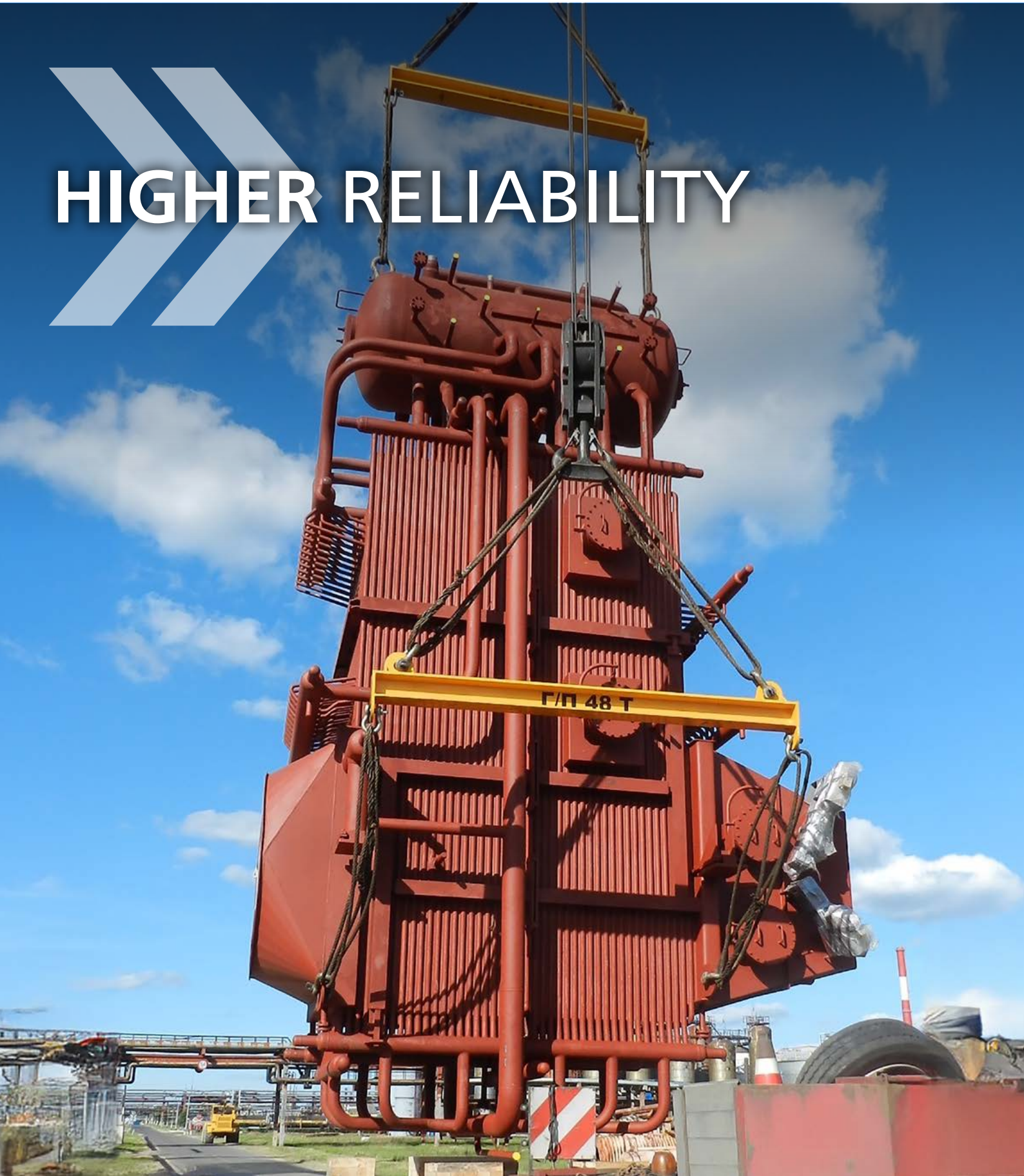
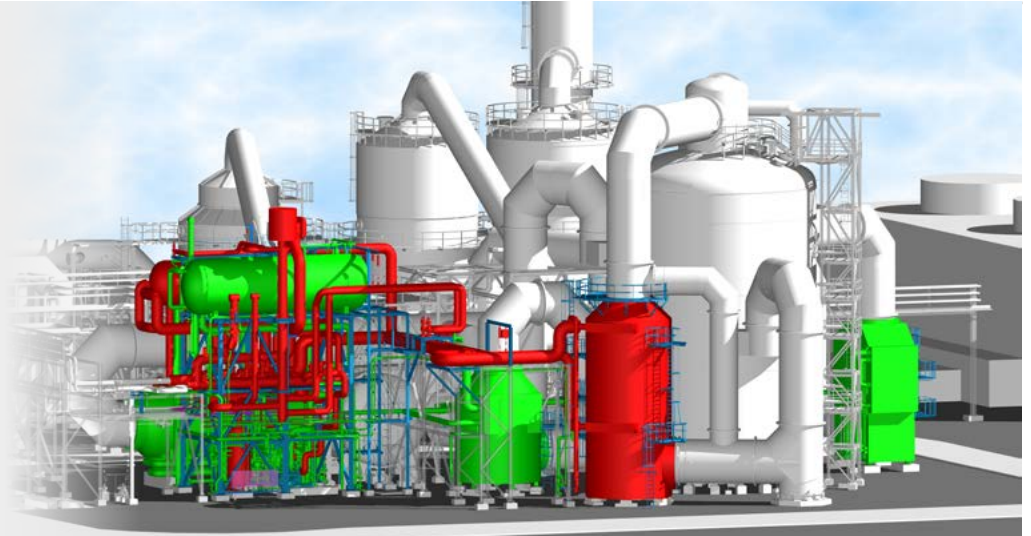


REFERENCE SHEET
Process Boiler Systems

HIGHER RELIABILITY



Custom-made process boiler systems following furnaces and converters



For decades, we've supported customers worldwide with process boiler systems for their sulphuric acid production, sulphur recovery plants and thermal oxidation plants for chemical residues. When selecting a project partner for new plants or modernization, it's particularly important that the supplier knows how to avoid sulfuric acid corrosion, sulfurization, chlorine-induced high-temperature corrosion, thermal expansion problems, hot spots, low-temperature embrittlement, etc. Our experience with more than 40 new installations and modernizations since 1990 enables us to offer solutions with higher reliability.

With our individual and customer-oriented design and optimal layout, we avoid unplanned shutdowns for our customers. We conduct root cause analysis and feasibility assessments based on the drawings of the existing process boiler system. Our core competencies are the detailed design of modernized pressure vessels and collaboration with specialized manufacturing partners.

From fire tube boilers and water tube boilers to cylindrical or rectangular modules with superheaters and economizers, we've manufactured boiler systems following furnaces and converters in many variations and design code combinations. Customer specifications are checked and evaluated for possible better technical solutions prior to the contract.

Scope of Supply

- Design beginning with heat engineering / root cause analysis (revamps)
- 3D and 2D planning, workshop drawings
- Manufacturing of boiler with refractory lining, ceramic ferrules
- Manufacturing of steam drum, economizer, superheater modules, piping
- Pre-acceptance and shop test with notified body, stamping
- Seaworthy packing and transport to jobsite or FOB North Sea port
- Final documentation with detailed assembly manual

Technical Data	
Design codes	EN12952, EN12953, EN13445, AD2000, ASME I / ASME VIII Div.1 & S/U stamps / PED
Thermal power of system	up to 120 MW
Process gas flow	up to 350,000 kg/h
Steam flow	up to 180 t/h
Steam pressure	up to 90 bar (g)
Pressure part materials	Fine grain steels, austenitic, low alloyed, cast iron, CS
Weight of single vessels	up to 175 t

