Estimated cost of one half-port ITER DC PbLi test module
(A cursory look)

FS, SiCf/SiC, PbLi mass data
Based on volume fraction data

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Cost Estimate for FS-F82H parts

Allocated assembly time with the fabricated panels:
- Prepare mat cutting list: 6h
- Material cutting: 8h
- Tack weld: 6h
- Inspect: 2h
- Weld per specifications: 24h
- Stress relieve: 4h

Labor 50h @ $80.00 = $4000.00

Cleaning cost:
- Sand blasting: 4h
- Passivate: 4h
- Rinse: 2h
- Alcohol rinse: 4h
- Package: 6h

Labor 20h @$80.00=$1600.00

Fabricated panel cost: 1050.6 kg@ $62.33/Kg = $65486.5
25% (waste)= Kg 262.64@ $62.33/Kg = $16370.35

Tot material cost $81856.89
Total cost for one unit $87458.89

(Fabricated material costing from ARIES-ST $1992)
Estimated cost for SiC\(_f\)/SiC FCI

Protective package:

Labor 8h @ $80.00/h = $640.00

Fabricated material cost: 215.92 kg @ $1000/kg = $215917.7
25% (waste) 53098 kg @ $1000/kg = $53979.43
Total fabricated material cost = $269897.13
Labor cost = $640
Total cost for one unit = $270537

(Fabricated material SiC\(_f\)/SiC @ >$1000/kg from ARIES-ST 1992)

$80.00/h labor for 2004
Cost estimate for Breeder Pb-17Li

5557.9 kg @ $11.85/Kg = $65861 @ 60% enriched

Total material cost $65861

(Material costing from ARIES-ST $1992)
Estimated total cost for one half-port DC-PbLi test module

- FS FW/blanket $87458.9 @ $62.33/kg
- SiC_f/SiC insert $270537.0 @ $1000/kg
- Pb-17Li* $65861.0 @ $62.33/kg (Li^6 60%)

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Total $423856.9 (1992$ ARIES-ST)

Observations:
- Accurate cost estimate is not possible at this time.
- Cost of test module will be dominated by fabricated unit cost of SiC_f/SiC FCI.

* Note: We will need more Pb-17Li in the loop