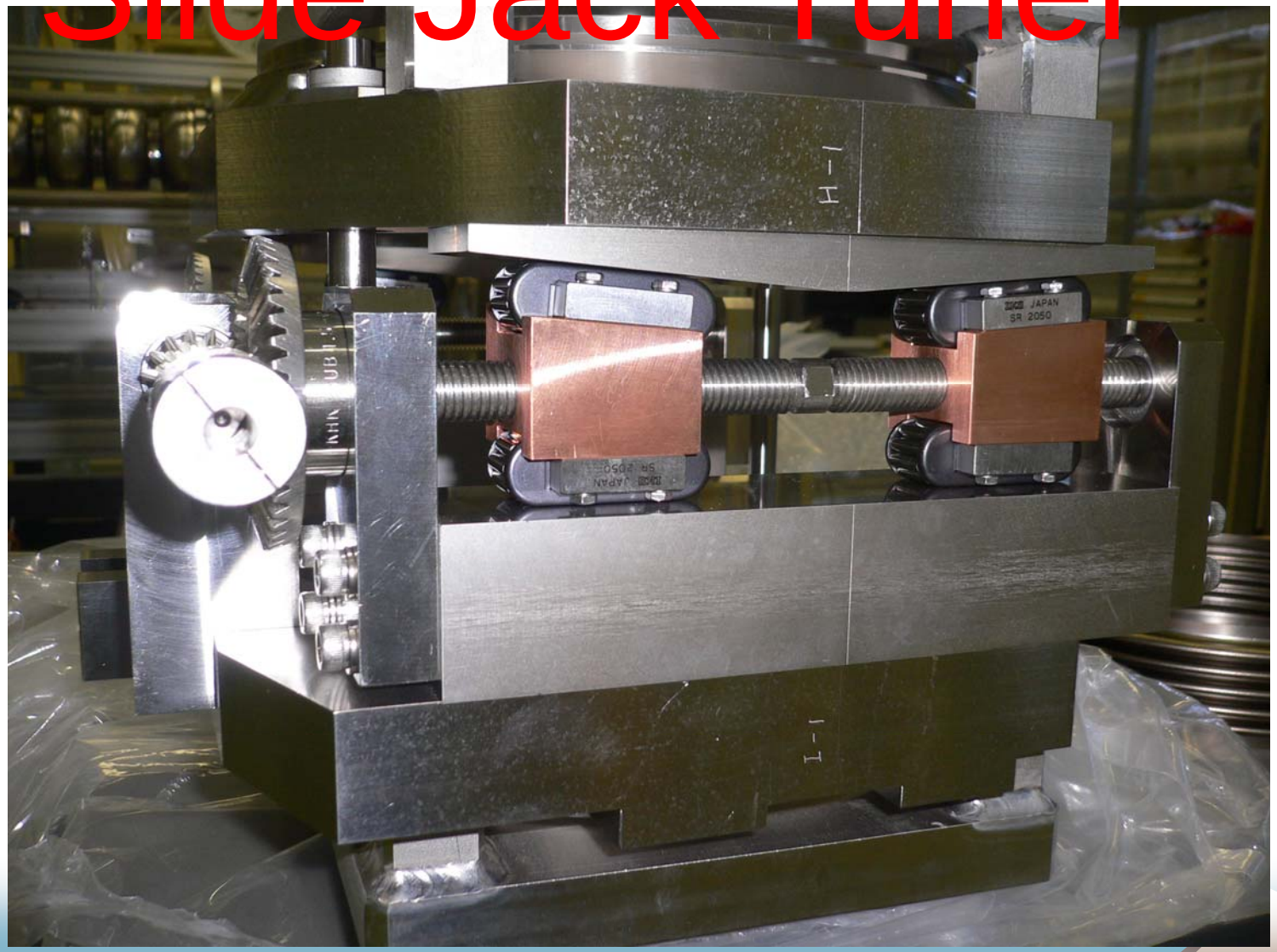
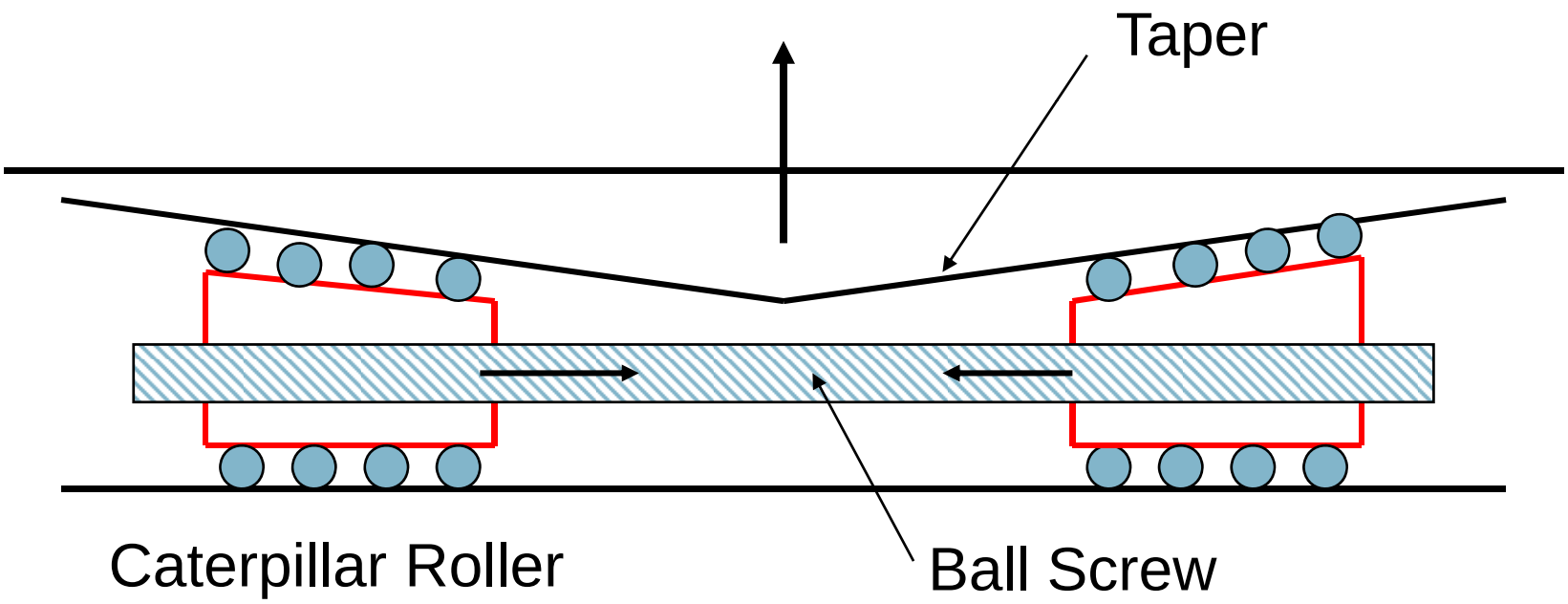
Slide Jack Tuner

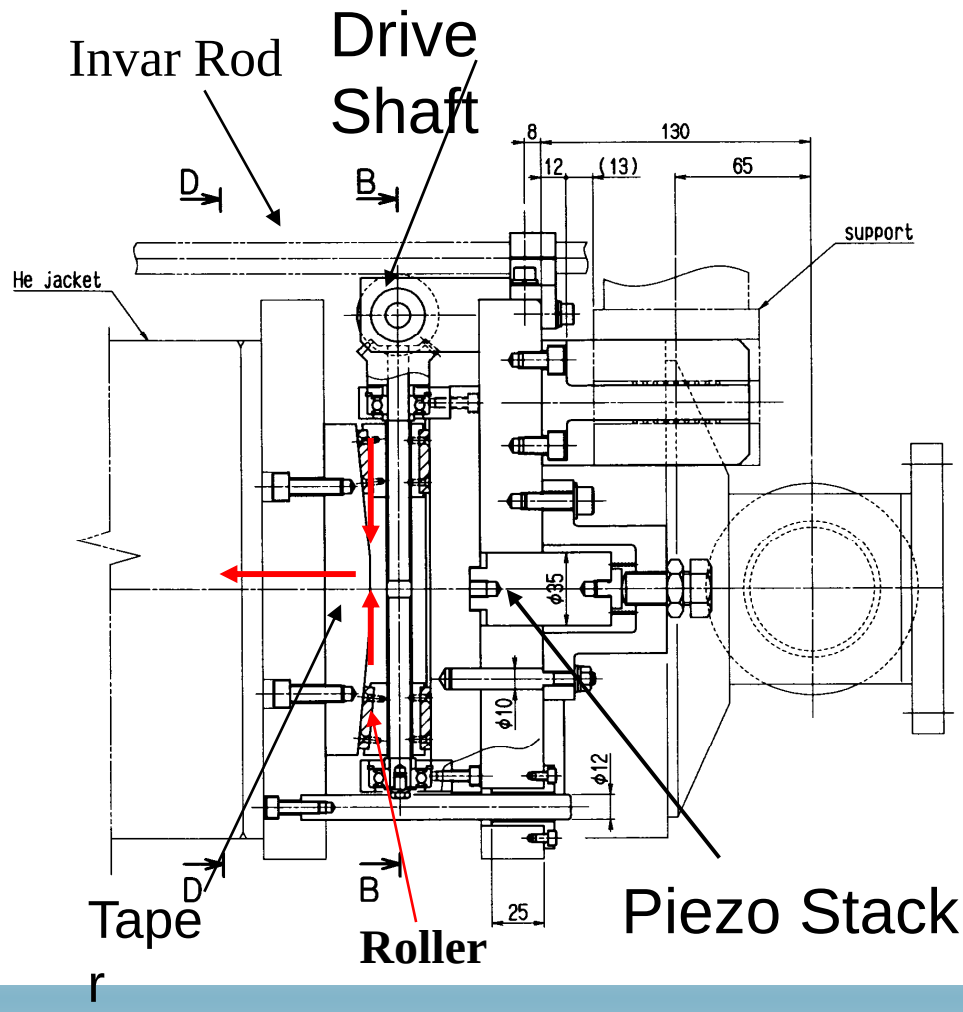


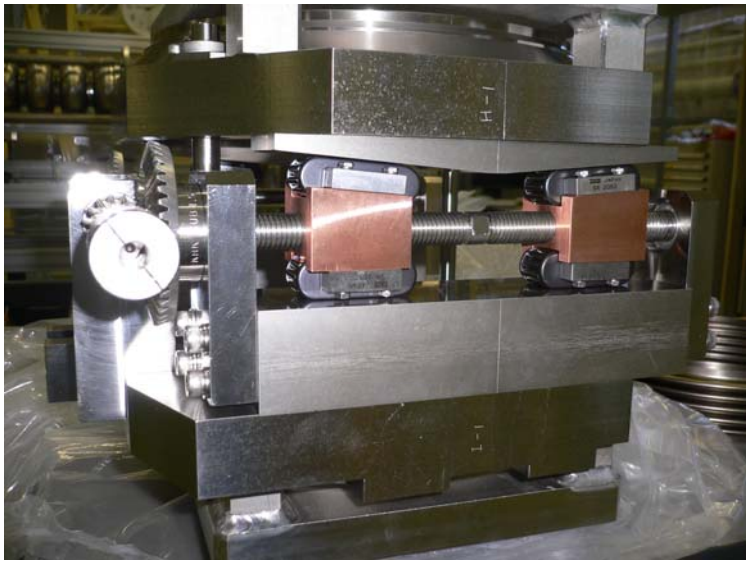
Slide Jack Tuner

Roller Wedge & Ball Screw

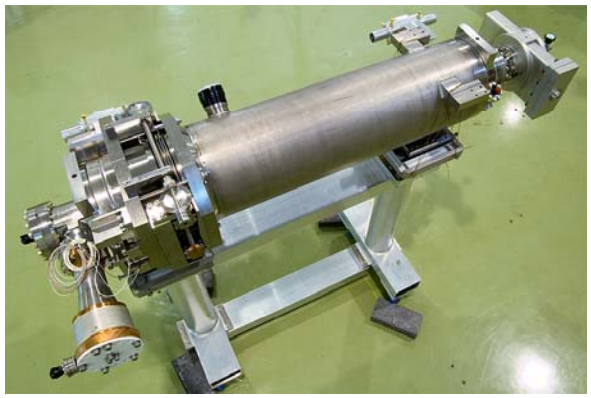


Slide Jack Tuner 290N/μm

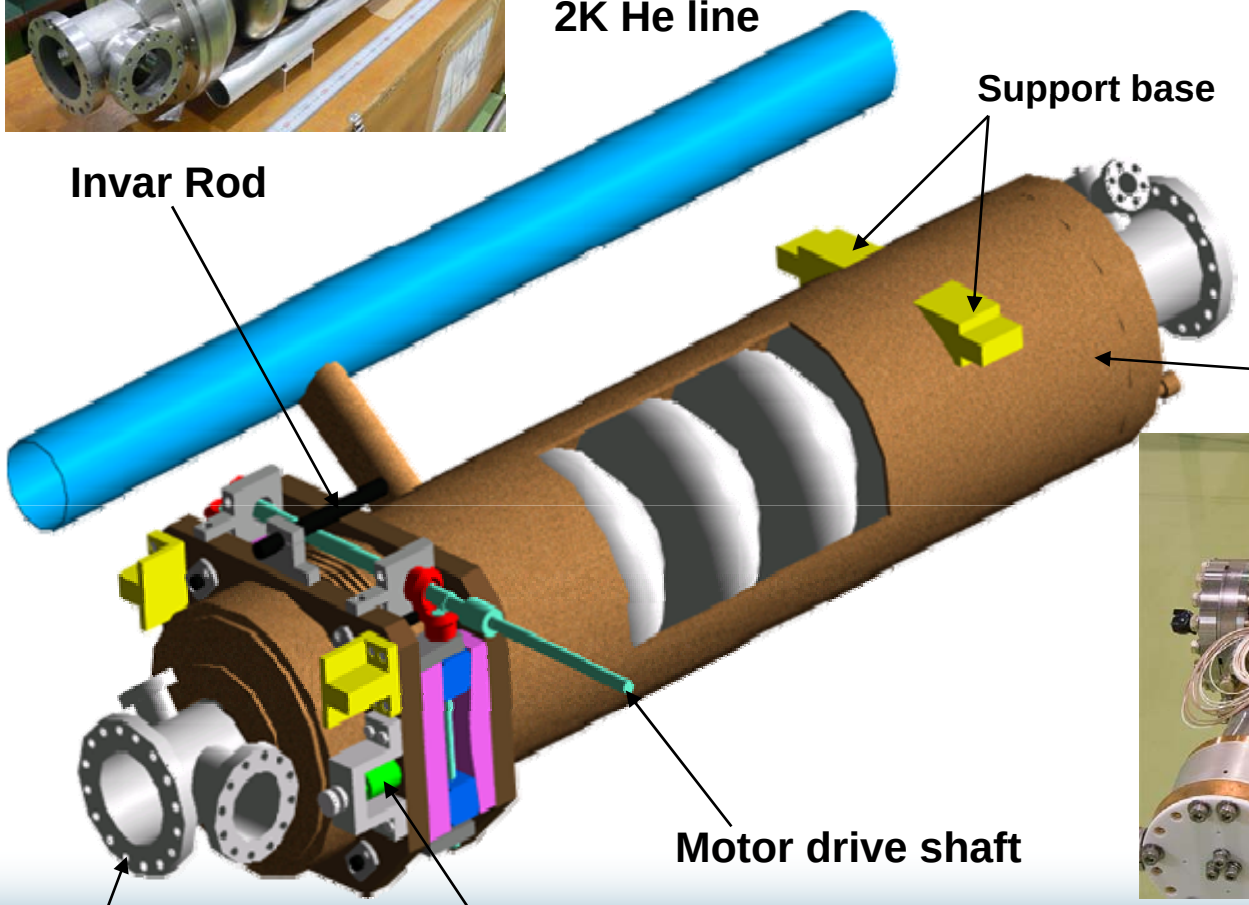


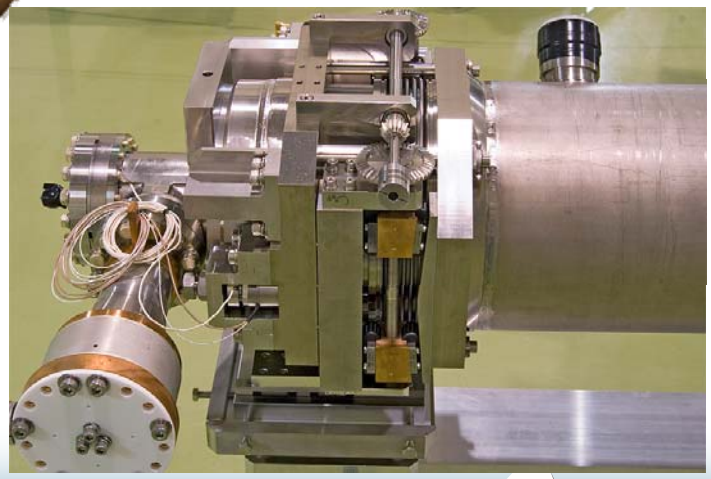


STF BL Module



a Cavity covered with Ti Jacket





Slide Jack Tuner

Components

Component	Number	Reduction	Allowed Load	Max. Load
Caterpillar Roller	2 x 4		26500 N	1980 N
Wedge	2 x 2	1 / 15		
Ball Screw	2	1 / 12		264 N 0.22 Nm
Gear	2 x 2	1 / 3		0.073 Nm
Drive Shaft	1			0.15 Nm
Rotational Coupling	2			
Rotary Feed-through	1		2 Nm	0.15 Nm
Motor	1			
Piezo	1		14000 N	3960 N

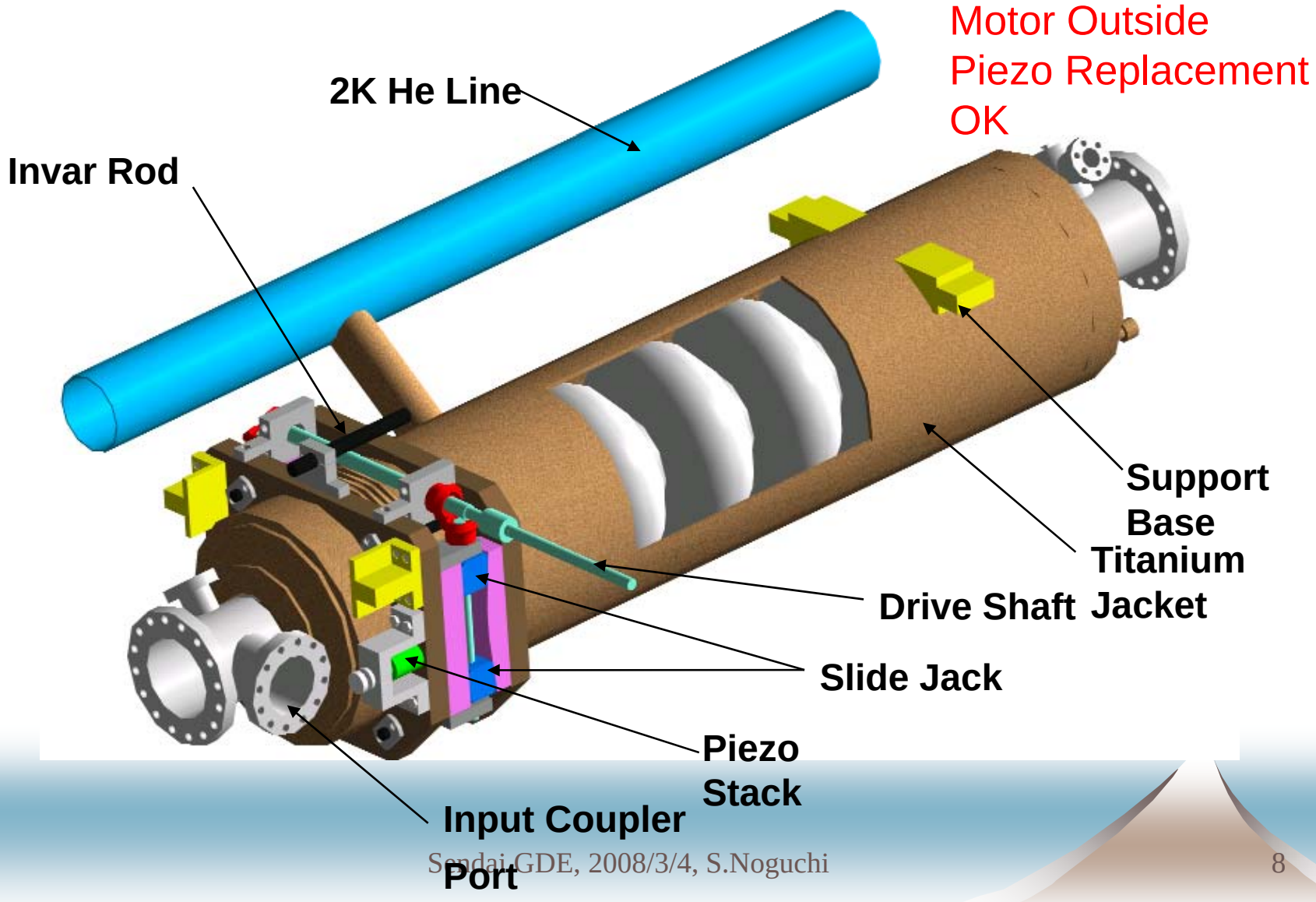
Special Features

- Robust & Stiff
- Outside Motor
- Commercial Components
- Piezo Replaceable

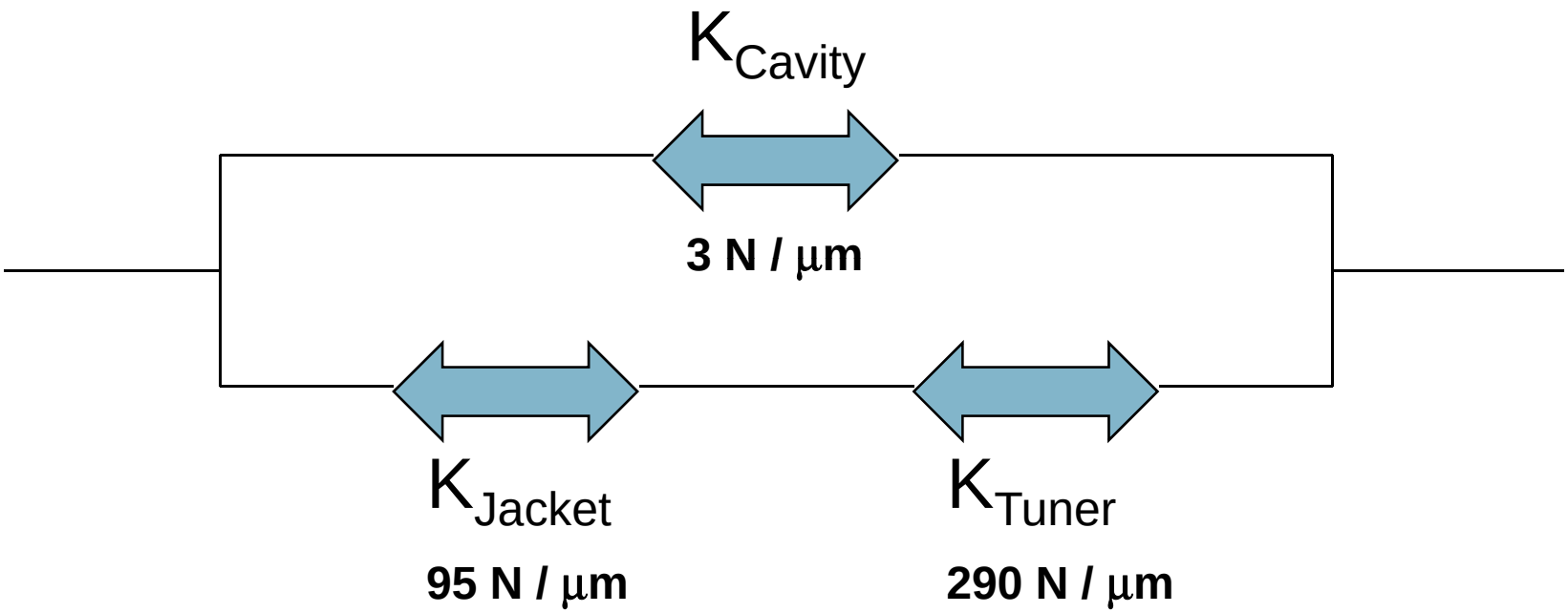
Specification / Performance

Stroke	2.7 mm 810 kHz	33 kHz / Turn
Tuner Stiffness	290 N / μm	
Overall Stiffness	72 N / μm	Small Lorentz Detuning

Tuner and Jacket



Stiffness of the Slide Jack Tuner System



$$\frac{1}{K_S} = \frac{1}{K_{Jacket}} + \frac{1}{K_{Tuner}}$$

K_S = 72 N / μm

Jacket Stiffness