

# Statement of Work, NGXO Mandrel Blanks

October 22, 2011

NASA Goddard Space Flight seeks a total of sixteen fused quartz cylinders that meet requirements specified below. The delivered cylinders are intended as "blanks" to be further formed and polished into x-ray optic forming mandrels.

The cylinders shall have the following properties:

1. Material: GE124 fused quartz
2. Hollow cylinders having the following outer diameters: 200mm, 205mm, 210mm, and 215mm. Their wall thickness is approximately 20-35 mm.
3. They all have the same axial length of approximately 300mm, with the top and bottom surfaces perpendicular to the cylindrical axis.

Tolerances on these parameters are tabulated in Table 1

**Table 1. Parameters specifying the finished cylinders.**

Cylinder Serial No.	OD (mm)	OD tolerance (mm)	ID (mm)	ID tolerance (mm)	Length (mm)	tolerance Length (mm)
1	200	±1	160	+0/-10	300	+8/-2
2	205	±1	160	+0/-10	300	+8/-2
3	210	±1	160	+0/-10	300	+8/-2
4	215	±1	160	+0/-10	300	+8/-2

**Quantity:** four each