## High-Pressure Helium Swivels

## SNS SPALLATION NEUTRON SOURCE

## Flexible Interconnects for Use on Mobile CCRs



Double O-Ring seals allow minimal gas loss during operation.



Long and short pin versions allow hoses to bypass each other at the 180 degree point for full 0 to 360 rotation.



Hose weight is supported by low-profile ball-bearings to ensure seal integrity in all situations



Banjo type construction means that a single C-clip holds the whole device together. All gas pressure forces are completely balanced inside device.



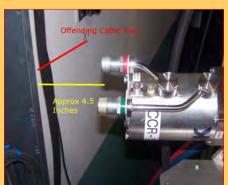
New versions are more compact using a smaller main body.



Long pin model installed on CCR-11



SNS CCR-11 (BL4a) is required to rotate 360 degrees on axis as well as 90 degrees perpendicular to the coldhead axis for sample changes.



CCR-11 is mounted very close to a concrete wall when operational. This is all the room the helium lines had for bending and twisting.



CCR-11 mounted and attached to remote compressor. Even with cable try removed hoses could not have fit into allotted space.