The Advantages



GC in seconds. Cycle times are up to 50 times faster – from minutes to seconds!



High compatibility. The HyperChrom GC is compatible with many well established injection and detection systems and standard consumables, allowing customers to work with the consumables and columns they know best.



Environmentally friendly. Reduced use of gases, consumables and electricity promote the sustainable development of your company.



Cost saving. One HyperChrom GC replaces 5 to 10 conventional GCs and is compatible with standard consumables and common fused silica columns, radically cutting down running costs.



High resolution. In classical GC, peaks are broadened by diffusion – this effect is counteracted by our innovative peak focussing.



Broad range of applications. Our hyper-fast GCs are suited for most standard applications including VOCs, TPHs, SimDist, PAHs, FAME, and many others.

HyperChrom

In 2018, the HyperChrom GC was awarded the TASIA award. We are grateful for the appraisal of the jury and work hard to meet these expectations and more!



"This is the largest innovation in gas chromatography since the introduction of comprehensive GC×GC some 25 years ago. This instrument allows us to do something that has been speculated about for decades; in short, GC can become much faster, more sensitive and more selective."



Learn more about the HyperChrom GC and our passion and get in contact with us via:

info@hyperchrom.com www.hyperchrom.com

HyperChrom



Hyper-fast GC without compromise

- high resolution
- laboratory level stability
- low running costs

The Cost Savings

Besides reducing investment costs by approximately 360 000 €, running costs are drastically reduced as well:

> Annual cost savings: 36.000

Savings p.a. of:

Consumables	10.000 €
Electricity	13.000 €
Climatization	5.000 €
Service	8.000 €

= 36.000 €

The

60

And on top savings of Helium, maintenance, spare parts...



Rxi-5HT; 2m; 0.18mm; 0,1µm 200 30°C (10s) > 400°C/min / 350°C (2s), **Potential** Helium 1.4 ml/min С **High-resolution** C₂₀ 150 separation of alkanes C₁₀ up to C40 within a C。 runtime of 60 seconds. After 10 seconds of 100 -Post-Run, the GC is ready for the next **Signal (FID, a.u.)** 05 measurement. sec. 40 20 30 50 60 Time (s)

Flow resistance (foam) Sample introduction **Resistively heated** separation column Flow-Field Detector (MS, FID, ...) Gradient fan

The Setup

In the HyperChrom GC, a helically wrapped 2-4 meter fused silica column is placed inside a resistively heated stainless-steel capillary. This stainlesssteel capillary is cooled down using a controlled air flow.

This mechanism allows fast cooldowns and spatial temperature gradients in addition to regular temporal gradients. The resulting peak focussing and particularly fast heating and cooling techniques constitute a high resolution HyperChrom hyper-fast GC.