New source deployment system for SK as an R&D of HK calibration

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- **Some calibration works of SK are done manually in the dark.**

→ ・**Deployment system using a winch with wire encoder controlled by PC**

・**Work under the light as much as possible (figure in the next page)**

- **This work is also R&D for HK calibration system.**

Source Deployment System

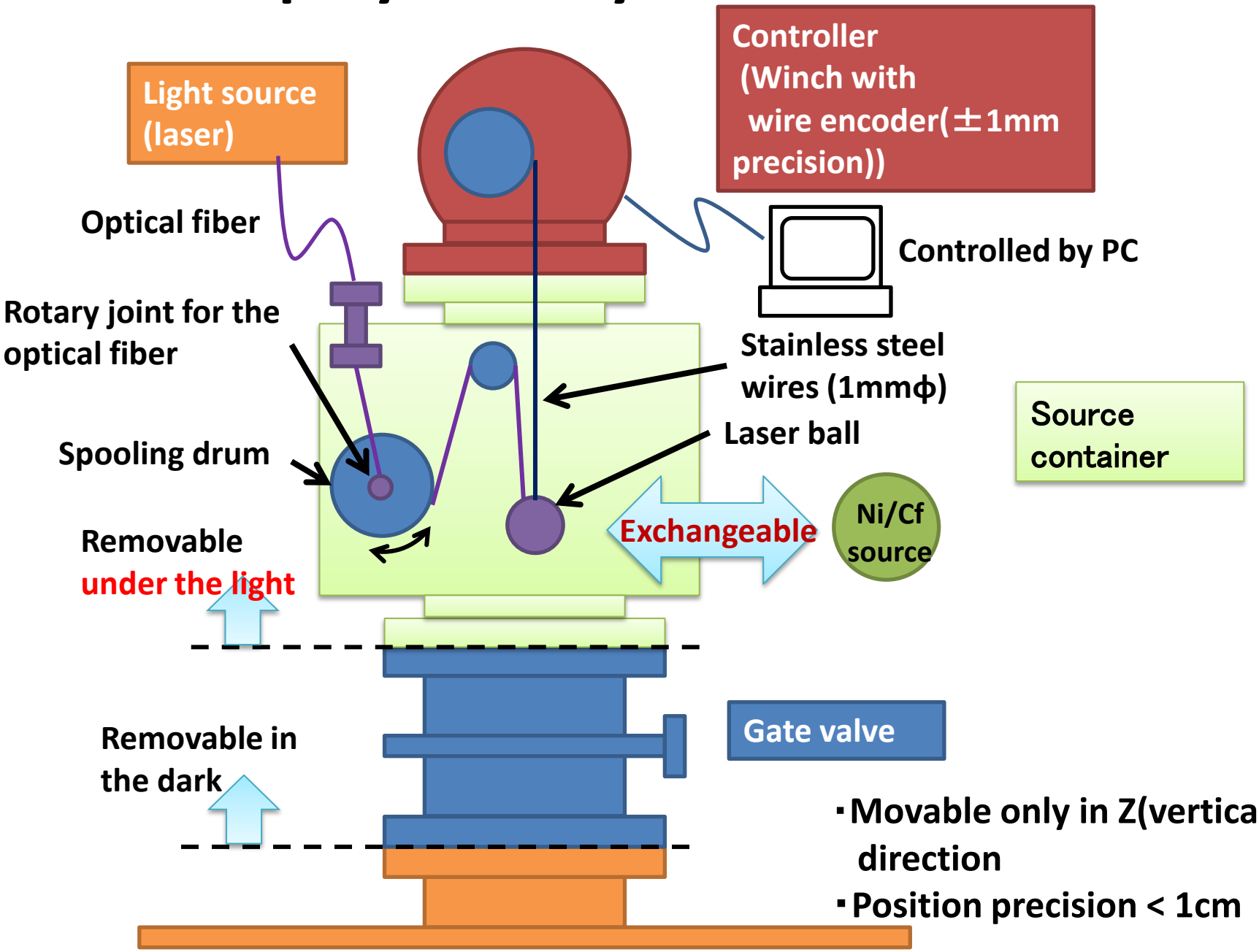
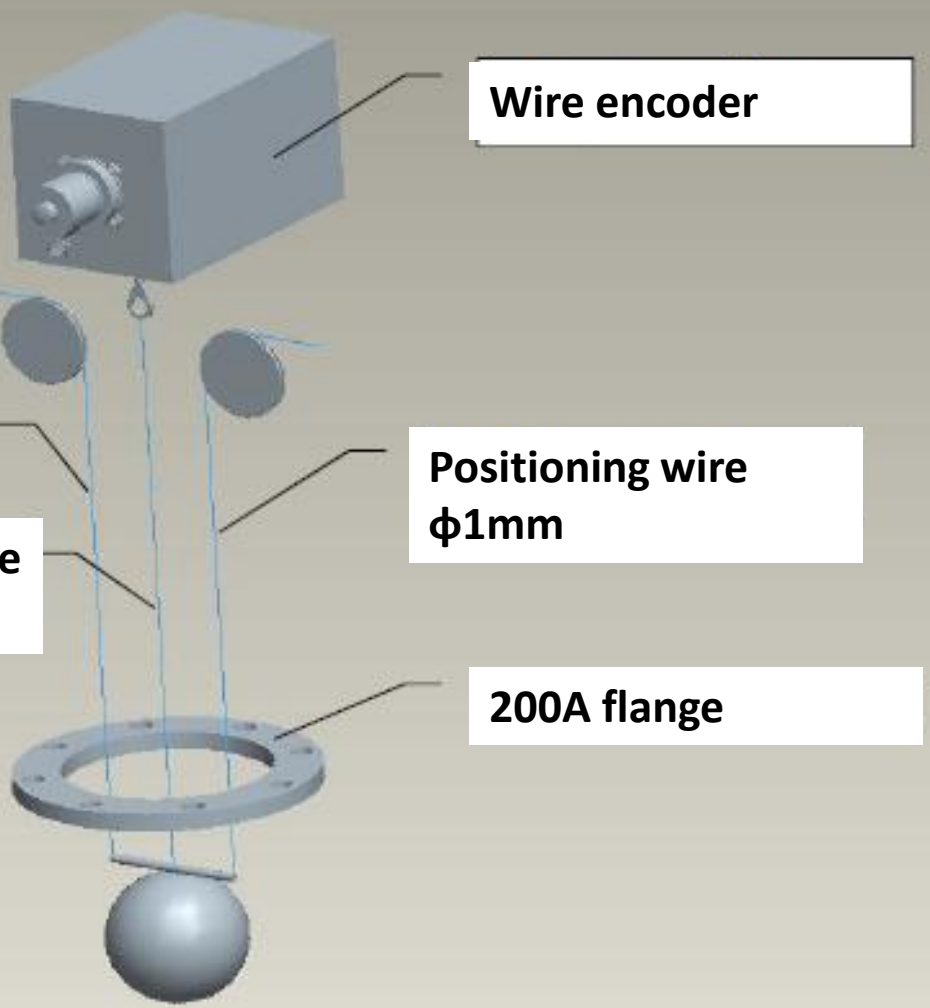


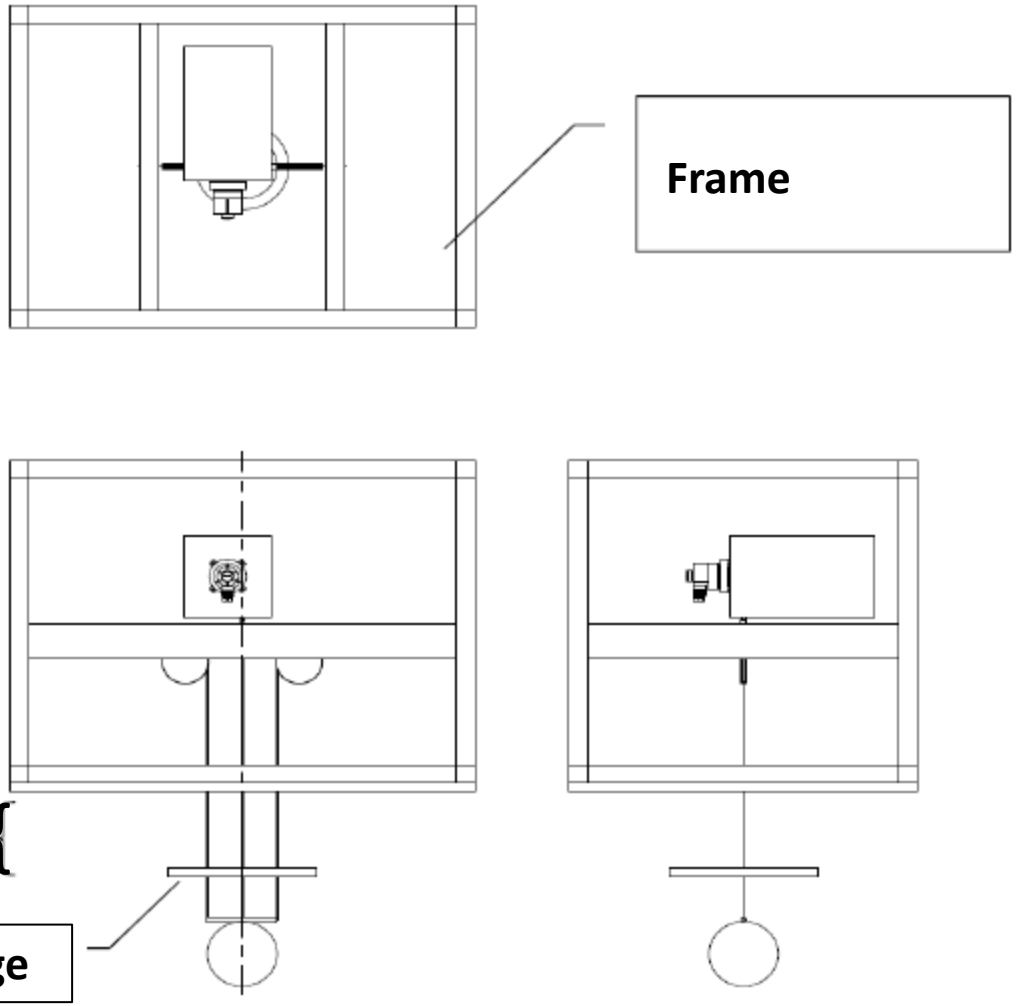
Image of the system

Sources are suspended with 2 wires

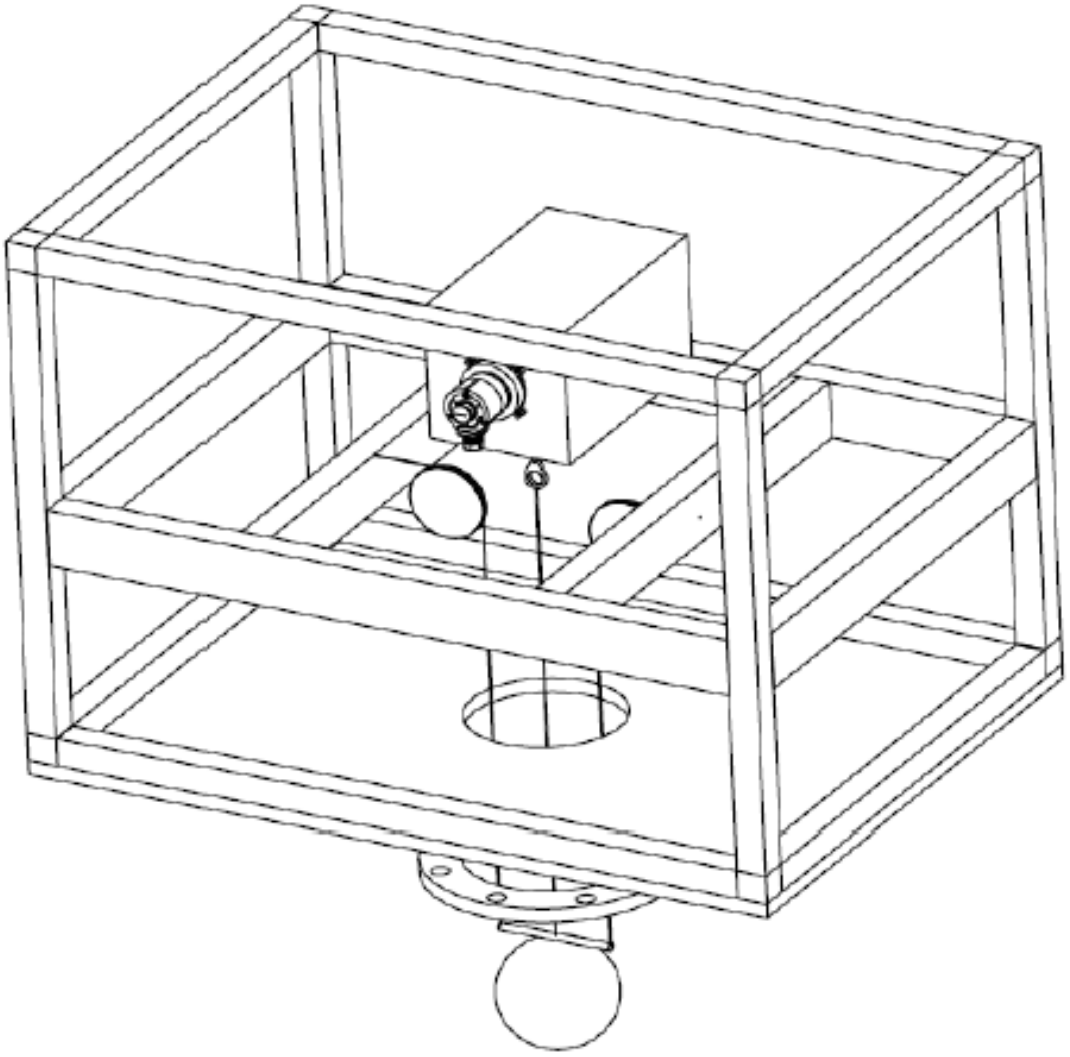
- to prevent sources from rotation
- safer considering damage or cutoff of wires



Front, Top, & Side Views



Schematic View



Schedule

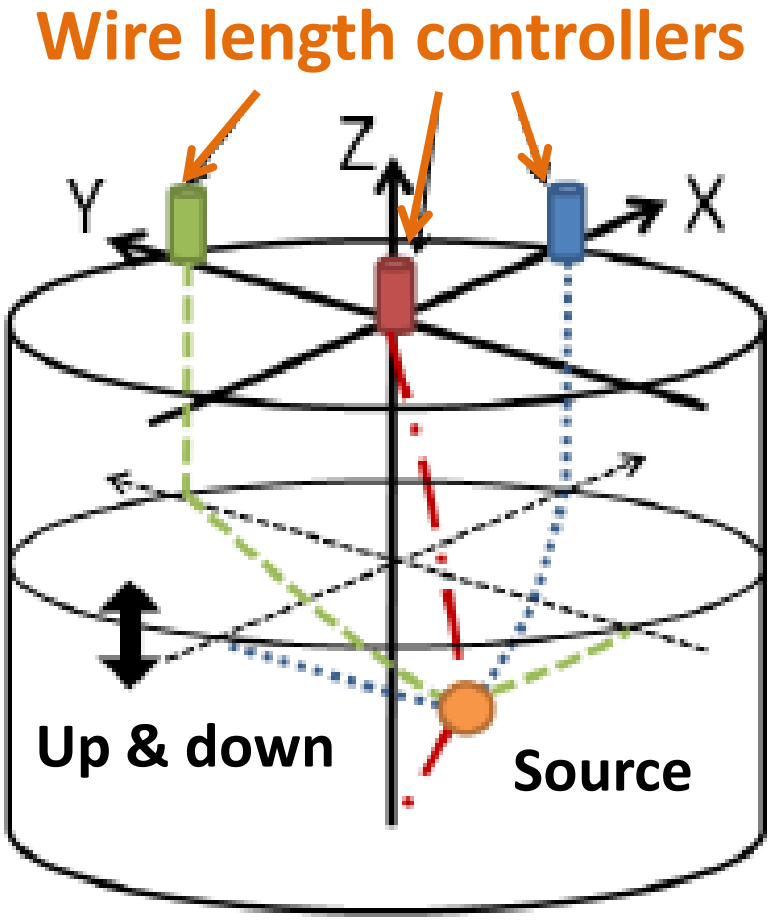
- **FY2014 design & production**
- **FY2015**

  1st half Test in the air & programming control software

  2nd half Total test & use in SK
- **FY2016～ R&D in the HK prototype**

R&D of 3D deployment system in the HK prototype

Since HK is so large, the calibration system should be movable automatically in 3D to reduce time and manpower.



Summary

- We are planning to set a new 1D (z direction) source deployment system in the SK in FY2014 &2015.
- After that, we will start R&D for 3D system in HK prototype.