

HI-ECN3 — EN-HE ongoing activities for WP5

HI-ECN3 WP5 coordination meeting #1 – R. Rinaldesi – EN-HE

Ongoing activities

Tender process for the replacement of the TCC8 crane

Refurbishment of the ECN3 transfer tables

2024-12-10



Overhead crane in TCC8

- Crane installed in 1978 and refurbished in 2014
- Generally in good conditions
- Upgrade is needed to meet the future needs of the project:
 - Remotely controlled operations
 - No electronic components on-board
 - Emergency brake



- Cost will be similar
- Overall duration of the on-site intervention much shorter (procedure for paint containing lead...)
- Design can be optimized for the new needs (addition of an auxiliary hoist)
- Possibility to test the entire crane at the contractor's facility
- Higher number of expected bidders





TCC8 crane - Technical features 1/2

Specific aspects of a crane working in a harsh environment:

- Mechanical redundancies (double motor with differential unit) on all motions
- Emergency brake
- Remote control panel no electronic components on-board (except load cell)
- Four removable cameras on-board





TCC8 crane - Technical features 2/2

- Remote control desk with 4 screens
- Redundant position detection system: cameras+rulers and resolvers







Cable reel to install a motorized device on the hook



TCC8 crane - Schedule

- Market Survey almost completed; seven qualified Firms
- Dispatch of Invitation to Tender: beginning of March '25
- Bidders' conference with on-site visit: end of March '25
- Contract signature: June-July '25
- On-site intervention: 3 months from September '26 (depending on project schedule)



ECN3 transfer tables

 Bogies used to handle material between the bottom of the shaft and ECN3

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- Steel structure in good condition
- Control equipment and cables obsolete
- Refurbishment includes
 - New travel motor
 - New cable reel
 - New control panel
 - Radio remote control
 - General mechanical check
 - Re-painting of the structure



ECN3 transfer tables - Schedule

- Delivery expected before end of the year
- **Installation and test in January (after lift worksite)**

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Final electrical connection during YETS '25-'26





