Cavity and Cryomodule

ILC-Asia Collaboration Meeting

PAL Report

January 14, 2004

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KAPRA

ILC-Korea WG
on SRF Cavity and Cryomodule

We reviewed and learned

very excellent SRF efforts on ILC worldwide

KEK
TTF, TESLA Collaboration
USA

many technical issues need to be confirmed and be optimized during the R&D period

scientific & technical efforts for the better performance are very important and under way very aggressively

engineering efforts for mass production, eventually for the cost reduction with reasonable reliability could be more important

We understand and/or agree;

involvement of ILC construction and exploitation
is a good opportunity (ITER like participation)

schedule is very tough for the active participation,
but doable (domestic organization)

participation of the international collaboration is critical
from the beginning (GDE/GDI/GDO..construction..operation)

semi-international (eg. ILC-Asia) collaboration and agreement
are strongly need for sharing role, duty, responsibility, etc.

make industries to participate as early as possible

participation should have goals beyond ILC cavity/cryomodule fabrication/test (domestically)

Example

If Korea contribute 1/6~1/10 of total cryomodules

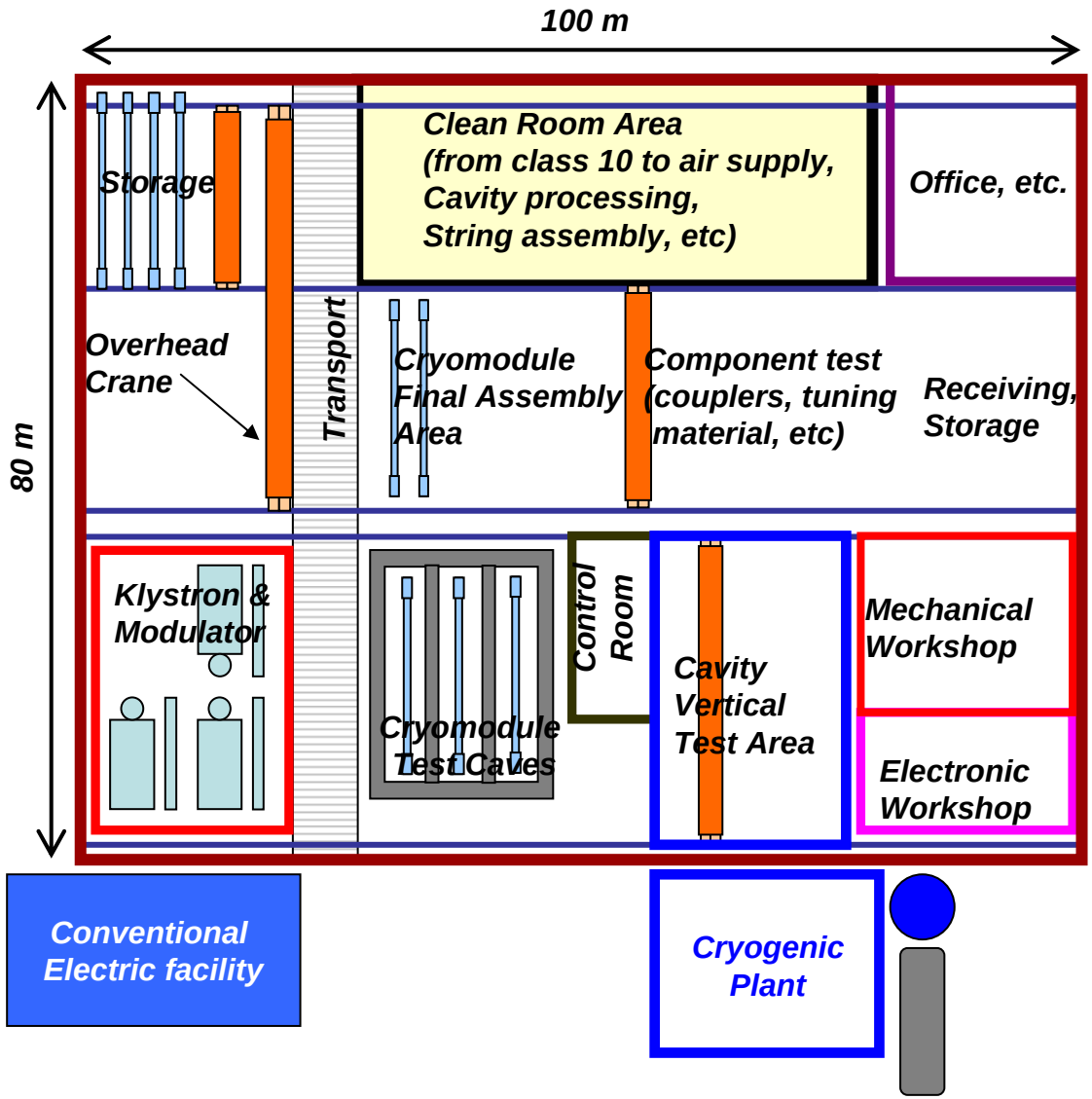
~200 production cryomodules in 4 years

→1 cryomodule/week and 12~16 cavities/week including basic tests

(assuming production line is fully developed)

→may need 2 cryomodules/week 25~30 cavities/week facilities

ILC-Korea Cavity Production, Cryomodule Assembly & Test Facility (Plan)



ILC-Korea Cavity Production, Cryomodule Assembly & Test Facility (Plan)