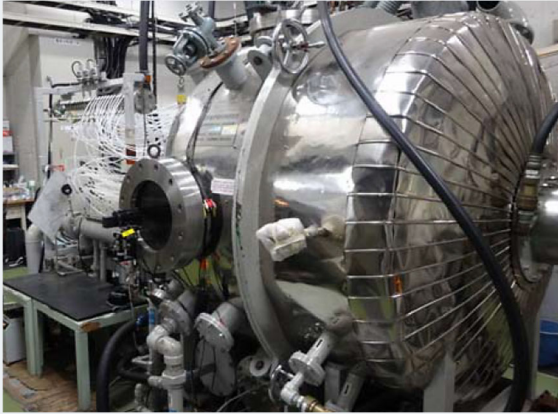


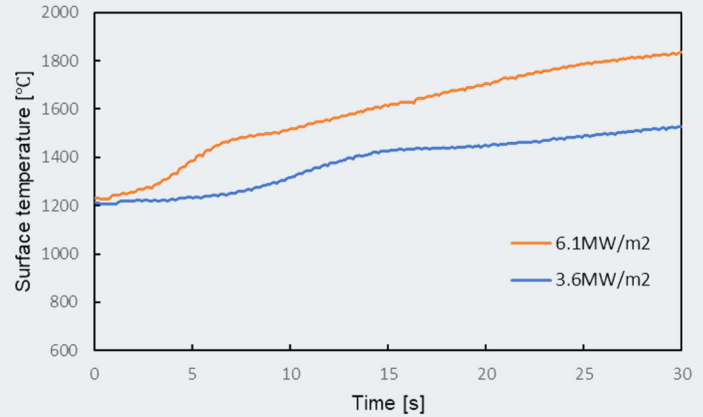
1,500°C Heat Resistant Pitch-based CMC composite

Application: Heat-resistant material for spacecraft Thermal Protection System (TPS)

Arc heating wind tunnel test machine (JAXA)



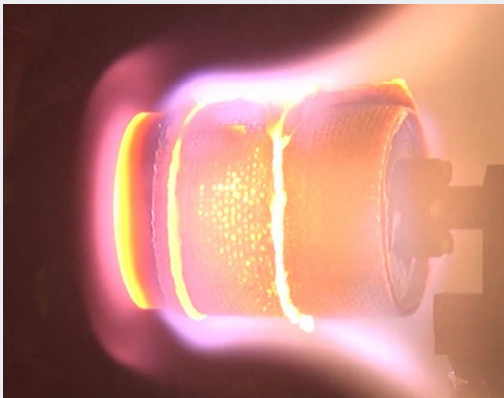
Surface Temperature



Test Condition / Result

Sample Density g/cm ³	Test Condition		Temperature		Thickness		
	Heat Rate MW/m ²	Distance mm	Surface °C	Backside °C	Before Test mm	After Test mm	Δ mm
2.38	3.6	100	1544	683	29.65	29.87	0.22
2.41	6.1	80	1842	759	29.99	30.12	0.13

Test Specimen Appearance



Heat Rate	Before Test	After Test
3.6 MW/m ²		
6.1 MW/m ²		

As the result of arc heating wind tunnel tests on SMC pitch-based C/C with metal Si (C/SiC), there were no cases of detachment.