

Agilent Distributor News

Volume 7, Issue 3

What makes Agilent J&W GC capillary columns the best? The tightest QC specs in the industry.



Agilent is the leading GC column manufacturer in the world, selling more GC columns than any other vendor. Why are we the industry leader? Agilent J&W GC columns have the most rigorous quality control specifications in the industry. Every column must pass strict standards with reported inner and outer diameters, column length, film thickness, theoretical plates, and retention indexes.

Why does column quality matter?

- **Column-to-column reproducibility.** Every Agilent column will perform just like the previous column.
- **Assured performance.** Unlike other manufacturers, Agilent provides *actual* performance results for each column, not just a representative chromatogram. Customers know exactly how their column will perform.
- **Maximum and reproducible inertness.** Each column is tested against demanding test probes to ensure ultimate inertness.
- **Robustness.** Agilent columns have proven their endurance in the most demanding applications.

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When your customers want the most reproducible column performance and the most comprehensive product selection, sell them an Agilent J&W GC column.

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Keeping you informed

This quarterly newsletter offers timely information about Agilent products and services to help you better serve your customers. If you know a colleague who would also like to subscribe to this newsletter or if you have questions or comments, please contact _____.

Our measure is your success.



Agilent Technologies

What makes Agilent J&W GC capillary columns the best?

Continued from page 1

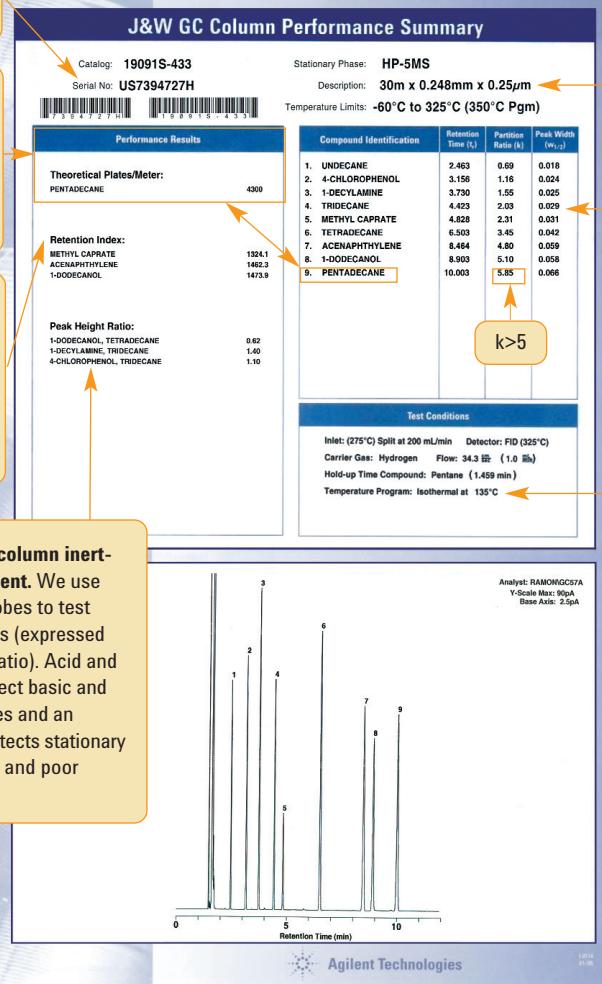
Actual Chromatogram for the Tested Column

Easy column tracking. Each column has a unique serial number for easy tracking.

Most stringent column efficiency measurement. We measure column efficiency isothermally using a probe with $k>5$, which ensures that the result is not artificially inflated.

Most stringent column selectivity measurement. We use **two or three** probes and three functional groups to express column selectivity (retention index). Most competitors use only one probe, and it is often not very sensitive.

Most stringent column inertness measurement. We use **two or three** probes to test column inertness (expressed by peak height ratio). Acid and base probes detect basic and acidic active sites and an alcohol probe detects stationary phase oxidation and poor deactivation.



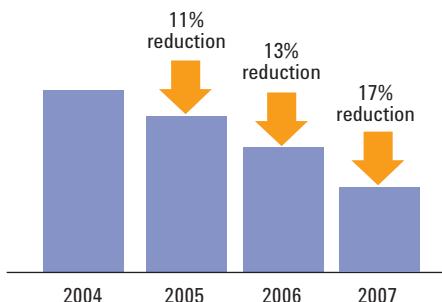
Easy method development. We ship each Agilent column with exact dimension specifications, enabling easy and accurate method development.

Demanding test components. We use demanding test mixture components to measure column efficiency and inertness.

Accurate test results. Each column is isothermally tested.

Actual test results. Each Agilent J&W GC capillary column comes with a summary performance chart that shows the actual test chromatogram, unlike most other column manufacturers, who use a representative chromatogram. Our customers know exactly how each column performs.

Mean Bleed Level Reduction Compared to 2004 (HP-5 ms)



Lower and lower bleed. Agilent column performance gets better all the time—a result of our constantly improving column manufacturing process.

FREE
SUPPLIES

See page 7 for promotions that offer free supplies with purchases that include a GC column.



New PAH columns mean lower costs for environmental and food testing labs

Introducing **ZORBAX Eclipse PAH** (polycyclic aromatic hydrocarbons) LC columns—the best answer for separating these potentially carcinogenic compounds. This newest addition to the line of ZORBAX Eclipse columns includes the industry's *first* PAH column in 1.8 µm particle size, offering the fastest throughput available today, with no compromise in resolution.

This line is Agilent's first polymerically bonded phase, which provides more shape selectivity than traditional monomerically bonded phases. These columns, therefore, are good choices for geometric isomer samples such as carotenes.

Target Customers

- Environmental contract/testing labs—labs that do waste water, groundwater, drinking water, air quality and soil testing.
- Labs that follow European Food Safety directives, universities, and food safety authorities worldwide.
- Labs that analyze combustion products such as diesel/auto exhaust and tobacco. These labs generally have the flexibility to change columns to reduce analysis time and improve productivity.
- Labs separating geometric isomers and want more shape selectivity.

NOTE: Environmental labs may use GCs to test for PAHs. These are good potential customers for this new line of ZORBAX Eclipse PAH LC columns.

Available Dimensions

- Rapid Resolution High Throughput (RRHT) **1.8 µm** for highest productivity. Usually the best choice for customers with new systems and MS detectors.
- Rapid Resolution **3.5 µm** for high productivity. Typically best for customers with only UV and fluorescence detectors (FLD) because the FLD cannot switch wavelengths quickly enough for most RRHT separations.
- 5 µm:** longer columns for more traditional analyses. Also good for customers with only UV and FLDs.

Key Selling Points for Environmental Labs (the primary customer)

- High productivity** for running samples faster, freeing instruments and people for additional analysis or for taking in more samples for increased revenue.
- Fast analysis time**—down to 5 minutes with no compromise in resolution. High resolution and short analysis time means lower operating costs.
- Tested with a mix of 16 PAHs** in EPA method 610 (550 and 8310), proving that the specific column can deliver greater than baseline resolution for all components.

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New PAH columns

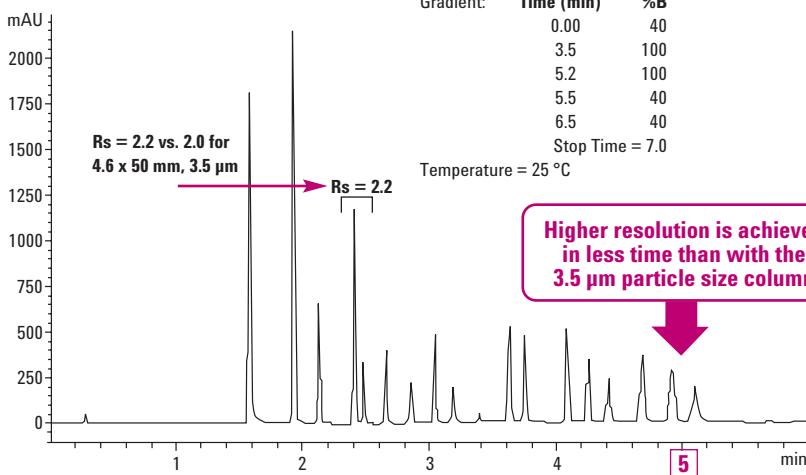
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PAH Column Strengths

Feature	Benefit
RRHT – 1.8 µm particles	Extremely high efficiency in short and long (100 mm) column lengths
1.8 µm, 3.5 µm, 5 µm particles in a variety of dimensions	Choices for every type of customer
Polymerically bonded C18 bonded phase	Required for shape-selective separations such as PAHs
Polymerically bonded C18 bonded phase	Alternate selectivity for other separations
Based on silica used in Eclipse Plus columns (Rx-Sil+)	Best peak shape possible. This is true for PAHs and other compounds.
Example separations available on all column configurations.	Easy customer start-up with Agilent products.

High Resolution and Fast Analysis on Rapid Resolution High Throughput (RRHT) 4.6 x 50 mm, 1.8 µm Eclipse PAH Column

Conditions:
DAD 220, 4 nm No. Ref. DAD Stop Time = 6.0 min
Flow 2.00 ml/min
Mobile Phase A = Water; Acetonitrile
Gradient: Time (min) %B
0.00 40
3.5 100
5.2 100
5.5 40
6.5 40
Stop Time = 7.0
Temperature = 25 °C



More information

See Product Announcement dated August 13, 2007, for more information and a complete listing of Eclipse PAH columns, part numbers and prices. Or check "Agilent's Newly Expanded ZORBAX Eclipse Plus LC Columns," Agilent publication 5989-6436EN.

<http://www.chem.agilent.com/scripts/LiteraturePDF.asp?iWHID=52612>



Make sure your customers get this guide!



New LC and LC/MS maintenance guide helps customers keep systems at peak performance

"**Maintaining Your Agilent LC and LC/MS Systems**" (publication 5989-7477EN) provides an easy-to-use, 96-page guide filled with the collective wisdom and technical insight of Agilent experts. Use this guide, with its helpful illustrations and photos, to show your customers:

- Maintenance schedules
- Troubleshooting tips and tools
- Information on replacement parts and supplies

The guide covers:

- Manual injection valve maintenance
- Autosampler maintenance
- Fraction collector maintenance
- Pump maintenance
- Detector maintenance
- General supplies

New in this updated guide:

- 1200 Series parts and supplies
- Autosampler supplies for Agilent HPLC systems with CTC autosamplers
- Maintaining the MSD
- Quiet Cover
- Certified vials, caps and septa
- New electronic crimper and decapper

Order in bulk and give them to your customers! Hard copies will be available in English on November 1, 2007. Localized versions in Chinese, French, German, Japanese and Spanish will follow.

New Literature

Electronic Newsletters

The screenshot of "Separation Times" shows a woman with orange hair smiling. Below her is a photograph of a GC/MS interface. A sidebar on the right contains a "Did you know?" section about ChemStation and a "ask the experts" section with three questions.

The screenshot of "Agilent in Pharmaceutical Analysis" shows a protein chip and a computer screen displaying software. A sidebar on the right contains a "Did you know?" section about MassHunter software and a "ask the experts" section with three questions.

"eSeparation Times," Volume 20, Number 5, 2007. Available at www.agilent.com/chem/separationtimes

In this issue:

- Find semivolatiles at part-per-billion levels
- Faster solution for unified volatile organic analysis with 0.18 mm ID GC columns
- Reduce repair—and requalifications—in regulated labs

"Agilent in Pharmaceutical Analysis," Issue 20, 2007. Available at www.agilent.com/chem/pharma20

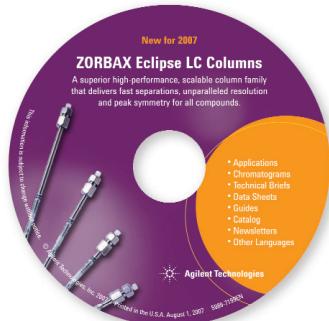
In this issue:

- Replace SDS-PAGE for protein QA/QC and support full compliance
- Reduce repair—and requalifications—in regulated labs
- New software shortens metabolite identification from days to minutes
- Routine metabolite identification at hundredfold lower concentration

Brochures

"Agilent's Newly Expanded ZORBAX Eclipse Plus LC Columns," publication 5989-6436EN. (See page 3 for more information on this product line.)

CD-ROMs



"ZORBAX Eclipse LC Columns," publication 5989-7199EN

Flyers

"Get your complimentary ZORBAX Eclipse LC Columns CD-ROM," publication 5989-7404EN

"Our measure is your success," publication 5989-7256EN

Selection Guides



"Agilent ZORBAX Column Selection Guide for HPLC," available in English (5989-5992EN), French (5989-5992FR), German (5989-5992DEE), and Spanish (5989-5992ES)

www.chem.agilent.com/scripts/LiteraturePDF.asp?iWHID=48367

Maintenance Guides

"Maintaining Your Agilent LC and LC/MS Systems" publication 5989-7477EN. (See page 5 for more details.)

Free supplies for environmental and food safety industries

Environmental Industry

Your customers receive FREE GC or LC supplies with any order over \$900 containing at least one Agilent GC or LC column.

GC environmental supplies (all three items)

- One pack of 50 11 mm advanced green inlet septa (part number 5183-4759)
- One 10 μL fixed needle, tapered syringe (part number 5181-1267)
- One liner (choice of single taper direct connect, splitless, 4 mm ID, deactivated, part number G1544-80730 or 5181-3316 with no glass wool)



LC environmental supplies (both items)

- Two packs of 2-mL wide-opening screw-top glass vials, 100/pack (part number 5182-0714)
- Two packs of blue PP screw caps with PTFE/red silicone rubber septa, 100/pack (part number 5182-0717)

Customers also get environmental analysis methods cards and poster, which will help them **save time and cost-per-sample by having the applications they need, including instrument conditions, readily available to ensure accurate, reproducible results every time.**

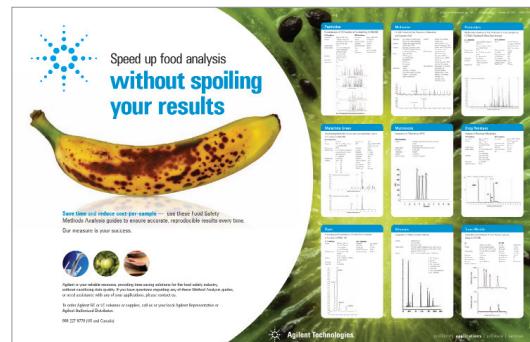
Promotion expires March 14, 2008

Food Safety Industry

Your customers receive a FREE pack of Agilent AccuBOND[®] Florisil SPE cartridges with any order over \$900 containing at least one Agilent GC or LC column.

Customers get their choice of the following:

AccuBOND [®] Florisil SPE Cartridges	Description	Unit
Agilent Part Number		
188-2410	100 mg, 1 mL	100/pack
188-2420	200 mg, 3 mL	50/pack
188-2450	500 mg, 3 mL	50/pack
188-2456	500 mg, 6 mL	30/pack
188-2460	1,000 mg, 6 mL	30/pack



They also get a food analysis applications/methods poster—**speeding up food analysis without spoiling results.**

Promotion expires April 11, 2008

»» Learn more at
www.agilent.com/chem/specialoffers

Agilent Distributor News is a quarterly newsletter
for distributors of Agilent chemical analysis products
and services.

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