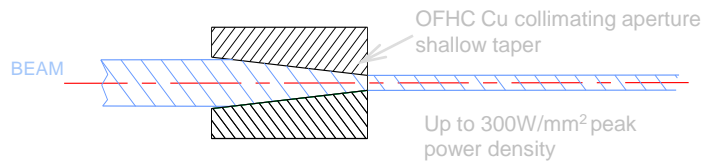


Features

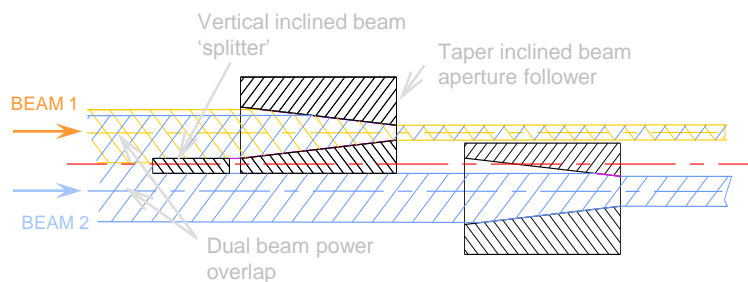
- Precision EDM machined apertures - passes only 'good' central cone downstream and absorbs excess heatload. Approved for use at APS, DLS and CLS.
- Single beam design - configuration 'A' rated to peak face-on power density of $300\text{W}/\text{mm}^2$ with up to 4kW total power load.
- Dual canted undulator 'beam splitter' - config 'B'. Permits beam splitting even with overlapping thermal edges from beam sources. Power densities up to $100\text{W}/\text{mm}^2$ with up to 3kW total power load accepted. Compact package - 200mm length per stage.
- Motorised multi-DOF mounting platform for either configuration permits steering to sub-micron and arc-second resolution.
- Standard primary slits used on all DLS undulator beamlines.

Undulator Power Management Apertures

Single Undulator Beam - Configuration 'A'



Canted Undulator Beam - Configuration 'B'



Since, for many beamlines, only a very small fraction of the central cone of the undulator beam is ever utilised, the outer 'cone' may be safely absorbed without altering the essential characteristics of the line. Up to 95%+ of the heatload can be safely removed in this way so that a typical 4kW beam is reduced to <100W, ensuring heatloads are minimised onto sensitive optical components further downstream and reducing overall costs of applied cooling throughout the line.



Above: Dual beam splitter masks with motorised platform for pitch, yaw, height & traverse.

- **Single Beam** – A more conventional tapered collimator in a practical OFHC Cu construction, with shallow angle taper, power densities of $300\text{W}/\text{mm}^2$ can be safely accommodated.

- **Dual Beam** – A unique solution from IDT permits even overlapping canted undulator beams to be collimated and separated in a very compact package.

