



TELEDYNE
HANSON RESEARCH
Everywhereyoulook™

2017

BUYER'S GUIDE

SALES AND SUPPORT

OUR HEADQUARTERS Teledyne Hanson Research, Inc.
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Chatsworth, CA 91311 USA

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1 - YEAR WARRANTY

Hanson products are warranted for one full year, including parts and labor (except for glass and consumables). International dealer warranties may vary. A variety of HRCare service and preventive maintenance contracts are available to maintain peak operation of your Hanson equipment. Consult your Hanson representative for details.

NOTE: Minimum order \$200

TERMS AND CONDITIONS OF SALE

For our complete terms and conditions of sale, visit www.hansonresearch.com/terms-and-conditions



QUALITY

I.S. EN ISO 9001:2008

NSAI Certified

Teledyne Hanson Research is
ISO 9001 certified.



PRODUCT CATEGORIES

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SETTING THE STANDARD SINCE 1951

When Hanson Research built the world's first six-vessel dissolution tester, we didn't realize we were laying the foundation of modern quality testing for pharmaceuticals. Here we are, half a century later, pioneering the next generation of equipment that will keep tomorrow's medications safe and effective.



PRECISION PERFORMANCE
VISION[®] INSTRUMENTS



DISSOLUTION TESTERS

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VESSELS

Teledyne Hanson offers a complete line of borosilicate glass dissolution vessels to accommodate a vast array of testing applications, including traditional small volume, Chinese small volume, standard one liter, and large-volume 2 liter. Our Precision dissolution vessels meet USP vessel dimensions and are an excellent choice for dissolution testing, including ASTM requirements. Easi-Lock™ vessels come with individual serial numbers and a USP Certificate of Conformance (COC). Amber and Peak vessel options also available.

VISION EASI-LOCK VESSELS

are designed with rugged, chip-proof rims to prevent accidental chipping of glass vessel lids and for easy lock-in position in the vessel plate. They come with individual serial numbers and a USP Certificate of Conformity (COC).

HANSON CHINESE SMALL VOLUME

is based on the official method listed in the Chinese Pharmacopoeia and provides a mid-range volume for applications requiring less media than standard 500 or 900 mL dissolution tests but more than traditional small volume.

VOLUMETRIC GRADUATION MARKS

and serial numbers come standard on all vessels.

COVERS

Vision® vessel covers minimize evaporation to help control media volume during dissolution tests. Designed for seamless integration with Vision dissolution testers, these vessel covers can accommodate a variety of sample probes, digital temperature probes, and dissolution apparatuses. Automatic dosage delivery is also available with ADD™ (Auto-Dosage Delivery) covers. 150 and 250 mL vessels require a vessel cover and adapter ring for use in a Vision tester.

EASI-LOCK ADD VESSEL COVER

allows for the automatic dosage delivery of suspensions, solid dosage forms, and sinkers. The trigger delivers the dosage automatically via the Hanson AutoMag™ or SuperMag™ magazine, or by touch for manual sampling and staggered start times.

APPARATUSES

Choose from a variety of baskets (USP App. 1), paddles (USP App. 2), and dissolution apparatuses commonly used for transdermal testing such as the paddle over disk (USP App. 5), rotating cylinder (USP App. 6), and immersion cells.

The spin-shaft design of Hanson paddles, baskets, and rotating cylinder allows you to easily detach the lower apparatus portion from the upper shaft. The upper shaft remains firmly in place to maintain accurate height measurements when switching among different apparatuses.





NUMBERED LOCATIONS

help maintain USP/ASTM compliance for apparatus positioning with respect to the dissolution tester.

BUILT-IN DRAINAGE

allows paddles and baskets to be washed and dried in place.

APPARATUS TRAYS

Protect your investment by protecting the integrity of your apparatus. Made from sturdy PVC, these compact, stackable trays are the safest and most convenient method of storing USP paddles, baskets, and basket shafts.

The Vision 1 Apparatus Tray is designed to hold Vision 1 L spin-basket shafts and spin-paddles, and will also accommodate many other brands of shafts up to 216 mm (8.5 in.) in length. The Vision 2 Apparatus Tray is designed to hold the longer shafts for Vision 2 L and SR8-Plus™, and will also accommodate many other brands of shafts up to 380 mm (15 in.) in length.

DISSOLUTION TESTERS

The Vision G2 series of dissolution testers incorporate more than 60 years of Hanson dissolution expertise. With our plug-and-play modular design approach, Vision systems are easily upgraded and automated without the need for separate firmware. All Vision testers include a full color touchscreen with intuitive menus allowing precision control of paddle speeds from 25 to 250 rpm and temperatures from 25 °C to 55 °C. With powerful programming capabilities and robust security for up to 50 users, create and store up to 100 protocols on-board, transferable by flash drive to other Vision G2 testers. Vision G2 dissolution testers meet and exceed worldwide standards including compliance with USP, US FDA, ASTM, EP, JP, CE, CSA, RoHS, and 21 CFR Part 11.



CLASSIC 6

Precision engineered to ease the rigors of manual dissolution testing with its award-winning, space-saving footprint designed for ease of use.

Classic 6 Dissolution Tester
Vision G2 **74-201-006**



ELITE 8

A versatile, high-precision instrument ideal for automation and extended applications as well as 8-sample manual testing.

Elite 8 Dissolution Tester, 1 L
Vision G2 **74-101-008**



ELITE 8 "HIGH STAND"

The deeper waterbath of the High Stand accommodates 2 L vessels for high-concentration drug formulations. Order direct from the factory or purchase a conversion kit to upgrade an existing 1 L system.

Elite 8 Dissolution Tester, 2 L High Stand, Vision G2 74-101-018

VISION G2 ADVANTAGES

- Versatile, easy to operate
- Customizable reports allow users to define the report style
- Hand-held digital temperature probe for convenient use in vessels and waterbath
- Faster maintenance with quick, no-tools-needed access to internal components
- Low variation in spindle speed: 0.6 rpm max (typical performance)
- Independent Vision heater circulator with low vibration and space-saving location
- Durable waterbath with fast heat-up & low level drain
- Rugged, chip-proof vessels
- Free technical support for the life of the instrument
- Numerous user-defined configurations for ultimate control and flexibility, including user-defined speed and temperature tolerances, alarms, and more!

ACCESSORIES ORDERED SEPARATELY

Elite 8 High Stand Conversion Kit, Vision G2, 2 L, (converts a Vision G2 Elite 8 from a 1 L to 2 L dissolution tester) 74-107-025

Vision G2 Elite 8 Conversion Kit (upgrades original Elite 8 to G2 Elite 8) 74-107-018

Vision G2 Classic 6 Conversion Kit (upgrades an original Classic 6 to a G2 Classic 6) 74-107-016

Vision G2 Tester Firmware Upgrade (free firmware upgrades) 74-109-021

Q-PAK™ SELF-VALIDATION GUIDELINES

Vision:
USP, IQ/OQ/PQ 74-108-005
ASTM, IQ/OQ 74-108-006

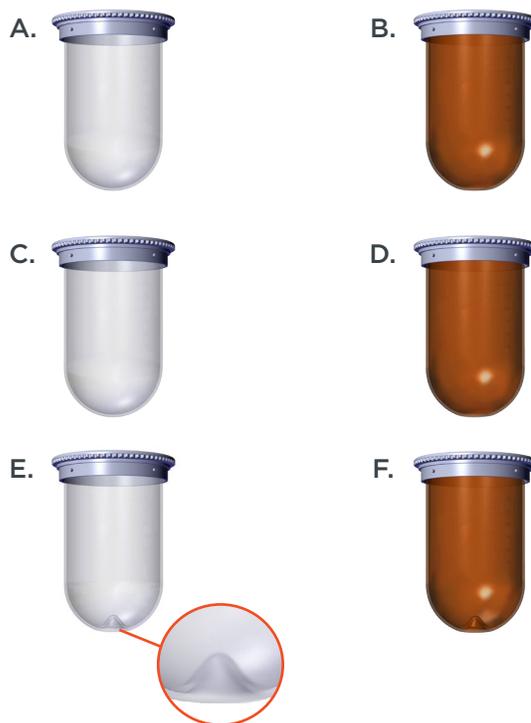
1 L SYSTEMS



1 L SYSTEMS

Classic 6 Dissolution Tester **74-201-006**
Elite 8 Dissolution Tester **74-101-008**

1 CHOOSE VESSEL



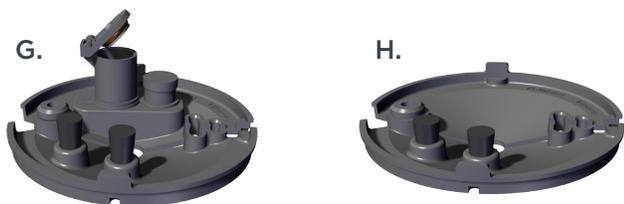
- A. **Super Precision Vessel**, 1 L, USP, Glass, Vision
74-104-121
- B. **Super Precision Vessel**, 1 L, USP, Amber, Glass, Vision
74-104-122
- C. **Precision Vessel**, 1 L, USP, Glass, Vision (serialized)
74-104-101
- D. **Precision Vessel**, 1 L, USP, Amber, Glass, Vision (serialized) (Special Order-min order 6)
74-104-102
- E. **Peak Vessel**, 1 L, USP, Glass, Vision (serialized) (Special Order-min order 6)
74-104-131
- F. **Peak Vessel**, 1 L, USP, Amber, Glass, Vision (serialized) (Special Order-min order 6)
74-104-132

Depth Set Tool for Peak Vessels

Tool provides means for proper placement of paddles used in Peak vessel applications, placing the paddle blade at the exact height required. Made of durable carbon fiber and Delrin plastic and is wash safe.

74-104-133

2 CHOOSE VESSEL COVER



G. **Easi-Lock ADD Cover**, Vision (Auto-Dosage Delivery)
74-107-023

H. **Easi-Lock Cover**, Vision
74-107-022

For Calibration Tools, see SERVICE AND VALIDATION

3 CHOOSE APPARATUS

I.



J.



K.



L.



M.



I. 40-Mesh Basket, USP, 316 SS, SR8-Plus/Vision (serialized)
74-105-252

J. 10-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6)
65-220-010

K. 20-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6)
65-220-020

L. Suppository Basket, SR8-Plus/Vision (not serialized)
65-700-048

M. Basket Shaft, 1 L, USP, 316 SS, Vision (serialized)
74-105-251

N.



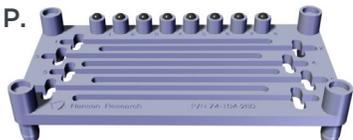
O.



N. Spin-Paddle, PVDF, 1 L USP, Vision (serialized)
74-105-201

O. Spin-Paddle, 316 SS, 1 L USP, Vision (serialized)
74-105-202

P.



P. Stackable Apparatus Tray, Vision 1 (holds paddles, baskets shafts, and baskets for Vision 1 L or Small Volume)
74-104-280

4 CHOOSE MANUAL SAMPLING PROBE

Q.



R.



Q. Disposable Syringe, 10 mL, Luer Type
91-030-132

R. Manual Sampling Cannula (for all Vision manual sampling except 2 L), Adjustable, 1/8 in., PEEK (uses Tip Filters or In-Line/Syringe Filters)
74-104-201

For Filters, see DISSOLUTION CONSUMABLES
For Automation, see DISSOLUTION AUTOMATION

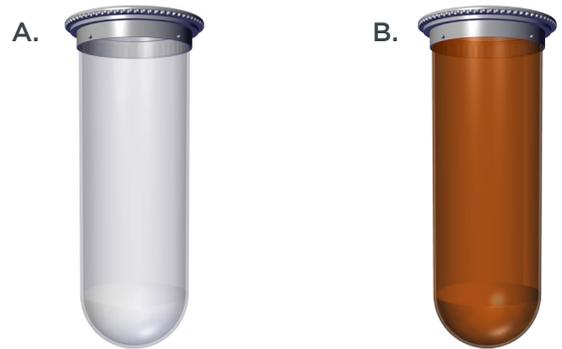
2 L SYSTEMS



2 L SYSTEMS

Elite 8 Dissolution Tester, 2 L **74-101-018**

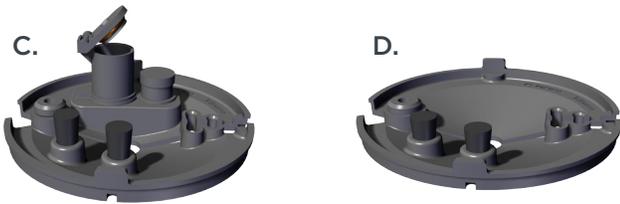
1 CHOOSE VESSEL



A. Precision Vessel, 2 L, USP, Glass, Vision
74-104-111

B. Precision Vessel, 2 L, USP, Amber, Glass, Vision
(Special Order-min order 6)
74-104-112

2 CHOOSE VESSEL COVER



C. Easi-Lock ADD Cover (Auto-Dosage Delivery),
Vision
74-107-023

D. Easi-Lock Cover, Vision
74-107-022

3 CHOOSE APPARATUS

E.



F.



E. 40-Mesh Basket, USP, 316 SS, SR8-Plus/Vision (serialized)
74-105-252

F. 10-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6)
65-220-010

G.



H.



G. 20-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6)
65-220-020

H. Suppository Basket, SR8-Plus/Vision (not serialized)
65-700-048

I.



I. Basket Shaft, 2 L, USP, 316 SS, Vision
74-105-371

J.



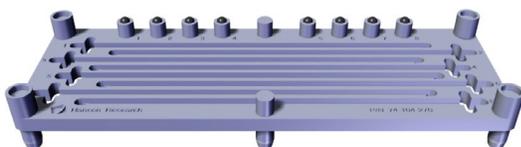
K.



J. Spin-Paddle, PVDF, 2 L, USP, Vision (serialized)
74-105-351

K. Spin-Paddle, 316 SS, 2 L, USP, Vision (serialized)
74-105-361

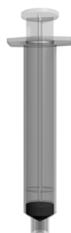
L.



L. Stackable Apparatus Tray, Vision 2 (holds paddles, basket shafts, and baskets for Vision 2 L or SR8-Plus)
74-104-270

4 CHOOSE MANUAL SAMPLING PROBE

M.



M. Disposable Syringe, 10 mL, Luer Type
91-030-132

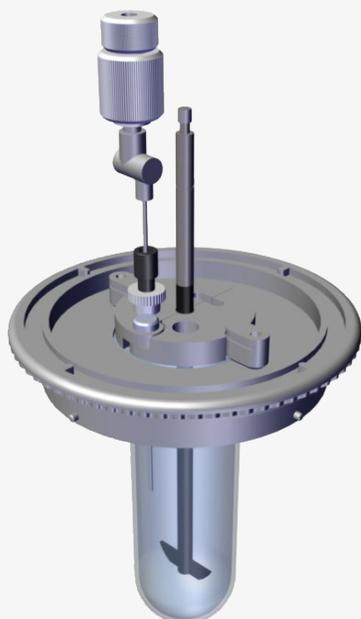
N.



N. Manual Sampling Cannula, 2 L, 1/8 in., PEEK (uses Tip Filters or In-Line/Syringe Filters)
74-105-360

For Filters, see **DISSOLUTION CONSUMABLES**
For Automation, see **DISSOLUTION AUTOMATION**

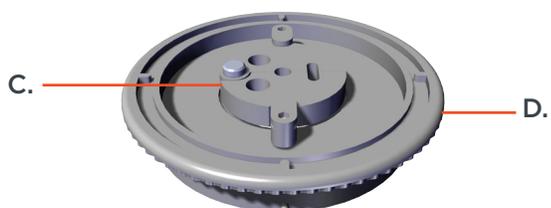
150 ML SYSTEMS (SV)



150 ML SYSTEMS SMALL VOLUME (SV)

Classic 6 Dissolution Tester **74-201-006**
Elite 8 Dissolution Tester **74-101-008**

2 CHOOSE VESSEL COVER

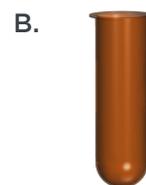


C. Easi-Lock Cover, 150 mL, Vision
(compatible w/ SuperMag)
74-104-163

D. Easi-Lock Adapter Ring, 150 mL, Vision
74-104-155

For automation with SuperMag™ magazine, see
DISSOLUTION AUTOMATION

1 CHOOSE VESSEL



A. Round-Bottom Vessel, 150 mL, Glass, Vision
(serialized)
74-105-151

B. Round-Bottom Vessel, 150 mL, Amber, Glass, Vision
(serialized) (Special Order-min order 6)
74-105-161

3 CHOOSE APPARATUS



E. 40-Mesh Mini Basket, 316 SS, Vision
(Special Order-min order 6) (serialized)
74-105-221

F. Mini-Basket Shaft, 316 SS, Vision
(Special Order-min order 6) (serialized)
74-105-220



G. Mini Spin-Paddle, PTFE Coated, Vision (serialized)
74-105-203

H. Mini Spin-Paddle, 316 SS, Vision (serialized)
74-105-204



250 ML SYSTEMS CHINESE SMALL VOLUME (CSV)

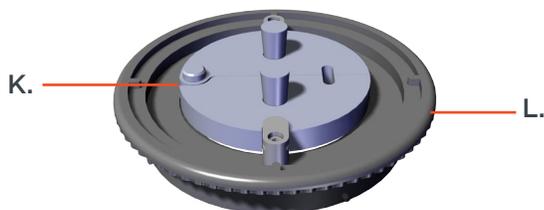
Classic 6 Dissolution Tester **74-201-006**
Elite 8 Dissolution Tester **74-101-008**

1 CHOOSE VESSEL



- I. Round-Bottom Vessel, 250 mL, Glass, Chinese Small Volume, Vision (serialized) (Special Order-min order 6) **74-105-280****
- J. Round-Bottom Vessel, 250 mL, Amber, Glass, Chinese Small Volume, Vision (serialized) (Special Order-min order 6) **74-105-281****

2 CHOOSE VESSEL COVER



- K. Chinese Small Volume (CSV) Cover, Vision (Special Order-min order 6) (compatible w/ SuperMag) **74-104-173****
- L. Chinese Small Volume (CSV) Adapter Ring, Vision (Special Order-min order 6) (required for 250 mL Chinese Small Volume) **74-104-175****

3 CHOOSE APPARATUS



- M. Chinese Small Volume (CSV) Mini Spin-Paddle, 316 SS, Vision (Special Order-min order 6) **74-105-290****

For automation with SuperMag™ magazine, see
DISSOLUTION AUTOMATION

STATIONARY BASKET + COVER

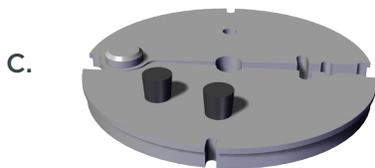


STATIONARY BASKET

For 1 L manual or automated systems

Helps with problems associated with floating, sticking, and swelling dosage forms; and complies with the USP Monograph for Felodipine Extended-Release tablets.

2 CHOOSE VESSEL COVER



C. Stationary Basket Cover, Vision
(for Stationary Basket p/n 95-590-150)
(Special Order-min order 6)
74-107-019

For 1 L systems, see page 8-9.

1 CHOOSE VESSEL



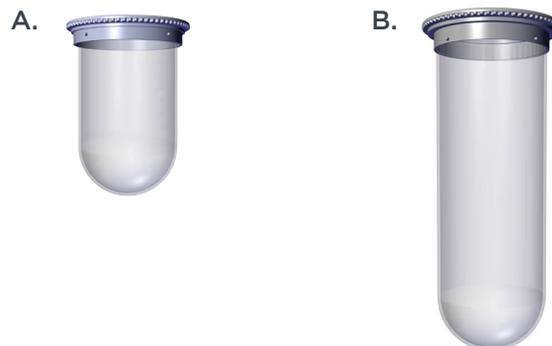
A. For 1 L Vessels, see page 8.

3 CHOOSE APPARATUS



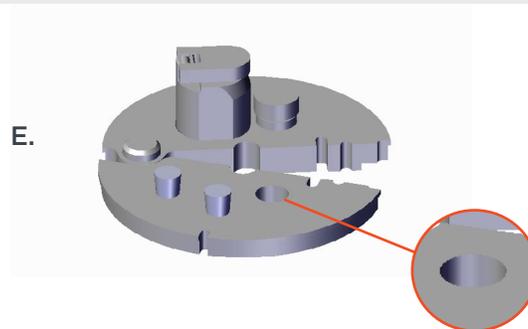
D. Stationary Basket, 8 Mesh, USP, 316 SS (uses Stationary Basket Vessel Cover p/n 74-107-019)
95-590-150

1 CHOOSE VESSEL



- A. For 1 L Vessels, see page 8.
- B. For 2 L Vessels, see page 10.

2 CHOOSE VESSEL COVER



- E. Fiber Optic ADD Cover, Vision
74-107-053

3 CHOOSE FIBER OPTIC APPARATUS

For more information about fiber optic options from our partners, contact your local Teledyne Hanson representative or email us at sales@hansonresearch.com



FIBER OPTIC ADD COVER

For customers conducting *in-situ* UV monitoring with Pion fiber-optic UV and Vision series testers, the new Fiber Optic ADD Vessel Cover combines three features crucial to lab productivity:

- The ease of use of our Easi-Lock vessel covers;
- Our automatic dosage delivery (ADD) capability allowing dosages pre-loaded into sealed humidity chambers to be manually introduced almost simultaneously into all 6 or 8 vessels.
- And now the ability to quickly and easily mount Pion's fiber-optic probes to the vessel covers.

For 1 L systems, see page 8-9.
For 2 L systems, see page 10-11.

USP APP. 5



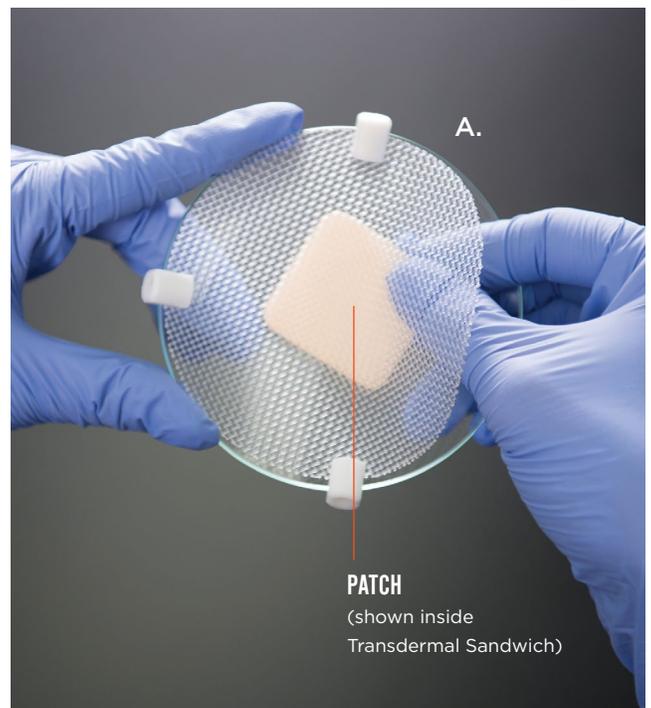
The Hanson Transdermal Sandwich (USP App. 5) is a convenient disk assembly recommended by the US FDA for testing patch dosage forms in a standard dissolution test station. It consists of a glass watchglass (on which the patch is placed, delivery side up), a 17 mesh PVDF screen to hold the patch, and PVDF clips to hold the disk assembly together.

Used with 1 L and 2 L vessels. Accommodates patches up to 90 mm diameter.

USP APP. 5 - PADDLE OVER DISK "TRANSDERMAL SANDWICH"

A. Transdermal Sandwich for Patch, App. 5
(serialized; Vision requires Spacer p/n 74-104-240 - one per position)
Single 65-190-092
Set/6 65-190-093

Adjustable Height Spacer for App. 5, Vision
(serialized; 1 per position required with Transdermal Sandwich p/n 65-190-092/093 for Vision)
Single (adjustment tool not included) **74-104-240**
Set/6 (includes adjustment tool) **74-107-060**



For 1 L systems, see page 8-9.
For 2 L systems, see page 10-11.



The Rotating Cylinder complies with USP <724> and holds patches up to 5 x 14 cm in size (f.). For larger patches up to 10 x 14 cm in size, a Rotating Cylinder with Extension (d.) is available (both pieces are matched and must be purchased together). The Rotating Cylinder and Extension are serialized and come with a Certificate of Conformance.

Used with 1 L vessels and standard dissolution equipment as described in USP <711>.

USP APP. 6 "ROTATING CYLINDER"

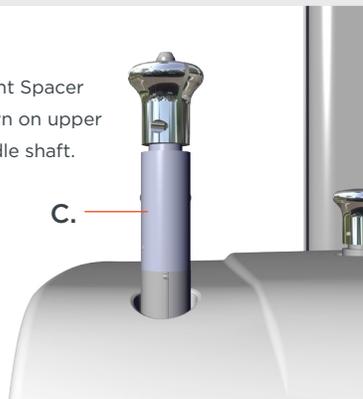
FOR PATCHES UP TO 10 X 14 CM

B.



Height Spacer shown on upper spindle shaft.

C.



B. Apparatus 6 Rotating Cylinder w/ Extension, Vision (Special Order-min order 6) (serialized; requires Height Spacer p/n 74-105-243 - 1 per position)
74-105-241

C. Height Spacer for App. 6 Rotating Cylinder, Vision (Special Order-min order 6) (for App. 6 Rotating Cylinder w/ Extension p/n 74-105-241 - 1 per position)
74-105-243

FOR PATCHES UP TO 5 X 14 CM

D.



D. Apparatus 6 Rotating Cylinder only, Vision (Special Order-min order 6) (serialized)
74-105-240

For 1 L systems, see page 8-9.

IMMERSION CELL



The Hanson Immersion Cell is designed for release-rate testing of ointments and other topical preparations in the convenience of standard dissolution test equipment. It is designed for use with the 150 mL Flat-Bottom Vessels to eliminate dead volume. The Immersion Cell uses standard 25 mm filter disks, and its 3 mm deep dosage area provides for testing of infinite dose topical applications. Immersion Cells with convenient assembly tools are available as a set. Extra Immersion Cells may be ordered separately. See USP <1724> for more information.

Use with 150 mL flat-bottom vessels in any Vision tester.

IMMERSION CELL USP <1724>

1 CHOOSE VESSEL

A.



B.

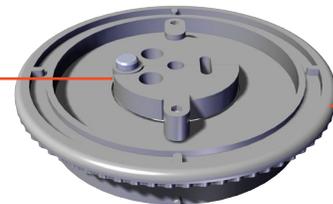


A. Flat-Bottom Vessel, 150 mL, Glass, Vision (serialized)
74-105-152

B. Flat-Bottom Vessel, 150 mL, Amber, Glass, Vision (serialized) (Special Order—min order 6)
74-105-162

2 CHOOSE VESSEL COVER

C.



D.

C. Easi-Lock Cover, 150 mL, Vision (compatible w/ SuperMag)
74-104-163

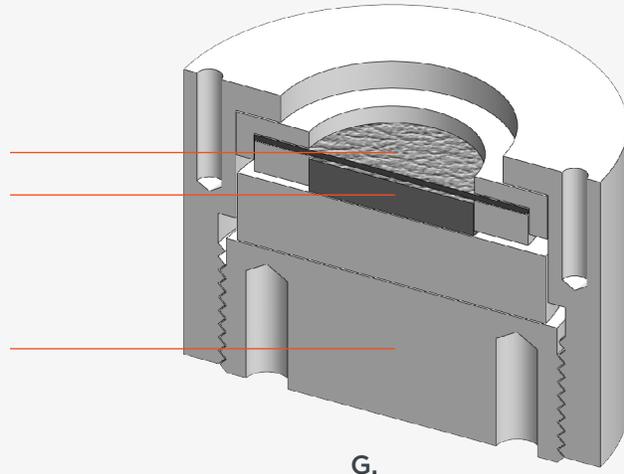
D. Easi-Lock Adapter Ring, 150 mL, Vision
74-104-155

IMMERSION CELL (cross section)

Membrane Area (for standard 25 mm filter disks)

Dosage Area (provides for true repeatable volume)

Assembly Tools available for easy cell preparation and removal



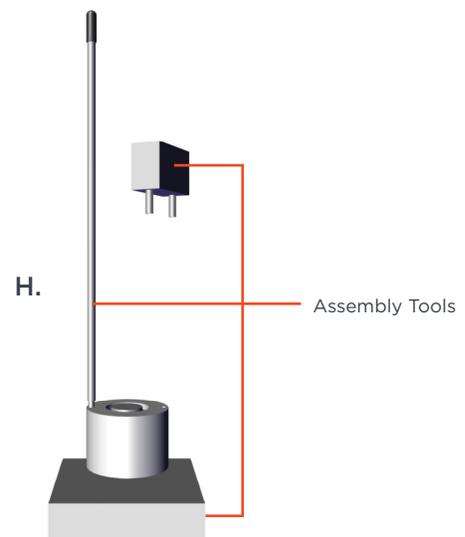
3 CHOOSE APPARATUS



E. Mini Spin-Paddle, PTFE Coated, Vision (serialized)
74-105-203

F. Mini Spin-Paddle, 316 SS, Vision (serialized)
74-105-204

4 CHOOSE IMMERSION CELL



G. Immersion Cell, 15 mm (cell only)
Single Cell 65-190-043

H. Immersion Cell w/ tools, 15 mm
Single Set 65-190-051
Set/6 65-190-052





DISSOLUTION AUTOMATION

DISSOLUTION TESTERS
DISSOLUTION AUTOMATION
DISSOLUTION CONSUMABLES
MEDIA HANDLING
DIFFUSION TESTING
DIFFUSION AUTOMATION
PHYSICAL TESTING
SERVICE AND VALIDATION
LEGACY ACCESSORIES
INDEX



AUTOSAMPLERS

Maximize lab speed and versatility with the unique capability of the AutoPlus Maximizer™ autosampler to connect up to three baths at once. Integrate the AutoPlus with AutoFill™ fraction collector with one or more dissolution testers for an incredibly powerful combination of precision, automation, and broad range of fluidic options.

AUTOMATED FILTER MANAGEMENT

The Vision AutoFilter Changer™ brings a new approach to automated filtration by giving you the power to determine the life of your filters. Rather than discard filters after one-time use, the Vision AutoFilter Changer enables you to automatically introduce 25 mm syringe filters to the fluidic path, remove them if desired, return them back into position, or completely discard them, all of which is programmable. There are almost no limitations to the Vision AutoFilter Changer — you decide what works best for your method.

VESSEL-MOUNT PROBES

Vessel-Mount Probes are stationary probes mounted directly into your vessel's cover. Adjustable styles allow you to set your exact sampling height. Use the Return Port Fitting to return rinse media back into the vessel.

To automate sampling, both Vessel-Mount Probes and the Return Port Fitting require a Tubing Harness to connect to the Vision AutoPlus.



MAGAZINES

The AutoMag™ and SuperMag™ magazines for the Vision G2 Elite 8 both accommodate Auto-Probes™ for automatic sampling from each vessel with the Vision AutoPlus, and either Recirculating Auto-Probes for automatic return of rinse to the vessel or Digital Temperature Probes for individual temperature readings in each vessel.

The AutoMag works solely with 1 L or 2 L testing. The SuperMag accommodates 1 L, 150 mL, and 250 mL testing. Each magazine requires a Tubing Harness. Probes and Tubing Harnesses are factory installed only when ordered together with a magazine.

1L

CSV

SV

SUPERMAG™ MAGAZINE

accommodates 1 L, 150 mL, and 250 mL testing.

AUTOMATED SAMPLE COLLECTION

The Vision AutoFill™ is a sample collector designed for seamless integration with the Vision AutoPlus. Vision AutoFill accessories include choice of collection racks with 13 x 100 or 16 x 100 mm test tubes for UV-Vis, 12 x 32 mm vials for HPLC, sample trays with 12 x 32 mm vials for UPLC®, and more.

RACKS TUBES VIALS

AutoFill collection racks are designed with smart technology that notifies the AutoPlus autosampler when an incorrect rack type is being used for a method. When this happens, the AutoPlus displays a notification message for the end-user to ensure that the correct rack type is used for testing.

AUTOMATED SAMPLING CONFIGURATIONS

AUTOMATED SAMPLING WITH VESSEL-MOUNT PROBES

Vessel-Mount Probes are stationary probes mounted directly onto your vessel's cover. Adjustable-length styles allow you to set a specific sampling position.



1. ELITE 8 or CLASSIC 6



2. VESSEL-MOUNT PROBES



3. AUTOPLUS/AUTOFILL

AUTOMATED SAMPLING WITH MAGAZINES

The AutoMag™ and SuperMag™ magazines for the Vision Elite 8 both accommodate Auto-Probes for automatic sampling from each vessel with the Vision AutoPlus.



1. ELITE 8



2. MAGAZINE



3. MAGAZINE PROBES



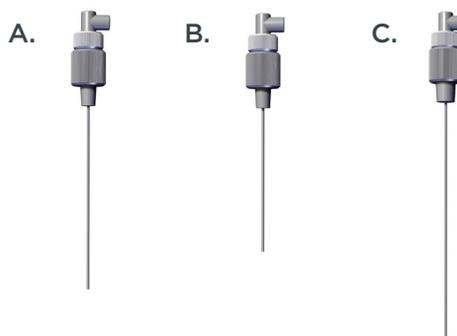
4. AUTOPLUS/AUTOFILL



VESSEL-MOUNT PROBES

To automate sampling, both Vessel-Mount Probes and the Return Port Fitting require a Tubing Harness to connect to the Vision AutoPlus.

1 CHOOSE FIXED OR ADJUSTABLE LENGTH



- A. Fixed Vessel-Mount Probe, 500 mL**
1/16 in., 316 SS, Vision (uses Cartridge Filters; requires Tubing Harness p/n 60-200-706/708)
74-104-202
- B. Fixed Vessel-Mount Probe, 900 mL**
1/16 in., 316 SS, Vision (uses Cartridge Filters; requires Tubing Harness p/n 60-200-706/708)
74-104-203
- C. Fixed Vessel-Mount Probe, 2 L**
1/16 in., 316 SS, Vision (uses Cartridge Filters; requires Tubing Harness p/n 60-200-706/708)
74-105-370

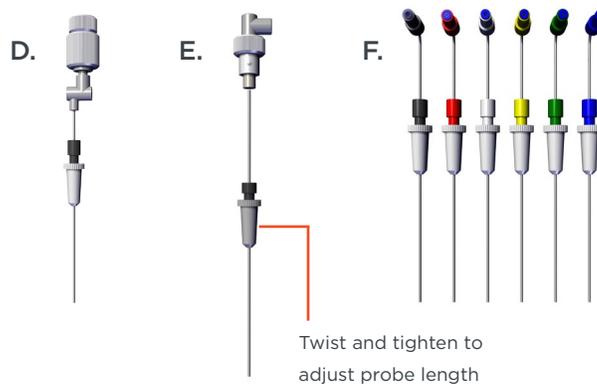
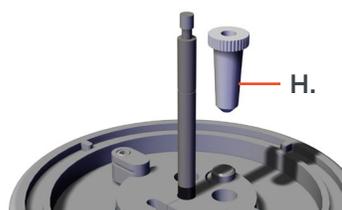
2 CHOOSE TUBING HARNESS FOR PROBES



- G. Tubing Harness, 3 ft, PTFE, 1/16 in.** (required for Vessel-Mount Probes; extra harnesses required for 3-bath system, return to vessel, and Auto-Probes)
6-Sample 60-200-706
8-Sample 60-200-708

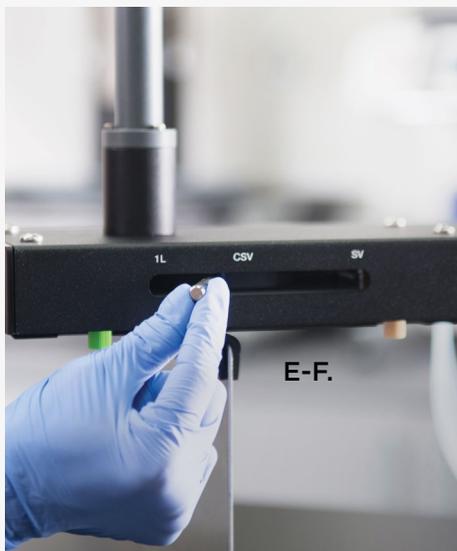
3 RETURN-TO-VESSEL OPTION

- H. Return Port Fitting, Vision** (for return to vessel; Tubing Harness p/n 60-200-706/708 required)
74-104-205



- D. Adjustable Vessel-Mount Probe, Small Volume only**
1/16 in., 316 SS, Vision (uses Cartridge Filters; requires Tubing Harness p/n 60-200-706/708)
74-104-211
- E. Adjustable Vessel-Mount Probe (App. 5 and other volumes except small volume)**
1/16 in., 316 SS, Vision (uses Cartridge Filters; requires Tubing Harness p/n 60-200-706/708)
74-104-204
- F. Adjustable Vessel-Mount Probe, 900 mL**
1/16 in., SS, Vision G2 (uses In-Line/Syringe Filters; requires Tubing Harness p/n 60-200-706/708)
Set/6 74-104-216
Set/8 74-104-218

MAGAZINES



VISION G2 ELITE 8 MAGAZINES

Use **AutoMag** magazine for 1 L or 2 L only testing.
User **SuperMag** magazine for interchangeable
150 mL, 250 mL (CSV) and 1 L testing.

2 CHOOSE TUBING HARNESS FOR PROBES



G. Tubing Harness, 3 ft, PTFE, 1/16 in. (required for Vessel-Mount Probes; extra harnesses required for 3-bath system, return to vessel, and Auto-Probes)
6-Sample 60-200-706
8-Sample 60-200-708

1 CHOOSE AUTOMAG OR SUPERMAG



For 1 L Elite 8 systems:

- A. AutoMag, 1 L (factory installed)**
(includes probe fittings)
74-107-010
- B. AutoMag 1 L (field installed)**
(upgrade to existing Vision G2 Elite 8 tester)
Built prior to June 2016 **74-107-011**
Built after May 2016 **74-107-051**

For 2 L Elite 8 High Stand systems:

- C. AutoMag, 2 L (factory installed)**
(includes probe fittings)
74-107-040
- D. AutoMag, 2 L (field installed)**
(upgrade to existing Vision G2 Elite 8 tester)
Built prior to June 2016 **74-107-041**
Built after May 2016 **74-107-052**

For combination 150 mL, 250 mL, and 1 L systems:

- E. SuperMag (factory installed)**
for 150 mL, CSV, 1 L (includes probe fittings)
74-107-020
- F. SuperMag (field installed)**
for 150 mL, CSV, 1 L (upgrade to existing Vision G2 Elite 8 tester)
Built prior to June 2016 **74-107-021**
Built after May 2016 **74-107-055**

Conversion Kit: AutoMag 1 L to 2 L
74-107-035

Conversion Kit: AutoMag to SuperMag
74-107-045

3 CHOOSE SAMPLING PROBES



Uses PE Tip Filters.

Auto-Probes are mounted directly in the magazine and reduce hydrodynamic interference by automatically exiting the vessels after sampling. Auto-Probes require a Tubing Harness for use with a magazine.

H. Auto-Probe for 1 L, 150 mL, CSV

1/8 in., Vision G2 (order 6 or 8; for 1 L requires AutoMag; for 150 mL or CSV, requires SuperMag plus Tubing Harness p/n 60-200-706/708)

Single Probe (PEEK) 74-105-307

Single Probe (SS) 74-105-337

Auto-Probe for 2 L

1/8 in., Vision G2 (order 6 or 8; requires AutoMag plus Tubing Harness p/n 60-200-706/708)

Single Probe (PEEK) 74-105-327

Single Probe (SS) 74-105-338

4 CHOOSE SECOND PROBE TYPE

After selecting Auto-Probes for your magazine's first probe position, choose either Digital Temperature Probes (DTPs) for automatic vessel temperature measurement or Recirculating Auto-Probes to return rinse media back into the vessel. Only one probe type can be used in your magazine's second probe position.

OR

DIGITAL TEMPERATURE PROBES

Digital Temperature Probes

Vision G2 AutoMag/SuperMag

Factory-installed (set/6) 74-104-219

Field-installed (set/6) 74-104-221

Digital Temperature Probe for all Vision Mags

(use for 7th and 8th position or as a replacement probe; circuit board not included)

Single Probe 74-104-210

RECIRCULATING AUTO- PROBES

Recirculating Auto-Probes with 6-Sample Tubing Harness, 1 L, PEEK, Vision G2 AutoMag/SuperMag

(for return to vessel; requires Auto-Probes; cannot be used simultaneously with Digital Temperature Probes)

Factory-installed 74-107-706

Field-installed 74-107-716

Recirculating Auto-Probes with 8-Sample Tubing Harness, 1 L, PEEK, Vision G2 AutoMag/SuperMag

(for return to vessel; requires Auto-Probes; cannot be used simultaneously with Digital Temperature Probes)

Factory-installed 74-107-708

Field-installed 74-107-718

AUTOSAMPLERS & COLLECTION

The Vision AutoPlus™ is a modern upgrade of the popular Hanson legacy AutoPlus autosampler. The Vision AutoPlus comes with a choice of 6 or 8 sampling channels, and DissoScan™ (1-bath) or Maximizer™ (up to 3 baths) models. Precision syringe pump mechanics, all-inert tubing and valves, and color touchscreen programming with up to 100 protocols are standard on each instrument.



VISION AUTOPLUS & AUTOFILL COLLECTOR

Choose DissoScan for single-bath-only system. Choose Maximizer for system accommodating up to three baths.

DissoScan

115/230 V, Vision G2

6-Sample System 61-101-016

8-Sample System 61-101-018

Maximizer

115/230 V, Vision G2

6-Sample System 61-101-006

8-Sample System 61-101-008

Q-Pak™ Self-Validation Guidelines

Vision G2 AutoPlus, IQ/OQ/PQ

61-108-005

Required for G2 AutoPlus multi-bath and network printer connection:

Ethernet Network Switch, 5-Port,

10/100 Mbps, 115/230 **91-215-050**
(requires LAN cable)

LAN cable

7 ft **91-211-036**

25 ft **91-211-035**

Sampler Firmware Upgrade Kit

Vision G2 (free firmware upgrades)

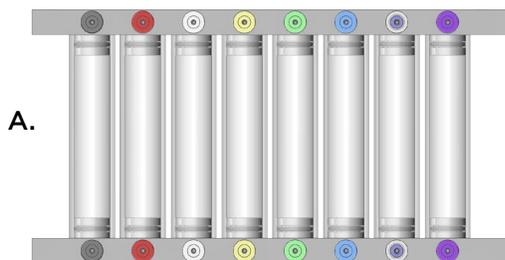
61-109-021

AutoFill Collector

115/230 V, Vision G2

61-201-001

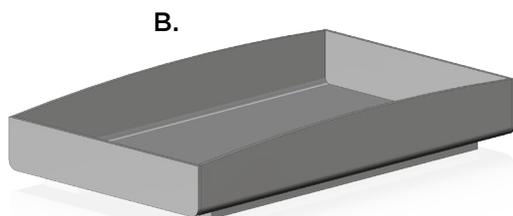
RETRIEVAL RESERVOIR



The AutoFill retrieval reservoir is an accessory add-on to the Vision AutoFill that eliminates sampling waste volume. The retrieval accessory allows rinse media to be directed back to the vessel after UV analysis and/or collection. Easy field retrofit.

- A. Retrieval Reservoir, AutoFill**
 Factory-installed **61-201-010**
 Field-installed **61-201-011**

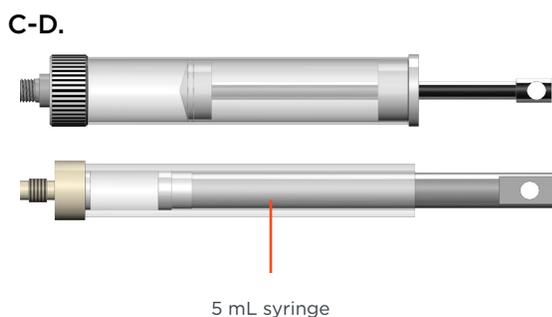
SAMPLER TRAY



A sampler tray is required for the Vision AutoPlus and Vision Microette if the Vision AutoFill is not purchased, or if the AutoFill will not sit on top of the Vision AutoPlus as recommended.

- B. Sampler Tray, Vision G2, AutoPlus, Vision Microette**
61-105-045

10 ML SYRINGE KITS



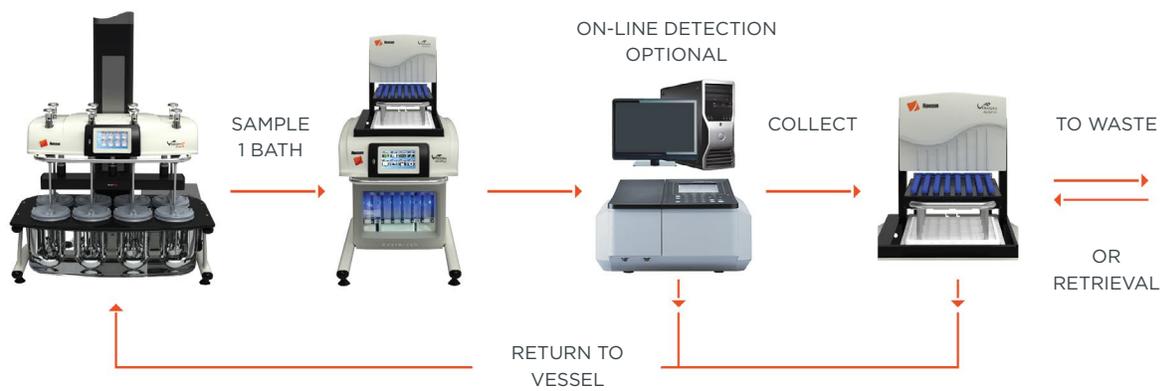
- C. 6-Sample, 10 mL Syringe Kit, Vision G2, AutoPlus**
 Factory-installed **61-107-056**
 Field-installed **61-107-066**
- D. 8-Sample, 10 mL Syringe Kit, Vision G2, AutoPlus**
 Factory-installed **61-107-058**
 Field-installed **61-107-068**

Not compatible with Vision Microette

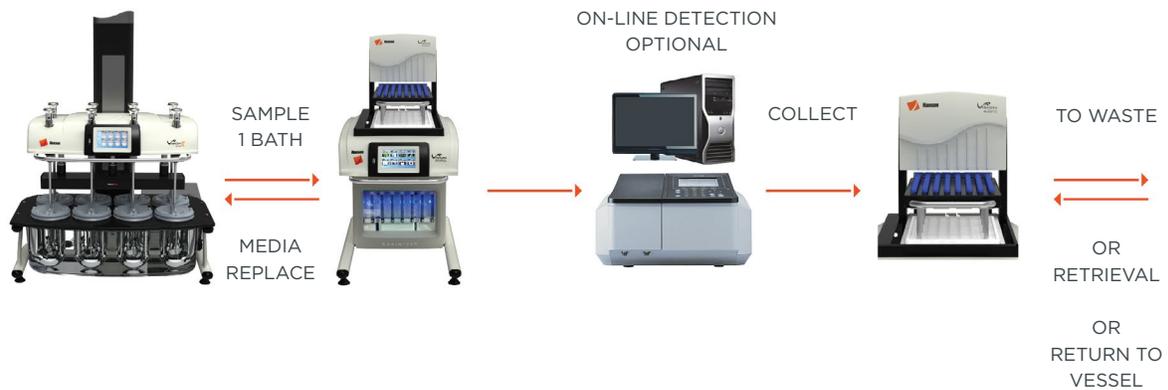
The 10 mL syringe (at top, shown above 5 mL syringe for comparison) is generally used only in special cases; consult Hanson with your requirements. 10 mL syringe kits are ordered separately and can be installed at the factory at the time of original order, in which case the standard 5 mL syringes will still be supplied in a separate box. 10 mL syringes are also available as a field-install kit. (Not compatible with Vision Microette.)

VISION AUTOPLUS AUTOSAMPLING SYSTEMS

1 1-BATH BASIC SYSTEM: DISSOSCAN & MAXIMIZER



2 1-BATH WITH MEDIA REPLACE: MAXIMIZER



Vision G2 dissolution test Instruments are designed for seamless integration, intuitive programming and operation, flexibility to handle a wide range of applications, with maximum throughput and productivity. Design your lab system to handle everything from basic 1-bath routines to extensive multi-bath testing. Collect samples for off-line analysis in UV-Vis, HPLC, or UPLC® detectors. Connect to a spectrophotometer multi-cell transport for on-line UV analysis.

3 2-BATH WITH MEDIA REPLACE: MAXIMIZER



4 3-BATH SYSTEM: MAXIMIZER



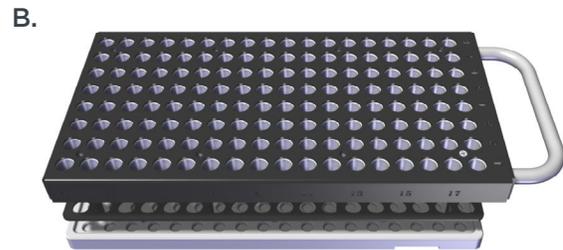
COLLECTION RACKS



AUTOFILL COLLECTION RACKS

Used with AutoFill Collector
115/230 V, Vision G2 **61-201-001**

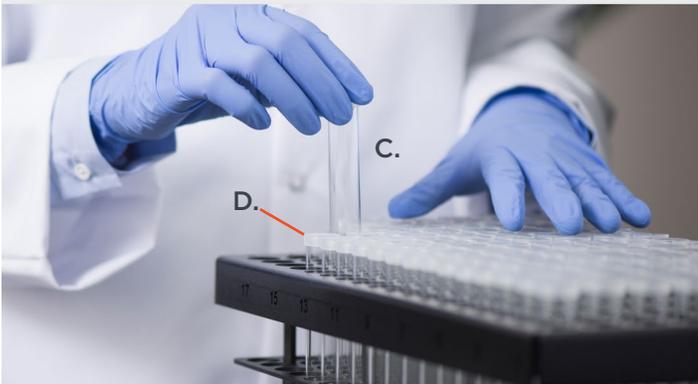
1 CHOOSE AUTOFILL RACK FOR TEST TUBES



A. Collection Rack for 16 x 100 mm Test Tubes
(18 rows)
61-201-052

B. Collection Rack for 13 x 100 mm Test Tubes
(18 rows)
61-201-057

2 CHOOSE TEST TUBES



C. Test Tubes
16 mm x 100 mm (250/pk) **91-030-051**
13 mm x 100 mm (250/pk) **27-800-633**

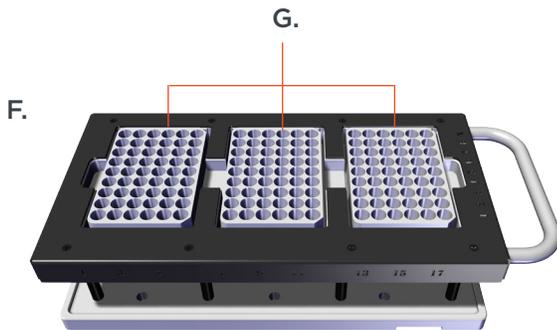
D. Reusable Evaporation Caps, 16 mm, Short Style
(100/pk) **61-107-003**

3 CHOOSE AUTOFILL RACK FOR VIALS



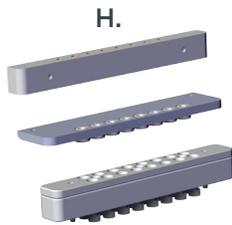
E. Collection Rack for 12 x 32 mm HPLC Vials
(21 rows)
61-201-053

For Shimadzu or Agilent HPLC systems, order F-H:



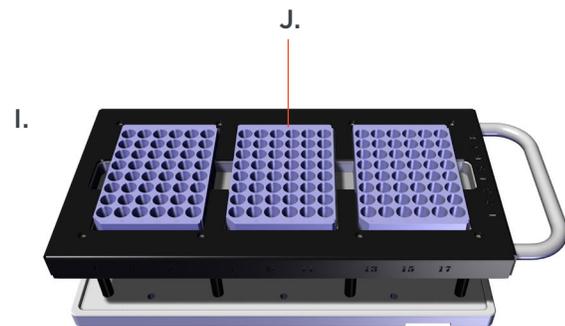
F. Collection Rack for Shimadzu/Agilent HPLC Trays (12 mm x 32 mm)
61-201-059

G. Shimadzu HPLC Vial Tray
(54 wells; each tray = 9 x 6 rows)
(3/pk) **91-030-161**



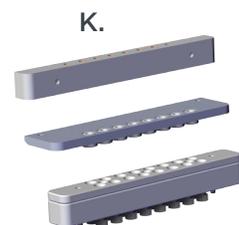
H. Needle Block Kit. For Shimadzu or Agilent HPLC Racks.
Factory-installed **61-201-024**
Field-installed **61-201-025**

For Waters Acquity® UPLC systems, order I-K:



I. Collection Rack for Waters Acquity UPLC Trays
(12 mm x 32 mm)
61-201-054

J. UPLC Vial Tray
(48 wells; each tray = 8 x 6 rows; requires 3 trays per single UPLC Rack p/n 61-201-054)
(1/pk) **91-030-159**



K. Needle Block Kit. For Waters UPLC Rack.
Factory-installed **61-201-014**
Field-installed **61-201-015**

4 CHOOSE VIALS

L. Vials w/ Pre-Cut Septum, HPLC, UPLC, 12 mm x 32 mm
(100/pk) **91-030-150**



ON-LINE UV-VIS CONFIGURATIONS

CLOSED LOOPED WITH PERI-PUMP

The closed-loop system configuration requires the following components:

1. One dissolution tester (sold separately);
2. Spectrophotometer system and flow cells; and
3. Closed-Loop Software and Accessories Kit.



DETECT & COLLECT SYSTEMS - 1, 2, OR 3 BATH

Detect & Collect configurations require the following components:

1. One, two, or three dissolution testers (sold separately);
2. AutoPlus autosampler with AutoFill fraction collector (sold separately);
3. Spectrophotometer system and flow cells; and
4. Detect & Collect Software and Accessories Kit for 1, 2, or 3 bath systems.



1 CHOOSE SPECTROPHOTOMETER AND FLOW CELLS

A.



HANSON UV-1800

The Hanson UV-1800 is a compact, double-beam UV-Vis spectrophotometer wrapped in a sleek form. The UV-1800 uses the Czerny-Turner mounting for its monochromator, and boasts the highest resolution in its class, a bright optical system, and a compact design. Like Vision instruments, the UV-1800 is USB-memory ready, which enables you to save measurement data to highly versatile USB memory, and perform data analysis printing using a PC.



Minimum PC Requirements for ARGUS/Dissolution

- Windows 7 or higher (32 and 64 bit).
- 1 GB RAM minimum
- 1280 x 1024 screen
- CD drive
- CPU speed >1 GHz
- 200 MB free disk space

A. Hanson UV-1800 UV-Vis Spectrophotometer System (includes spectrophotometer, high-speed USB 2.0 cable, and 8-cell positioner)
61-572-501

UV Flow Cell

1 mm **91-450-101**
2 mm **91-450-102**
5 mm **91-450-103**
10 mm **91-450-104**

2 CHOOSE CLOSED-LOOP SYSTEM KIT

Closed-Loop System Software and Accessories Kit (includes Ismatec Peri-Pump; Ethernet switch; all cables and tubing needed for single-bath closed-loop setup; ARGUS/Dissolution software licensed for single bath; and ARGUS software validation package (21 CFR Part 11 compliant).
61-572-104

Q-Pak™ Self-Validation Guidelines On-Line UV Systems

for Closed Loop w/ Peri-Pump **61-572-108**

3 CHOOSE DETECT & COLLECT SYSTEM KIT

Each kit contains an Ethernet switch and all tubing and cables needed to connect your tester(s), autosampler, and computer workstation; ARGUS/Dissolution software package licensed for the specified number of baths; and ARGUS software validation package (21 CFR Part 11 compliant).

Detect and Collect Software and Accessories Kit

Single-Bath **61-572-101**
Two-Bath **61-572-102**
Three-Bath **61-572-103**

Q-Pak™ Self-Validation Guidelines UV-1800 UV-Vis Spectrophotometer
IQ/OQ **61-572-505**

Client/server configurations are also available. Consult factory.

FILTER MANAGEMENT

For convenience and efficiency, the Vision G2 series of instruments offers several filter management options. With our fully automated AutoFilter™ Changer, filter change options are quickly programmed into the protocol and the system takes care of the rest. In systems where filter changes are done manually, the stationary filter block kit attached to the tester or to the autosampler provides an easy-to-access location for all sampling and filter-change operations.



1. STATIONARY FILTER KITS

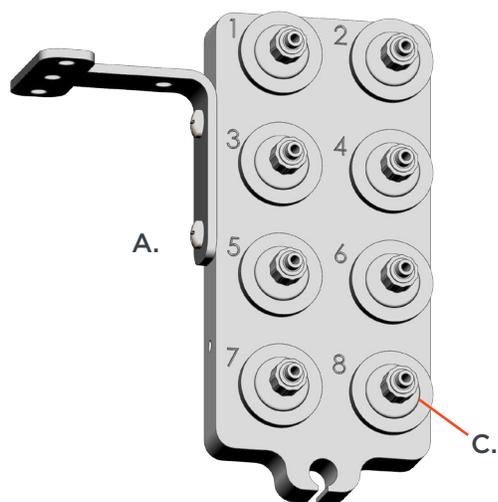
Stationary filter management solutions include the Filter Block Kit shown above as installed on a Vision Elite 8 tester, and the In-Line Filter Fitting Kit shown on the opposite page.



2. AUTOMATED FILTER MANAGEMENT

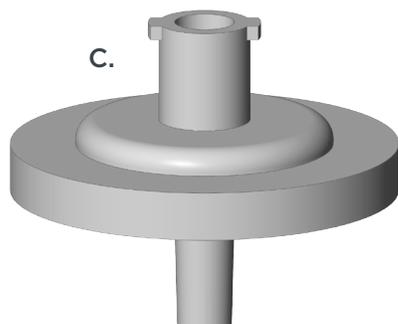
The Vision AutoFilter Changer automatically introduces 25 mm syringe filters into the fluidic path of your dissolution tester. A seamless addition to the Vision series of instruments, the AutoFilter Changer allows you to filter 8 samples at once and saves time and costs by giving you the ability to determine the life of your filters. See details on next page.

STATIONARY FILTER KITS



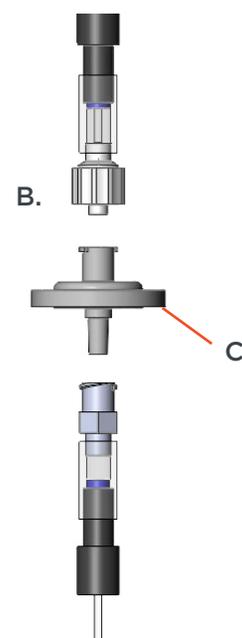
FILTER BLOCK KIT

For use with Elite 8 and AutoPlus, can also be attached to the Classic 6. The kit includes the block, attachment bracket, screws, all necessary male and female luer fittings, union fittings, and tubing harness. The filter block can be installed in a number of orientations (as shown above) to optimize work flow. In-line filters (C) are ordered separately.



IN-LINE FILTERS

25 mm diameter, 5 micron filters for use with in-line filter fitting system and/or filter block. Compatible with AutoFilter Changer.



IN-LINE FILTER FITTING KIT

For use with Elite 8, AutoPlus, and SR8-Plus. Kit includes all necessary couplers and luer fittings sufficient for eight fluid lines. In-line filters (C) are ordered separately.

1 CHOOSE FILTER KIT

A. Filter Block Kit for In-Line Filters
(uses in-line filters p/n 91-450-062; includes 8-sample tubing harness)
61-107-010

B. In-Line Filter Fitting Kit
SR8-Plus/AutoPlus (for in-line/syringe filters p/n 91-450-062)
(8/pk) **72-300-262**

2 CHOOSE FILTER

C. In-Line Filters, 5 micron
(for Filter Block Kit p/n 61-107-010 or In-Line Filter Fitting Kit p/n 72-300-262)
(75/pk) **91-450-062**

AUTOMATED FILTER MANAGEMENT

The Vision® AutoFilter™ Changer brings a new approach to automated filtration by giving you the power to determine the life of your filters. Rather than discard filters after one-time use, the Vision AutoFilter Changer enables you to automatically introduce filters to the fluidic path, remove them if desired, return them back into position, or completely discard them, all of which are programmable. Use the pull-through configuration to draw samples directly into the AutoFilter changer at syringe-vacuum pressure. Use the push-through configuration as shown on opposite page to drive samples through filters at much higher pressures.



VISION AUTOFILTER CHANGER

Automatic insertion and removal of filters from fluidic path, filters up to 8 samples simultaneously. Compatible with a broad variety of 25 mm syringe filters.

Vision AutoFilter Changer, 115/230 V **43-101-008**

Q-Pak™ Self-Validation Guidelines
AutoFilter Changer, IQ/OQ **43-108-005**

AUTOFILTER CHANGER



DISSOLUTION TESTERS
 DISSOLUTION AUTOMATION
 DISSOLUTION CONSUMABLES
 MEDIA HANDLING
 DIFFUSION TESTING
 DIFFUSION AUTOMATION
 PHYSICAL TESTING
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 LEGACY ACCESSORIES
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PUSH-THROUGH CONFIGURATION (Recommended)



PULL-THROUGH CONFIGURATION



PROTOCOL MANAGER™ DESKTOP SOFTWARE

FAST, EASY, DRAG-AND-DROP PROTOCOL MANAGEMENT

Dissolution labs running Teledyne Hanson Vision G2 instruments can now manage Teledyne Hanson protocols more efficiently than ever before. Teledyne Hanson's new Protocol Manager™ desktop software eliminates all connectivity and storage limits by connecting your Vision G2 systems to a centralized protocol database and a spacious, easy to use interface, with unlimited capacity, drag-and-drop simplicity, and increased support for 21 CFR Part 11 compliance.

Protocol Manager Desktop Software **81-400-806**

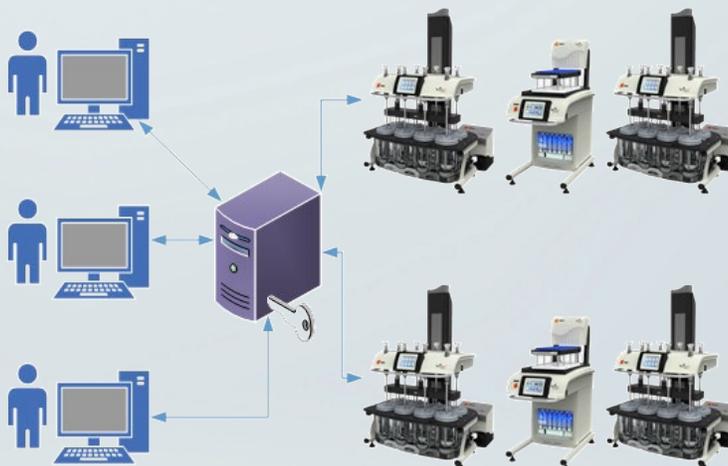
DATA INTEGRITY AND 21 CFR PART 11 COMPLIANCE

- Data transfers to and from instruments are validated by local network controls
- Test reports are digitized, documented with dual electronic signatures and automatically archived.
- Audit trail records all changes to permissions and protocols, including what was changed, when, and by whom.
- Archived test results cannot be deleted or altered; deleted protocols are logged in the audit trail.
- On any deleted protocol the version stored with the archived test run is maintained.



NETWORKED PRODUCTIVITY

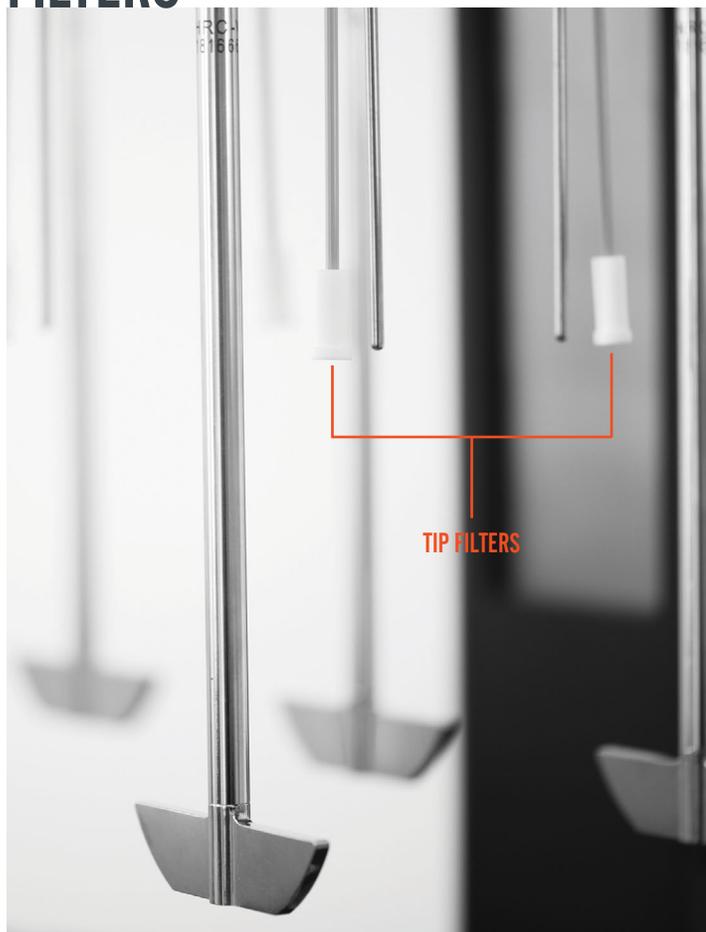
- Unlimited number of instruments, protocols, test reports, groups, and authorized users.
- Add an instrument simply by entering its serial number and IP address.
- Protocol Manager automatically detects all system components and characteristics.
- Protocol conflicts are rapidly resolved through illustrated, context-sensitive help.
- Accepts thousands of characters per protocol with all fields searchable and filterable.





DISSOLUTION CONSUMABLES

FILTERS



Porous Polyethylene (PE) is 100% inert in all applications and meets all current US FDA and USP guidelines.

1 TIP FILTERS

Tip Filters, 1 micron, PE, 1/8 in.
(100/pk) **27-101-087**
(1,000/pk) **27-101-097**

Tip Filters, 4 micron, PE, 1/8 in.
(100/pk) **27-101-088**
(1,000/pk) **27-101-098**

Tip Filters, 10 micron, PE, 1/8 in.
(100/pk) **27-101-074**
(1,000/pk) **27-101-091**

Tip Filters, 35 micron, PE, 1/8 in.
(100/pk) **27-101-085**
(1,000/pk) **27-101-095**

Tip Filters, 45 micron, PE, 1/8 in.
(100/pk) **27-101-089**

Tip Filters, 70 micron, PE, 1/8 in.
(100/pk) **27-101-082**
(1,000/pk) **27-101-092**

Tip Filters, 10 micron, PE, 1/16 in.
(100/pk) **27-101-083**
(1,000/pk) **27-101-093**

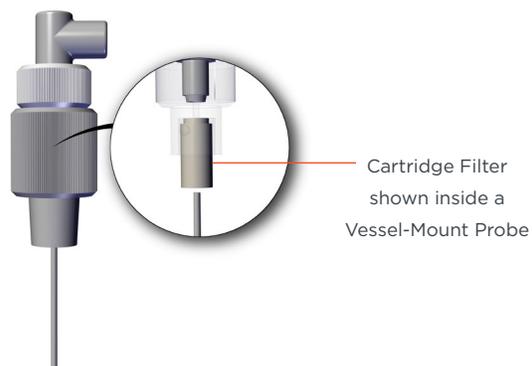
Tip Filters, 20 micron, PE, 1/16 in.
(for Sample & Return Probes only)
(100/pk) **27-101-103**

Tip Filters, 35 micron, PE, 1/16 in.
(100/pk) **27-101-086**
(1,000/pk) **27-101-096**

Tip Filters, 45 micron, PE, 1/16 in.
(100/pk) **27-101-090**

Tip Filters, 70 micron, PE 1/16 in.
(100/pk) **27-101-084**
(1,000/pk) **27-101-094**

2 CARTRIDGE FILTERS



Cartridge Filters, 10 micron, PE, Vision
(100/pk) **74-104-301**
(1000/pk) **74-104-302**

Cartridge Filters, 35 micron, PE, Vision
(100/pk) **74-104-303**
(1000/pk) **74-104-304**

Cartridge Filters, 70 micron, PE, Vision
(100/pk) **74-104-307**
(1000/pk) **74-104-308**

3 IN-LINE/SYRINGE FILTERS

In-Line Filters, 5 micron
(for Filter Block Kit p/n 61-107-010 or In-Line Filter Fitting Kit p/n 72-300-262)
(75/pk) **91-450-062**

For Vision manual sampling cannulas, see page 9 or 11.
For SR8-Plus manual sampling cannulas, see page 89.



Sinker loaded into an Easi-Lock ADD cover for automatic dosage delivery.

SINKERS

- A. Japanese Pharmacopoeia Cage Sinker, 316 SS**
95-590-026
- B. 3-Prong Sinker**
95-590-025
- C. Spiral Uncoated Sinker, 316 SS**
.84 in. (inside length) x .39 in. (i.d.)
95-590-024
- D. Spiral Coated Sinker, PTFE**
100% inert epoxy; .84 in. (inside length) x .37 in. (i.d.)
95-590-021
- Spiral Uncoated Sinker, 316 SS**
(.84 in. (inside length) x .37 in. (i.d.))
95-590-022
- E. Spiral Coated Sinker, PTFE**
100% inert epoxy; .84 in. (inside length) x .39 in. (i.d.)
95-590-023
- F. Sinkers (wt 1.3 g; 9.5 mm x 25 mm capacity)**
(6/pk) **65-190-012**
(12/pk) **65-190-013**
- Wire, 316 SS (50 ft roll) (wire to sink capsules)**
65-700-316





MEDIA HANDLING

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TESTERS

MEDIA PREPARATION

The Media-Mate™ Plus is one of the most effective tools in ensuring successful Performance Verification Tests (PVT). It exceeds USP / US FDA recommended media deaeration specifications and saves time by dispensing media into 6 or 7 vessels simultaneously. By significantly reducing dissolved oxygen levels, it helps facilitate successful passage of PVT tests by eliminating test variability caused by more sensitive Prednisone tablets.



MEDIA-MATE PLUS

Media-Mate Plus, 10-40 L
115 V **25-710-101**
230 V **25-710-102**

Q-Pak™ Self-Validation
Guidelines for Media-Mate Plus
IQ/OQ/PQ **25-710-803**

MEDIA-MATE PLUS™ FEATURES

- Preheats, filters, deaerates, and volumetrically dispenses media in less than 5 minutes
- Delivers media to 6 or 7 vessels simultaneously
- Easy adjustments for precise volumetric dispensing with $\pm 1\%$ accuracy
- Mobile, ergonomic cart for easy use around the lab
- Convenient retractable power cord
- Measuring vessels made with corrosion-resistant parts
- Compatible with nearly all dissolution testers
- USP <711> and <1092> compliant
- Full compliance to USP Toolkit (dissolved oxygen below 6 ppm)
- The most important tool for a successful PVT



The easy-to-use controls on the Media-Mate panel allow one push to initiate a complete media measurement, deaeration, and dispense cycle, filling all 6 or 7 dissolution vessels in less than 5 minutes.



Volume change adjustment provides quick and easy settings from 250 mL to 1,000 mL in 50 mL increments. Rapidly fill 6 or 7 vessels in Hanson, Agilent, VanKel, Distek, Erweka, and other brands of dissolution testers.

Interchangeable pre-heat tanks (10-40 L) can be conveniently dedicated to different media and buffers. Order an extra tank, heater, and temperature control for this purpose.

MEDIA-MATE PLUS ACCESSORIES

Tank, Heater, and Temperature Control
115 V **25-710-115**
230 V **25-710-116**

Temperature Control only
115 V **25-710-125**
230 V **25-710-126**

Heater Assembly only
115 V **25-710-130**
230 V **25-710-131**

Single Vessel Filler
25-710-415

Media Filler Hose Extension w/ Filter
(draws media from other source)
11-000-004

Filter Cartridge for Tank,
Polypropylene, 5 micron, (5/pk)
25-710-723

Low-Volume Tank Assembly
25-710-442

Low-Volume Tank Upgrade Kit
25-710-731

Fill Tube Upgrade Kit
25-710-733

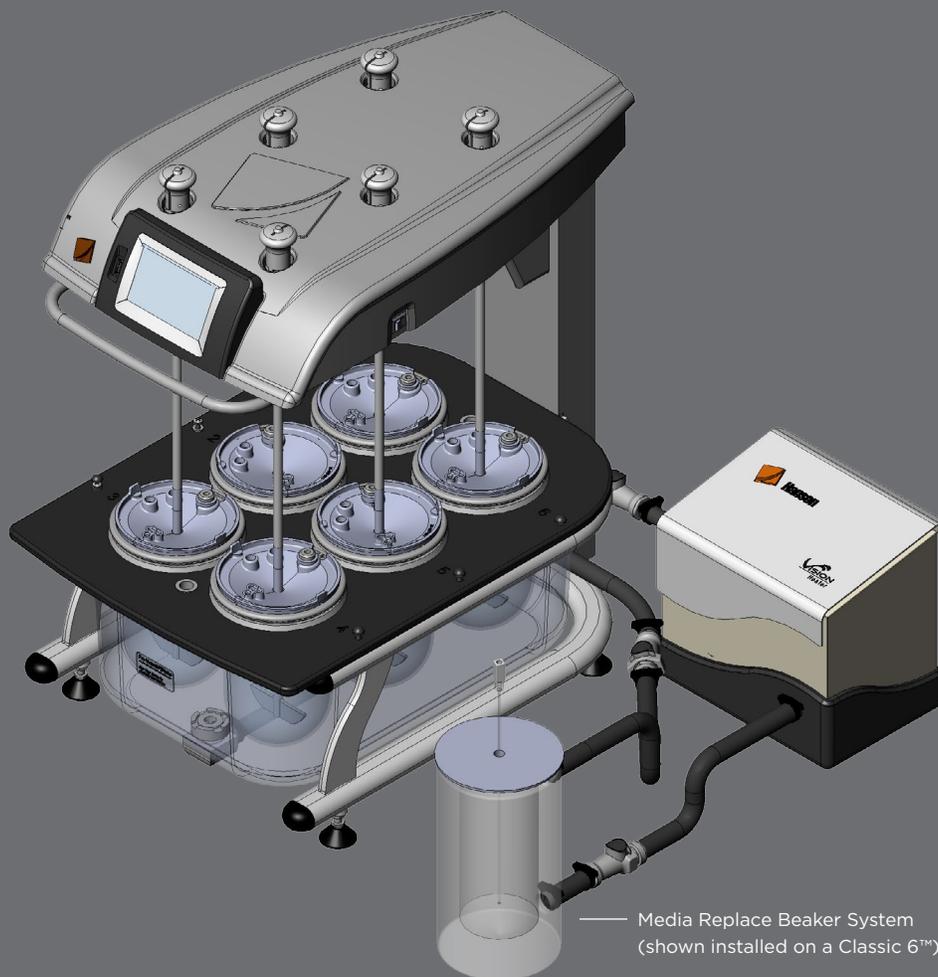
Dispense Bar Assembly for Sotax AT7
25-710-113

Calibration Gauge Set, Media-Mate Plus
(required for fine volume adjustment)
91-902-045

Calibration Kit, Media-Mate Plus
(includes 8 Plastic Vessels (1 L), 8-Position Vessel Carrier, and Calibration Gauge Set)
25-710-705

Base Plate Replacement Kit, Media-Mate Plus
25-710-726

MEDIA REPLACE BEAKER



Media Replace Beaker System
(shown installed on a Classic 6™)

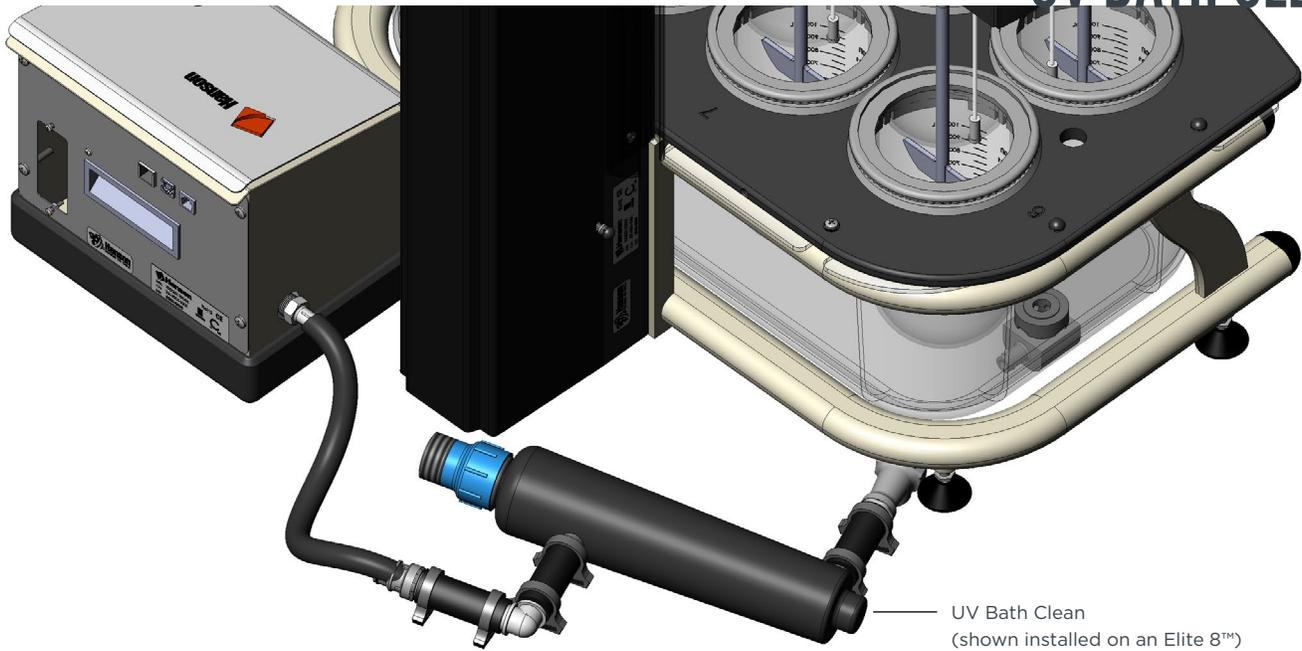
The Media Replace Beaker system is an optional accessory available for a new or existing Classic 6 dissolution tester. It allows the Classic 6 to simultaneously warm an additional one liter of media while performing a six-sample dissolution test. The warmed media can then be replaced either manually into the dissolution vessels or automatically using the Vision AutoPlus autosampler.

The Media Replace Beaker system consists of a jacketed beaker that warms media to the intended test media temperature. The two ports in the beaker's jacket connect it to both the Classic 6 waterbath and Vision Heater, which allows warmed water to continuously flow through the entire system, creating a stabilized temperature environment for media.

FEATURES:

- Holds 1 L of solution
- Adds a seventh position for warmed media
- Jacketed exterior keeps media warm for immediate use during your test
- Comes complete with a cover and 6 probes to connect to your Vision® AutoPlus™
- Includes all the tubing and quick-disconnect fittings to connect to your Classic 6™
- Field retrofit option available

Media Replace Beaker System, Classic 6
(includes beaker, beaker cover, tubing, and six probes)
74-207-015



UV Bath Clean
(shown installed on an Elite 8™)

Maintain clear water in your dissolution waterbath for months on end with the UV Bath Clean. The UV Bath Clean is a non-chemical system that incorporates an Aqua® Ultraviolet sterilizer into your waterbath's circulation system. The sterilizer contains a UV lamp that safely emits a germicidal ray that alters or disrupts the DNA or RNA of single-celled organisms flowing through your waterbath's circulation system. When proper procedures are followed, the UV Bath Clean can reduce waterbath cleaning by 6 months or more. The UV Bath Clean is compatible with all Vision dissolution testers.

FEATURES:

- Increases instrument uptime resulting in higher throughput
- Cuts down on the use of costly, high purity water
- Effectively lowers water's bacterial count
- Enhances visual observation of the dissolution process
- Cap glows to tell you when lamp is on
- Does not require chemicals that can destroy waterbath's tubing and pumps

UV Bath Clean
115 V **74-107-047**
230 V **74-107-048**

Bulb Replacement,
8 Watt **91-500-117**



AFTER MONTHS OF NO CLEANING



AFTER 6 MONTHS WITH UV BATH CLEAN



PRECISION PERFORMANCE
VISION[®] INSTRUMENTS



DIFFUSION TESTING

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VERTICAL DIFFUSION CELL (VDC)

The Hanson Vertical Diffusion Cell (VDC) is an ideal tool for the study, development, and quality control of topical preparations. Made of inert borosilicate glass, the VDC is designed for accuracy and ease of use with over thirty years of rigorous industry, university, and regulatory application and collaboration. Hanson VDCs are compatible with a number of membrane types including synthetic, animal skin, cadaver skin, and Strat-M® membranes. Hanson VDCs include individualized serial numbers and are readily available in three convenient sizes.



CUSTOM APPLICATIONS

Novel dosage forms are being researched everyday throughout various scientific industries. Teledyne Hanson's team of development engineers can design special cells and cell tops to accommodate custom applications such as in-situ fiber optics, non-viscous dosage forms, permeation through fingernails and toenails, iontophoresis and much more. Hanson can support your unique application.

VERTICAL DIFFUSION TEST SYSTEM

The Hanson **6-Cell Manual Diffusion Test System** is a start-up vertical diffusion cell test system ideal for manual use and sampling. It is adaptable for later addition of the Vision Microette autosampler. See following pages for vertical diffusion cell options.



6-CELL MANUAL DIFFUSION TEST SYSTEM

A start-up vertical diffusion cell test system ideal for manual use and sampling. It is adaptable for later addition of the Vision Microette autosampler.

6-Cell Diffusion Drive & Manual System Kit 59-104-001

The 6 Cell Diffusion Drive and Manual System Kit includes:

- Cell stand with power supply, magnetic drive, and stirring control
- Circulator flow indicator
- Circulator tubing
- Jacketed beaker
- Sampling probe
- Sampling syringe
- Cell volume evaluation kit
- Check valves and fittings (7)

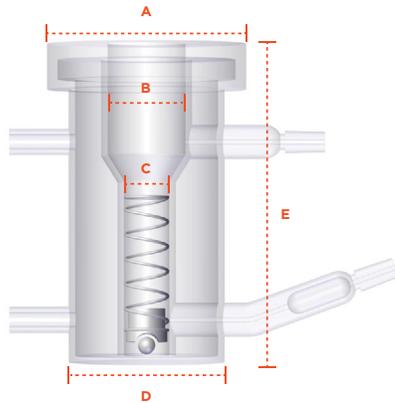
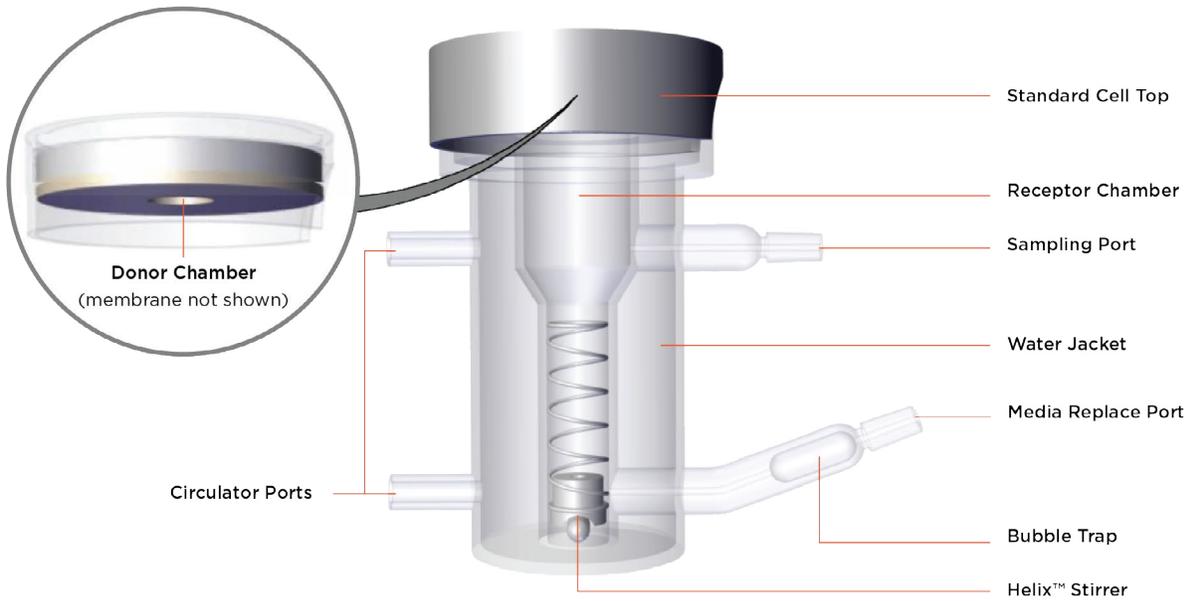
To complete the startup system, additional components are ordered separately:

- Vertical diffusion cell assemblies (6)
- Circulating waterbath 115 V or 240 V
- Startup tool kit 115 V or 230 V
- Check valves (spares, pack of 100)
- Vials
- Membranes

Q-Pak™ Self-Validation Guidelines Manual Diffusion Cell System

IQ/OQ/PQ **58-001-815**

USP <1724> "MODEL A" VDC BY HANSON



	Cell Type		
	4 mL	7 mL	12 mL
A	38 mm	38 mm	38 mm
B	9 mm	15 mm	15 mm
C	9 mm	9 mm	15 mm
D	30 mm	30 mm	30 mm
E	61 mm	61 mm	61 mm

Hanson VDCs are available in the **three standard sizes** in amber or clear glass, and in **custom sizes upon request**. The 7 mL "Standard" VDC is **recommended by the US FDA** for topicals.

DIFFUSION SYSTEM ACCESSORIES

Circulating Waterbath
115 V **58-001-430**
240 V **58-001-431**

Startup Tool Kit
The Startup Tool Kit provides all the tools needed to prepare vertical diffusion cells for a diffusion test. It includes an applicator to apply dosages to the cell top and cleaning tools that conveniently extract media from the cells without the need to remove the cells from the stand.
115 V **58-001-721**
230 V **58-001-722**

Check Valves for Manual Diffusion Cell System
(100/pk) **58-001-716**

Applicator/Mixer, Polyethylene **91-030-138**

Vials w/ Pre-Cut Septum, HPLC, UPLC, 12 mm x 32 mm
(100/pk) **91-030-150**

Membrane for Cells, 25 mm diam x 0.45 micron
(filter media: hydrophilic polysulfone)
(100/pk) **91-030-062**

Manual Sampling Syringe, 1 mL, Manual Diffusion
91-030-155

Cell Cleaning Adapter Kit
59-107-012

Needle Cleaning Adapter Kit
(6/pk) **59-107-011**



VERTICAL DIFFUSION CELL USP <1724>

1. Standard VDC Assemblies
2. Double-Thick VDC Assemblies

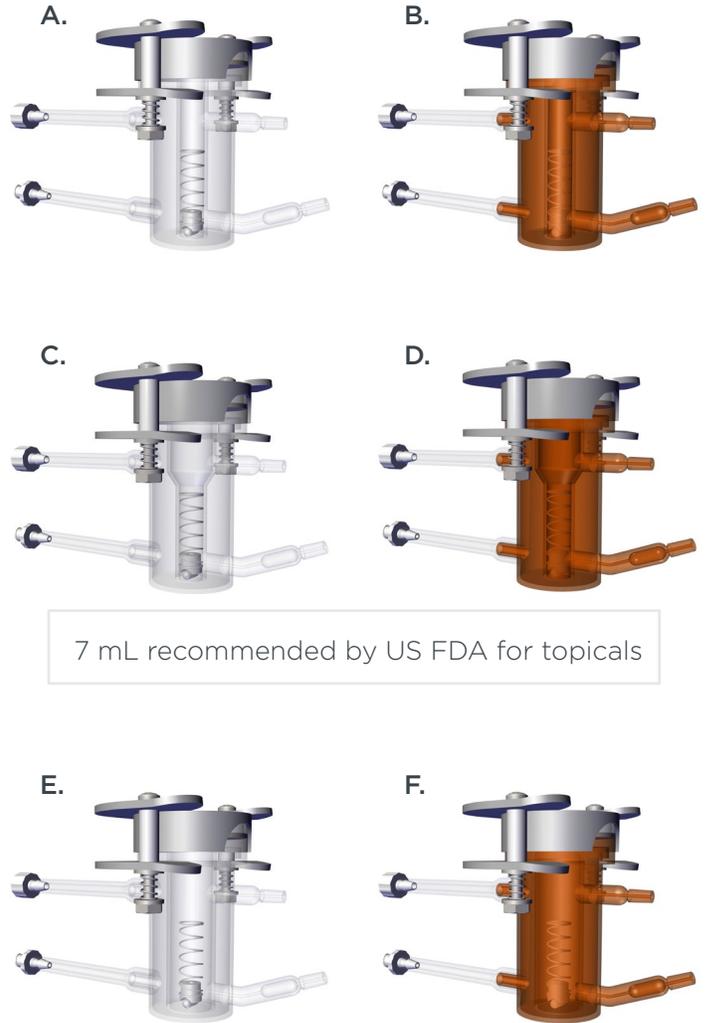
STANDARD VDC ASSEMBLY

The standard VDC assembly includes the cell top, clamp, dosage wafer, and helix kit.

A-B. Vertical Diffusion Cell, 4 mL vol, "Small"
9 mm orifice (serialized)
Clear **58-001-451**
Amber **58-001-452**

C-D. Vertical Diffusion Cell, 7 mL vol, "Standard"
15 mm orifice (serialized)
Clear **58-001-455**
Amber **58-001-456**

E-F. Vertical Diffusion Cell, 12 mL vol, "Large"
15 mm orifice (serialized)
Clear **58-001-459**
Amber **58-001-460**



STANDARD VDC SPARE PARTS

Helix Kit
for 4 mL and 7 mL VDCs **58-001-467**
for 12 mL VDCs **58-001-468**

Vertical Diffusion Cell, 4 mL vol (cell only)
Clear **58-001-453**
Amber **58-001-454**

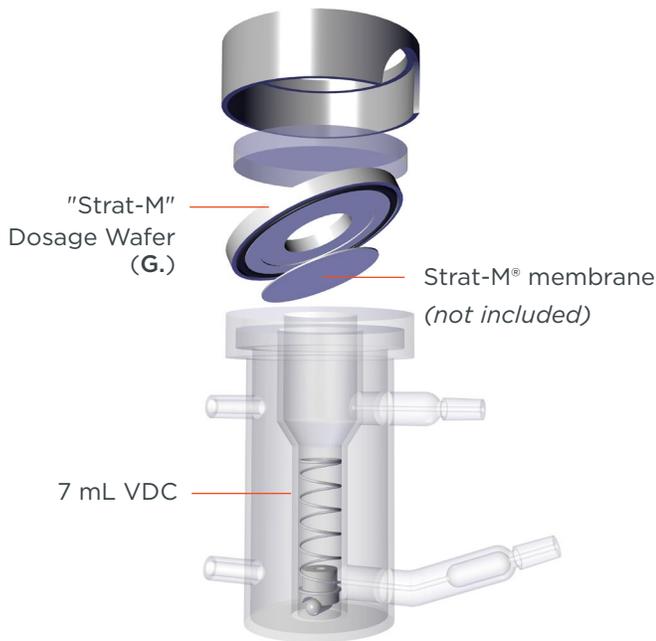
Vertical Diffusion Cell, 7 mL vol (cell only)
Clear **58-001-457**
Amber **58-001-458**

Vertical Diffusion Cell, 12 mL vol (cell only)
Clear **58-001-461**
Amber **58-001-462**

G. Clamp Assembly
58-001-450



DOUBLE-THICK VDC ASSEMBLY



Double-thick dosage wafer and clamp assembly are included in the following VDC assemblies.

"Strat-M" Vertical Diffusion Cell, 4 mL vol,
9 mm orifice, (serialized)
Clear **59-104-101**
Amber **59-104-102**

"Strat-M" Vertical Diffusion Cell, 7 mL vol,
15 mm orifice (serialized)
Clear **59-104-121**
Amber **59-104-122**

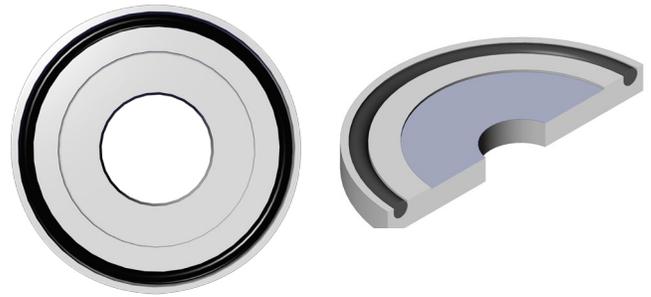
"Strat-M" Vertical Diffusion Cell, 12 mL vol,
15 mm orifice, (serialized)
Clear **59-104-141**
Amber **59-104-142**

"No-Leak" Vertical Diffusion Cell, 4 mL vol,
9 mm orifice, (serialized)
Clear **59-104-111**
Amber **59-104-112**

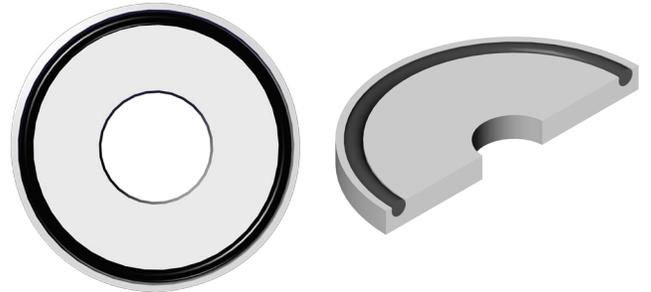
"No-Leak" Vertical Diffusion Cell, 7 mL vol,
15 mm orifice (serialized)
Clear **59-104-131**
Amber **59-104-132**

"No-Leak" Vertical Diffusion Cell, 12 mL vol,
15 mm orifice, (serialized)
Clear **59-104-151**
Amber **59-104-152**

DOUBLE-THICK SPARE PARTS



"Strat-M" Dosage Wafer, Double Thick w/ O-Ring,
9 x 3 mm (for 4 mL VDCs) **59-104-110**
15 x 3 mm (for 7 mL and 12 mL VDCs) **59-104-120**
The Hanson "Strat-M" dosage wafer is specifically designed to readily accommodate the EMD Millipore 25 mm Strat-M® membrane. The wafer is double thick, with a 3 mm deep dosage area, and also includes a unique and proprietary Hanson O-ring design to effectively secure the Strat-M® membrane in the VDC device without any leakage problem.



"No-Leak" Dosage Wafer, Double Thick w/ O-Ring,
9 x 3 mm (for 4 mL VDCs) **59-104-130**
15 x 3 mm (for 7 mL and 12 mL VDCs) **59-104-140**
A similar double thick dosage wafer for use with other synthetic membrane types is also available. The "No-Leak" dosage wafer includes a similar O-ring seal to minimize any leakage problems that analysts have experienced when working with the standard VDC. The double thick dosage area (3 mm deep) accommodates the infinite dose requirement for semisolid diffusion testing of creams, ointments, and gels.

Clamp Assembly for Double-Thick Dosage Wafer
(required for use with double-thick dosage wafers)
59-104-150

EMD Millipore and Strat-M are registered trademarks of Merck KGaA, Darmstadt, Germany.

VDC TOPS



STANDARD CELL TOP

The standard cell top (included with standard VDC assembly) is occluded to minimize back diffusion during the sampling process. A membrane is applied to one side of the dosage wafer, and the dosage is applied to the opposite side in the donor chamber. This cell top is best used for viscous materials such as creams, ointments, and gels.

STANDARD TOP SPARE PARTS

Cell Ring
58-001-507

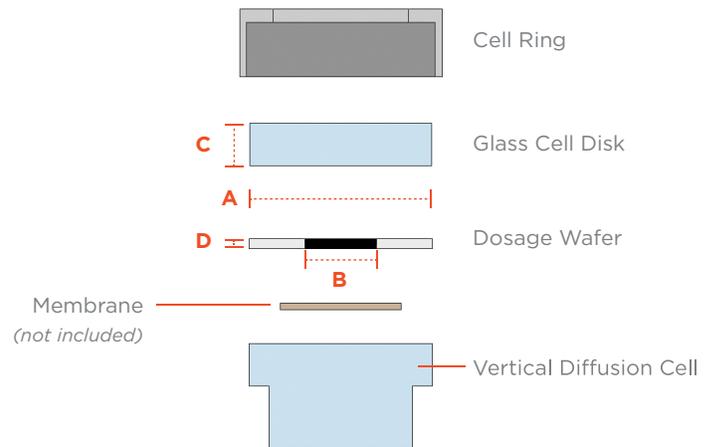
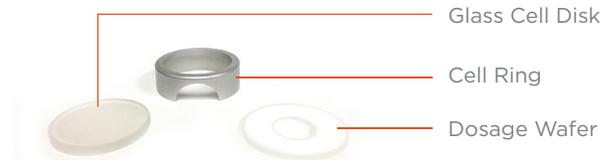
Glass Cell Disk
58-001-506

Dosage Wafer
9 x 1.5 mm (for 4 mL VDCs) 58-001-518
15 x 1.5 mm (for 7 mL and 12 mL VDCs) 58-001-521

Clamp Assembly
58-001-450



STANDARD CELL TOP COMPONENTS



	Cell Type		
	4 mL	7 mL	12 mL
A	38 mm	38 mm	38 mm
B	9 mm	15 mm	15 mm
C	4 mm	4 mm	4 mm
D	1.5 mm	1.5 mm	1.5 mm



OPEN CELL TOP

The open cell top with cap is easily adaptable to the Hanson VDC. The cap can be removed between sampling time points to add or remove material. It is best used for less viscous materials because the cell top can be assembled prior to applying the dose. The larger donor chamber also allows more donor material to be used.

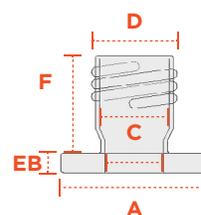
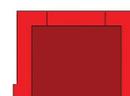
OPEN CELL TOP

Open Cell Top w/ Cap, 9 mm, Glass
(2 mL capacity; for 4 mL VDCs)
Clear **58-001-530**
Amber **58-001-548**

Open Cell Top w/ Cap, 15 mm, Glass
(6 mL capacity; for 7 mL and 12 mL VDCs)
Clear **58-001-531**
Amber **58-001-549**



OPEN CELL TOP WITH CAP COMPONENTS



Membrane
(not included)



	Cell Type		
	4 mL	7 mL	12 mL
A	38 mm	38 mm	38 mm
B	9 mm	15 mm	15 mm
C	9 mm	18 mm	18 mm
D	12 mm	22 mm	22 mm
E	6 mm	6 mm	6 mm
F	30 mm	30 mm	30 mm

VDC SPECIAL APPLICATIONS



FIBER OPTIC CELL

The fiber optic diffusion cell is a special modification of the standard VDC designed to accommodate a fiber optic probe for *in situ* drug analysis. The cell includes a 15 mm orifice, nominal 12 mL receptor volume, and a special glass port to accommodate insertion of a fiber optic probe. Fiber optic probes and UV systems are purchased separately (e.g. Pion Inc.)

FIBER OPTIC CELL

Fiber Optic Diffusion Cell, 15 mm
(Special Order-min order 6) (Fiber Optic Probe not included)
Clear **58-001-472**
Amber **58-001-473**



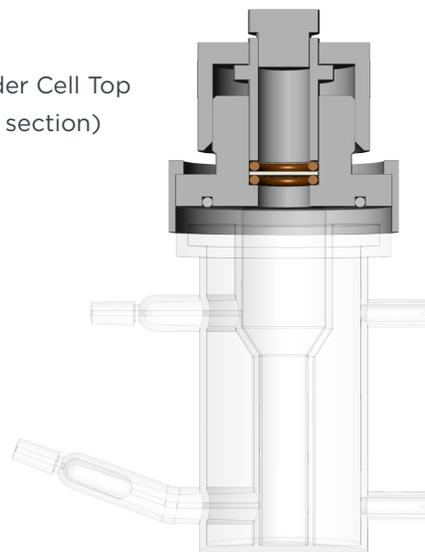
NAIL HOLDER CELL TOP

The nail holder cell top is designed to hold a sample finger or toe nail for testing related semisolid drug formulations. The cell top is made of inert PEEK material and includes a dosage area cavity to apply the semisolid formulation on the nail. These special cell tops are sold separately and may be used on any of the standard Hanson VDCs.

NAIL HOLDER CELL TOP

Nail Holder Cell Top
(Special Order-min order 6) (cell not included)
58-001-471

Nail Holder Cell Top
(cross section)



PATCH SUPPORT



PATCH SUPPORT TOP

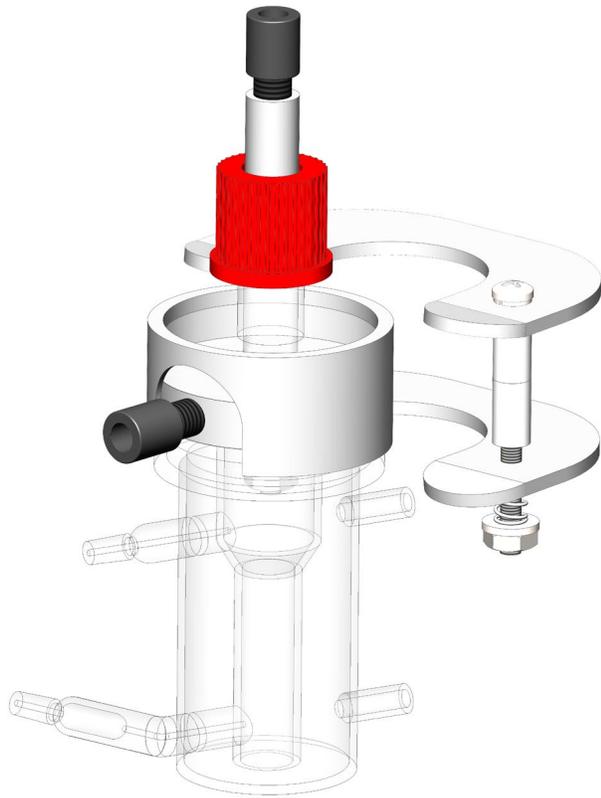
The patch support top is designed for testing transdermal patches on the Vertical Diffusion Cell (VDC) apparatus. The patch support is made of inert PVC material, and holds the transdermal patch firmly in place while allowing air circulation at the top of the patch. Patch support tops are sold separately and may be used on any of the standard Hanson VDCs.



Patch Support

(replaces Glass Cell Disk and Dosage Wafer to allow for air circulation at top of patch)
58-001-571

CUSTOM DESIGNS



IONTOPHORESIS TOP

The iontophoresis cell top is a special designed top to accommodate electric iontophoresis probes (+ and -) to be placed above and below the cell membrane in the VDC. These cell top configurations are sold separately and work on standard Hanson VDCs. Iontophoresis probes and system controls are purchased separately by customer.



HORIZONTAL DIFFUSION CELL (HDC)

The Hanson horizontal diffusion cell (HDC) system consists of two half-cell compartments, sitting side-by-side with a separating membrane between them, held together by an appropriate clamping device, mounted on a cell drive platform. Custom modifications are available upon request, including: amberization, special cell volume and orifice sizes, extra porting for iontophoresis, and more.



DIFFUSION AUTOMATION

DISSOLUTION TESTERS
DISSOLUTION AUTOMATION
DISSOLUTION CONSUMABLES
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AUTOMATED VDC TEST SYSTEM

The Vision Microette system automates sampling from groups of six Hanson Vertical Diffusion Cells (VDCs) for extensive unattended tests and handles surfactants, saline, and hydroalcoholic receptor solutions. The Vision Microette is an ideal research and quality control tool for the study of topical and transdermal drug delivery formulations, as well as ophthalmics, cosmetics, skin care products, and pesticides.

The Vision Microette includes two models: a versatile “**Multi-Group**” system that can automate up to three groups of VDCs, and a lower cost “**Single-Group**” system that automates a single group of VDCs.

US Patents; CE / CSA / RoHS compliant



VISION MICROETTE

6 CELLS SINGLE-GROUP SETUP

Vision Microette Single-Group setup automates sampling from 1 group of 6 VDCs (6 cells total).



12 CELLS MULTI-GROUP SETUP

Vision Microette Multi-Group setup automates sampling from 2 groups of 6 VDCs (12 cells total).



18 CELLS MULTI-GROUP SETUP

Vision Microette Multi-Group setup automates sampling from 3 groups of 6 VDCs (18 cells total).

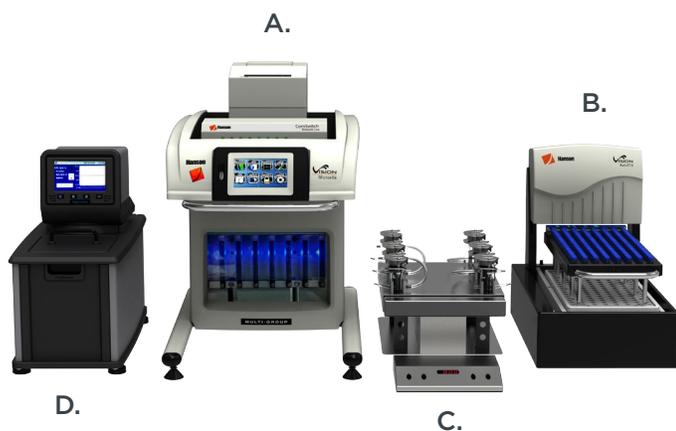




SYSTEM COMPONENTS

The Vision Microette automated test system requires each of the following system components and comes with optional Q-Pak self-validation guidelines. VDC choices ordered separately.

- A. Vision Microette Autosampler**
Single-Group **59-101-003**
Multi-Group **59-101-002**
- B. AutoFill Collector**, 115/230 V, Vision G2
61-201-001
- C. 6-Cell Drive System**
MicroettePlus/Vision Microette
58-001-420
- D. Programmable Circulating Waterbath**,
Vision Microette (requires firmware ver. 2.11)
115 V **58-001-430**
230 V **58-001-431**



EXPANSION KIT

To expand the multi-group system from a single group of VDCs, order a multi-group expansion kit for each additional 6-cell drive system (C.), Vision AutoFill Collector (B.), and 6 VDCs.

Multi-Group Expansion Kit
(order 1 per additional 6-cell group)
58-001-720

Q-Pak™ Self-Validation Guidelines
Vision Microette, IQ/OQ/PQ **59-108-005**

Required for multi-bath and network printer connection:

Ethernet Network Switch, 5-Port, 10/100 Mbps,
115/230 **91-215-050** (requires LAN cable below)

LAN cable
7 ft **91-211-036**
25 ft **91-211-035**

COLLECTION ACCESSORIES



AUTOFILL COLLECTOR

AutoFill Collector 115/230 V, Vision G2
61-201-00

AUTOFILL RACK FOR VIALS

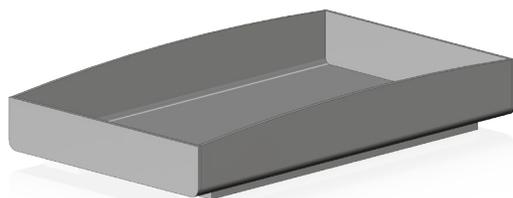


Collection Rack for 12 x 32 mm HPLC Vials
AutoFill (21 rows)
61-201-053

VIALS



Vials w/ Pre-Cut Septum, HPLC, UPLC, 12 mm x
32 mm
(100/pk) 91-030-150



SAMPLER TRAY

A sampler tray is required for the Vision Microette if the Vision AutoFill is not purchased, or if the AutoFill will not sit on top of the Vision Microette.

Sampler Tray, Vision G2, AutoPlus, Vision
Microette
61-105-045





PHYSICAL TESTING

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TABLET DISINTEGRATION

The new Phase One™ Disintegration Tester from Hanson Research delivers fast, efficient testing in compliance with USP <701> and <2040> and their harmonized EP and JP methods. Tests may be run with either one or two beakers and basket assemblies simultaneously. Built for ease of use with a simple, intuitive user interface, the Phase One tester permits programming of a timed test in less than one minute. Built in the USA with high quality components and durable construction, the Phase One tester is intended to deliver decades of reliable performance with a very low total cost of ownership.



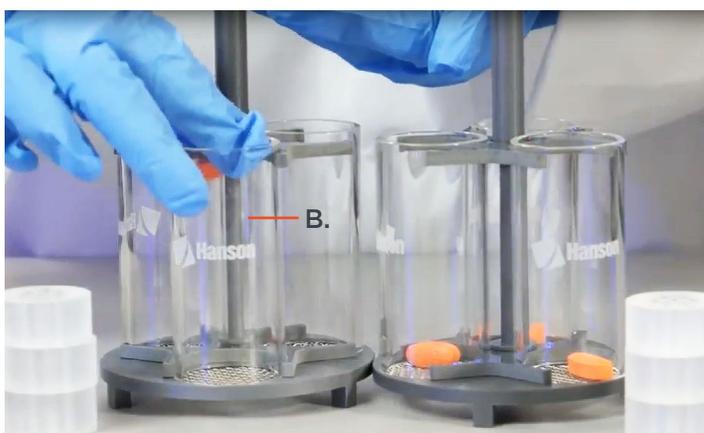
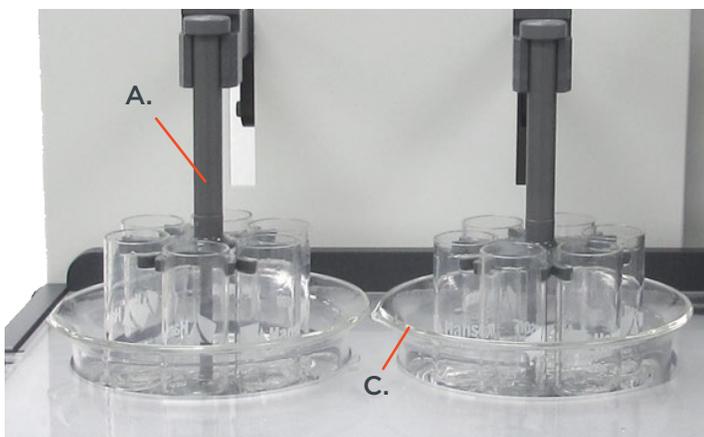
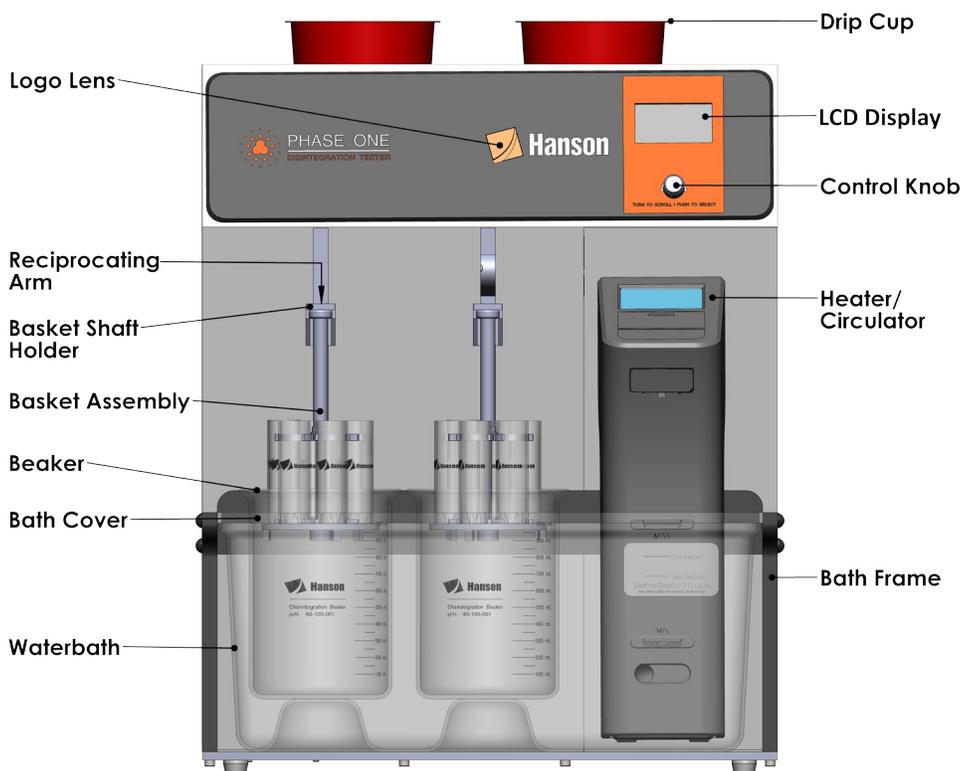
PHASE ONE DISINTEGRATION TESTER

Provides a compact, cost-effective solution for labs performing quality control during new product development or batch/lot manufacturing.

115 V (Tester with 120VAC/60Hz Heater) **40-101-001**
230 V (Tester with 240VAC/50Hz Heater) **40-101-002**

Q-Pak™ Self-Validation Guidelines
Phase One, IQ/OQ **40-108-005**

PHASE ONE SYSTEM COMPONENTS



SYSTEM ACCESSORIES

The Phase One Disintegration Tester comes with two 6-tube basket assemblies complete with acrylic disks, two precision beakers, four drip cups, and one heater/circulator compatible with the lab site's power. Order optional accessories below.

A. 6-Tube Basket Assembly, App. A, Phase One (includes basket shaft with plastic clips, six glass tubes, six acrylic disks, and one wire mesh screen.) **40-107-046**

Top Basket Screen & Clip for 6-Tube Basket (optional accessory for use with gel caps and other floating dosage forms.) **40-107-056**

B. 3-Tube Basket Assembly, App. B, Phase One (includes basket shaft with plastic clips, three glass tubes, three acrylic disks, and three wire mesh screens.) **40-107-043**

Top Basket Screen & Clip for 3-Tube Basket (optional accessory for use with gel caps and other floating dosage forms.) **40-107-053**

C. Beaker, Glass, Phase One **40-107-009**

POWDER FLOWABILITY

The Flodex™ flow indicator is a simple-to-use tool that helps you determine a reliable and repeatable flowability index over an arbitrary scale to use as a specification for your raw materials. The Flodex determination of intrinsic flowability is based upon the ability of powder to fall freely through an orifice in a disk. This one simple test takes in account the numerous parameters that affect powder flowability such as:

- Angle of repose
- Compressibility
- Flow rate
- Flow cell
- Particle size and shape
- “Fines”
- Unit surface
- Actual and bulk density
- Porosity
- Settling
- Electrostatic charge



FLODEX FLOW INDICATOR

A simple-to-use powder flow indicator tool that is fully compliant with USP <1174>.

Complete Flodex Test System 21-101-050

Flodex Index Disk Kit 21-101-055

(19 disks total in kit; 304 SS; orifice sizes include 4, 5, 6, 7, 8, 9, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, and 34 mm)



FLODEX FEATURES:

- USP <1174> compliant
- Allows for a simple repeatable index of flowability of powders
- Easily operated by non-technically trained personnel
- Enables flowability testing before the setup and filling of manufacturing equipment
- Comes complete with a full set of disks for use with a variety of powder types
- Stainless steel loading funnel discharges electrostatic potential that builds up between particles of powder
- Ideal for purchasing and quality assurance specifications
- Avoids a high coefficient of variation in product uniformity
- Accommodates a variety of powder types for use in manufacturing oral pharmaceutical dosage forms, coffee, and more!

INTRINSIC FLOWABILITY

For complete technical details, please see "Intrinsic Flowability: A New Technology for Powder-Flowability Classification" by Dr. Gioia in Pharmaceutical Technology Magazine.

Reprints are available from Hanson Research.

NEW! HRCARE 360 SUPPORT

MAINTAIN OPTIMUM PERFORMANCE WHILE CONTROLLING COSTS

HRCare 360 Support offers a choice of three turnkey solutions for dissolution and diffusion testing instruments manufactured by Hanson Research. Each support package is designed to alleviate concerns about system performance, consistency, reliability, random audits, scheduling of downtime, and proactive control of maintenance costs. HRCare 360 Support is available in USA and Canada only. Please see following pages for more USA & Canada service plans.

360 SUPPORT PACKAGES ¹	GUARANTEED PASS		
	VIP PREVENTIVE (7-401)	PREMIUM PERFORMANCE (7-411)	MECHANICAL ASTM (7-412)
Preventive maintenance (PM) 2x per year			✓
Preventive maintenance with USP calibration (PM+) 2x per year	✓	✓	
Performance qualification (PQ) 2x per year		✓	
Mechanical calibration (ASTM) 2x per year			✓
Audit-proof documentation	✓	✓	✓
Unlimited phone and email support	✓	✓	✓
Firmware updates	✓	✓	✓
Priority scheduling	✓	✓	✓
Electronics warranty (parts and labor) ^{2,3}	✓	✓	✓
Full system warranty (parts and labor) ^{2,4}		✓	✓
Certified operator training (on site) ⁵		✓	✓
Performance qualification guaranteed pass		✓	
ASTM mechanical calibration guaranteed pass			✓

1. HRCare 360 Support is available in U.S. and Canada only. Applies to all Vision testers and autosamplers (G1 and G2), Media-Mate Plus, SR8-Plus, legacy AutoPlus, and MicroettePlus instruments.
 2. Excludes glassware, consumables, and pre-existing conditions. 3. Includes electronic components only (boards, displays, keypads, motors, sensors); excludes external mechanical, cosmetic, and chassis components. 4. Non-critical legacy parts are subject to availability. 5. Onsite training must be combined with pre-scheduled service call.



SERVICE AND VALIDATION

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HRCARE SERVICE

At Hanson Research, we care about quality! We build our equipment to last ten years and longer, and we want our customers to earn return after return on their investment. Hanson HRCare support programs maintain your dissolution test systems in tiptop shape for years of service, performance, and laboratory throughput. HRCare service, maintenance, installation, and validation programs are designed to bring you the confidence of “audit-proof” dissolution lab validation. We support every maintenance, calibration, and validation protocol with ISO 9001:2008 quality documentation. HRCare programs are available to all U.S. customers. Similar programs are available in select countries worldwide—please consult Hanson for details. HRCare service technicians are factory trained and updated on the latest product technology, software/firmware, and regulatory developments.

ASTM PROGRAM

Hanson HRCare provides ASTM E2503-13 mechanical qualification, in addition to comprehensive IQ/OQ/PQ, service, and extended warranty programs. HRCare ASTM mechanical qualification is available for Hanson SR8-Plus and Vision dissolution testers, including older units already installed and in use. A suitable PM program is recommended for all older equipment. The Hanson HRCare team is factory-trained and certified on all aspects of instrument qualification, service, and preventive maintenance.

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Hanson ASTM Certificates of Conformity (COCs) are available for USP accessories (vessels, paddles, baskets, and shafts), detailing all relevant ASTM dimensions and tolerances. These quality accessories, with corresponding COCs, are required for ASTM. Certificates of Analysis (COAs), recording actual dimensional measurements, are available for USP accessories on special order (minimum order 6). Please note that a COA is not required for ASTM when a COC is available. A convenient “pre-scan” to evaluate previously installed equipment is available prior to full ASTM mechanical qualification.

CERTIFICATES & DOCUMENTATION

No discounts apply to the part numbers below. Please supply serial numbers at time of order, if applicable.

Certificate of Analysis (COA) (min order 6)
for USP Vessel **7-930**
for USP Paddle **7-931**
for USP Basket **7-932**
for USP Basket Shaft **7-933**

Certificate of Conformity (COC)
for USP accessory (Special Order) **7-909**

Documentation Replacement Service
for Certificate of Conformity (Special Order) **7-910**
for Blank IQ/OQ Protocols* **7-911**
for Blank PQ Protocols* **7-912**

*U.S. customers only with proof of HRCare service purchase.

ASTM Certificate of Conformance (COC)

COCs for individual accessories are available on special order.

“Range” COCs are available at:

www.hansonresearch.com/support.

SERVICE & VALIDATION PLANS - USA & CANADA ONLY

PM = Preventative Maintenance

PQ = Performance Qualification

PM+ = Preventative Maintenance Plus

ASTM = ASTM Mechanical Calibration

OQ = Operation Qualification (baths only)

MVPQ = Mechanical Verification & PQ

	PART NO.	EMERGENCY ON-CALL SERVICE	SCHEDULE VISITS (PER UNIT)	TELEPHONE & EMAIL SUPPORT	HRCARE DOCUMENTATION	INCLUDES PHYSICAL CALIBRATION	SERVICE PARTS DISCOUNT	LABOR DISCOUNT	SERVICE REPAIR WARRANTY	Q-PAK DISCOUNT
SERVICE & MAINTENANCE										
Basic Service & Repair	7-100	•		•	Service Docs				3 Mos.	
PM1	7-111	•	1/Yr	•	PM Certs		10%		3 Mos.	50%
PM2	7-112	•	2/Yr	•	PM Certs		20%	10%	3 Mos.	50%
PM+1	7-121	•	1/Yr	•	PM+ Certs	As Found & As Left	10%		3 Mos.	50%
PM+2	7-122	•	2/Yr	•	PM+ Certs	As Found & As Left	20%	10%	3 Mos.	50%
INSTALLATION & VALIDATION										
Installation & Familiarization	7-131		1	•	Training Docs					50%
IQ/OQ (excluding baths)	7-141		1	•	IQ/OQ Certs	As Left				
IQ (baths only)	7-142		1	•	IQ Certs					
OQ1	7-143		1/Yr	•	OQ Certs	As Left				
OQ2	7-144		2/Yr	•	OQ Certs	As Left		10%		
PQ1	7-151		1/Yr	•	PQ Certs	Chemical Calibration				
PQ2	7-152		2/Yr	•	PQ Certs	Chemical Calibration		10%		
ASTM1	7-161		1/Yr	•	ASTM Certs	ASTM As Left				
ASTM2	7-162		2/Yr	•	ASTM Certs	ASTM As Left		10%		
MVPQ1	7-171		1/Yr	•	MVPQ Certs	As Left				
MVPQ2	7-172		2/Yr	•	MVPQ Certs	As Left		10%		
EXTENDED WARRANTY										
Extended Warranty 1 Year Parts & Labor	7-191	•		•	Ext. Warr. Certs		100%	100%	Yr	50%

DISSOLUTION TESTERS
 DISSOLUTION AUTOMATION
 DISSOLUTION CONSUMABLES
 MEDIA HANDLING
 DIFFUSION TESTING
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The Hanson Q-Pak™ guidelines addresses manufacturers' and USP / US FDA recommendations for dissolution instrument IQ, OQ, and PQ (Installation, Operation, and Performance Qualifications). This unique guideline directs the user through instrument qualification and documentation of key elements of functional validation. Combined with our easy-to-use calibration tools, the Q-Pak can ensure optimum dissolution performance and maximum regulatory compliance. Q-Paks are ideal guidelines to help develop document system qualification for audit trail.

Q-PAK FOR CURRENT PRODUCTS

Vision Dissolution Testers - USP
IQ/OQ/PQ **74-108-005**

Vision Dissolution Testers - ASTM
IQ/OQ **74-108-006**

Vision G2 AutoPlus, IQ/OQ/PQ 61-108-005

AutoFilter Changer, IQ/OQ 43-108-005

Media-Mate Plus, IQ/OQ/PQ 25-710-803

Manual Diffusion Cell System,
IQ/OQ/PQ **58-001-815**

Vision Microette, IQ/OQ/PQ 59-108-005

On-Line UV Systems
(for Closed Loop w/ Peri-Pump) **61-572-108**

UV-1800 UV-Vis Spectrophotometer,
IQ/OQ **61-572-505**

Phase One, IQ/OQ 40-108-005

Q-PAK FOR LEGACY PRODUCTS

SR8-Plus - USP, IQ/OQ/PQ 73-100-805

SR8-Plus - ASTM, IQ/OQ 73-100-876

AutoPlus, IQ/OQ/PQ 60-200-805

Vision-Enabled AutoPlus, IQ/OQ/PQ 60-200-851

MicroettePlus, IQ/OQ/PQ 58-001-805

QC-21 Qualification Protocol, IQ/OQ 39-400-810

VALIDATION PRINTER + SUPPLIES

Validation Printer, 115/230 V, Epson
Compatible with all Vision and SR8-Plus instruments
74-107-090

Validation Printer Ribbon, Epson
(2/pk) **74-107-091**

Validation Printer Paper, Epson
(5/pk) **74-107-092**

Citizen Printers Discontinued
Citizen validation printers (Hanson part numbers 74-104-060, 74-104-063, 73-100-116, 60-200-101, 60-200-102) have been discontinued by the manufacturer. Ribbons and paper remain available.

Validation Printer Ribbon, Citizen
(2/pk) **47-200-703**

Validation Printer Paper, Citizen
(5/pk) **47-200-704**

SERVICE TOOLS

Validation Tool Kit (for Vision dissolution testers and ASTM validation on SR8-Plus)
74-107-004

Digital Level Kit
(required for Vision dissolution testers and all ASTM waterbath validation)
74-107-002

Height Set & Check Tool Kit, Vision
(set tool and Go/No-Go Depth Gauge)
74-107-005

O-Ring Tool Kit, Vision (service tool only)
74-107-003

Shaft Straightening Kit w/ Dial Indicator, SR8-Plus
65-233-000

Analog Temperature Probe for SR8-Plus/SR6 ValiData
64-700-128

Certified Calibrated Digital Thermometer
SR8-Plus/Vision
65-233-402

Certified Calibrated Digital Tachometer
SR8-Plus/Vision
65-233-301

Certified Vibration Meter Kit, SR8-Plus/Vision
(typically measures displacement, but may also be used to measure acceleration and velocity)
65-233-203

Certified Alignment Kit, SR8-Plus
(includes Alignment Gauge, Shaft Wobble Meter, Level, Depth Gauge, and Height Ball Gauge)
65-233-101

Recalibration Service (no discounts apply)
for Validation Tool Kit 74-107-004
7-921
for Certified Calibration Kits except 74-107-004
7-920

CALIBRATION ACCESSORIES

USP Prednisone, Calibration Standard
91-951-017

USP Prednisone, Calibration Tablets
(disintegrating) (30 tabs)
91-951-007



LEGACY ACCESSORIES

(MACHINES NO LONGER SOLD)

LEGACY – SR8-PLUS

Our SR8-Plus™ dissolution tester has been discontinued since April 2012. Although these products will no longer be sold, we still support a wide range of common accessories and consumables for the SR8-Plus. Additional Service parts and accessories may be available.

Subject to availability.

VESSELS

All vessels have volumetric graduation marks and serial numbers except Plastic Vessel p/n 91-030-003.

A Vessel Centering Ring is required for each 1 L and 2 L vessel used with the SR8-Plus, except for Peak Vessels.

Vessel Centering Ring, SR8-Plus (fits into base plate for 1 L and 2 L vessels) **73-100-550**

Vessel Centering Ring, SR8-Plus (included w/ Peak Vessels; required for Super Precision Vessels if AccuCenter Centering Bracket is not used) **73-101-515**

1 L VESSELS



A. Precision Vessel, 1 L, USP, Glass, SR8-Plus (serialized) **72-600-510**

B. Precision Vessel, 1 L, USP, Glass, Amber, SR8-Plus (Special Order-min order 6) (serialized) **72-600-556**

Peak Vessel, 1 L, Glass, SR8-Plus (serialized w/ vol markings; includes Vessel Centering Ring p/n 73-101-515) **95-590-047**

Peak Vessel, 1 L, Amber, SR8-Plus (serialized w/ vol markings; includes Vessel Centering Ring p/n 73-101-515) **95-590-048**

Plastic Vessel, 1 L, USP, 1 L (not serialized; no volume markings) **91-030-003**

ACCUCENTER SYSTEM

The AccuCenter system provides ultimate dimensional accuracy, making it ideal for ASTM and USP mechanical calibration requirements. The system consists of a vessel centering bracket designed for the SR8-Plus base plate* and a Super Precision vessel that is held in place by the bracket.

*AccuCenter brackets are also available for Agilent VK 7000 and Distek 2100 A, B, and C base plates.

SUPER PRECISION VESSELS

Vessel, USP, Super Precision, 1 L, Glass, SR8-Plus

(serialized; requires Vessel Centering Ring p/n 73-101-515 or AccuCenter Centering Bracket p/n 73-101-519)
Clear **73-101-520**

Amber (Special Order-min order 6) **73-101-521**

VESSEL CENTERING BRACKET

AccuCenter Vessel Centering Bracket
SR8-Plus **73-101-519**

SR8-PLUS

2 L VESSELS

Vessel, 2 L, USP, Glass, SR8-Plus (serialized) **72-600-509**

Vessel, 2 L, USP, Glass, Amber, SR8-Plus (Special Order-min order 6) (serialized) **72-600-580**

Round-Bottom Vessel, 150 mL, Glass, SR8-Plus (serialized) **72-600-573**

150 ML VESSELS

Round-Bottom Vessel, 150 mL, Glass, Amber, SR8-Plus (Special Order-min order 6) (serialized) **72-600-583**

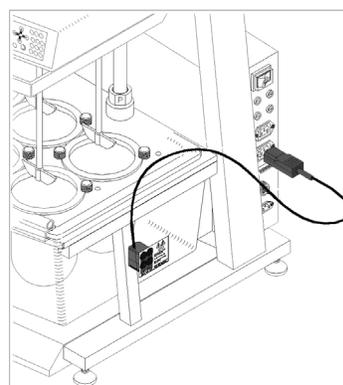
Flat-Bottom Vessel, 150 mL, Glass, SR8-Plus (serialized; for Immersion Cell p/n 65-190-043) **72-600-572**

CIRCULATING WATER PUMP

Circulating Water Pump, SR8-Plus

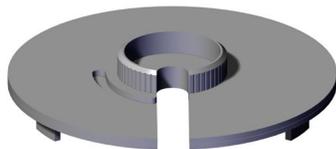
Non-Reverse Plug (1995-1997) **64-710-421**

Reverse Plug (since 1997) **64-710-420**



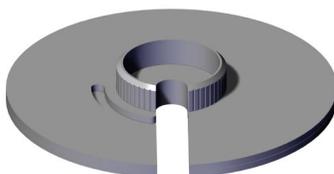
VESSEL COVERS

FOR 1 L & 2 L VESSELS



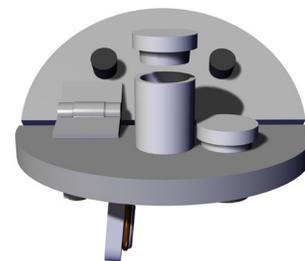
Rotary Vessel Cover, Low
Evaporation, SR8-Plus

65-233-170



Rotary-X Vessel Cover, SR8-Plus
(for Super Precision Vessels)

65-233-173



ADD Vessel Cover, SR8-Plus
("Auto-Dosage Delivery")

73-100-430

FOR 150 ML VESSELS

Vessel Cover, 150 mL, Small Volume,
SR8-Plus **72-600-560**



VESSEL CARRIERS

Universal Vessel Carriers hold all brands of 1 L and 2 L dissolution vessels. Made of all non-corrosive rigid ABS plastic construction with sturdy non-ski rubber legs, these vessel carriers transport filled vessels to and from media prep stations and dissolution baths. Space-saving stackable design when empty.



Universal Vessel Carrier, SR8-Plus

6 Position **95-590-069**8 Position **95-590-070**

USP APP. 1 - BASKETS AND SHAFTS

FOR 1 L AND 2 L

Basket Assembly, USP, SR8-Plus

With 15 in. shaft (serialized) **65-240-000**With 21 in. shaft (serialized) **65-240-400**

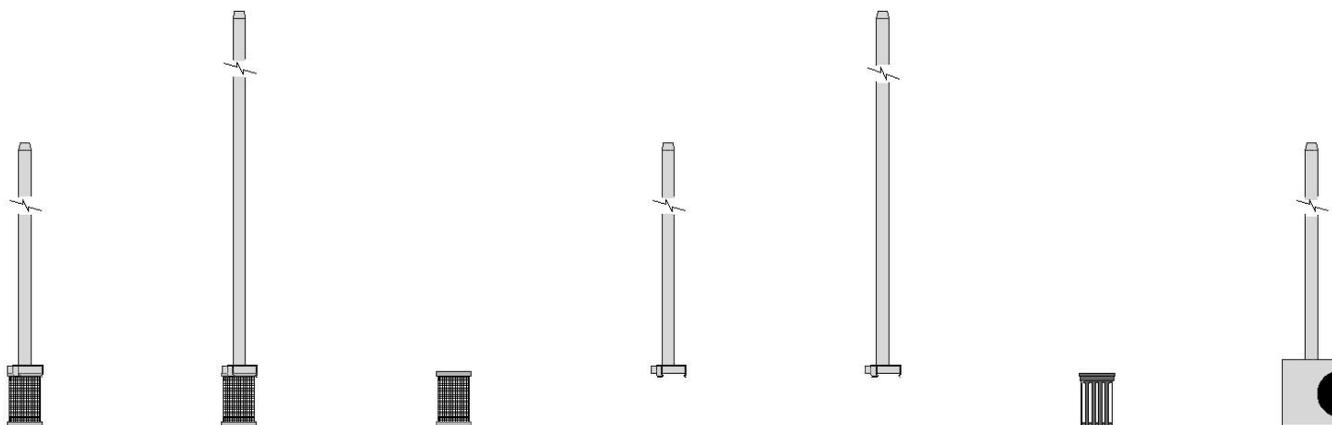
Baskets Only

40-Mesh Basket, USP, Precision, 316 SS, SR8-Plus/Vision (serialized) **74-105-252**10-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6) **65-220-010**20-Mesh Basket, 316 SS, SR8-Plus/Vision (Special Order-min order 6) **65-220-020**Suppository Basket, SR8-Plus/Vision (not serialized) **65-700-048**

Shafts

Basket Shaft, 1 L, USP, 15 in., SR8-Plus (serialized) **65-237-000**Basket Shaft, 2 L, USP, 21 in., SR8-Plus (serialized) **65-260-000**

Stationary Basket

Stationary Basket, 8 Mesh, 316 SS (uses Stationary Basket Vessel Cover p/n 95-590-151) **95-590-150**Vessel Cover, Stationary Basket, SR8-Plus (for Stationary Basket p/n 95-590-150) **95-590-151**

FOR 150 ML

Basket

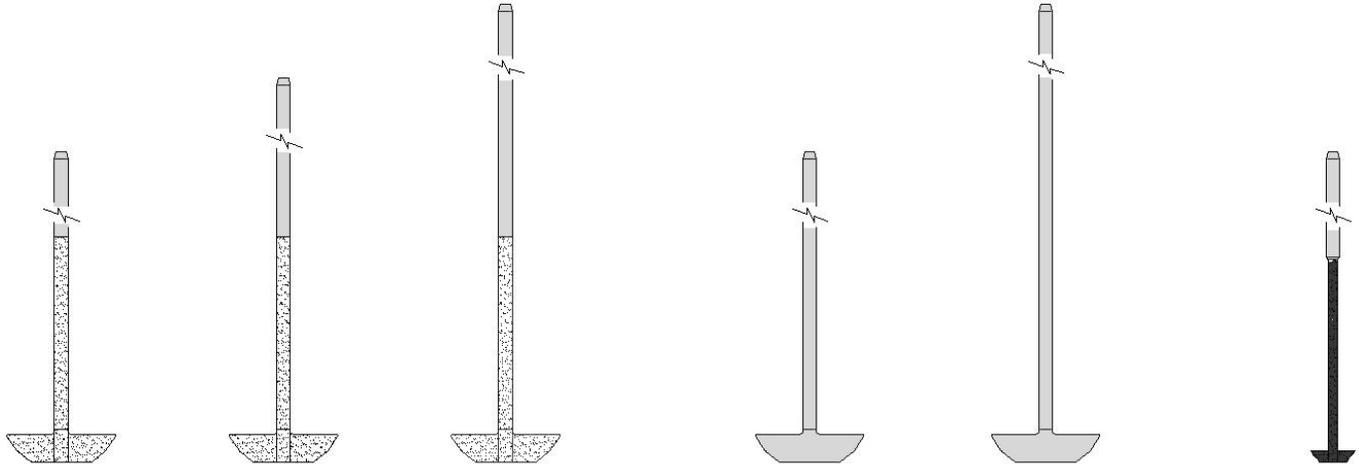
Mini Basket, 40-Mesh, 316 SS, Vision (Special Order-min order 6) (serialized; for Small Volume, requires Basket Shaft p/n 74-105-220) **74-105-221**

Basket Shaft

Mini Shaft 316 SS, Vision (Special Order-min order 6) (serialized; for Small Volume; requires Mini Basket p/n 74-105-221) **74-105-220**

SR8-PLUS

USP APP. 2 - PADDLES



FOR 1 L

Paddle w/ 15 in. shaft, USP, PVDF, SR8-Plus (serialized) **72-800-456**
Paddle w/ 15 in. shaft, USP, 316 SS, SR8-Plus (serialized) **65-700-036**
Paddle w/ 18 in. shaft, Long, PVDF, SR8-Plus (serialized) **72-800-461**

FOR 2 L

Paddle w/ 21 in. shaft, Extra Long, USP, 2 L, PVDF, SR8-Plus (serialized) **72-800-457**
Paddle w/ 21 in. shaft, Extra-Long, USP, 2 L, 316 SS, SR8-Plus (serialized) **65-700-037**

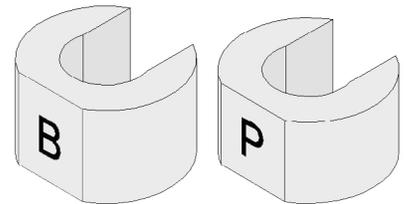
FOR 150 ML

Mini-Paddle, PTFE Coated, for 150 mL vessels, SR8-Plus (serialized) **72-800-460**

HEIGHT SPACERS

Basket Height Adjustment Spacer, SR8-Plus (serialized) **72-800-501**
Paddle Height Adjustment Spacer, SR8-Plus (serialized) **72-800-502**
Mini-Paddle Height Spacer (for small volume systems) **72-800-503**

Ointment Cell Height Spacer **72-800-505**

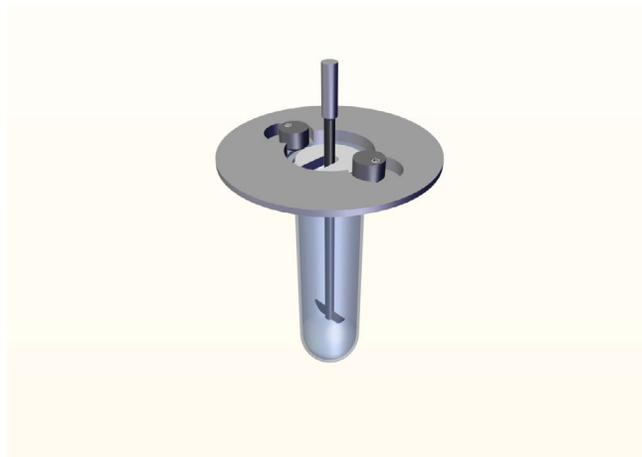


APPARATUS TRAYS

Apparatus Tray - Vision 2, Stackable, Vision **74-104-270**
(holds paddles, baskets shafts, and baskets for Vision 2 L or SR8-Plus)

SMALL VOLUME KITS

Hanson small volume accessories are used for low concentration drug formulations and other special applications where small volume dissolution media is required. Small volume kits for the SR8-Plus include a mini-paddle, 150 mL vessel (choice of round or flat bottom) with special vessel cover, and a vessel adapter for use on the SR8-Plus base plate. Small volume probe retrofit kits are ordered separately (1 per position to replace 1L sample probe kits). Spares of individual kit components may be ordered separately.



SMALL VOLUME DISSOLUTION KITS

Small Volume Dissolution Kit (1), Round Bottom, 150 mL, SR8-Plus [72-800-719](#)
 Small Volume Dissolution Kit, Round Bottom, 150 mL, SR8-Plus (set/6) [72-800-720](#)
 Small Volume Dissolution Kit (1), Flat Bottom, 150 mL, SR8-Plus [72-800-721](#)
 Small Volume Dissolution Kit, Flat Bottom, 150 mL, SR8-Plus (set/6) [72-800-722](#)

VESSEL ADAPTER KIT

Vessel Adapter Kit, Small Volume, SR8-Plus (1 per vessel) [72-800-714](#)

SMALL VOLUME PROBE RETROFIT KIT

Small Volume Probe Retrofit Kit, SR8-Plus (1 per vessel) [72-300-259](#)

USP APP. 5 - PADDLE OVER DISK

Transdermal Sandwich for Patch (1), App. 5, [65-190-092](#)
 Transdermal Sandwich, App. 5 (set/6), [65-190-093](#)

USP APP. 6 - ROTATING CYLINDER

Apparatus 6 Rotating Cylinder, SR8-Plus (max patch area = 5.5 in. x 2 in.) [65-590-011](#)
 Apparatus 6 Rotating Cylinder with Extension, SR8-Plus [65-590-013](#)
 (max area patch w/ extension = 5.5 in. x 5.69 in.)

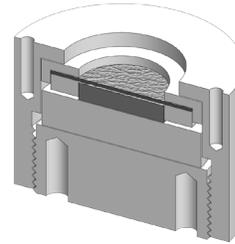
SR8-PLUS

SINKERS



For Sinkers – See DISSOLUTION CONSUMABLES.

IMMERSION CELL



For Immersion Cell – See end of DISSOLUTION TESTERS section for this accessory.

TEMPERATURE PROBES

Hanson Digital Temperature Probes (DTPs) are rugged and robust digital devices, intelligent in design, and virtually imperious to analog noise. Our exclusive "digital-sensor" technology ensures precision temperature resolution, reporting, and validation, and provides extensive data on multiple vessel temperatures, including maximum/minimum/average statistical data. Each DTP carries an individual and unique electronic signature, serial number, and calibration log ideal for USP/US FDA/21 CFR Part 11 compliancy. Easy retrofit on all Hanson SR8-Plus dissolution testers. DTPs are normally attached to a sampling probe.

DIGITAL TEMPERATURE PROBES

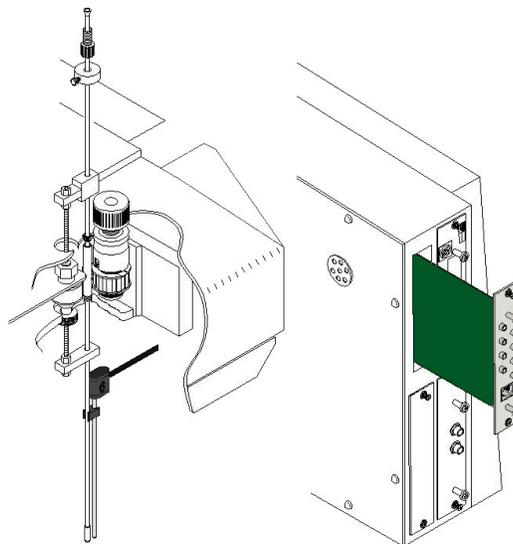
Digital Temperature Probe, SR8-Plus
(single probe)
73-108-405

Digital Temperature Probes, SR8-Plus
(set/6) (factory installed)
73-108-100

Digital Temperature Probes, SR8-Plus
(set/6) (field upgrade kit)
73-108-105

DIGITAL TEMPERATURE PROBES

Analog Temperature Probe,
for SR8-Plus/SR6 ValiData
64-700-128



MANUAL SAMPLING CANNULAS

CANNULA KIT

Manual Sampling Cannula Kit, SR8-Plus (set/8) 72-300-232
(includes probes and syringes for obsolete Slide-Open Vessel Cover p/n 72-600-587)

CANNULAS -316 STAINLESS STEEL

316 SS cannulas come with an inert Tefzel female luer, have a 1/8 in. o.d., low hold-up volume, and are compatible with In-Line/Syringe Filters and Tip Filters.

Cannula, Manual Sampling, 500 mL, 7.75 in., 316 SS 95-590-001
Cannula, Manual Sampling, 900 mL, 4.75 in., 316 SS 95-590-002
Cannula, Manual Sampling, Head Mount, 15 in., 316 SS 95-590-003

CANNULAS - PEEK

PEEK cannulas come with an inert S.S. luer, have a 1/8 in. o.d., and are compatible with In-Line/Syringe Filters and Tip Filters. PEEK and Tefzel are biocompatible, chemically inert, and non-corrosive.

Cannula, Manual Sampling, 500 mL, 7.75 in., PEEK 95-590-009
Cannula, Manual Sampling, 900 mL, 4.75 in., PEEK 95-590-005
Cannula, Manual Sampling, Head Mount, 15 in., PEEK 95-590-006
Stopper for 15 in. cannula 95-590-007

SYRINGE

Disposable Syringe, Luer Type, 10 mL 91-030-132

SR8-PLUS

MANUAL SAMPLING PROBES

Easi-Probe Kits are used for manual sampling with the SR8-Plus. Easi-Probes are mounted to the SR8-Plus head and use 1/8 in. filters or In-Line/Syringe Filters.

EASI-PROBES FOR 1 L

Easi-Probe Kit, 1 L, 6-Sample, 1/8 in., SR8-Plus **72-300-304**
Easi-Probe Kit, 1 L, 8-Sample, 1/8 in., SR8-Plus **72-300-305**

EASI-PROBES FOR 2 L

Easi-Probe Kit, 2 L, 6-Sample, 1/8 in., SR8-Plus **72-300-324**
Easi-Probe Kit, 2 L, 8-Sample, 1/8 in., SR8-Plus **72-300-326**

AUTOMATED SAMPLING PROBES

Fixed Vessel Sample Probe Kits include vessel covers with stainless sample probes and return probes, tubing connectors, and a wash station (Tubing Harness not included). Order 1 kit for each bath. Use of standard tip filters or 5 micron in-line/syringe filters are required for sample filtration into the AutoPlus.

FIXED VESSEL PROBES FOR 1 L

Fixed Vessel Sample Probe Kit, 1 L, 6-Sample, 1/16 in., SR8-Plus (w/ covers) **60-200-206**
Fixed Vessel Sample Probe Kit, 1 L, 8-Sample, 1/16 in., SR8-Plus (w/ covers) **60-200-208**
Fixed Vessel Sample Probe Kit, 1 L, 6-Sample, 1/8 in., SR8-Plus (w/ covers) **60-200-216**
Fixed Vessel Sample Probe Kit, 1 L, 8-Sample, 1/8 in., SR8-Plus (w/ covers) **60-200-218**

EASI-PROBES FOR 1 L

E-Probes (Electronic Probes) use 1/8 in. filters. E-Probes are for use with E-Probe Actuator Kits. If an E-Probe Actuator Kit is not used with E-Probes, order a Head Kit p/n 73-105-705 to mount E-Probes to SR8-Plus head. Contact your local Hanson representative for more information on E-Probe Actuator Kits.

Sample Probe Kit, 1 L, 6-Sample, 1/8 in., Head Mount, E-Probes **60-151-106**
Sample Probe Kit, 1 L, 8-Sample, 1/8 in., Head Mount, E-Probes **60-151-108**

EASI-PROBES FOR 2 L

Sample Probe Kit, 2 L, 6-Sample, 1/8 in., Head Mount, E-Probes **60-151-116**
Sample Probe Kit, 2 L, 8-Sample, 1/8 in., Head Mount, E-Probes **60-151-118**

HEAD KIT

Head Kit (set/8), SR8-Plus (use for Head Mount Probes w/o E-Probe Actuators) **73-105-705**

AUTO PILL DROPPERS

Auto Pill Droppers, 6-Sample, SR8-Plus (requires E-Probes), [65-233-706](#)
Auto Pill Droppers, 8-Sample, SR8-Plus (requires E-Probes), [65-233-708](#)

FILTERS

TIP FILTERS

See DISSOLUTION CONSUMABLES. Use Tip Filters for 1/16 in. probes.

IN-LINE / SYRINGE FILTERS

See DISSOLUTION CONSUMABLES.

FILTER KITS

In-Line Filter Fitting Kit, SR8-Plus/AutoPlus (8/pk) [72-300-262](#)
(for In-Line/Syringe Filters p/n 91-450-062)

VOLUMETRIC FLASKS

Volumetric Flask, 1000 mL, Class A/20 °C [95-590-043](#)
Volumetric Flask, 500 mL, Class A/20 °C [95-590-041](#)
Volumetric Flask, 500 mL, Class A/37 °C [95-590-044](#)
Volumetric Flask, 900 mL, Class A/20 °C [95-590-042](#)
Volumetric Flask, 900 mL, Class A/37 °C [95-590-045](#)

FIRMWARE UPGRADE KITS

Firmware Upgrade Kit ver. 3.11 for SR8-Plus (compatible with Vision G2 AutoPlus) [73-100-719](#)

Q-PAK SELF-VALIDATION GUIDELINES

Q-Pak IQ/OQ/PQ Validation Guideline, SR8-Plus-USP [73-100-805](#)
Q-Pak IQ/OQ Validation Guideline, SR8-Plus-ASTM [73-100-876](#)

PRINTER SUPPLIES

See SERVICE AND VALIDATION.

LEGACY ACCESSORIES

(MACHINES NO LONGER SOLD)

LEGACY – AUTOPLUS

The AutoPlus™ with MultiFill has been discontinued since April 2012. Although these products will no longer be sold, we still support a wide range of common accessories and consumables for the legacy AutoPlus and MultiFill.

Subject to availability.

COLLECTION RACKS

Collection Rack for 12 mm x 32 mm HPLC Vials, MultiFill (uses Pre-Cut Septum Vials p/n 91-030-150)
91-030-063

Collection Rack for 13 x 100 mm Test Tubes, MultiFill **91-030-071**

TUBING

Tubing Harness, PTFE, 3 ft, 1/16 in., AutoPlus/AutoMag/SuperMag
6-Sample **60-200-706**
8-Sample **60-200-708**

RETRIEVAL RESERVOIR

Retrieval Reservoir & Bench Mount Base Assembly - Complete, AutoPlus/Vision-Enabled AutoPlus
60-200-022

NEEDLE OPTIONS

PEEK Needles Option, MultiFill (set/8) (field retrofit replaces SS needles) **60-200-496**

FIRMWARE UPGRADE KITS

Firmware Upgrade Kit ver. 3.20, AutoPlus
60-200-724

Firmware Upgrade Kit ver. 4.0, Vision-Enabled AutoPlus (field installed)
60-200-725

SOFTWARE DRIVER FOR AGILENT 8453

Driver for Hanson/Agilent Dissolution Systems, Current Version, SR8-Plus/Vision G2 AutoPlus (provided on CD; not compatible with Vision-Enabled AutoPlus)
81-200-026

PRINTER SUPPLIES

See SERVICE AND VALIDATION.

Q-PAK SELF-VALIDATION GUIDELINES

Q-Pak IQ/OQ/PQ Validation Guideline, AutoPlus **60-200-805**
Vision-Enabled AutoPlus **60-200-851**

LEGACY ACCESSORIES

(MACHINES NO LONGER SOLD)



LEGACY - QC-21

Our QC-21™ disintegration test system has been discontinued since September 2011. Although this product will no longer be sold, we still continue to support a wide range of common accessories and consumables for the QC-21. Additional service parts and accessories may be available.

Subject to availability.

- 6-Tube Basket Assembly, 10 Mesh, USP Standard Disintegration, QC-21 (App. A) [65-320-001](#)**
- Basket Top Plate Assembly (w/ 10-Mesh Screen), QC-21 (App. A) (Special Order) [65-320-010](#)**
- Fluted Plastic Disc for Standard Baskets, QC-21 (set/6) (App. A) [65-170-001](#)**
- Glass Tubes for Standard Baskets, QC-21 (set/6) [65-169-001](#)**
- 3-Tube, Veterinary Bolus Disintegration Basket, QC-21 (App. B) [65-303-011](#)**
- Plastic Disc for Veterinary Basket, QC-21 (set/3) (App. B) [65-303-023](#)**
- Glass Tubes for Veterinary Basket, QC-21 (set/3) (App. B) [65-303-022](#)**
- Flat-Bottom Beaker, 1 L, QC-21 [91-030-036](#)**

QUALIFICATION PROTOCOL

QC-21 Qualification Protocol, IQ/OQ [39-400-810](#)

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PACKAGING INFORMATION

SYSTEM	PIECES	WEIGHT (LB)	WEIGHT (KG)	BOX/PALLET DIMENSIONS (IN.)	BOX/PALLET DIMENSIONS (CM)
Vision Classic 6	1	150	68	41 x 37 x 39	104 x 94 x 99
Vision Elite 8	1	225	102	41 x 37 x 45	104 x 94 x 115
Vision Elite 8 High Stand, 2 L	2				
	Box #1	225	102	41 x 37 x 45	104 x 94 x 115
	Box #2	35	16	25 x 22 x 20	64 x 56 x 51
Vision AutoPlus & AutoFill	1	140	64	49 x 41 x 30	125 x 104 x 76
Vision AutoFilter Changer	1	110	50	41 x 37 x 45	104 x 94 x 115
Vision Microette & AutoFill	1	250	113	49 x 41 x 47	125 x 104 x 120
Manual Diffusion Test System	1	53	24	24 x 20 x 33	61 x 51 x 84
Media-Mate Plus	1	215	98	41 x 37 x 59	104 x 94 x 150
Flodex	1	11	5	24 x 10 x 10	61 x 25 x 25
Phase One Disintegration Tester	1	91	41	23 x 31 x 34	58 x 79 x 86
UV-1800 Spectrophotometer	1	100	45	41 x 37 x 39	104 x 94 x 99
Alignment Kit	1	8	4	15 x 12 x 10	38 x 31 x 25
Validation Tool Kit	1	12	6	18 x 16 x 12	46 x 41 x 31
Certified Vibration Meter Kit	1	8	4	15 x 12 x 10	38 x 31 x 25
Vessels, 1 L, Glass, SR8-Plus (6)	1	8	4	18 x 16 x 12	46 x 41 x 31
Vessels, Easi-Lock, 1 L, Glass, Vision (6)	1	10	5	18 x 16 x 12	46 x 41 x 31
Printer	1	9	4	15 x 12 x 10	38 x 31 x 26
Extra Tank, Heater, and Control for Media-Mate Plus	1	30	14	25 x 22 x 20	64 x 56 x 51

- lb x .4536 = kilograms
- cm x .3937 = inches
- EIN # 95-2386931
- Sched. B. # for Systems: 9027.80.3500
- Sched. B. # for Accessories: 9027.90.8950
- Harmonized Tariff #: 9027-80-8030
- Courier shipment rates are calculated based on volumetric weight or actual weight, whichever is greater.

- U.S. Post Office will not accept packages larger than 79 in. total (length x girth).
- Order Cancellation Fee: 10% of order.
- Restocking Fee: Up to 25% on returned goods.
- No returns accepted on custom or special orders.
- Damage Claims must be made within 5 days of receipt of goods. Claims made after 5th day will not be accepted unless carrier agrees to claim.

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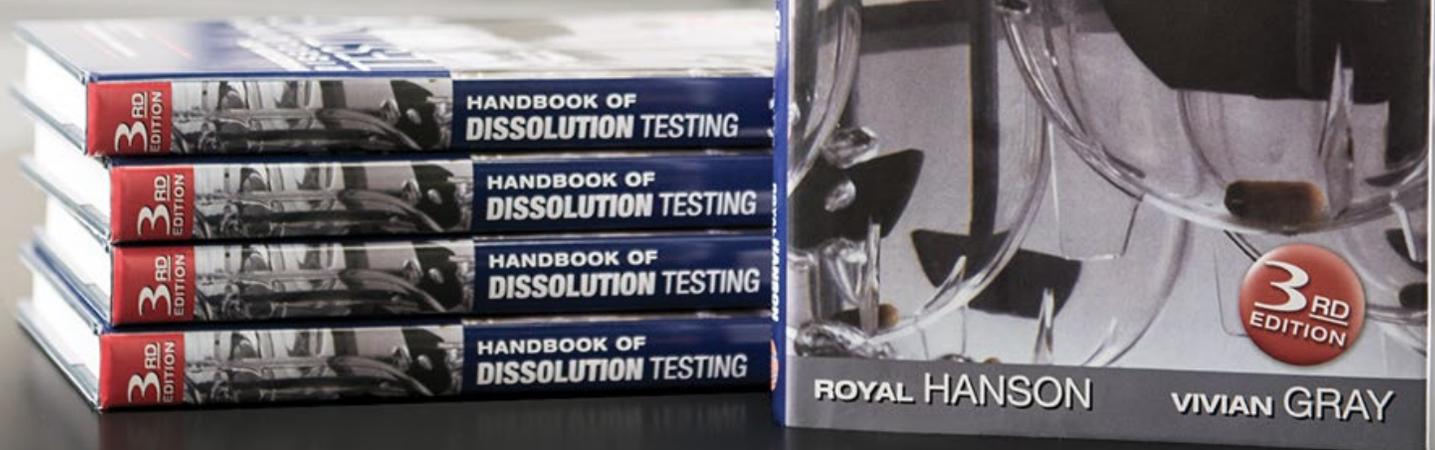
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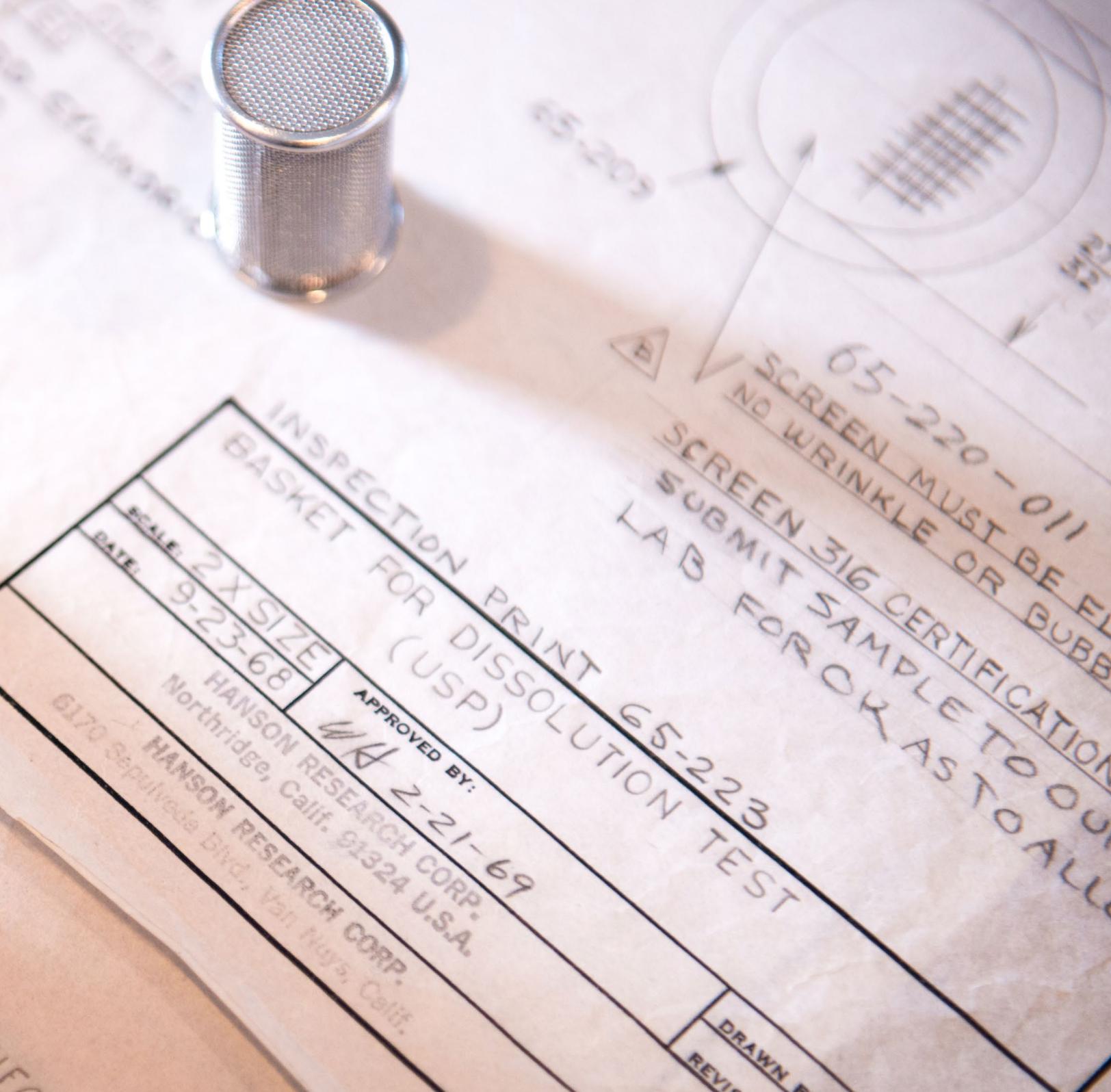
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