INNOVATIVE
YET INTUITIVE
HPLC



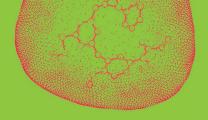
Novel Analytical Chromatographic System





# **Advantages**

Taking a fresh look at an existing technology that hasn't changed in decades, we removed complexities and upgraded outdated components. The software has been completely overhauled. Now manage Alltesta systems, as well as access all data from your smartphone, tablet, or personal computer. Your data is effortlessly and securely stored.













### **User Friendly**

A convenient and space saving design thanks to our new approach to solvent delivery, detection and sample introduction. Our offer includes a digital library with hundreds of methods. This ensures ease of use for operators of all skill levels.

### **Cost Effective**

We combine high quality with value for money. Our approach to manufacturing allows us to pass on savings to the customer, meaning the Alltesta is highly competitive on the market. Our team of chemists and engineers left no stone unturned when researching chromatography's history for inspiration.

### **Flexible**

Several configurations for different needs and budgets are available. The basic kit is fully upgradable, meaning you can reduce your upfront costs. The complete kit constellation allows you to fulfill all your chromatography purposes. Therefore, your HPLC equipment grows as your needs grow.



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Your account is reachable by any internet ready device: PC, smartphone, tablet.



# **HPLC.Cloud**

The web-application www.hplc.cloud solves the problem of instrument control and data handling. Run injections and sequences, record chromatograms, integrate peaks and estimate compounds.



#### Account

Your cloud account is available worldwide. You can review progress in real-time. The results are stored securely on



We offer the possibility to self-host. Server is ready to use with a preinstalled HPLC Cloud software All sensitive data revealed by the Alltesta can be kept on your intranet.



#### Interface

The intuitive interface is designed to maximize your productivity. This improves how you collect, process and share chromatography data



#### Undates

Enjoy seamless updates of the app and instruments firmware Software and driver installation not required.



Verified analytical methods are available in the app library. Consumables have a OR code to easily save your experiments information.



**Autosampler** The Autosampler Frees Up Time

and Handles Accuracy.

Compact autosampler has the capacity to hold 48 standard 2.0 ml vials or 96 wells plate to automate routines. This is fully integrated into the hplc.cloud software, available from any place at any time.

Inexpensive and reliable automation for any analytical and liquid handling instrument. Comprehensive control with direct access control injection order and assign a method to each sample.

Maximum pressure

Syringe Volume

100 pt. 4000 pt

100 µL standard

**Tray Capacity** 

48 2ml vials or 96 wells plate

SS316, PEEK, PTFE, Vespel

5000 psi

# Pump The Syringe Pump Delivers Pulseless Liquid Flow.

Designed for nearly every modern application that involves accurate flow metering. Suitable for diverse chemical and biomedical research areas where precise solvent dosing is required.

The syringe method of solvent delivery solves most problems associated with reciprocating pumps. Stable pulseless flow at any pressure. No solvent degassing required. Flow stability does not depend on the check valve performance. The pump is highly durable due to requiring one plunger stroke per analysis. Boasts a wide range of flow rates and fast refill times.





1.3 kg

There are two important advantages of a Gradient Alltesta system.

The solvent gradient is formed with zero dead volume on the high-pressure side.

Two syringe pump design eliminates the need for a solvent mixer and a pulse dampener.

Max Pressure

Flow Rate Resolution

Pressure Indication

Liquid Capacity  $5000_{\,\mu L}$ 

Flow Rate

1-2000 uL/min

Refill Speed

 $10\,000\,\mu\text{L/min}$ 

300 bar

μL/min

solution

er cycle

### Valve

#### **Our High-pressure** Switching Valve Expands Opportunities.

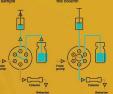
The Alltesta high pressure, high speed switching valve allows for several flow paths switching under high pressure

In a most affordable "Basic" setup, this valve eliminates the need for an autosampler by employing a fixed-volume injection loop and a manual syringe for sample introduction. The valve in "Flip" setup enables sample cleaning or column-switching for R&D purposes.



#### Sample introduction for "Basic" Alltesta

Filling the loop with Injecting the sample into



Pressure (max)

Switch time (60 degree)

0.3 sec

**Liquid Ports** 

10-32 UNE

Number of ports

Contact with liquid

SS316, Vespel

5000 psi

56 .. 8

### **Detector**

#### The Detector Sheds Light on the Analytes.

The Alltesta UV/VIS Detector is designed to continuously monitor the optical characteristics of the flow with up to 4 wavelengths simultaneously. The LED driven light source has zero warm up time along with great durability.

To eliminate hubble formation in the detector cell, we included a built-in back pressure regulator. The typical application is HPLC, but other applications such as Flow Injection Analysis (FIA) and preparative & flash chromatography can also be utilized.

**Data Acquisition Rate** Up to 80 sps

400 psi

Cell Pressure (max)

**Liquid Ports** 

10-32 IINE

Cell Volume

3 ut. 10 ut

Wavelength range

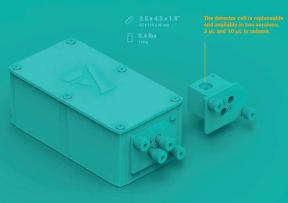
250....

Wavelengths

Up to 4

Noise level

0.05 mail



# **Basic**

**Isocratic Solvent Delivery** 

Multiwavelength UV-VIS Detector.

# Con figura tions



#### Basic

Pump - Valve - Detector

#### Manual sample introduction.

The "Basic" configuration is the most no frills and affordable HPLC system whilst fully optimized for educational institutions.

The perfect solution when only small numbers of samples need analysis.



#### **Basic Automated**

- Autosampler - Pump - Detector

#### Autosampler injection.

Replacing valves with an autosampler allows automated analysis. This is a great setup when multiple analyses of the same type need to be carried out labor un-intensively.

# **Gradient**

Gradient Solvent Delivery,

Autosampler Injection, Multiwavelength UV-VIS Detection.



### **Gradient Automated**

- Two Pumps - Autosampler - Detector

### A laboratory workhorse, holds up to 48 samples or 96 wells.

The "Gradient automated" configuration has 2 pumps to enable the delivery of gradient solvents.

This setting is intended for laboratories, universities and R&D departments. It will run several analyses via different methods.

### **Gradient Automated Flip**

- Valve - Two Pumps - Autosampler - Detector

#### Two-column automated analysis for bio samples.

The "Gradient Automated Flip" setting has an additional valve. It is our most advanced HPLC system. This enables FlipLC functions or column switching capabilities.

Configurations available for all sorts of analysis.

### **Alltesta Mini**

#### Complete functionality in a single unit

Offering small size, simplicity, and power to do most chromatography tests when automation is not required.

Alltesta Mini is the perfect analytical tool for education, onsite testing, monitoring production operations, and testing products in a small business setting when the lab is not available.

Easily upgrade your Mini with an additional pump and switching valve. If automated injection becomes required, you can upgrade the Mini by simply adding on our Alltesta Autosampler. If your product is not detectable by a UV detector, any other detector with an analog output can be supported.

Test products and chemicals anywhere by following an extensive portfolio of developed methods.

**Regired Wires** 

**Power & Ethernet** 

Schools & Universities Discounts

**Up to 20%** 



# Results

### Test products and chemicals anywhere

We offer a library of methods covering a wide range of compounds so you can easily separate complex natural samples like cannabis.

To let customers without experience in chemistry successfully perform analyses, we supply:

- Alltesta Chromatograph
- Chromatography column
   Premixed solvents
- Reference standards
- Software with optimized method (settings)







✓ 1

Sample injection: 57/8/2021: 70:35





	Time	Area		Compound	Amount	
1	7.871	22.416	-	Cannabidiol (CBD)	0.1	mg/ml
2	14.173	21.85	-	Cannabinol (CBN)	0.01	mg/ml
3	18	16.174	-	Delta-9-Tetrahydrocannabinol (THC)	0.1	mg/ml
	10 (07		10	Date & Transaction of Table	0.1	market

# **Custom**

### **Application Development.**

To help companies and individuals benefit from the use of HPLC, SIELC Technologies offers a free and fully confidential method development service. We'll enjoy the opportunity to assist in column and mobile phase selection, saving you time and money. Samples will be screened on up to six different stationary phases.

Enjoy analysis by SIELC's team of experienced and talented chromatographers. Fast turn around and full methods explained. LC/MS/ELSD compatible. Scalable for preparative chromatography. The Alltesta HPLC can be used with any commercial analytical column. SIELC offers a full range of columns with the latest column technology to encompass most applications along with tried and tested methods for tailored Alltesta usage.

#### Applications ready to use now

Small hydrophobic molecules, various drugs and chemicals	Newcrom R1, Legacy L1	Reverse phase C18 type (ODS)
Separation of polar molecules in high organic mobile phase	Primesep N, Obelisc N	Normal phase HILIC type
Dual charged column with basic surface for very basic molecules	Obelisc R	Reverse phase/cation-anion exchange
Latest mixed-mode technology for all types of separations.	Newcrom A, AH	Reverse phase/cation exchange
Complimentary mixed-mode columns for all types of separations	Newcrom B, BH	Reverse phase/anion exchange
Original mixed-mode column set with the longest usage history	Primesep A, 100, 200, C, 500	Reverse phase/cation exchange
Separation of inorganic anions, and acidic polar molecules	Primesep B, D, SB	Reverse phase/anion exchange
Cannabinoids specific column	Cannsep A, B, C	Reverse phase with very polar groups
Separation of polar molecules in non aqueous mobile phases	SHARC 1	Hydrogen bonding interaction column
Peptides and proteins separation columns	Promix AP, MP, LP	Reverse phase/ionic interaction
Chiral separation of small molecule complimentary columns set	Ciralia A, C, J	Chiral amylose and cellulose chemistry

# **Explore Alltesta**

more at www.hplc.cloud

Request a 1 month free trial and quotes.

Fill out the application at hplc.cloud/try





We love when HPLC does its iob

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