

VACUUM SYSTEMS AND COMPONENTS













# **EFFUSION CELL**





#### SEJ 15/40 - 1.5 cc - 1400°C

#### STANDARD SPECIFICATIONS

Mounting flange	40CF	
Maximum temperature	1400°C	
Thermocouple	K ou C	
Cell shutter	Manual	
Crucible	Al <sub>2</sub> O <sub>3</sub> - 1.5 cc	

Model	Thermocouple	Reference
SEJ 15/40 K	Туре К	302 431
SEJ 15/40 C	Type C	302 432

Options		
Boron nitride pyrolitic crucible (PBN)	302 138	
Alumina crucible (Al <sub>2</sub> O <sub>3</sub> )	302 139	
Graphite crucible (C)	302 140	
Pneumatic shutter (24 VDC without power supply)	302 146	
Cooling panel on flange 40CF	302 143	



Spare parts	
Crucibles	See options
Degassed heater without crucible	302 137
Thermocouple type K (Al <sub>2</sub> O <sub>3</sub> insulation)	302 141
Thermocouple type C (Al <sub>2</sub> O <sub>3</sub> insulation)	302 142
Shutter without control	302 144





### SEJ 20c/40 – 2 cc conique – 1400°C



STANDARD SPECIFICATIONS		
Mounting flange	40CF	
Maximum temperature	1400°C	
Thermocouple	K ou C	
Cell shutter	Manual	
Crucible	Al <sub>2</sub> O <sub>3</sub> - 2 cc	

Model	Thermocouple	Reference
SEJ 20c/40 K	Туре К	302 966
SEJ 20c/40 C	Туре С	302 967

Options		
Boron nitride pyrolitic crucible (PBN)	302 968	
Alumina crucible (Al <sub>2</sub> O <sub>3</sub> )	302 970	
Graphite crucible (C)	302 971	
Pneumatic shutter (24 VDC without power supply)	302 973	
Cooling panel on flange CF40/CF63	302 154	



Spare parts	
Crucibles	See options
Degassed heater without crucible	302 974
Thermocouple type K (Al <sub>2</sub> O <sub>3</sub> insulation)	302 975
Thermocouple type C (Al <sub>2</sub> O <sub>3</sub> insulation)	302 976
Shutter without control	302 979



## SEJ 25/40 – 25 cc – 1500°C



STANDARD SPECIFICATIONS		
Mounting flange	40CF	
Maximum temperature	1500°C	
Thermocouple	K ou C	
Cell shutter	Manuel	
Crucible	Al <sub>2</sub> O <sub>3</sub> - 25 cc	

Model	Thermocouple	Reference
SEJ 25/40 K	Туре К	302 433
SEJ 25/40 C	Туре С	302 434

Options	
Boron nitride pyrolitic crucible (PBN)	302 150
Alumina crucible (Al <sub>2</sub> O <sub>3</sub> )	302 151
Pneumatic shutter (24 VDC without power supply)	302 157
Cooling panel on flange CF40/CF63	302 154



Spare parts	
Crucibles	Voir options
Degassed heater without crucible	302 149
Thermocouple type K (Al <sub>2</sub> O <sub>3</sub> insulation)	302 152
Thermocouple type C (Al <sub>2</sub> O <sub>3</sub> insulation)	302 153
Shutter without control	302 155



# **CELLULES D'EVAPORATION**



COOLING PANEL FOR CELL SEJ 15/40					
Model	Flanges Reference				
PR 40-40	40CF	302 143			

Spécial SEJ 15/40 - 1.5cc

	SUPPORT FLANGE FOR EFFUSIONN CELLS				
Model	Characteristics	Reference			
BPSEJ	Source support for effusion cell with water or liquid nitrogen cooling system. Mounting on CF160 and designed to receive 3 effusion cells on CF40 flange. 3 CF16 flanges enable for shutters	301 017			
<ul> <li>Confocal position for the cells</li> <li>Max water flow : 4 L/min</li> <li>Bride 160CF</li> <li>Bride 160CF</li> <li>bride: 16CF</li> <li>bride: 16CF</li> </ul>					



VINCI TECHNOLOGIES - DIVISION MECA 2000

## **CELLULES D'EVAPORATION**

#### **REGULATED POWER SUPPLY FOR EFFUSION CELL : ACT5**

Power supply ACT-5 was designed by Vinci Technologies to provide research laboratories with a power supply specially adapted for effusion cells and manipulator heater.

It also allows the heating of sample holders and evaporation systems by Joule effect.

It comes in the form of a 19" rack 3U and integrates the power supply operating in constant voltage or constant current, with a regulator to maintain accurate temperature.

It is equipped for standard version with 2 thermocouple connectors : K and C and one shutter command.

RS232 plug for programming all parameters of the controller is available on request.

Power switching: continuous output current and voltage:
 >Vmax = 34 V / 30 V / 48 V depending on model
 >Imax = 10 A / 16 A / 24 A depending on model

•Voltage and current setting over the entire operating range by multi-turn potentiometer

Input voltage: 220 V ± 10 % to 50 Hz

•Dimensions: Rack 19" height 3 U

Temperature regulation: P.I.D. numerical regulator with self-regulating and self-adaptive microprocessor
 Accepts all conventional temperature probes equipped with outlets for thermocouples K and C :
 >Th. K (Chromel/Alumel) Tmax = 1200°C

The C (Tungsten Rhenium 5 %/26 %) Tmax = 2500 °C

•Temperature setting by digital buttons, programming possibilities of a slope to the set value. The accuracy is about 0.5% of scale.



POWER SUPPLY ACT 5						
Power su	pply	Associated cell	References			
ACT-5-10-24	10 A – 24 V	SEJ 15/40 - SEJ 20/40	350 001			
ACT-5-16-30	16 A - 30 V	SEJ 25/40 - SEJHT 10/40	350 002			
ACT-5-10-48	10 A - 48 V		350 003			
ACT-5-24-30	24 A - 30 V	SEJ 40/40	350 004			

