

- **Exchangeable working electrode**
- **Working Electrodes: GC, Pt, Au, Ag, MD**
- **Low cost of ownership**
- **Dedicated for PAD applications**

The name FlexCell™ is chosen since it emphasizes the versatility and serviceability of this thin-layer flow cell in the Antec program. With its unrivaled design working electrodes can be serviced or replaced in a few minutes. The low cost of ownership is attributed to the replacement of only the working electrode disc. The same holds for switching electrode material for different applications using the same flow cell. This makes the Flexcell suitable for all sorts of electrochemical analyses like the usual biogenic amines (glassy carbon), carbohydrates (gold), peroxides (platinum), halides (silver), sulfides (Magic Diamond) etc.



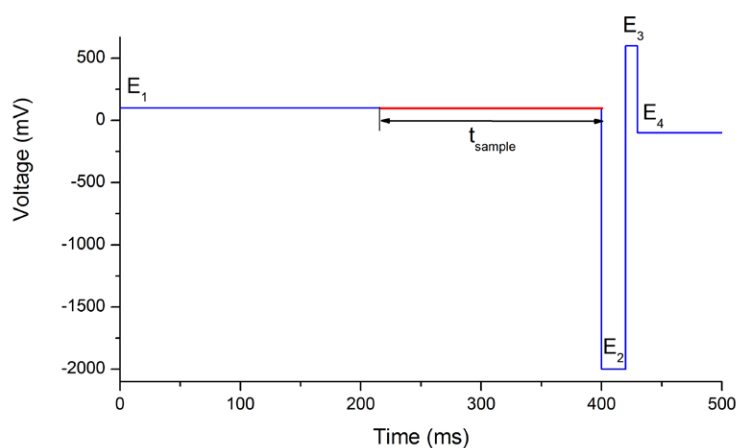
Applications

The FlexCell properties are particularly useful in applications using metal working electrodes. A typical example is the pulsed amperometric detection (PAD) of carbohydrates, where con-

sumption of the gold working electrode occurs. Replacement of the gold electrode is done in a few minutes. The total cell volume is less than 1 μL , which makes the FlexCell suitable as an electrochemical reactor in-line with other detectors.

PAD profile

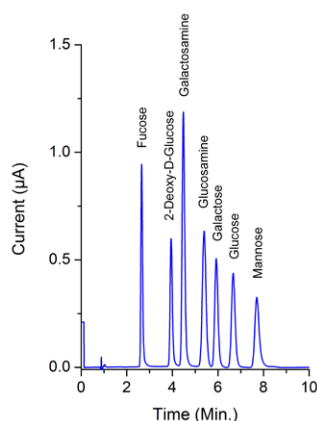
Example of a 4-step PAD potential waveform





HPLC-ECD of carbohydrates in pulse mode using a gold electrode

Separation of carbohydrates by anion exchange chromatography, detected with a FlexCell (Au + HyREF electrodes).



Specifications FlexCell

Cell type	Three electrode, thin-layer reactor cell
Cell volume	approx. 0.7 µL (50 µm spacer)
Spacers	50 µm and 130 µm
Working electrode diameter	8 mm
Working electrode area (wetted)	15 mm ²
Working electrodes (WE)	Glassy carbon (GC), Magic Diamond™ (MD), gold (Au), platinum (Pt), silver (Ag) and copper (Cu)
Reference electrode	HyREF™ (Pd/H ₂), salt bridge and ISAAC
Auxiliary electrode	Carbon-loaded PTFE
Wetted materials	PCTFE, FEP, palladium, carbon-loaded PTFE, material of WE
Flow rate	Typically 0.2 - 1.5 mL/min
Fluidic connections	1/16" o.d. PEEK tubing, with 10-32 PTFE fingertight connections



Working electrode holder with different working electrodes (left to right): Pt, Au, MD, GC

Part no | FlexCell with WE and REF

102.4305	Flexcell MD HyREF
102.4305	Flexcell GC HyREF
102.4320	Flexcell Pt HyREF
102.4325	Flexcell Au HyREF
102.4330	Flexcell Ag HyREF

For FlexCell mounted with Salt Bridge or ISAAC reference electrode and different WE, contact Antec Scientific.

Part no | Ordering Information replacement WE

102.5007	Flexcell WE disc GC (glassy carbon)
102.5022	Flexcell WE disc Pt (platinum)
102.5027	Flexcell WE disc Au (gold)
102.5032	Flexcell WE disc Ag (silver)
102.5037	Flexcell WE disc Cu (copper)
102.5050	Flexcell WE disc MD (magic diamond)

For other WE, contact Antec Scientific

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