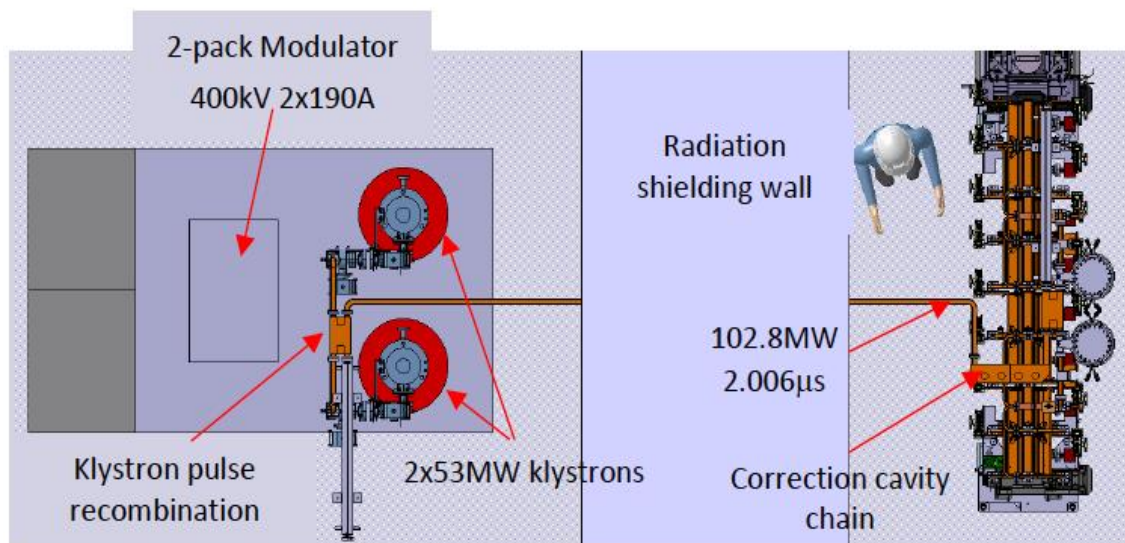




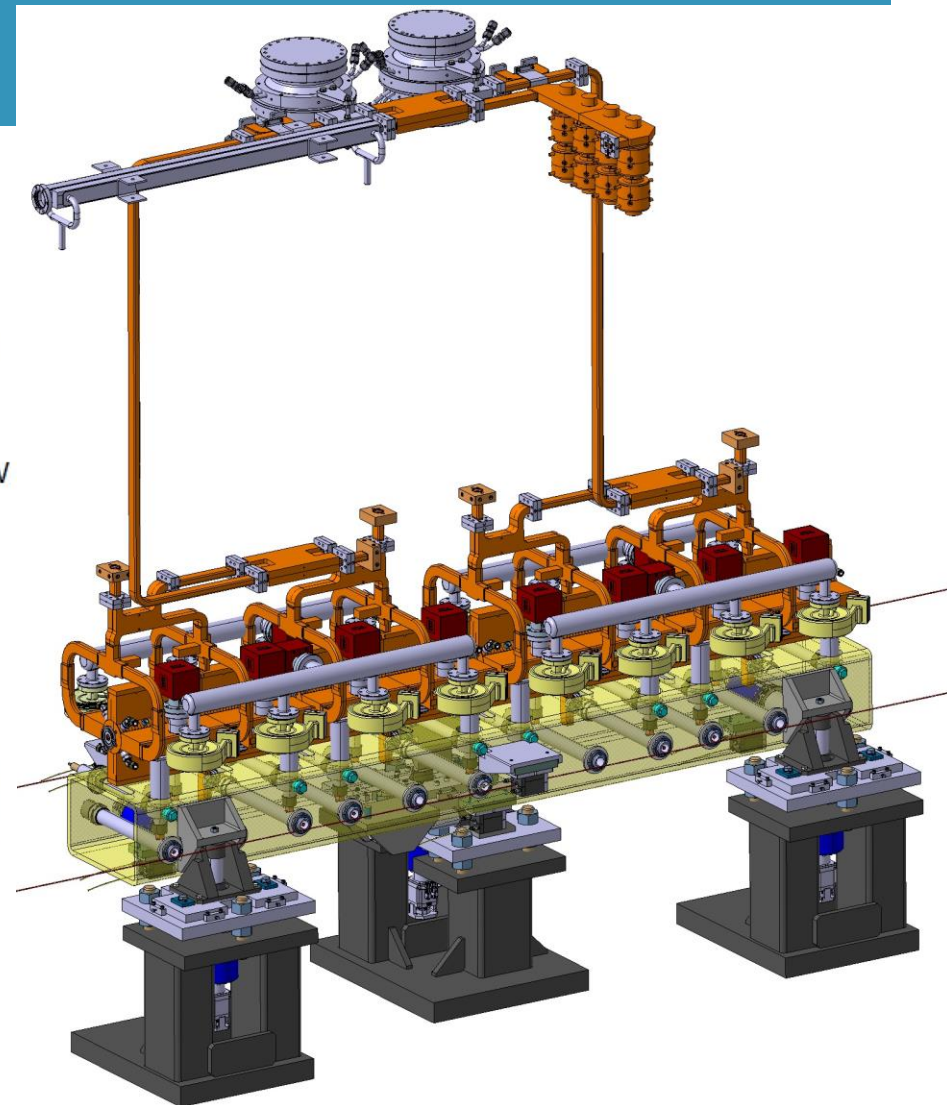
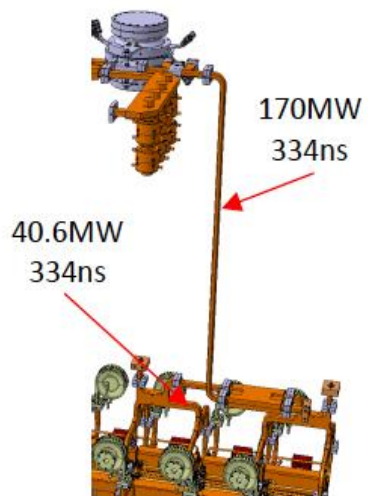
CLIC MODULE WAVEGUIDE DISTRIBUTION

CLC Module WG meeting– 24 march 2021

K-RF UNIT



BOC cavities
x 3.5 pulse compression



RF DEVELOPMENTS

MEETING ON 14.01

- Choose a SAS geometry and complete the design of a 380 GeV K-based SAS;
- Design an integrated input / output RF power coupler;
- Decide the flange type to connect to waveguide network;
- Decide about WFM.

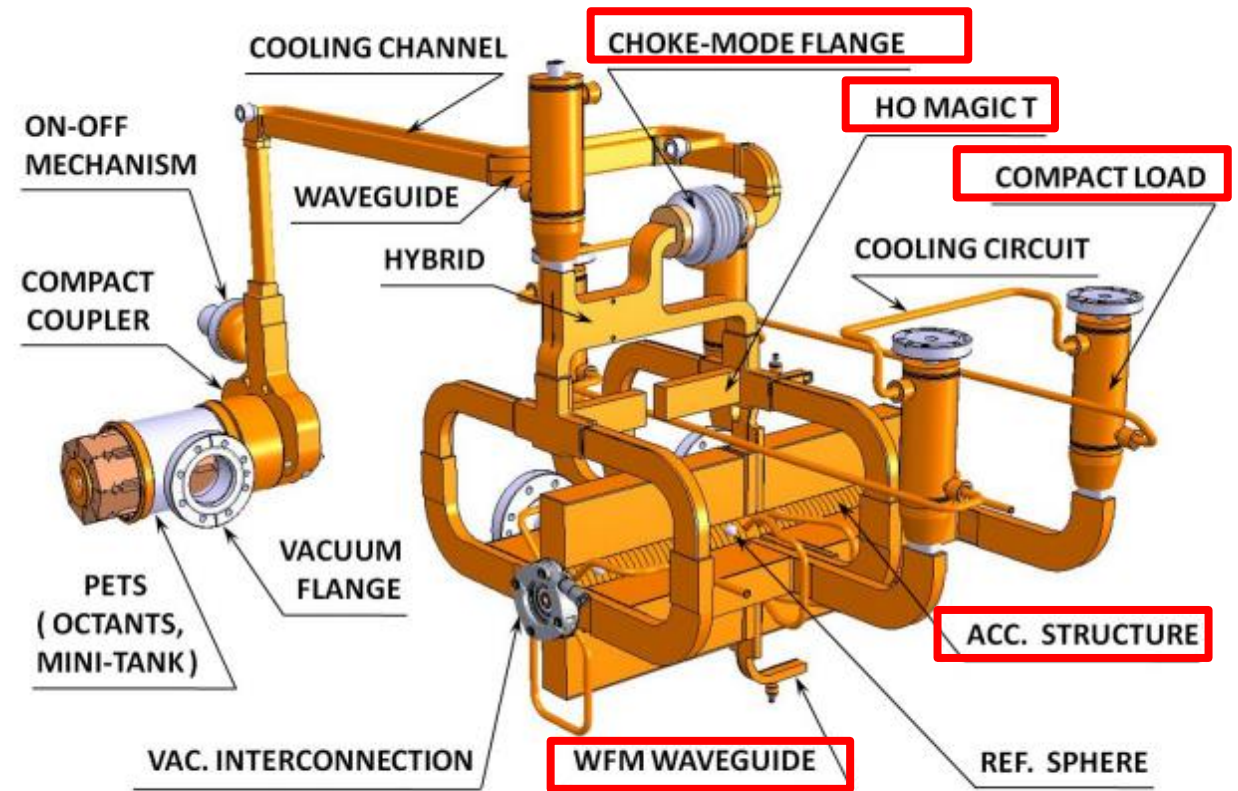
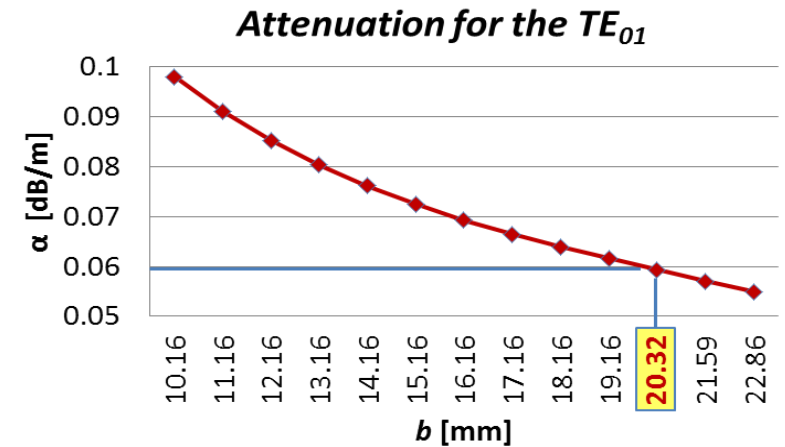
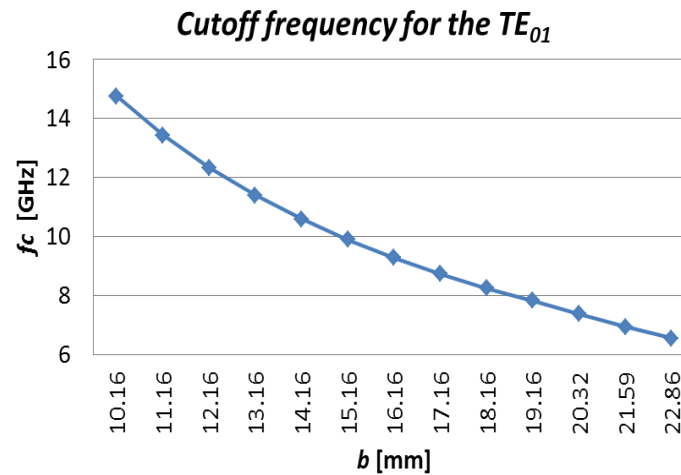
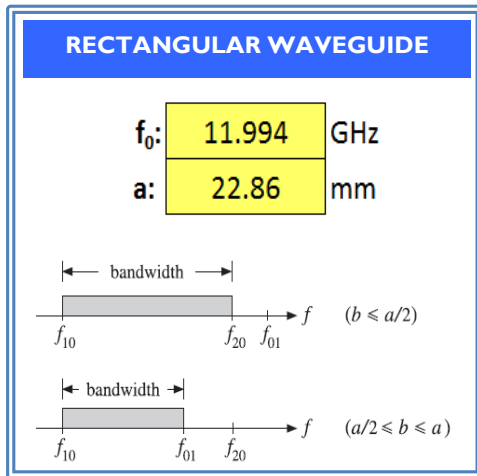


Fig. 5.126: Schematic view of the CLIC module RF system

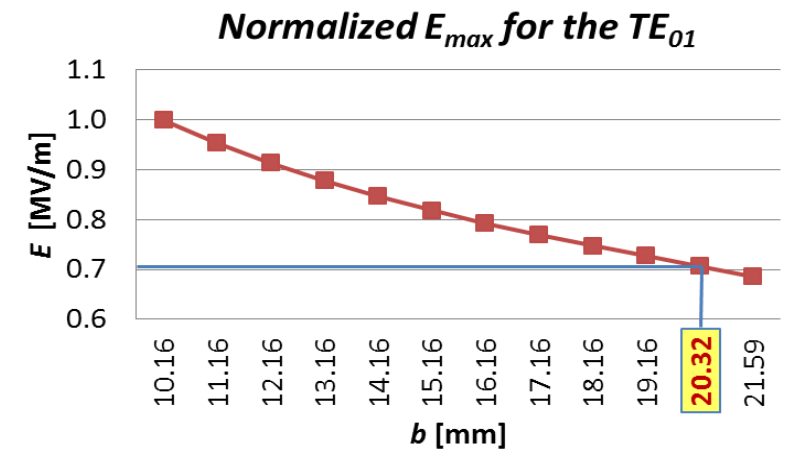
Summary presentation by A. Grudiev on 29 September 2021



RF DEVELOPMENTS - Optimization of the waveguide network



Reduced attenuation by **40%**, reduction of electric and magnetic fields by **30%**.



Preliminary studies by C. Serpico
 Presented at CLIC workshop 2018



RF DEVELOPMENTS - Optimization of the waveguide network

Pulse compressor	BOC K-design	RF design
	Correction cavities K-design	RF design
RF network	RF Network	RF design
	Flanges	Double height
	Waveguides	Double height
	Hybrid	Double height
	HOM Magic T	Simple height
	Directional coupler	Simple height t.b.c.
	Directional coupler	Double height
	Pumping ports	Double height
	RF Loads	RF design ? t.b.c.
	Window	ongoing

CLIC MODULE PROGRAM - Support needed from TE/VSC *meeting on 25/3 at 15h30*

- Design activity:
 - Double height waveguide pumping;
 - Review the Module pumping strategy.
- Experimental activity:
 - Support the development of double height components;
 - Contribute to the LAB measurement activity (alignment and thermo-mechanics);
 - Re-assess the choice of the mini-pump technology.