

# STANDARD SINGLE FILAMENT CELL : ST SERIES

## THE FLAT TANTALUM FILAMENT TECHNOLOGY

- Optimized performances at low and medium temperature
- Most commonly used cell, more than 10.000 in operation worldwide
- Provides a pure, stable and reproducible flux
- Uniformities better than +/- 1%
- Robust, reliable and cost effective solution

The standard single filament cell is **the most commonly used** as it is suitable for a **large range of elements and compounds** and was the first concept developed for MBE technology. **Field proven** and **stable in use**, they represent the **best cost-effective solution** for evaporating a variety of materials.

The heater is made of **high grade tantalum flat filament** and is shielded to minimize heat consumption. The heater radiates uniformly along the crucible length. At any temperature, the **stability is better than 0.1°C** over extended time periods.



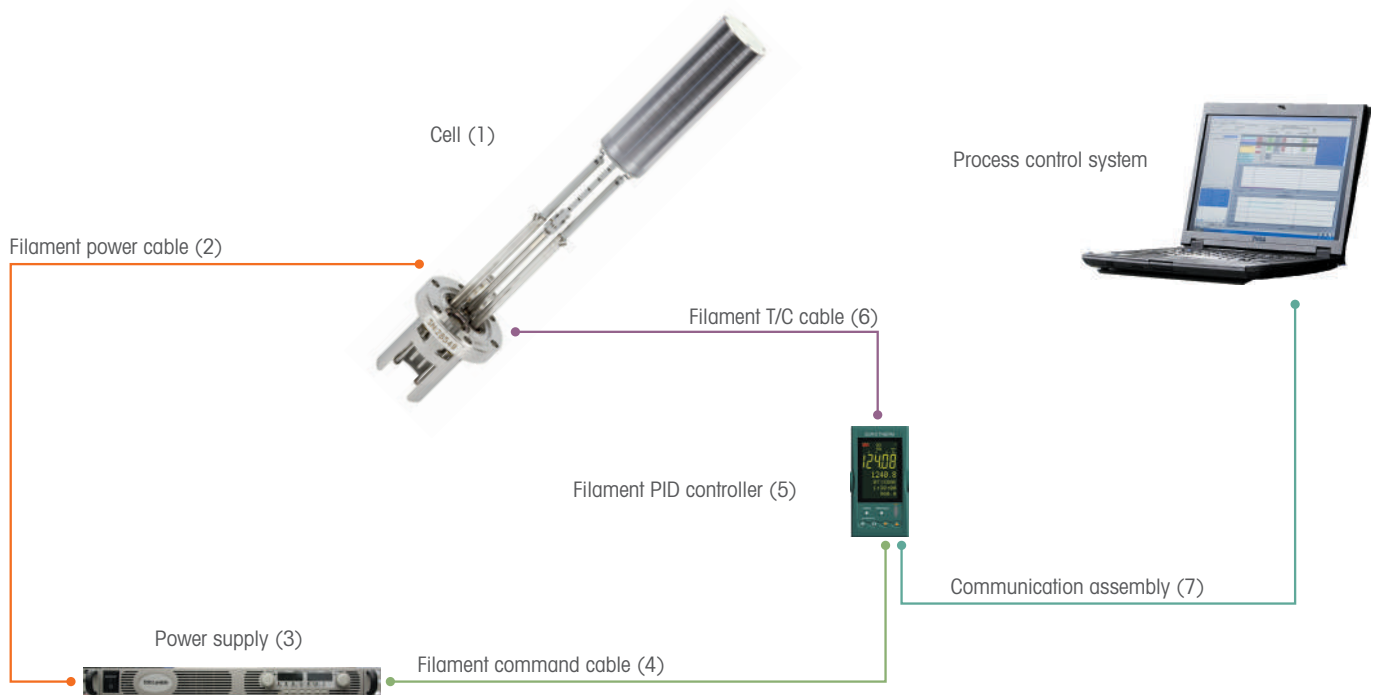
Single filament  
design



# SPECIFICATIONS

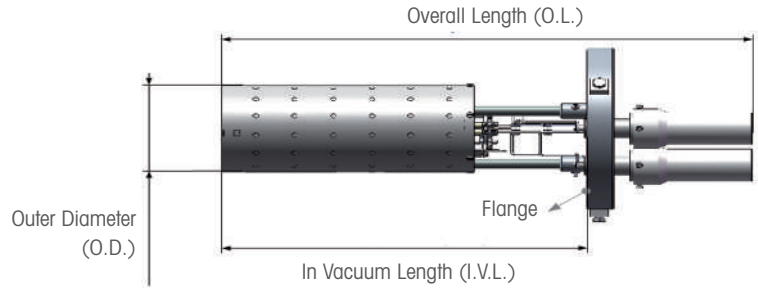
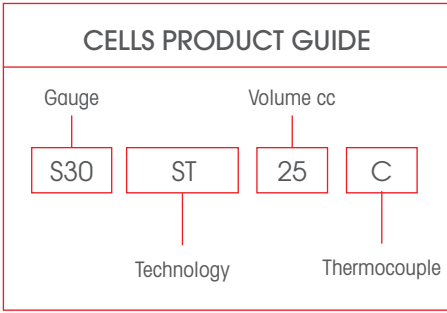
CELL MODEL	S30	S40	S63	S150
CHARACTERISTICS	ST SERIES			
Filament	One			
Heating filament type	Flat tantalum filament			
Thermocouple	C or K type		C type	
Crucible	PBN			
Mounting flange (min)	CF40 (2.75")	CF63 (4.5")	CF150 (8")	
Typical operating temperature	450°C-1200°C			
Maximum continuous operating temperature	1200°C			
Maximum outgassing temperature	1300°C			
Temperature stability	± 0.1°C			
WATER / GAS / ELECTRICAL				
Power supply recommended	30V-25A		100V-15A	100V-30A
Power output connector	M-Sock Ø5			
Thermocouple connector	HMPW-C-M			
Water connection (Swagelok)	SWG Ø3			

# OPERATING THE SOURCE



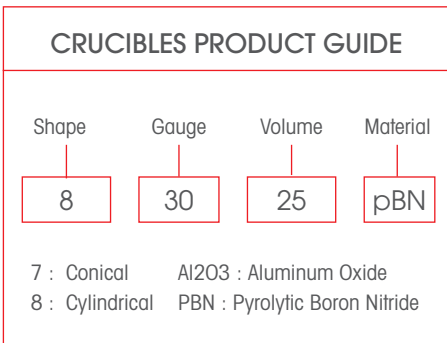
# ORDERING INFORMATION

## CELLS

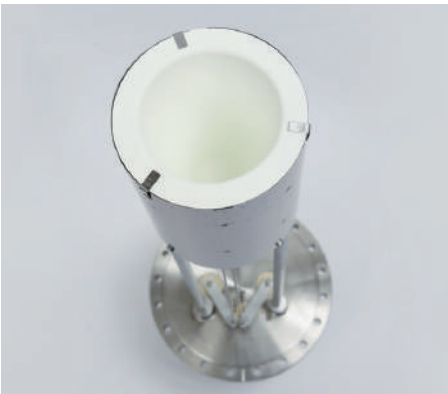


CELL MODEL	P.N.	H2O	FLANGE	I.V.L.	O.L.	O.D.	FORMER NAME
S 30 ST 25 C	R240 731 6	No	CF40 (2.75")	<b>Contact Riber</b>			ABN 125
S 30 ST 25 K	R240 732 5	No	CF40 (2.75")				ABN 125
S 40 ST 35 C	R240 731 7	No	CF40 (2.75")				ABN 135
S 40 ST 35 C	R240 954 3	No	CF40 (2.75")				ABN 135
S 40 ST 35 C	R240 954 2	No	CF40 (2.75")				ABN 135
S 40 ST 35 K	R240 732 6	No	CF40 (2.75")				ABN 135
S 40 ST 35 C	R235 037 5	No	CF40 (2.75")				ABN 135
S 40 ST 35 C	R235 100 7	Yes	CF63 (4"1/2)				VG type
S 63 ST 80 C	R240 877 3	No	CF63 (4"1/2)				ABN 60/80
S 63 ST 125 C	R235 106 7	Yes	CF63 (4"1/2)				VG type
S 150 ST 700 C	R240 732 7	No	CF150 (8")				ABN 700

## CRUCIBLES



CELL MODEL	VOL.	CRUCIBLE	P.N.
S30 ST	25	8 30 25 pBN	R302 776 4
S30 ST	25	8 30 25 pBN-DW	R330 079 4
S40 ST	35	8 40 35 pBN	R302 750 0
S40 ST	35	8 40 35 Al2O3	R304 797 1
S40 ST	22	7 40 22 pBN	R305 919 3
S63 ST	80	7 63 60 pBN	R725 100 2
S63 ST	80	7 63 80 pBN	R305 263 3
S63 ST	125	8 63 125 pBN	R330 043 5
S150 ST	700	7 150 700 pBN	R306 056 5



# SOURCE SELECTION GUIDE

SYSTEMS	SOURCE MODEL	S30	S40	S63	S150
ST SERIES					
<b>RIBER</b>	MBE32				
	Compact 12				
	Compact 21				
	EPINEAT				
	MBE412 (4"/6")				
	MBE49				
	MBE6000				
	MBE7000				
<b>VEECO /VARIAN</b>	GEN II				
	MOD GEN II				
	GEN930				
	GEN 20				
	GEN200				
	GEN2000				
<b>VG</b>	V80				
	V90				
	V100				
	V150				
<b>OTHER SYSTEMS</b>		Riber sources are also available for use on systems from : Eiko, Anelva, Ulvac, SVTA and DCA, as well as custom chambers. Contact Riber for details.			

- RECOMMENDED**
- CONTACT RIBER FOR MORE DETAILS**
- INAPPROPRIATE**

## TECHNOLOGICAL LEADERSHIP

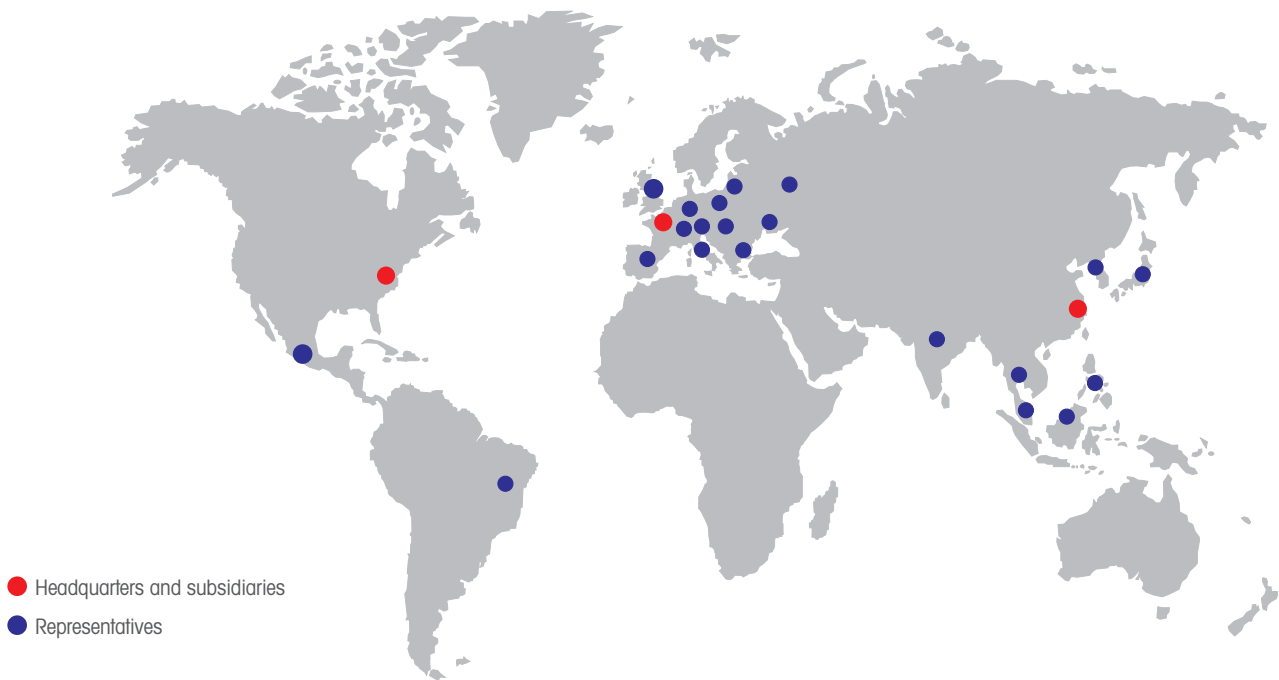
Riber is the world leading supplier of MBE processing equipment and related services.

In total, 850 of our MBE systems have been installed with at least one system in each of the 35 countries with which MBE is involved. This represents 75% of the global market.

Capitalizing on more than 30 years of experience, the company's core philosophy is to design systems in close association with customers. Riber has invented and designed major features which are now found in all MBE systems.

Riber plays a key role in the development of MBE technology, providing customers with solutions from equipment to epitaxial growth.

## WORLDWIDE PRESENCE



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