Electron penetration

Dose % of surface dose 80 % 200 kV

0%								
0	50	100 15	0 200	250	300	350	400 450	
Technical spec	cifications					Dept	th g/m² or μm in wate	
Туре		EBA-120/270 EBA-120/400		EBA-200/270 EBA-200/400		EBA-300/270 EBA-300/400 under development		
Electrical data								
Voltage range		80 kV to 120 kV		80 kV to 200 kV		120 kV to 300 kV		
Maximum power		2.7 kW (/270 version) 4.0 kW (/400 version)		3.7 kW (/270 version) 5.5 kW (/400 version)				
Dimensions and	weight							
Beam length (>90% of average, 10 mm air gap)		255 mm (/270 version) 380 mm (/400 version)		255 mm (/270 version) 380 mm (/400 version)		255 mm (/270 version) 380 mm (/400 version)		
Window configuration (needed as a basis for Monte Carlo simulations)		equival. Ti thickness 11 μm electron transparency 66%		equival. Ti thickness 11 μm electron transparency 66 %		equival. Ti thickness 14 μm electron transparency 66 %		
Weight		12.3 kg (/270 version) 13.2 kg (/400 version)		12.3 kg (/270 version) 13.2 kg (/400 version)				
Performance da	ita							
Surface dose uniformity lengthwise		< ±10%		< ±10 %		< ±10%		
Surface doses at max.voltage [kGy×m/min/kW]		1,237 (/270 version) 835 (/400 version)		484 (/270 version) 327 (/400 version)				
Environmental of	lata							
Operating temperature		4 °C to 80 °C		4 °C to 80 °C		4 °C to 80 °C		
Storage temperature		-20 °C to 60 °C		-20 °C to 60 °C		-20 °C to 60 °C		
Cooling								
Cooling agent	Cooling agent		water		water		water	
Cooling liquid flo	Cooling liquid flow rate		min. 4 l/min		min. 4 I/min		min. 4 l/min	
Water inlet temperature range		25 °C to 40°C		25 °C to 40°C		25 °C to 40°C		
Miscellaneous	lata							
Corrosion protection		provided		provided		provided		
Lifetime				> 6,000 hou	irs operation	40.000	(55)	

ebeam, a division of the Swiss technology company COMET, is a world leader in the industrial usage of innovative electron technology. ebeam explores,

develops and produces innovative solutions and products for cost-effective and environmentallyfriendly processes.

(given favorable environmental conditions and less than 10,000 on/off cycles)

ebeam Technologies

COMET AG, Herrengasse 10, 3175 Flamatt, Switzerland, **T**+41 31 744 90 00, **F**+41317449090

COMET Technologies USA, Inc.

76 Progress Drive, Stamford, CT 06902, USA, **T**+1 203 969 2161, **F** +1 203 969 2162

COMET Mechanical Equipment (Shanghai) Co., Ltd

1201 Guiqiao Road, building 10, 1st floor, Jin Qiao Export Processing Zone, Pudong, Shanghai 201206, P.R. China, **T** +86 21 6879 9000, **F** +86 21 6879 9009



ebeam Engines The next generation of high-performance lamps



ebeam Engines Small, compact and highly flexible

Powerful, robust and reliable: with a beam energy of between 80 and 200 kV, the new ebeam engines are ushering in a new dimension in ultra-compact engines which can be built in to take up a minimum of space, providing above-average reliability and service life as well as significantly increased performance.

The new EBA series lamps use the tried and trusted COMET metal ceramic vacuum tube technology, which also

enables a high maximum voltage, whilst being equally suitable for demanding situations, such as the sterilization of food packagings.





High flexibility

thanks to two electron window lengths

Long service life

- 6,000 hours minimum

High efficiency

 thanks to optimized electron optics and window transparency



Stability

- thanks to good high voltage stability up to 200 kV
- low arcing rate

High precision

 thanks to optional sensors for beam monitoring



Robust design

 thanks to the proven COMET metal ceramic vacuum tube technology

Sustainable corrosion protection

thanks to its special anti-corrosion coating

In 2009, ebeam received the Swiss Technology Award – the country's most important innovation and technology prize.

