## 1. TECHNICAL REQUIREMENTS
## for manufacturing and quality control of polished molybdenum disks

1.1 Material — molybdenum of 99.95% purity degree.
1.2. Table 1.

| | Diameter, mm | Thickness, mm | Thickness permit, mm | Permit deviation in parallelity, mm | Permit deviation in flatness, mm, max. | Roughness, μm |
|---|---|---|---|---|---|---|
| 1 | $80_{-0,19}$ | 3.4 | ±0,1 | ≤0.010 | ≤0.004 | ≤0.16 |
| 2 | $56_{-0,19}$ | 2.5 | ±0,2 | ≤0.010 | ≤0.004 | ≤0.16 |
| 3 | $40_{-0,16}$ | 1.8 | ±0,2 | ≤0.008 | ≤0.003 | ≤0.16 |
| 4 | $32_{-0,13}$ | 1.5 | ±0,2 | ≤0.008 | ≤0.003 | ≤0.16 |
| 5 | $24_{-0,13}$ | 1.2 | ±0,1 | ≤0.010 | ≤0.004 | ≤0.16 |

1.3. Final processing — etching.

1.4. Disks should be etched in a substance of the following composition:
Hydrochloric acid HCl chemically pure — 3 parts
Nitric acid $HNO_3$ concentrated and chemically pure — 1 part
Etching period — 8-10 minutes.

1.5. There should be no etching cracks, skins, cut-offs or chips, rough edges, scratches, alien inclusions on disks surface. Way of controlling – visual. In doubtful cases the microscope with a magnifying glass 16x is used. Dividing into layers is not permitted.

## 2. BYER'S PRINCIPLES OF ACCEPTANCE.

2.1. The quantity disks meant for input control is pointed out in the table 2.

Table 2.

| The lot quantity, pcs. | The selection quantity, pcs | Acceptance reject items quantity, pcs | Reject number, pcs |
|---|---|---|---|
| 151-280 | 32 | 2 | 3 |
| 281-500 | 50 | 3 | 4 |
| 501-1200 | 80 | 4 | 5 |
| 1200-3200 | 125 | 6 | 7 |

2.2. For testing on aspect of conformity to the mentioned requirements the accepted disks are polished according to the point 1.4 and controlled according to all the points of technical requirements.