 26cm(w) x 14cm(l) tray
GCT-26-142	External Gel Caster, fits two 26cm(w) x 14cm(l) trays
GCT-26-261	External Gel Caster, fits one 26cm(w) x 26cm(l) tray
GCT-26-262	External Gel Caster, fits two 26cm(w) x 26cm(l) trays
GCT-26-401	External Gel Caster, fits one 26cm(w) x 40cm(l) tray
GCT-26-402	External Gel Caster, fits two 26cm(w) x 40cm(l) trays
WGT-2614	Replacement Gel Tray, UVT, 26cm(w) x 14cm(l) for HSU-2614
WGT-2626	Replacement Gel Tray, UVT, 26cm(w) x 26cm(l) for HSU-2626
WGT-2640	Replacement Gel Tray, UVT, 26cm(w) x 40cm(l) for HSU-2640
EPS-300 X	<b>Power Supply, CE</b> , 10-300V, 4-500mA
EPS-600	<b>High Current Power Supply, CE</b> , 5-600V, 3-500mA (recommended for HSU-2640)