

# TDR Part 1 Section 2.2

## Superconducting RF Technology: Development of World-Wide SCRF R&D Infrastructure

### 1. Cavity

#### 1. Inspection Infrastructure and Capabilities

1. Optical Inspection
2. RF tuning
3. Tomography

#### 2. Production Facilities

1. EBW/Chemical Processing in EU, Americas, Asia
2. Mechanical Processing

#### 3. Test Infrastructure and Measurement Techniques

1. VTS
2. HTS
3. 2<sup>nd</sup> Sound
4. Thermometry / Mapping
5. X-ray Monitors

#### 4. Remediation Techniques

1. Grinding
2. Laser (?)
3. Tumbling

Draft text exists...needs figures, pictures, and updates on Japanese efforts on X-ray (1.1.3) and JLab FE measurements (1.3.5);

Help on Coupler section...

### 2. Coupler

1. Coupler Conditioning Facility (taken from IDR for the moment...)

# TDR Part 1 Section 2.8

## Superconducting RF Technology: R&D toward mass-production and design for manufacture

### 1. Cavity

#### 1. Mass Production / Plant Studies

1. EU – ETA in early summer? 1 plant, 3yrs, 18000 cavities
2. Americas - done, 6 yrs, 3600 cavities
  1. Sensitivity studies on yield; technique; qty
  2. Material Material Material
3. Asia
  1. Cavities..540/ yr

### 2. Cryomodule

#### 1. Mass Production / Plant Studies

1. EU
2. Americas – just done, not checked
  1. Update of 2007 study w/ new cryomodule costs
3. Asia
  1. Cryomodule Assy & Test Layout (J/E)
  2. CM Mfr Study (J)
  3. Split Quad Study