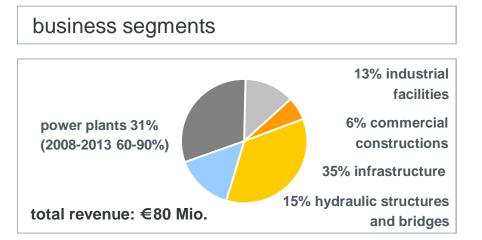


New waste to energy plant Amager Bakke

Dipl.- Ing. Johannes Hauptenbuchner - Züblin Stahlbau GmbH Presentation at Danish Steel Day on 12. November 2015



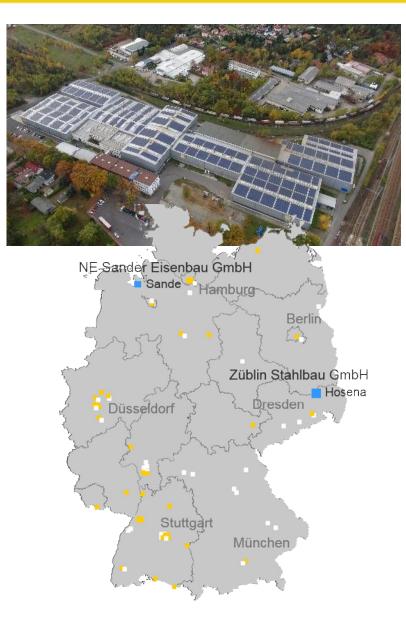
POWER PLANTS PROJECTS ZÜBLIN STAHLBAU



- 300 employees
- technical department: 30 engineers
- capacity: 16.000 20.000 t per year
- part weights up to 80 t (Hosena) 120 t (Sande)
- own installation crew steel & facade works
- projects in Europe, Asia, Middle East
- belonging to Z
 ü
 blin AG & STRABAG SE



Ed. Züblin AG Stuttgart



POWER PLANTS PROJECTS

COAL-FIRED POWER PLANT EEMSHAVEN (NETHERLANDS)

RWE Power AG | 2011 – 2013 | contract value: 32.0 mio €

12.000 tons steelwork in a Joint Venture; power houses, bridges construction of supply/disposal boiler & flue gas treatment



POWER PLANTS PROJECTS

NUCLEAR POWER PLANT OLKILUOTO 3 (FINLAND)

- Siemens AG, AREVA NP I 2006 2013 I contract value: 105.0 mio €
- 5.100 tons steelwork (Turbine Island) I 72.000 m² cladding (Turbine Island, Nuclear Island)

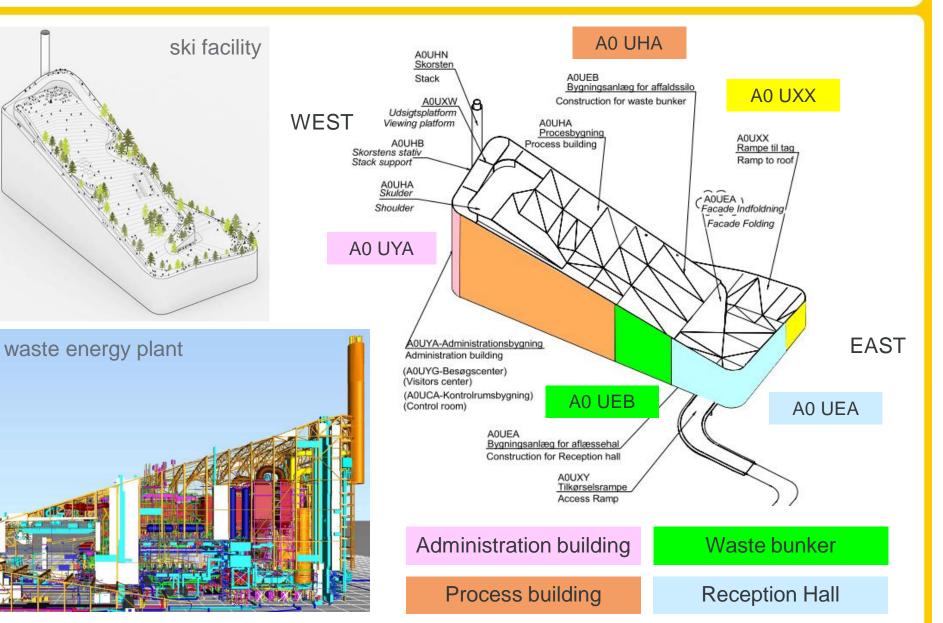








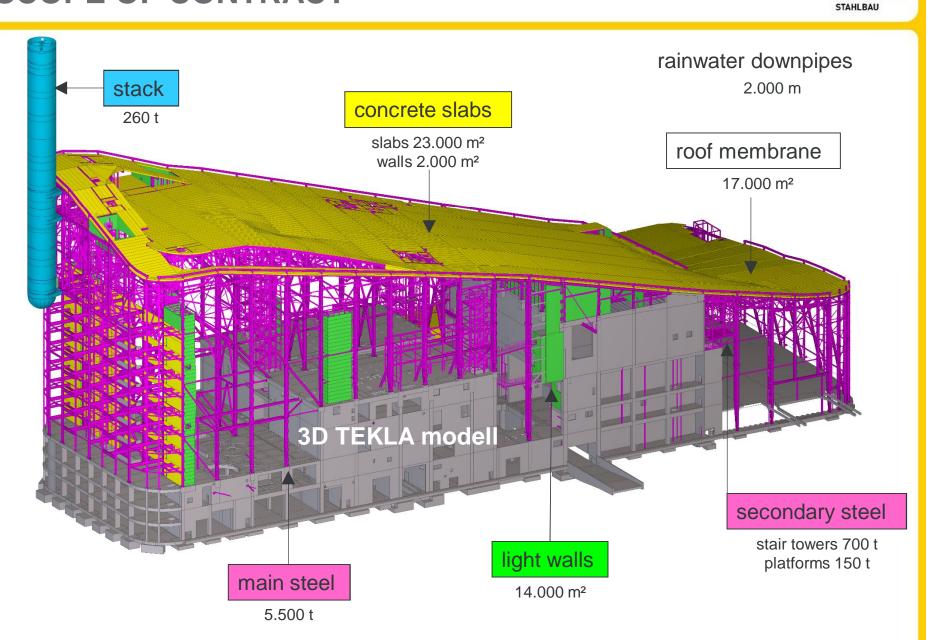
NEW WASTE TO ENERGY PLANT BUILDING STRUCTURE



STAHLBAU

ZUBLIN

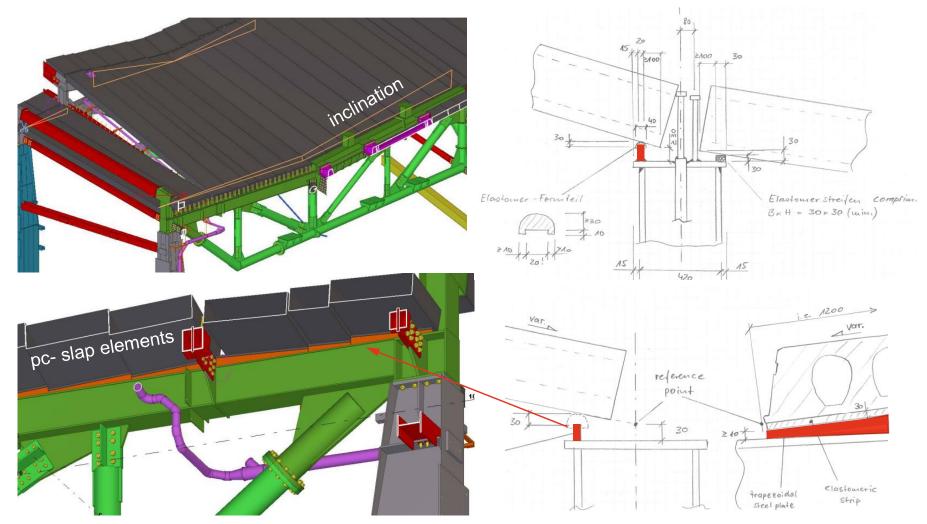
NEW WASTE TO ENERGY PLANT SCOPE OF CONTRACT



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3D MODEL DESIGN INTERFACE PRECAST ELEMENTS IN ROOF

precast- elements "tilting" on top of steel

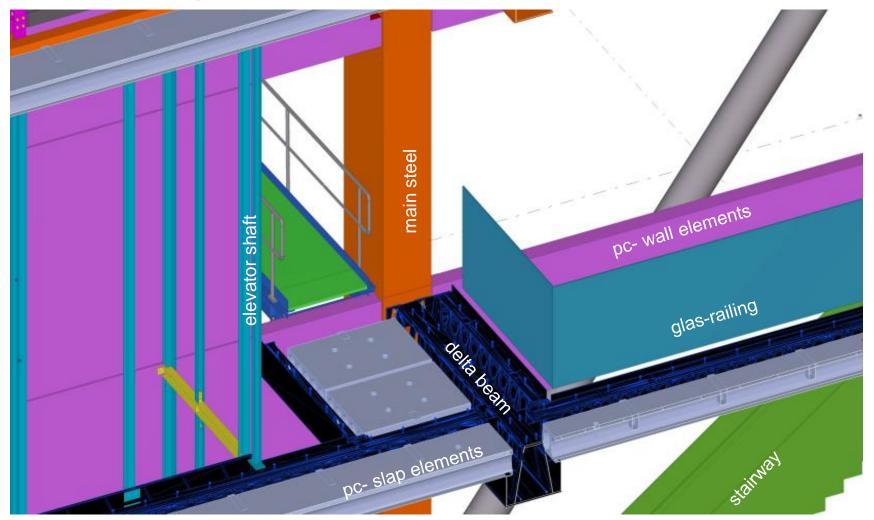


design of steel upstands to close gaps

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3D MODEL DESIGN INTERFACES IN ADMINISTRATION BUILDING

Multi- storey bulding - interfaces at slaps

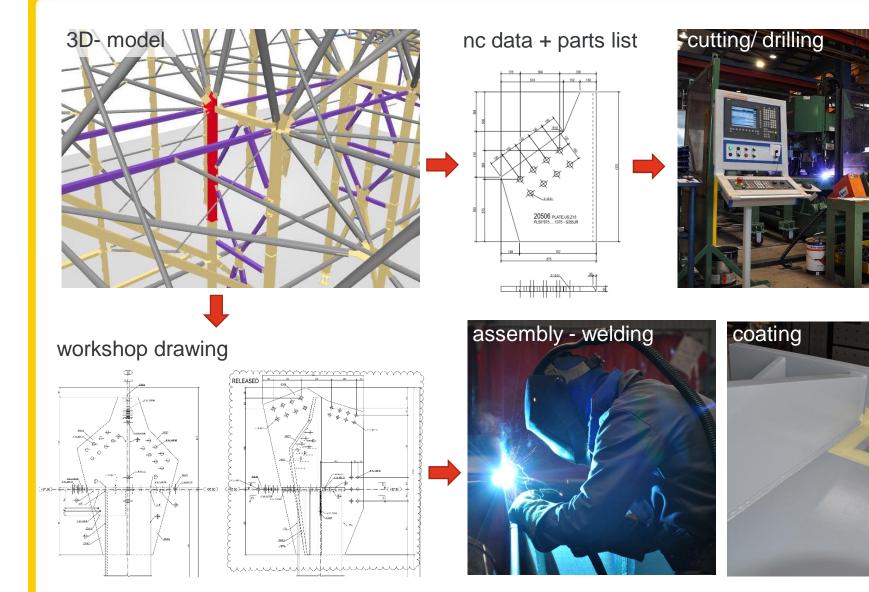


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clarification of interfaces of different products and their designers

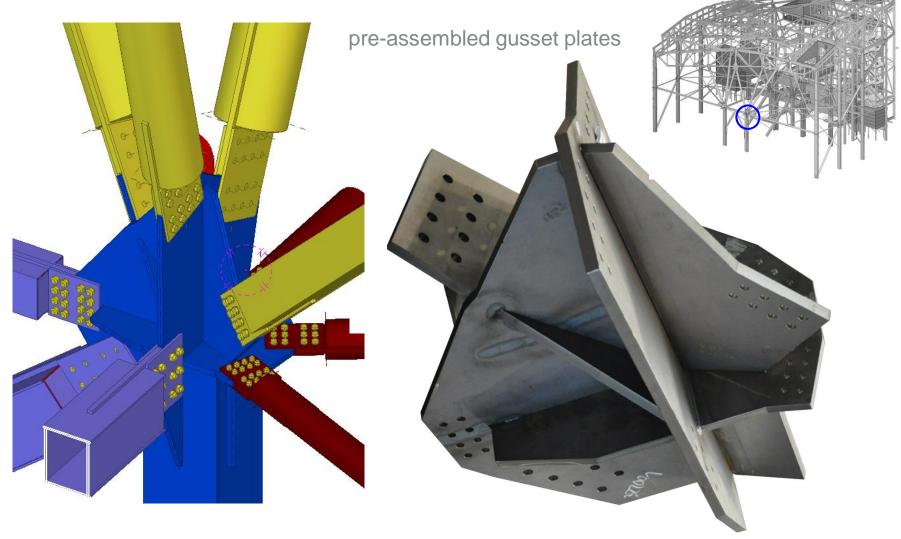
FABRICATION WORK FLOW



FABRICATION 3D- NODES OF TREE STRUCTURE

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simple design/ cutting – correct assembly?

column head at +58 m supporting the roof

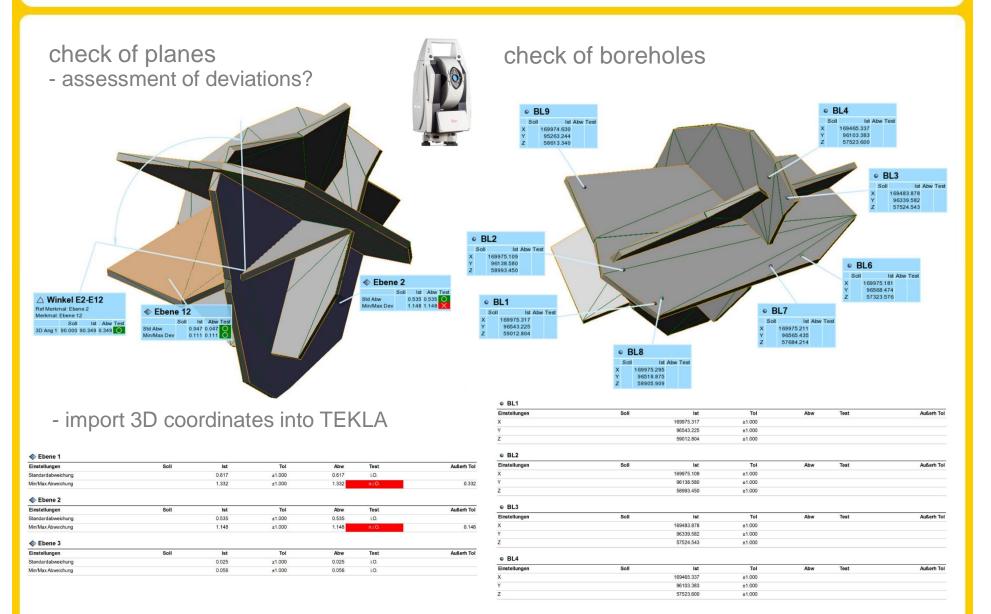






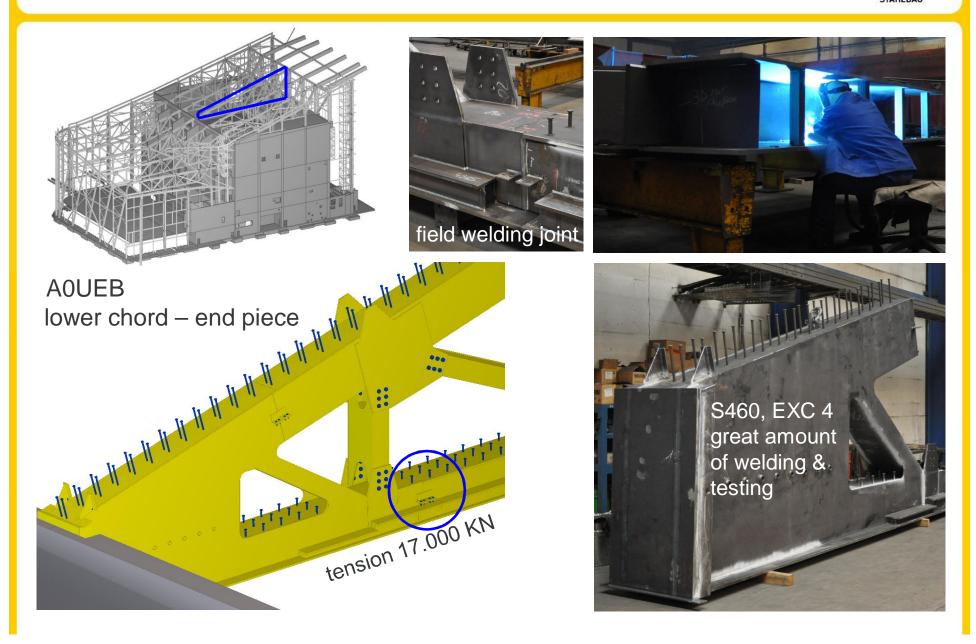
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FABRICATION 3D- NODES OF TREE STRUCTURE



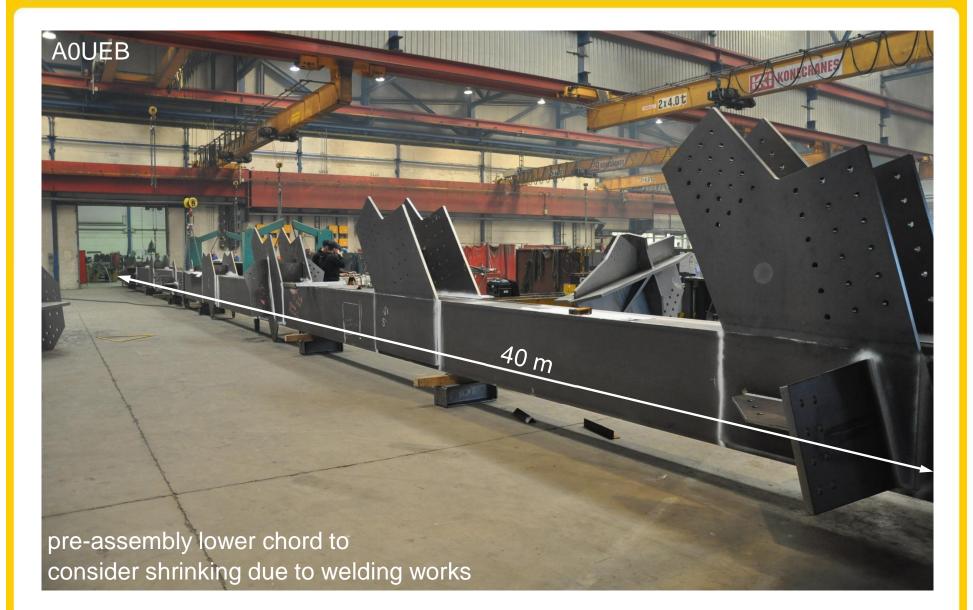
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FABRICATION TRUSS GIRDER – WASTE BUNKER



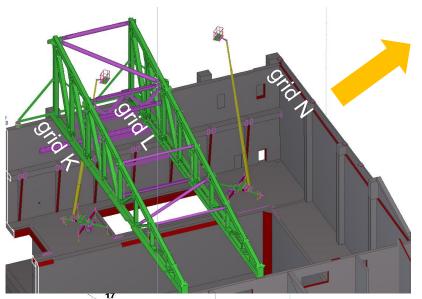
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FABRICATION TRUSS GIRDER

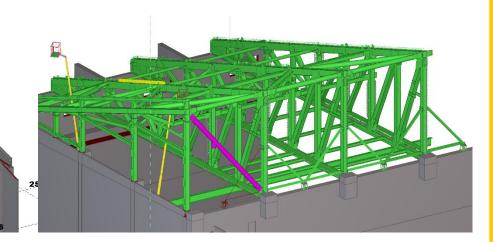


INSTALLATION PLANNING WASTE BUNKER A0UEB

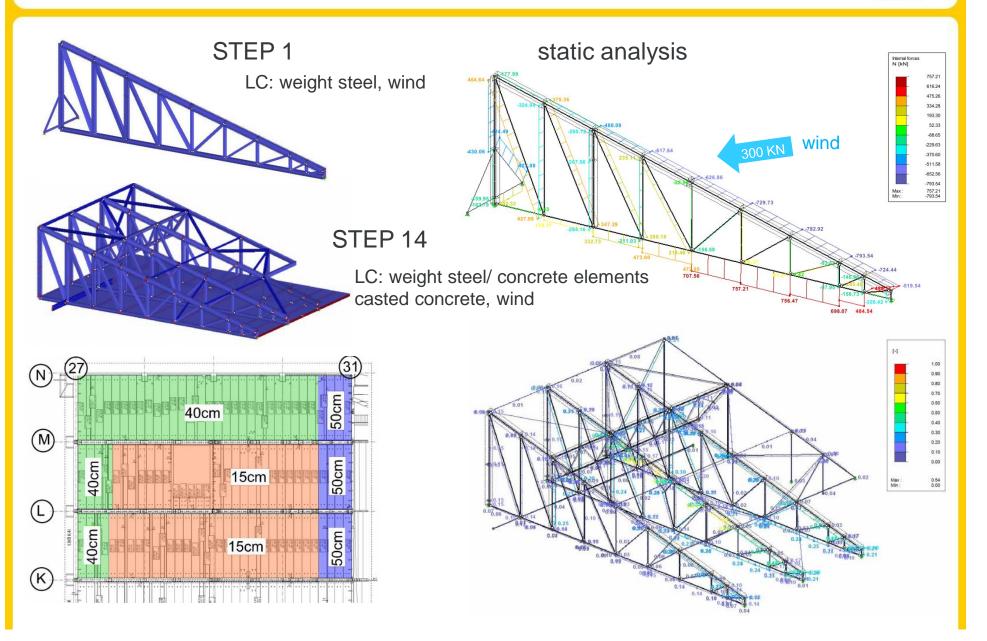
erection steps A0UEB north side K-N



Step 1	single truss girder grid K
Step 2	single truss girder grid L
Step 3	robustness truss grid 28/ K-L
Step 4	single truss girder grid M
Step 5	robustness truss grid 28/ L-M
Step 6	columns, beams grid N
Step 7	robustness truss grid 28/ M-N
Step 8	completion of vertical bracing
Step 9	removal of all tilt safety devices
Step 10	activating of support grid 30/ N
Step 11-14	hollow core elements, casting



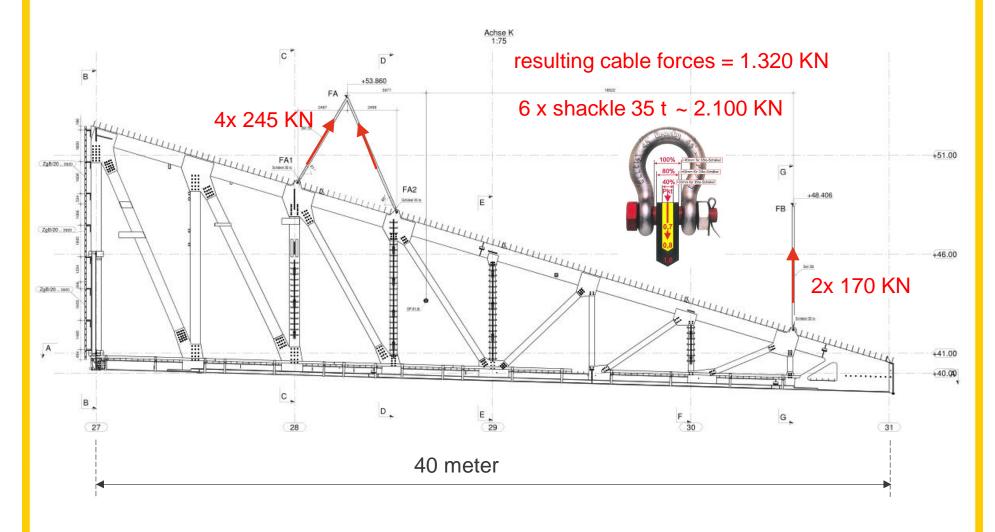
INSTALLATION PLANNING WASTE BUNKER AOUEB NORTH SIDE



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INSTALLATION PLANNING WASTE BUNKER A0UEB

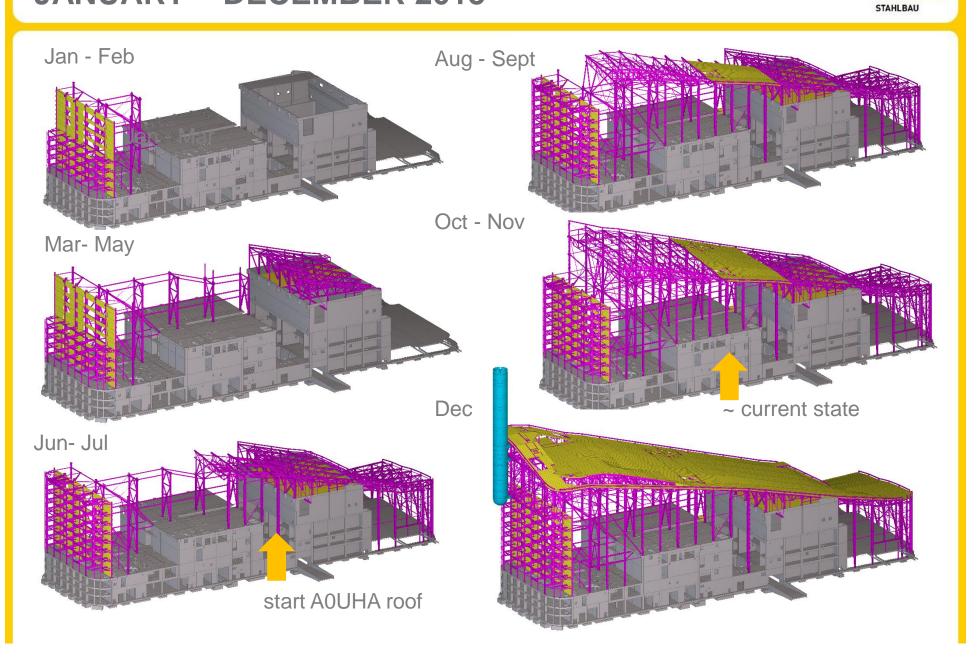
lifting scheme truss girder grid K/ 27-31: 87 t



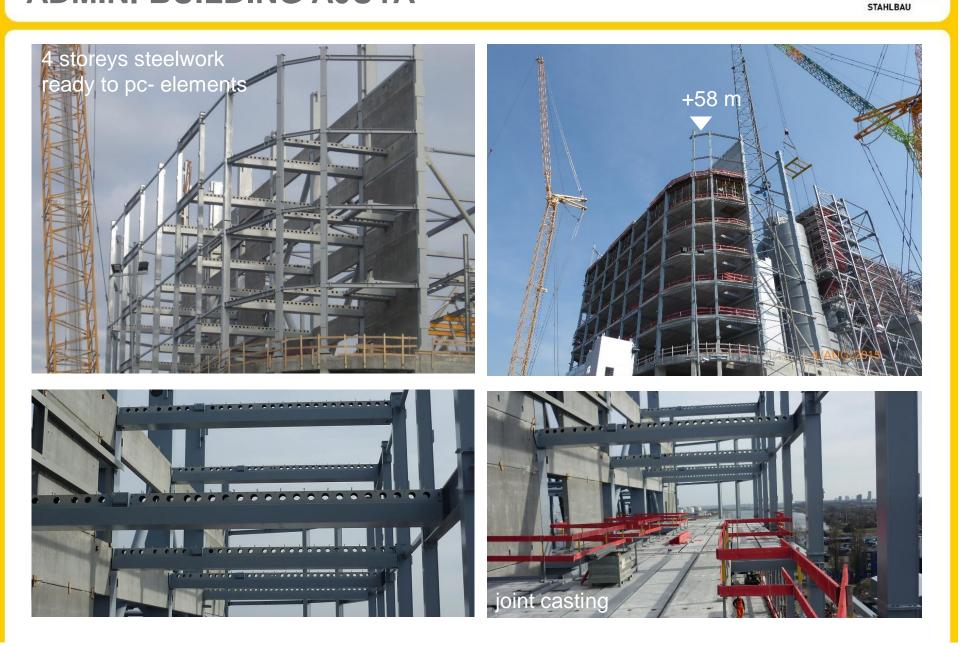
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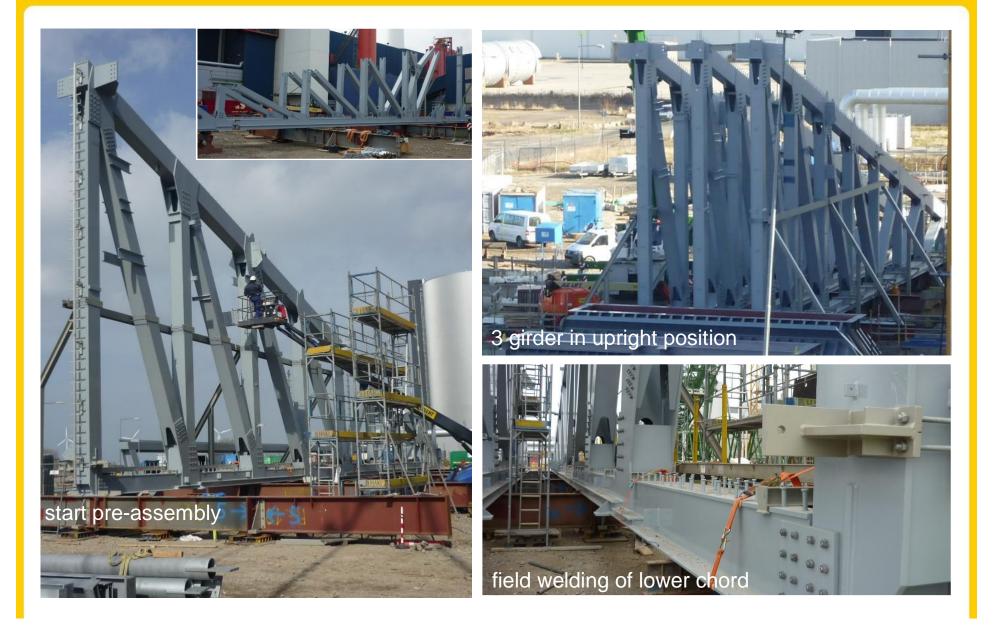
SITE INSTALLATION JANUARY – DECEMBER 2015



SITE INSTALLATION ADMIN. BUILDING A0UYA



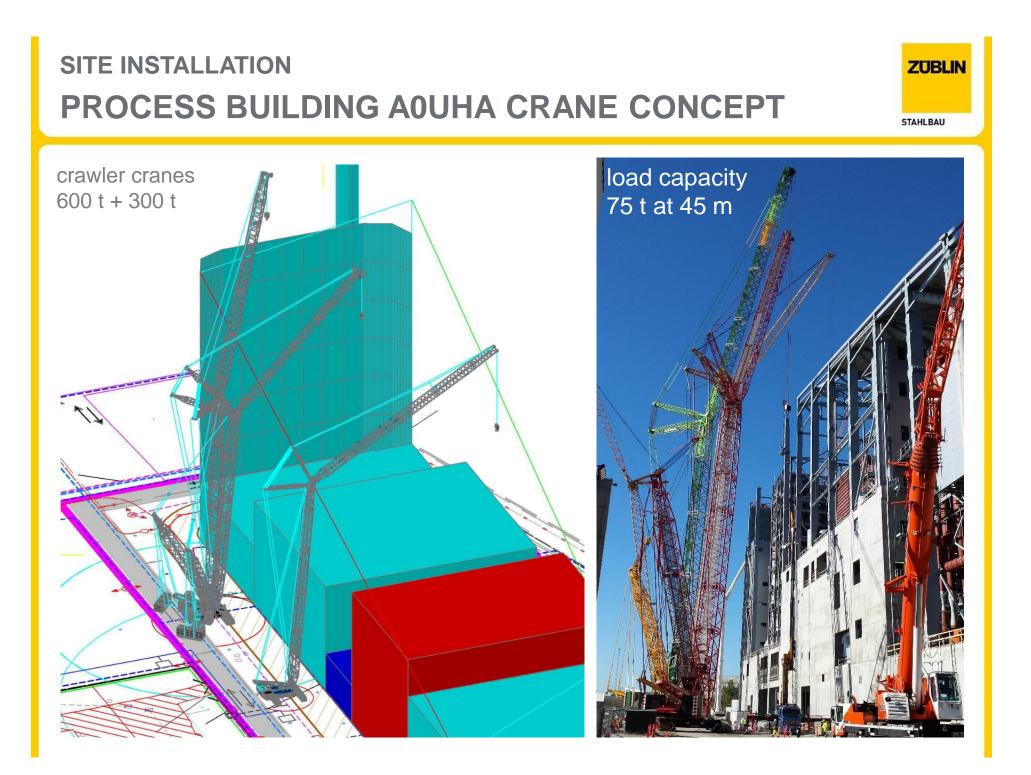
SITE INSTALLATION WASTE BUNKER A0UEB – PRE-ASSEMBLY



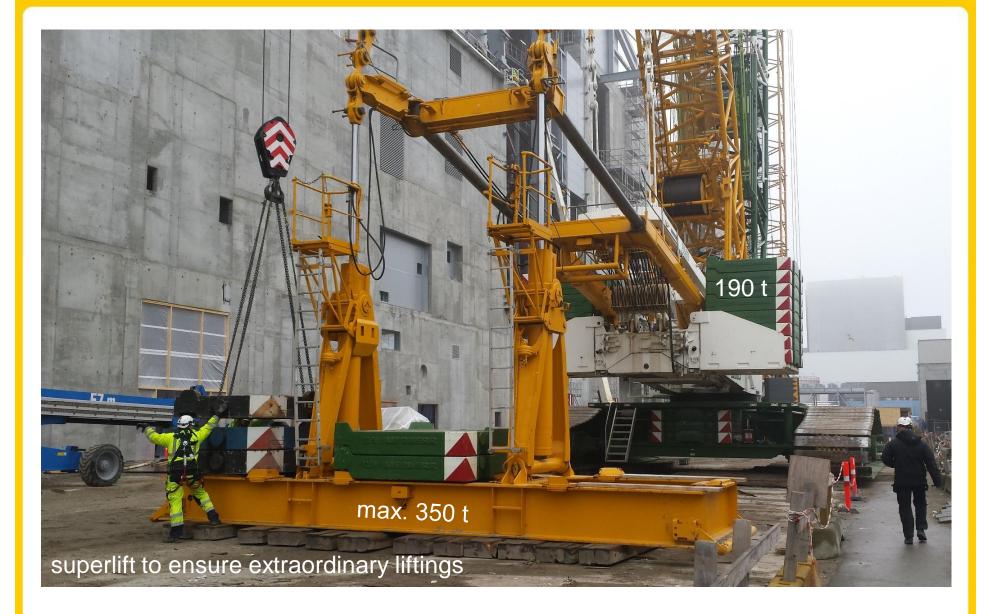
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SITE INSTALLATION WASTE BUNKER A0UEB - LIFTING





SITE INSTALLATION PROCESS BUILDING A0UHA



SITE INSTALLATION PROCESS BUILDING A0UHA – GIRDER COUPLE



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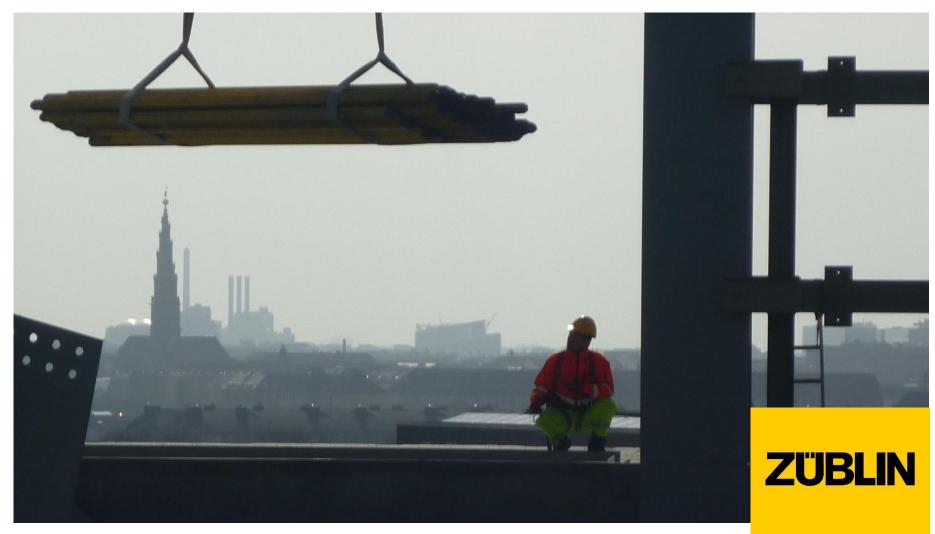
SITE INSTALLATION CURRENT STATE OF PROCESS BUILDING

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today: good state but still challenging



Thank you for your attention!



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