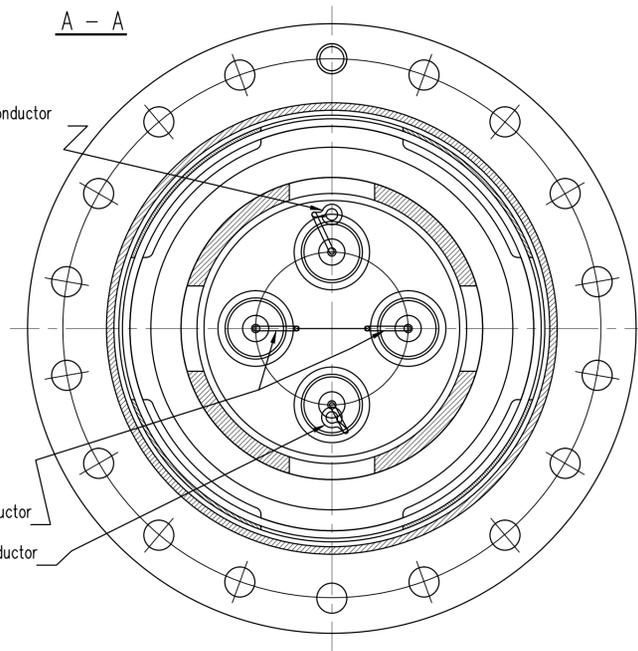
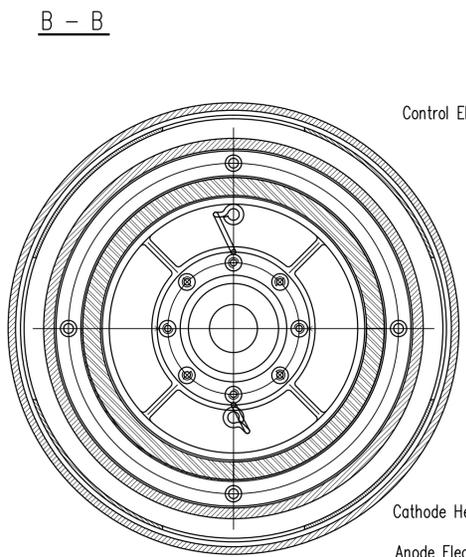
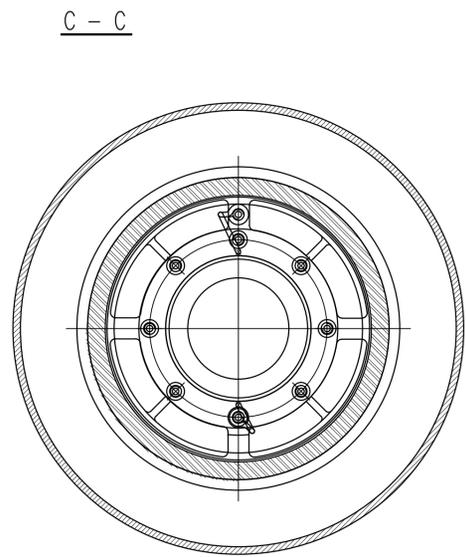


- Notes:
1. Copper: C10100-H02, Class 1 or 2 OFE, to ASTM F68-93 and B152-B8, mill source certificates, including heat number and chemical analysis must accompany part.
  2. Stainless steel made to ASTM A276-90, mill source certificates required, including heat number and chemical analysis. Non magnetic.
  3. Knife-edge flanges must be free of all nicks and defects; protect at all times.
  4. Machining: The use of polishing sanding disks, abrasive paper, or grinding wheels is prohibited without prior approval.
  5. Lubricants used for part machining must correspond to all UHV standards.
  6. High-temp processing: parts requiring heat treating above 300° C must be processed in a dry hydrogen or inert atmosphere, or in a clean oil-free vacuum furnace.
  7. UHV handling: Handle UHV-clean parts with clean polyethylene and nylon gloves, in/on a clean room and surface. For storage or shipping, wrap parts in lint-free tissue and food-grade aluminum foil; store in clean tote boxes.
  8. Leak testing: use a helium mass-spectrometer leak detector calibrated to 2x10<sup>-10</sup> std cc/sec above background.
  9. Assemblies which are fabricated and assembled clean by an outside vendor or collaborator will be brought in and used as-is, should receive careful attention, and the vendor should be inspected and qualified for UHV-clean work.
  10. Welding must correspond to all UHV standards.
  11. All dimensions are in millimeters.



Control Electrode Conductor  
Cathode Heater Conductor  
Anode Electrode Conductor

2	1	Nipple_MDC Catalog Reference_500-2	12TEL020000	Non Magnetic
1	1	Base Flange	12TEL010000	Non Magnetic
Item	Qty	Description	Standard	Material
FILE NAME		12TEL000000 Assy	FSCM NO	i
SIZE		A1	SHEET	q
DRAWN		04/06/2011 A. Didenko	SCALE 1:1	
CHECK		p n	FERMI NATIONAL ACCELERATOR LABORATORY UNITED STATES DEPARTMENT OF ENERGY	
APPR		04/08/11 A. Valishev	Electron Inch Gun	
ISSUED		11/02/04 G. Kuznetsov	Electron Inch Gun_12TEL000000	
REV		r	DWG NO	
CONTRACT NO D			12TEL000000 Assy	