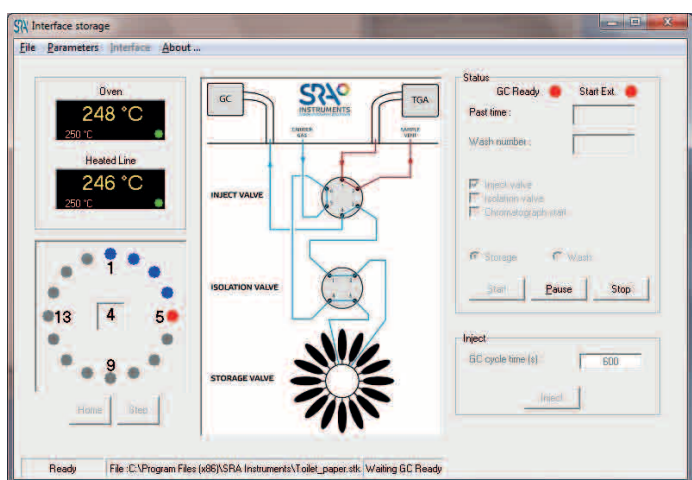


# IST16

## STORAGE INTERFACE FOR TGA-GC/MS COUPLING

### Characterisation of the thermal behaviour of materials

Thermogravimetry combined with gas chromatography and mass spectrometry (TGA-GC/MS) is now the method of choice for the qualitative and quantitative analysis of evolved gases. During the thermal degradation cycle of the materials, the composition of the evolved gas changes too fast for a GC/MS analysis in its standard configuration. With IST16, the chromatographic separation time is no longer a limitation for the detailed study of complex thermal analysis profiles. The IST16 interface allows to sequentially store in 16 loops several fractions of the gaseous effluent from the TGA and to automatically inject these samples into the GC/MS.



Main page of the software

### Software

The IST16 is supplied with a dedicated interface. It is possible to edit the storage sequence, save the methods, view the status of the instrument and automatically manage the start of the GC analyses.



IST16 - Storage interface SRA Instruments

The gases evolved during the cycle of the TGA are transmitted to the storage interface and then to the GC via heated and temperature-controlled micro-volume transfer lines.



With the IST16, it is possible to correlate thermal effects with information concerning the molecular nature, structure and composition of the materials.

The IST16 is designed to be coupled to any TGA and GC/MS models.

**IST16**  
For an efficient  
TGA/GC/MS coupling



### Application fields :



- Automotive
- Chemical, pharmaceutical
- Research
- Biomass
- Deformulation
- Etc.



16 storage loops



High temperature



Multi-systems compatibility



Fully automated

## IST16 STORAGE INTERFACE

### TECHNICAL SPECIFICATIONS

#### General specifications :

Dimensions (mm) : H 450 ; P 430 ; L 400  
Weight : 15 kg

#### Environmental conditions :

Temperature : 0 °C to 40 °C  
Relative humidity : 5 to 95 % non-condensing  
Altitude : up to 2000 m max.  
Use : indoor or enclosed

#### Utilities :

Power supply input : 110 or 220 VAC, 1000 W max

#### Technical specifications :

Number of loops : 16  
Loop volume : 250 µL in standard, customised volumes on request  
Number of valves : 3 (injection, storage and isolation)  
Heated zones : 3, electronically regulated  
Valve box temperature : 250 °C  
Transfer lines : 2 x 1,2 m  
Lines and loops treatment : Sulfinert  
Transfer lines temperature : 250 °C

#### Options :

Installation kit depending on the GC

#### Installation requirements :

The IST16 interface must be located between TGA and GC. It requires a free space of 60 cm wide between the two instruments.

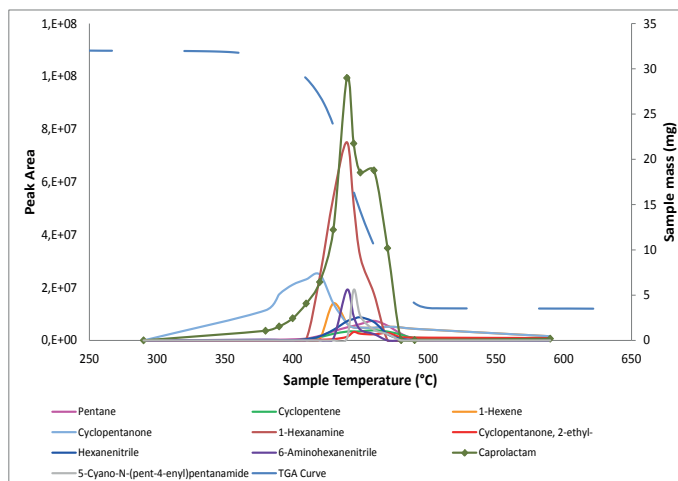
GC requirement : Split/splitless injector, remote start-in, remote ready-out.

TGA requirement : remote start-out (contact closure)

PC requirement : Windows 7, Ethernet port

#### Application fields :

Complex analysis of material degradation, polymers deformation, biomass, etc.



Example of emission profiles obtained with the polyamide 66



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