Materials List for:

Optimized Sealing Process and Real-Time Monitoring of Glass-to-Metal Seal Structures

Zhichun Fan¹, Kangjia Hu², Zhiyong Huang¹, Yong Zhang², He Yan¹

Correspondence to: He Yan at yanhe@mail.tsinghua.edu.cn

URL: https://www.jove.com/video/60064

DOI: doi:10.3791/60064

Materials

Name	Company	Catalog Number	Comments
ABAQUS	Dassault SIMULA	ABAQUS6.14-5	The software to carry out numerical simulation.
Fiber Bragg grating sensors	Femto Fiber Tec	FFT.FBG.S.00.02 Single	apodized FBG
Fusion splicer	Furukawa Information Technologies and Telecommunications	S123M12	FITEL's line of fusion splicers provides an excellent solution for both field and factory splicing applications?
Glass powder	Shenzhen Sialom Advanced Materials Co.,Ltd	LC-1	A kind of low melting-point glass powder (380?).
Graphite mold	Machining workshop of Tsinghua University	Graphite	The mold to locate each part of the metal-to-glass structure.
Heating furnace	Tianjin Zhonghuan Electric Furnace Technology Co., Ltd	SK-G08123-L	vertical tubular furnace
Kovar conductor	Shenzhen Thaistone Technology Co., Ltd	4J29	A common material used for the electrical penetration in the metal-to-glass seal structure
Optical interrogator	Wuhan Gaussian Optics CO.,LTD	OPM-T400	FBG spectrum analysis modules
Pro/Engineer	Parametric Technology Corporation	PROE5.0	The software to establish the 3D geometry.
Steel shell	Beijing Xiongchuan Technology Co., Ltd	316 stainless steel	A kind of austenitic stainless steel

¹Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Collaborative Innovation Center for Advanced Nuclear Energy Technology, Tsinghua University

²Institute of Nuclear and New Energy Technology, Beijing Key Laboratory of Fine Ceramics, Tsinghua University