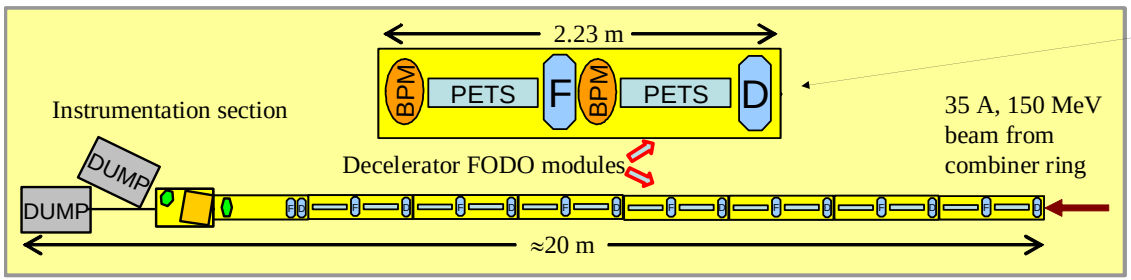
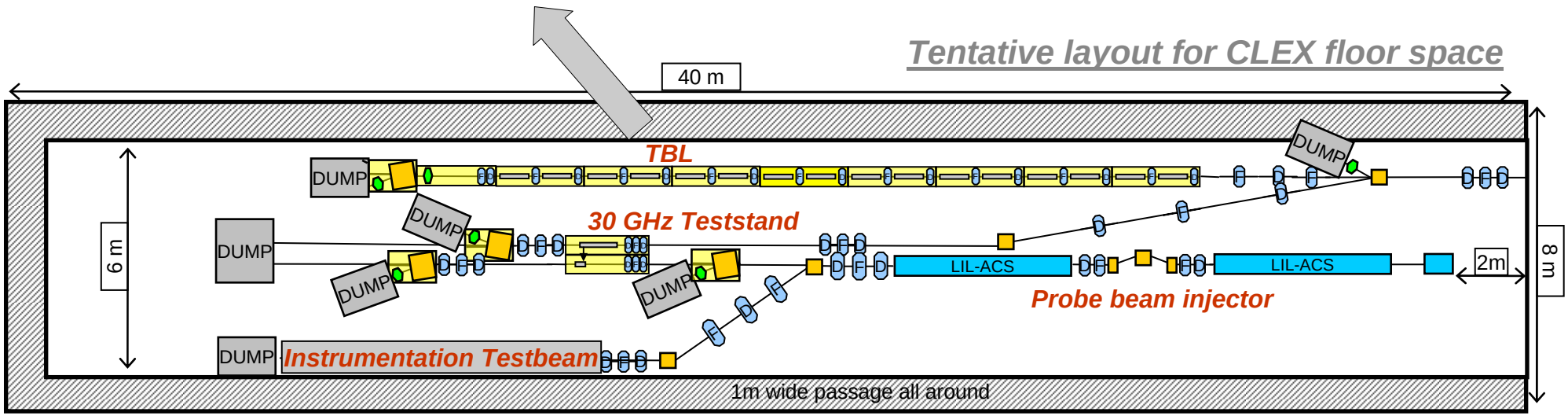
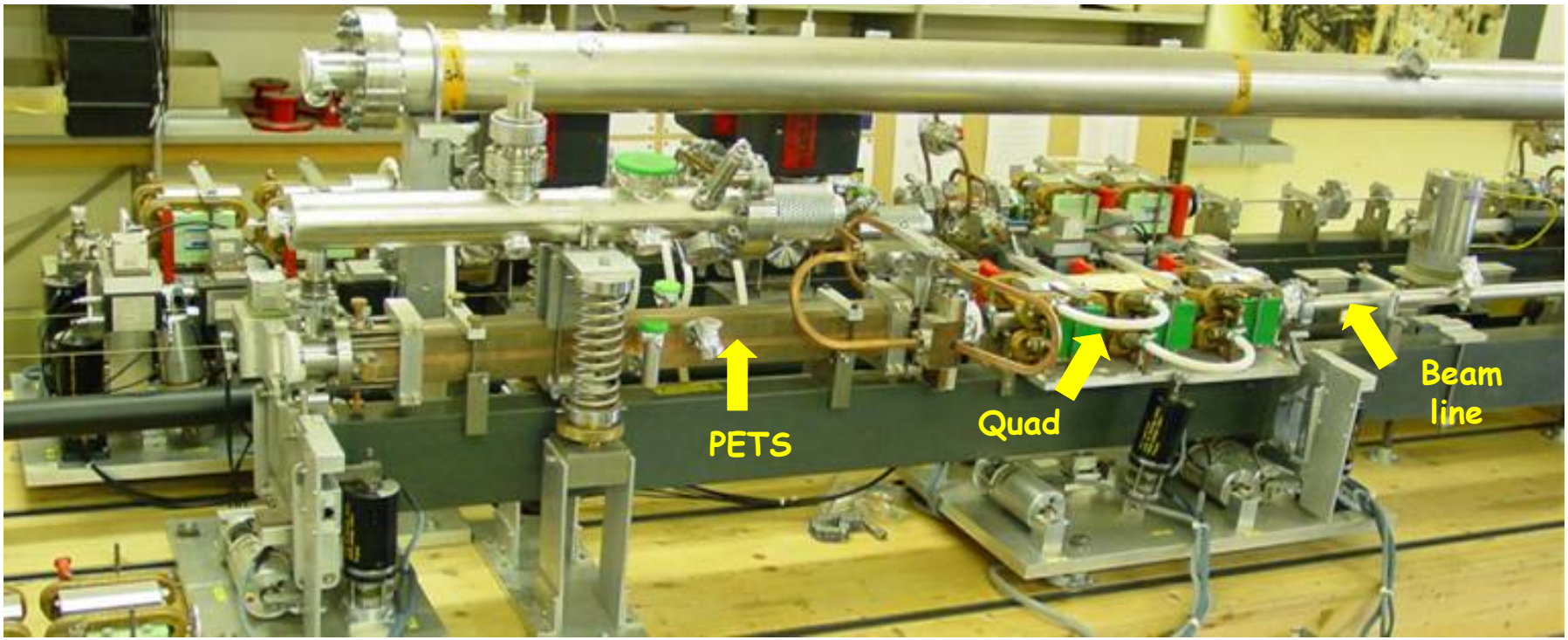
Mission.

The TBL as a scaled model of a CLIC drive beam decelerator sector will give the opportunity to test the operation of such a decelerator and the predictions of the numerical simulation tools which are used for its design. The TBL beam energy is down by a factor 13 and beam current down by a factor 4.3 compared with a CLIC decelerator. The FODO period length is the same as for CLIC, but the total length is about 30 times smaller than a CLIC decelerator sector.



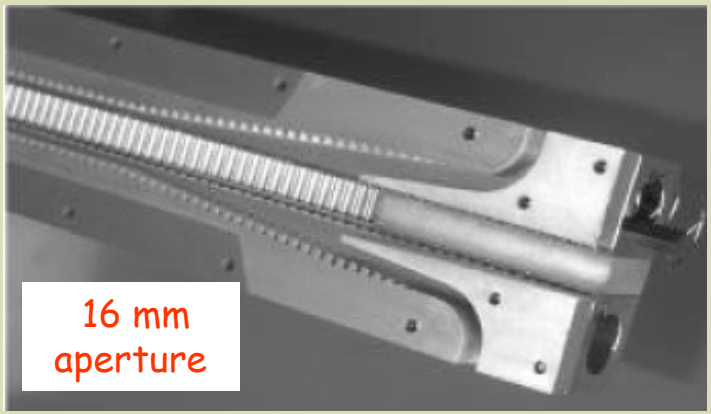
Each TBL module corresponds to one full FODO cell equipped with two quadrupoles, two PETS, two BPM's and appropriate monitors for beam loss.





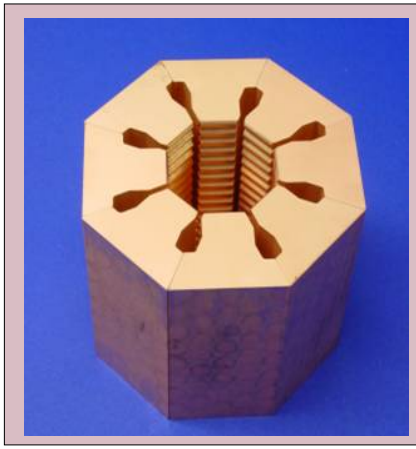
The TBL module will look like very similar to the PETS module in CTF2 (see picture)

30 GHz Power Extraction and Transfer Structures



Extremity of open PETS with output coupler.This 1 meter long structure was used in CTF2 for 30 GHz RF power production until 2002.

15 ns x 250 MW



25mm aperture

CLIC PETS regular part (machining test prototype)

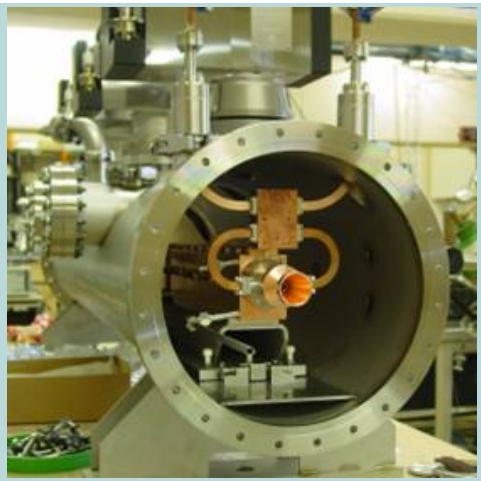
55 ns x 800 MW
150 A (design)

PETS output coupler

was

PETS single cell(9 mm)

Special PETS consisting of 3 (9mmx6.7mmx9mm) consequent structures was commissioning in CTF3 up to 75 ns x 52 MW.



CTF3 PETS in a vacuum chamber

140 ns x 100 MW x 5A
(design)