

A detailed photograph of an electron beam welding process. A mechanical arm from the top left directs a bright, intense red laser beam onto a metal workpiece at the bottom. The beam creates a bright, glowing point of contact, with a faint rainbow-like arc visible in the background. The scene is dark, emphasizing the high-temperature process.

A TEAM OF EXPERTS AT YOUR DISPOSAL

OUR EB SOLUTIONS MEET ALL YOUR CHALLENGES

ELECTRON BEAM WELDING

WORKING TOGETHER FOR ILC

SMALLEST TOOL EVER - FOR INSIDE CAVITY WELDING



OUR EB SOLUTIONS MEET ALL YOUR CHALLENGES

TECHMETA

OUR HISTORY AND OUR STRATEGY

TECHMETA

- Medium Size French company
- World Leader in Electron Beam Welding

INNOVATION STRATEGY

- Collective Intelligence
- Co-Construction



**HISTORY
STRATEGY**

**PROJECT
EXPERIENCE**

**ILC
COLLABORATION**

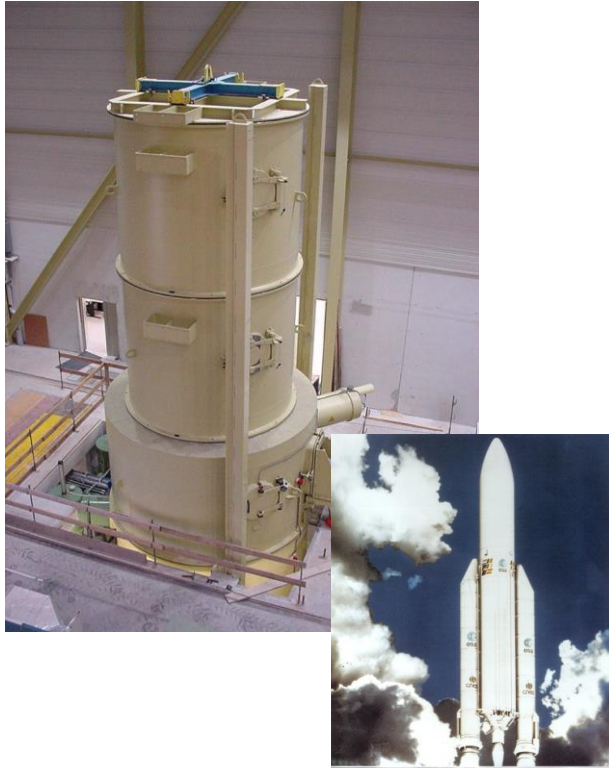
**WELDING
TOOL**

**OUR
VISION**

TECHMETA COLLABORATIF

PROJECT EXPERIENCE

TECHMETA
GROUPE **Bodycote**



**AEROSPACE
BOOSTER WELDING**



**PHYSICS INSTITUTE CERN
CMS SUPERCONDUCTOR INSERTS**



**AEROSPACE
ROCKET RESERVOIRS**



**FRENCH NAVY
SUBMARINE PARTS**

**HISTORY
STRATEGY**

**PROJECT
EXPERIENCE**

**ILC
COLLABORATION**

**WELDING
TOOL**

**OUR
VISION**

ILC

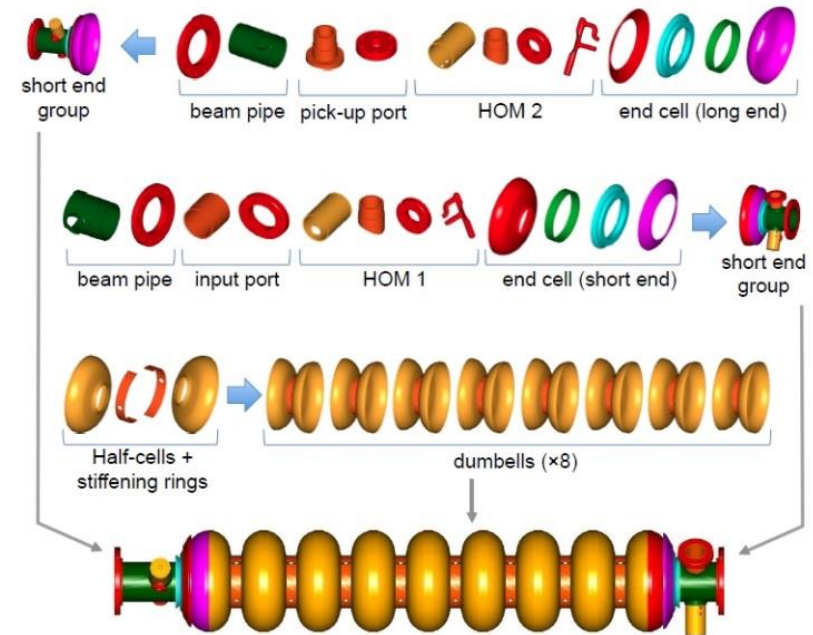
COLLABORATION PROJECT

COLLABORATION PROJECT

- Industry <> Academic co-working
- Great progresses for cavity construction
- Cavity fabrication road map (Xfel)

ILC

- Better cavity characteristics
- Cost reduction



**HISTORY
STRATEGY**

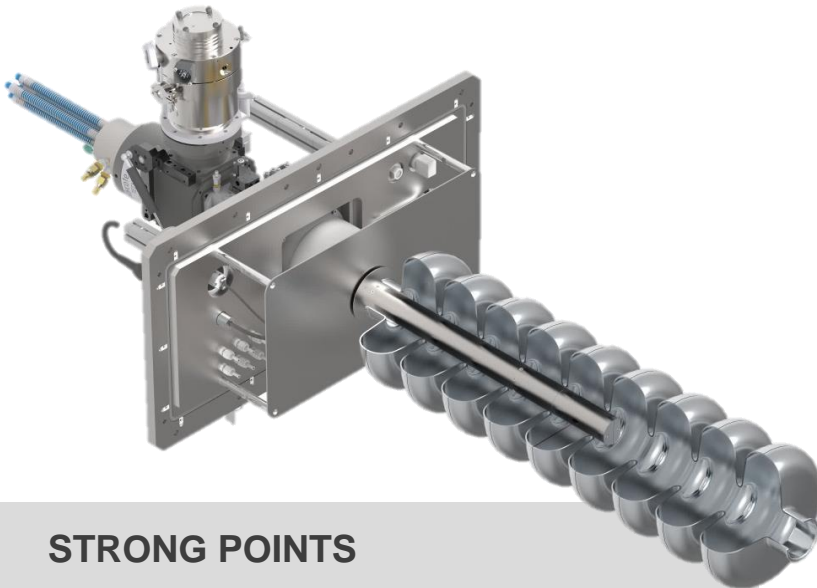
**PROJECT
EXPERIENCE**

**ILC
COLLABORATION**

**WELDING
TOOL**

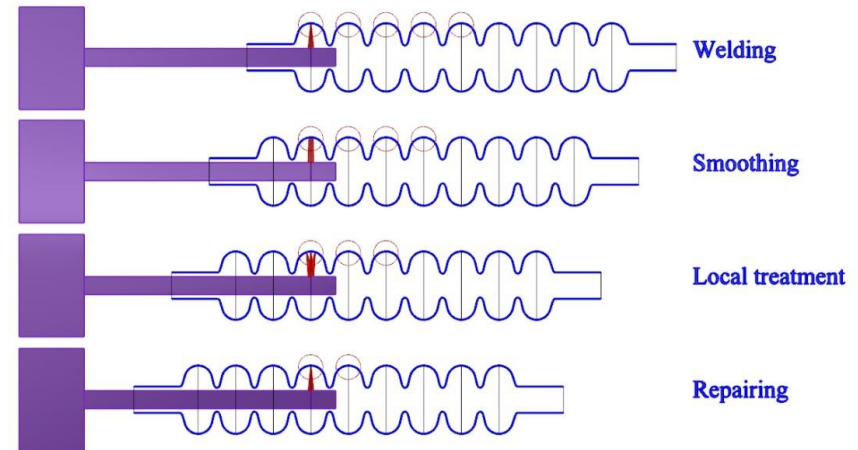
**OUR
VISION**

SMALLEST DIAMETER CAVITY WELDING TOOL



STRONG POINTS

- Optimal inside surface quality
- Lower shrinkage
- Reproducible welds
- User friendly set-up



GAINS

- Cost reduction
- Physical Cavity Parameter upgrade

**HISTORY
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**PROJECT
EXPERIENCE**

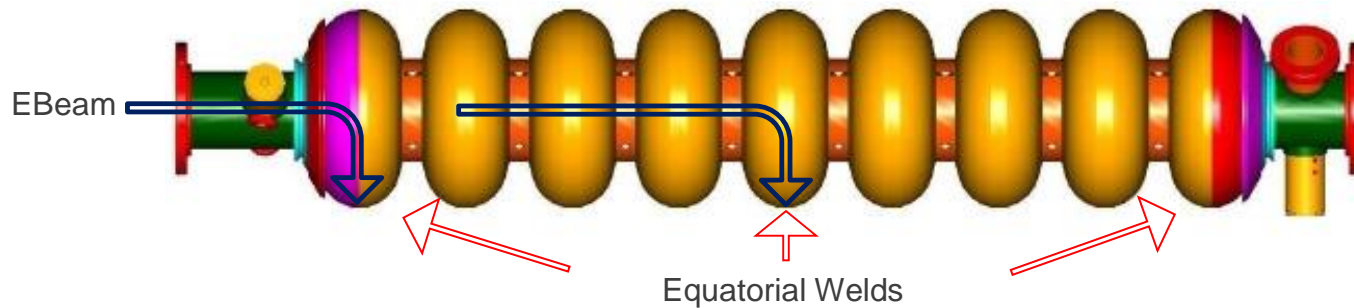
**ILC
COLLABORATION**

**WELDING
TOOL**

**OUR
VISION**

OUR VISION FOR ILC

OPTIMAL ILC CAVITY PERFORMANCE & COST REDUCTION



OUR INPUT

- 90° Deflector the Missing Link for Inside Cavity Welding of equatorial weld
- Electron Beam Equipment specialist
- Assistance

YOUR INTEREST

- Collaboration for proof and integration
- New way for improvements
- New way for cost reduction

HISTORY
STRATEGY

PROJECT
EXPERIENCE

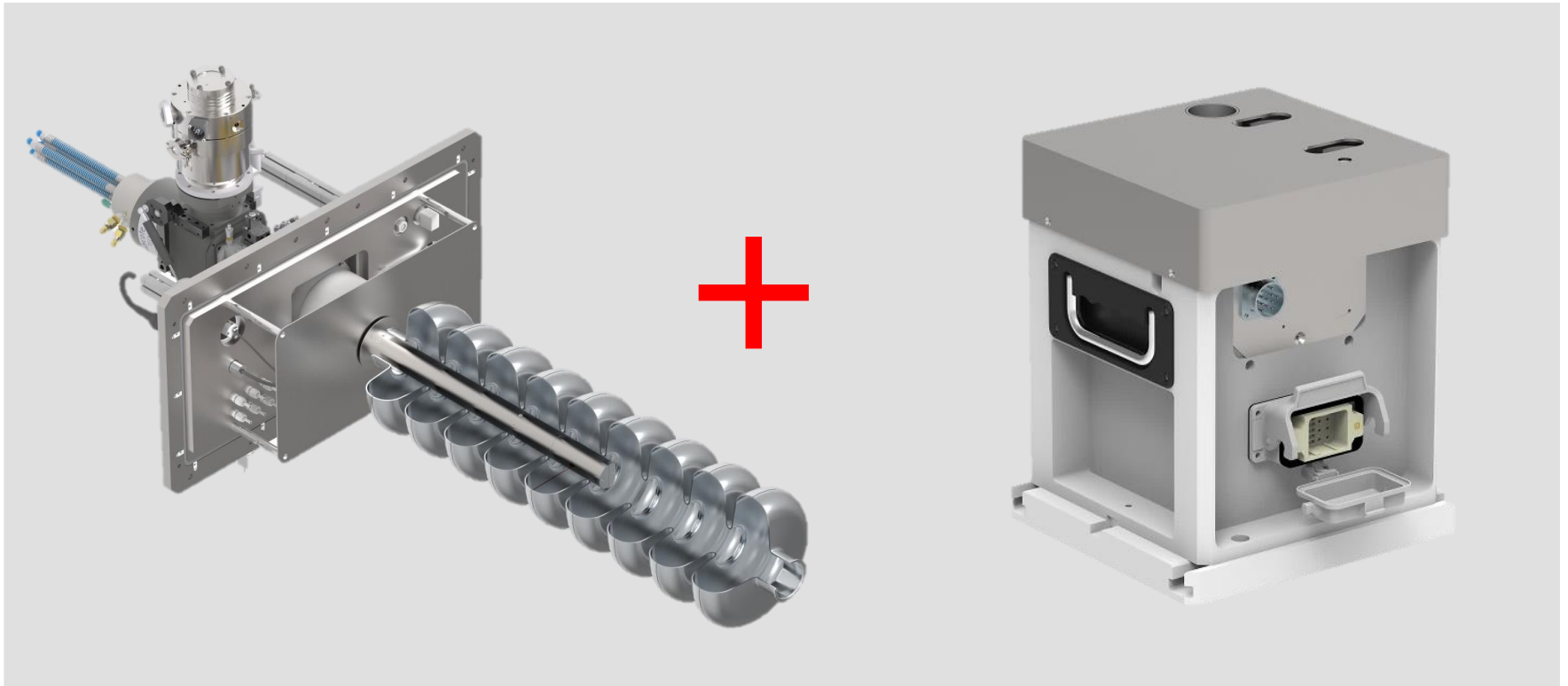
ILC
COLLABORATION

WELDING
TOOL

OUR
VISION

MAKING CAVITY WELDING EASIER...

...FOR YOU



TECHMETA

« SIMPLICITY IS COMPLEXITY
RESOLVED » C. BRANCUSI



**THANK YOU FOR
YOUR ATTENTION**

ANY QUESTIONS ?

OUR EB SOLUTIONS MEET ALL YOUR CHALLENGES

ELECTRON BEAM WELDING