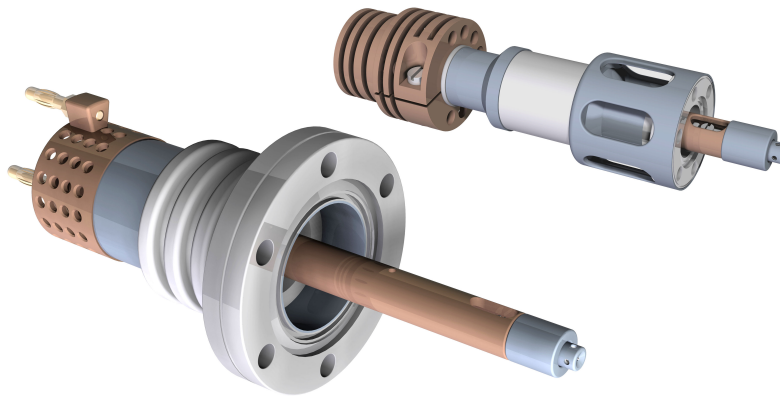


SPARE ELECTRON GUNS

- EBIT / EBIS SPARE GUNS FOR QUICK CATHODE REPLACEMENT -



EBIT and EBIS-A Spare Guns

Electron Beam Ion Sources such as the Dresden EBIT, Dresden EBIS-A, and Dresden EBIS-SC use cathodes of high emissivity to form electron beams to ultimately produce highly charged ions. These cathodes have a limited lifetime and need to be replaced after several thousand hours of source operation. In this case, a spare electron gun with a readily installed fresh cathode can be used for instantaneous replacement to have the ion source back in operation as quick as possible. Also, a spare gun can be used to have a different cathode diameter in stock. With larger cathodes higher electron currents and, thus, more ion output can be achieved. However, the electron beam compression by the magnetic field can be slightly less efficient reducing the ionization factor and the highest achievable charge states. If an EBIT or EBIS is supposed to be used for such opposite fields of applications (high currents versus highest charge states), having two different cathode diameters available is an advantage.

TECHNICAL PARAMETERS

cathode diameters	EBIT (0.5 mm, 1.0 mm), EBIS-A (1.0 mm, 1.5 mm), EBIS-SC (1.5 mm, 2.0 mm)
-------------------	--

CONTACT

Headquarters Großröhrsdorf
Dreebit GmbH
Dr. Daniel Kost
Southwallstr. 5
01900 Großröhrsdorf, Germany

Phone: +49-35952-420-236
Cell: +49-174-2610-366
E-Mail: ibt.sales@dreebit.com