

Technical Requirement

Product	Cryogenic seals for the liquid oxygen tanks
Specification	<ol style="list-style-type: none">1. Seal will be seated on the manhole cover of the liquid oxygen tanks. The followings are the specifications for the design of the seal.<ul style="list-style-type: none">- Allowable leak rate 1E-3 cc/sec max.- Static services only- Operating pressure: 1~20 bar- Operating temperature: -196°C ~50°C- Pressurizing medium: Helium gas and DI Water- Dimension of the seal groove: OD: 750 mm; ID: 722.82 mm; Height: 6.32/6.38 mm (OD can not be changed; ID and Height can be changed but minimized as much as possible)- Seal type: Extra jacket is made of PTFE; energized metal springs is inserted into the jacket. Propose the allowable surface finish value.- Elastic recovery of the seal should be maximized. During the operation, initial compression of the seal is a little bit decompressed upto 0.3 ~ 0.5 mm.- Bolt PCD 770, Bumax 109 class, M10, 80 EA are used.- Material of the manhole flange and cover which contacts with the seal is aluminum alloy 2219-T851. 2. Quantity 5 EA<ul style="list-style-type: none">- Including the certificate of conformity (COC)