

Industrialization SMTF/Fermilab View

Superconducting Module Test Facility
Collaboration



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SMTF ILC Industrial Strategy

- Really at the beginning of forming an industrial strategy in US
- Approach so far: work hand-in-hand with industry at Fermilab and within SMTF collaborating institutions to train industry personnel and begin transferring technology.

SMTF ILC Industrial Strategy

- View being developed by Helen Edwards, Shekhar Mishra, Hasan Padamsee, Warren Funk, Pat Kelley, Chris Adolphson and SMTF Collaboration
- “SMTF” committed to developing entire cavity/cryomodule chain with industry
- Will work with “forming” US industrial consortium Tony Favali, Ken Olsen....
- US industry is “self organizing”
- SMTF role is supplying consortium information

SMTF ILC Industrial Strategy

- High priority for SMTF is understanding the cavity processing parameters that will provide reliable, repeatable results - collaboration of Cornell, JLAB, ANL, LANL, Fermilab..... and industry
- Starting to work with several companies

Large ramp up needed

SMTF ILC Industrial Strategy

- Cryomodule assembly and cavities a large fraction of the ILC cost
 - Must understand cost
 - Must build several cryomodules soon and some completely in industry (US industry)
 - Pursue GFA program → helps industry with infrastructure
- Fermilab Proton Driver may be a vehicle for developing industry for ILC
- Other US SRF projects are opportunities too

SMTF ILC Industrial Strategy

- Have yet to convince leaders of GDE that industrialization is an immediate high priority
 - Discussions to begin at Snowmass
- Funds for industrialization “miniscule”

Large ramp up needed
and is expected in next few years