

# MBNS – International, spol. s r.o.



Brno 2026

OSTRAHA 0737  
LEGIE GUARD service,  
INFORMACE

← OFFICE MBNS spol. s r.o.  
International

ALFA TEST STEEL s.r.o.  
ALFA DEFECTOSKOPIE  
TEST TEL: 533 339 240 ↑

← PZK BRNO a.s. M+  
MI-Janeček, spol.

# COMPANY



## HISTORY

- established 1990
- private owned from 1995
- own fabrication from 2005

## DATA

- Location: Brno, Czech Republic
- Staff: aprx. 80
- Markets: EU, Middle East, Asia, North Africa



# PRODUCTS

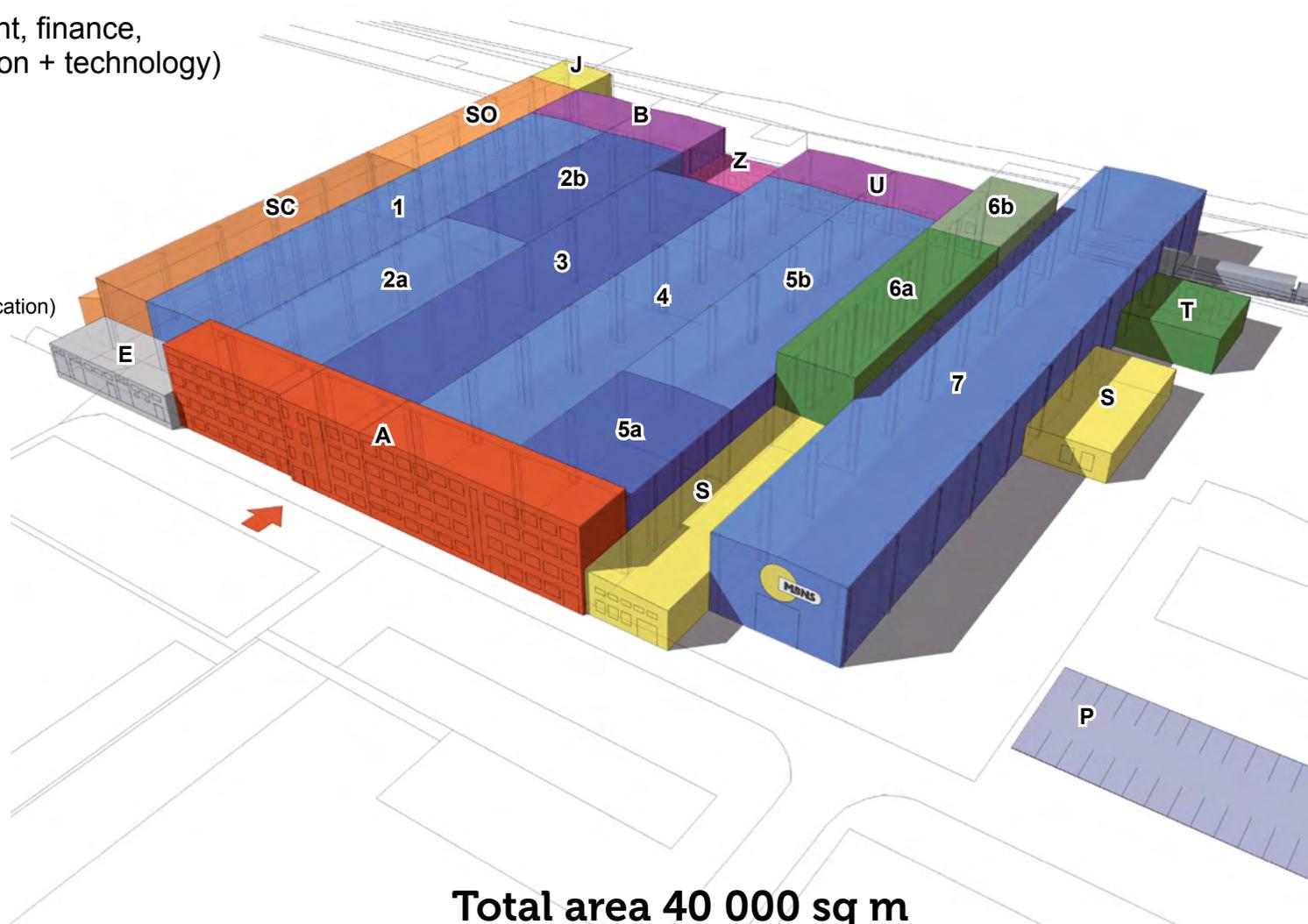
## FABRICATION OF THE EQUIPMENT FOR OIL, GAS, CHEMICAL, PETROCHEMICAL AND POWER INDUSTRIES

- Fired heaters, process furnaces, reformers
  - Convection modules, WHRSs
  - Coils - radiant, convection, helical etc.
  - Pre-heaters, stacks, structures etc.
  - RLOHs, manifolds, collectors, HTE, transferlines (TLE), cross-overs, pigtails etc.
  - Columns, reactors, pressure vessels
  - Mechanical pressure static equipment
  - Piping and tubular systems
  - Heavy steel structures
- 
- **up to max. weight 100 tons/pc;**  
**max. length 30 m/pc; max. diameter 5,5 m**



# FABRICATION SHOPS

- A** administration offices (management, finance, trade, QM, engineering, construction + technology)
- 1** machining shop
- 2a** welding and assembly shop
- 2b** mechanic and plate forming shop
- 3** tube bending and rolling shop
- 4** welding and assembly shop
- 5a** clean room (stainless and special steel fabrication)
- 5b** welding and assembly shop
- 7** heavy assembly & shipment shop
- Z** non-destructive analysis (X-ray)
- 6a** paint shop
- 6b** paint shop
- T** blast cleaning shop
- S** stores
- SC** closed store
- SO** open store
- J** scrap yard
- B** grinding shop & tool crib
- U** maintenance
- E** substation
- P** parking



**Total area 40 000 sq m**  
**Covered production area 17 000 sq m**

# FABRICATION FACILITIES

## MECHANIC AND PLATE FORMING SHOPS

### Plate edge planning - HHP 10 planning machine

- min. plate width 90 mm, max. plate length 9000 mm, through height 90 mm

### Pre-bending - press HPC 250 TO

- max. die width 1000 mm, max. piston stroke 520 mm, max. piston centre-to-housing frame depth 500 mm

### Plate roll bending

- max. plate thickness 45 mm, width 3000 mm

### Oxy-acetylene cutting

- automatic max. 50 mm, manual max. 20 mm (CS)

### Plasma cutting

- max. 50 mm (SS)

### Plate cutting

- max. 10 x 3000 mm

### Saw cutting

- At an angle up to 130 mm, upright 300 mm



# FABRICATION FACILITIES

## WELDING

### **Submerged arc welding (121/SAW) - ESAB CaB3000M 5x5 A6 LAF1001 FFRS2000 (new 2025)**

- min. Ø 250 mm, max. Ø 5580 mm

### **Standard thickness of welded plates, pipes and flanges**

- carbon steel 3 - 100 mm, stainless steel 3 - 100 mm

### **GTAW (TIG/WIG)**

- pipe outside Ø 16 - 800 mm (EWM, Fronius, Omicron – 15pcs)

### **GMAW (MIG/MAG)**

- conventional and pulse welding in shield gas,  
pulse welding-mainly SS, sources up to 500 A/60%ED  
(EWM, Fronius, Omicron – 15pcs)

### **Electrode**

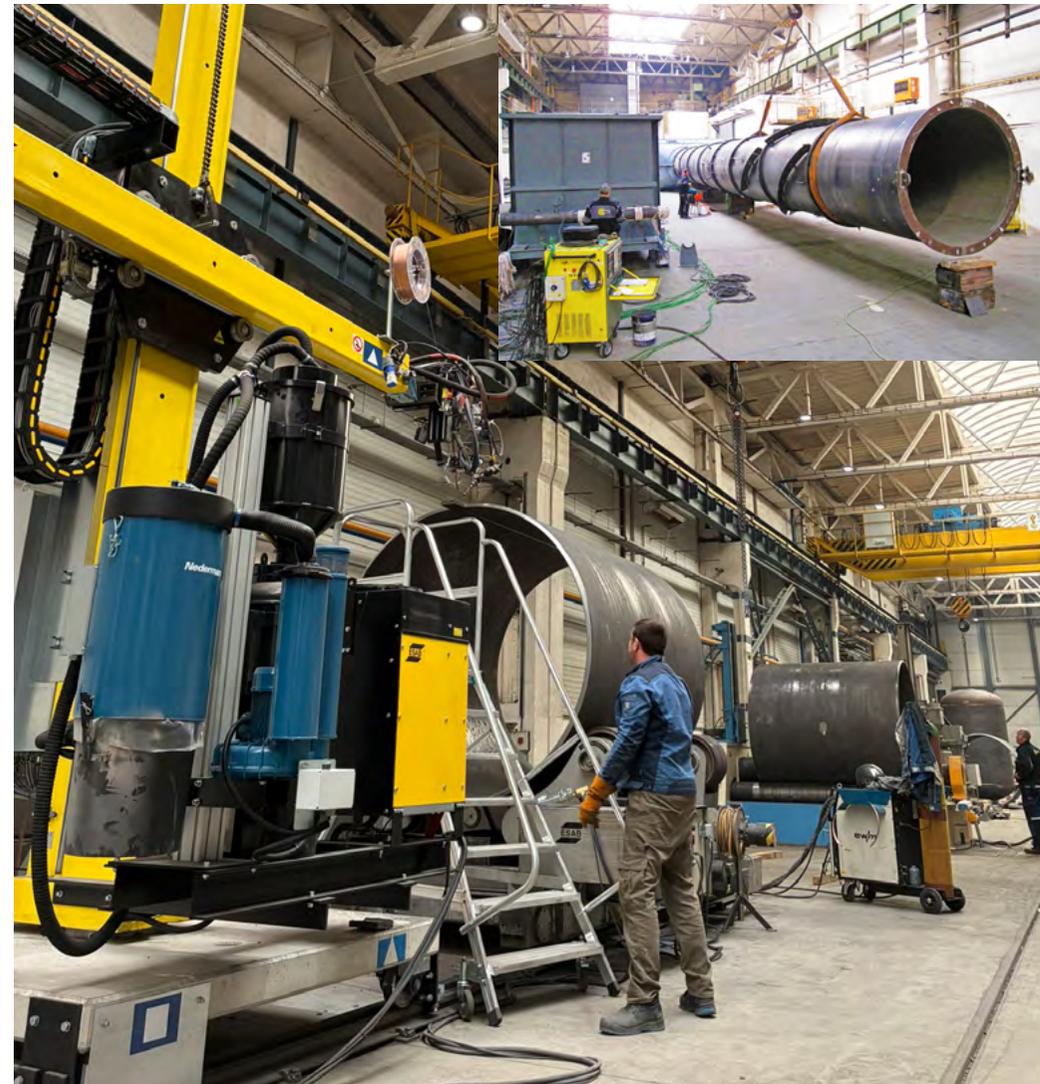
- conventional and special welding (EWM – 5pcs)

### **GTAW (TIG/WIG)**

- pulse sources up to 500 A/60%ED (EWM – 2pcs)

### **Stud welding**

- NELSON resistance stud welding from Ø 6 to Ø 14 mm (2pcs)



# FABRICATION FACILITIES

## TUBE BENDING

### Hot bending

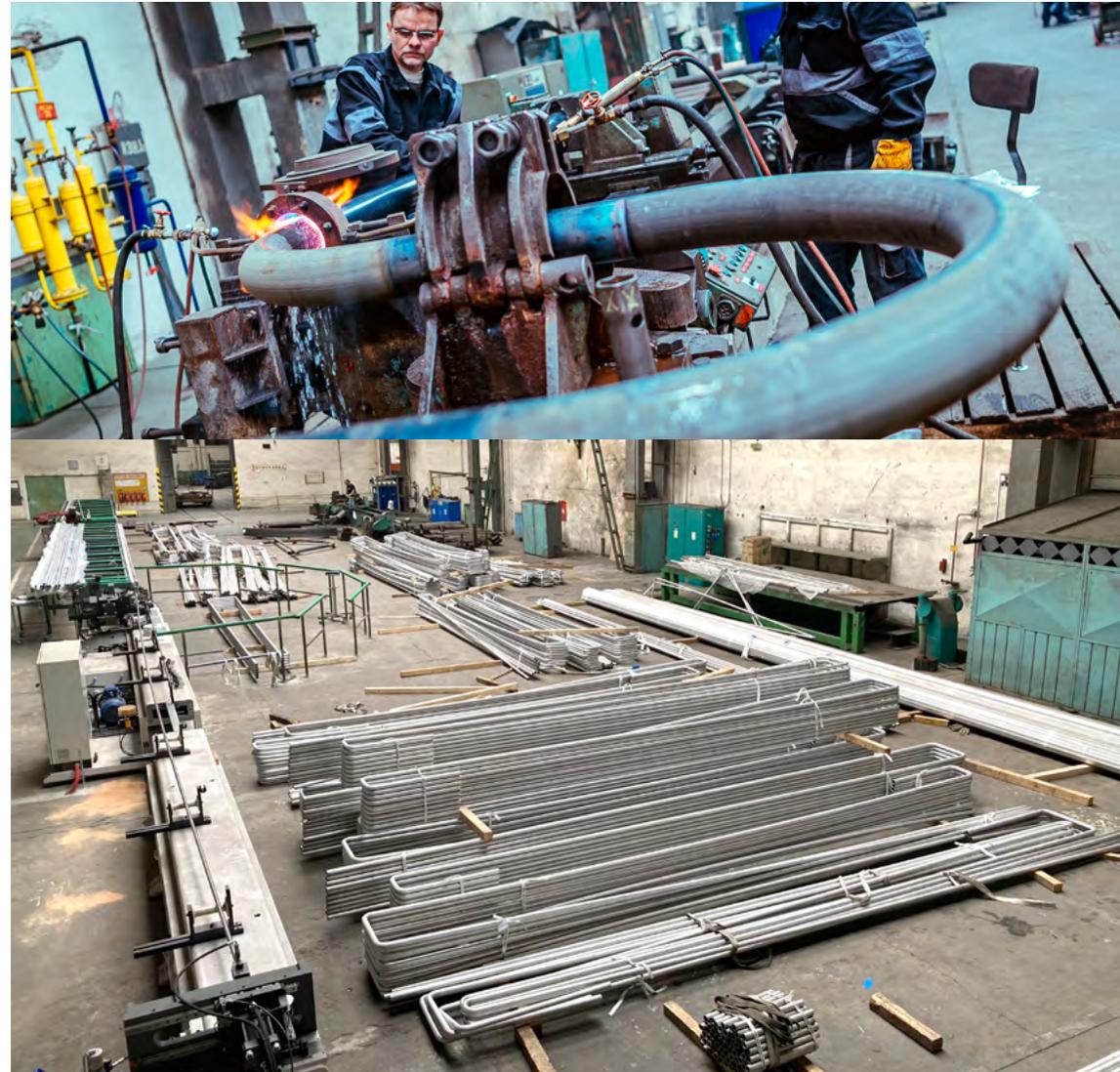
- D 89 - 377 mm, R min. 3 D but min. 450 mm,
- R max. 3000 mm, max. bend angle 180°,  
max. wall thickness 23 mm

### Cold bending/rolling

- D from 16 to 108 mm, R min. 3 D, max. bend angle 180°
- D from 20 to 159 mm, R max. unlimited, bend angle 360°,  
max. wall thickness 8 mm  
(AMOB MAH150 and HPR 12-V-H machines)
- tubes can be bent with the bend axis placed in more planes,  
as well as helically up to max.  $\varnothing$  159 mm
- D from 15 to 80 mm, R min. 1 D, max. bend angle 180°  
max. tube length 14 m (2023 AMOB CH 80 CN1  
booster machine)

### Press for panel straightening

- load – 350 tons (own design and fabrication)



# FABRICATION FACILITIES

## MACHINING

### Horizontal boring and milling machine PT160

- spindle  $\varnothing$  160 mm, X = 3150 mm, Y = 2300 mm, Z = 1600 mm, clamping area 6000 x 4000 mm, maximum load 20 t

### Vertical lathe SK25A CNC, SK 16

- max. machining  $\varnothing$  2700 mm, max. workpiece height 1500 mm, maximum load 12,5 t

### Lathes

- max. machining  $\varnothing$  620 mm, max. L = 4500 mm, maximum load 3 t

### Milling machines

- spindle  $\varnothing$  110 mm, X = 1600 mm, Y = 1250 mm, Z = 800 mm, clamping area 1400 x 1400 mm, maximum load 8 t

### Drilling machines

- max. drilling  $\varnothing$  40 mm, max. working span D = 2000 mm, max. workpiece height 1200 mm



# FABRICATION FACILITIES

## OTHER

### Non-destructive testing (indoors)

- X-ray RT, ultrasonic testing UT (new Olympus machine), magnetic testing MT, penetration testing PT, visual inspection, positive material identification PMI (NITON machine)

### Surface treatment

- blast cleaning, painting, pickling (ext.)

### Heat treatment

- local post welding heat treatment/stress relieving PWHT (Weldotherm machine)
- furnace HT (ext.)

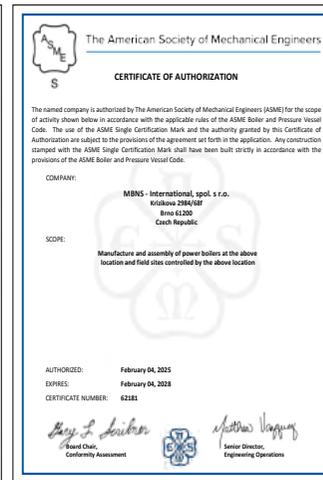
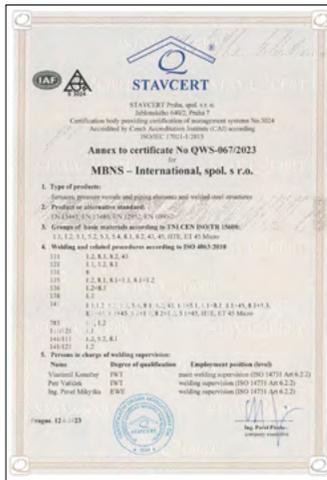
### Refractory works

- refractory & anchors supply and installations, dry-outs (ext.)



# CERTIFICATES

- EN ISO 9001 : 2015 in connection with EN ISO 3834-2 : 2021
- ASME BPV Code, Sect.VIII Div. 1, Sect. I and ASME B31.1, U+S stamps, NB Reg.
- AD 2000 Merkblatt HP 0
- EN 1090-2 + A1:2011, EXC 3
- ASME certified welders (WPQ) & procedures (PQR)



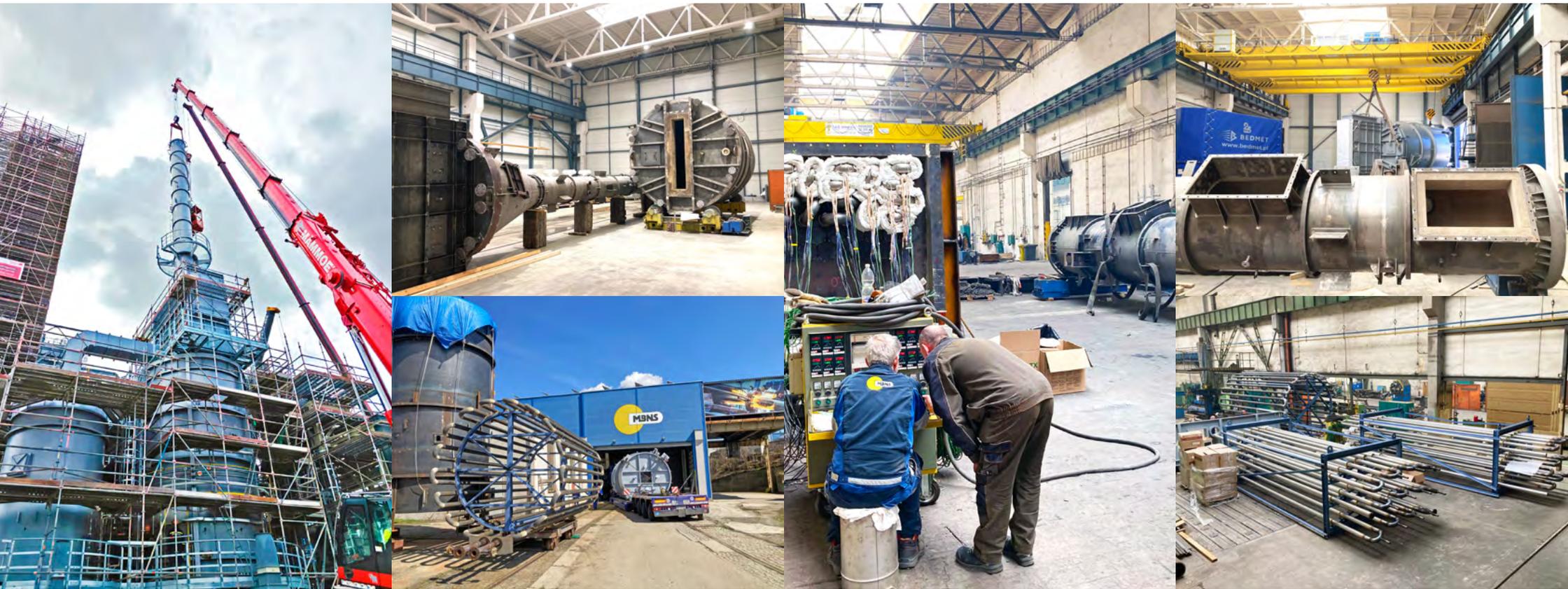
# FIRED EQUIPMENT 2000-2025

- **2025** Netherlands, convection section of Hydrofiner Charge Heater H-801, BP Refinery Rotterdam, VE
- **2025** India, convection coil 92-E-55, Indian Oil Corp. Ltd, Haldia refinery, T.EN
- **2025** Saudi Arabia, start-up heater damper, Saudi Arabian Mining Company (MAADEN)
- **2024** Romania, crossover & inlet system, convection mixed feed preheat coil, Petromidia refinery, T.EN
- **2024** Czech Republic, flue gas ducting, Litvinov refinery, ORLEN Unipetrol
- **2023** France, gasifier & afterburner of biomass gasification furnace, Clairefontaine
- **2023** Slovakia, convection section of the heater 17H301, refinery Slovnaft, MOL
- **2023** Estonia, convection section of the heater P-3, shale oil plant, Kohtla-Jarve
- **2022** Qatar, 656pcs of outlet pigtaills, Ras Laftan Qatar Shell GTL plant, T.EN
- **2021** Russia, radiant coils of heaters P-111A and P-111B, refinery Slavneft-YANOS
- **2021** France, reboiler heater B202N, VE/WOOD for Petroineos refinery in Lavera
- **2021** Russia, convection sections of ammonia reformer, KCKK Uralchem, Kirovo-Chepetsk
- **2021** Pakistan, inlet pigtaills, support frames, tube sheets, Engro Fertilizers Limited
- **2020** France, regeneration gas heater F1201, ExxonMobil Chemical France
- **2020** Czech Republic, incinerator of BBU Unit, Unipetrol RPA, Litvinov
- **2020** Czech Republic, vacuum distillation unit charge heater stack, Unipetrol RPA
- **2019** Middle East, HT + LT CROSSOVERS, Kharg Ethylene plant – Olefin Complex
- **2018** Egypt, 4 pcs of regeneration gas heaters for Zohr gas project, Vergaengineering
- **2017** Middle East, convection bank flue gas ducts, header boxes, Polymer Arian Company
- **2016** Slovakia, effluent chambers, 192 pigtaills, heater BA102.301, refinery Slovnaft
- **2015** Russia, 4pcs of fired heaters 208-20-H002 and 208-10-H001-003, Antipinsky oil refinery
- **2015** Russia, steam preheater 12 H-163 of sulphur acid plant, Ryazan refinery
- **2015** Belarus, cylindrical fractional column feed heater P-351N, Mozyr oil refinery
- **2015** Russia, hydrogen steam reformer effluent chamber OH-2001, Ryazan refinery
- **2014** Middle East, effluent transfer line+line between superheaters, Pardis Petrochemical
- **2014** Belarus, helical coils of reformer heaters No. 4+5, OAO Naftan refinery
- **2012** Iraq, heater H-01, Basrah refinery
- **2012** Belorussia, heater P150N, reboiler for column K150N, Mozyr oil refinery
- **2011** Russia, 3 pcs of vacuum heaters, Nizhnekamsk refinery, TANeko
- **2009** Russia, atmospheric heater of crude oil distillation unit, Usinsk refinery
- **2009** Russia, steam/gas mixture superheater of ammonia AM-76, KuibyshevAzot
- **2008** Ukraine, heaters 222-H1+222-H2, combustion air ducts, Nadvirna refinery
- **2008** Russia, collectors of the steam reformer of methanol plant, Novatek
- **2007** Germany, heater BA-6430, refinery BP, Gelsenkirchen
- **2006** Iraq, shaft heater and drum heater for Basrah Refinery
- **2006** Russia, effluent transfer line+12 risers of ammonia plant AM-76 reformer, KuibyshevAzot
- **2000-2003** Uzbekistan completion of the nitric acid production plant of capacity 360 ths. t/year and of the ammonium nitrate plant of capacity 450 ths. t/year



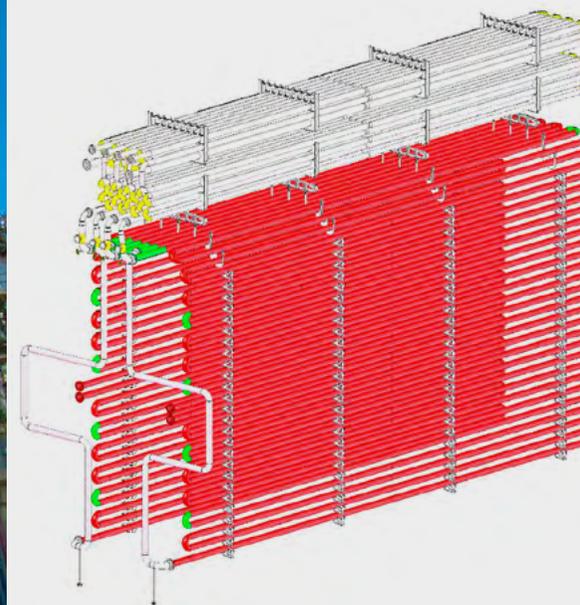
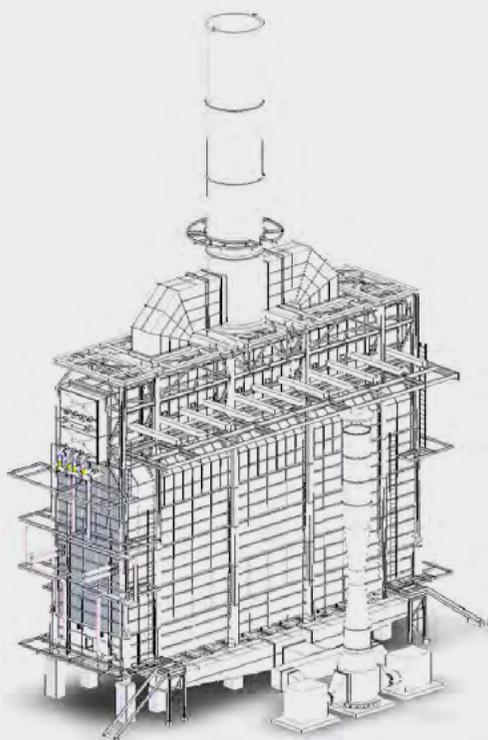
# SELECTED PROJECTS 2017+2019+2023

- 2 pcs of oil regeneration heaters 2D-400, incl. on-site assembly, HyLube 1+2 (2017+2019)
- 3 pcs of fired heaters 3D-110, 3D-111, 3D-400 + APH incl. on-site assembly, HyLube3 (2023)
- PURAGLOBE, ALTTROGLITZ, GERMANY



# SELECTED PROJECTS 2018

- atmospheric heater 4-H01 for PU-001 Crude Oil Distillation Unit with CDU No. 4 LPG Unit for Basrah Refinery, IRQ;  
dimensions approx. 25 x 7 x 40 m, total weight approx. 800 tons



# SELECTED PROJECTS 2018

- atmospheric heater 4-H01 for PU-001 Crude Oil Distillation Unit with CDU No. 4 LPG Unit for Basrah Refinery, IRQ; dimensions approx. 25 x 7 x 40 m, total weight approx. 800 tons



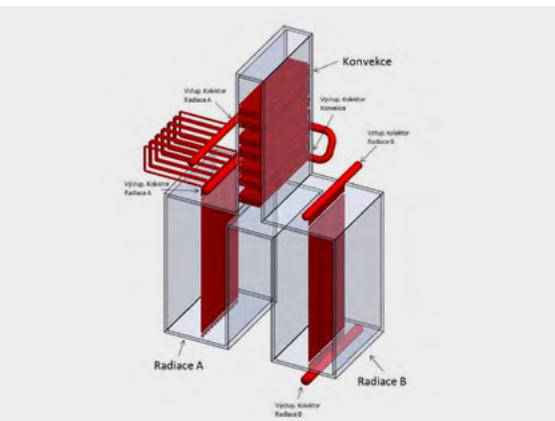
# SELECTED PROJECTS 2018+2020

- Spun cast Mixed Feed Inlet Headers of primary reformer H501 of Ammonia for Yara Sluiskil, NL, SMLS TUBES 355,6 x 27,3 mm and 457,2 x 33,45 mm A312 TP321H, pigtails 42,16 x 3,11 mm Incoloy 800H



# SELECTED PROJECTS 2019

- Revamp of heater B-101 of Styren III unit at SYNTHOS Kralupy, CZ, radiant coils: A - inlet manifold  $\varnothing 457,2 \times 12,8$  mm, A358Gr.304H, tubes Centralloy - HP40Nb+micro, outlet manifold  $\varnothing 508 \times 18$  mm, Alloy 800HT + B - inlet manifold  $\varnothing 508,13,2$  mm, A358Gr.304H, tubes  $88,9 \times 6,35$  mm Centralloy - HP40Nb+micro, outlet manifold  $\varnothing 609,6 \times 17,5$  mm, Alloy 800HT; radiant coils operating temperature  $900 - 1200$  °C; convection: inlet manifold  $\varnothing 406,4 \times 12,7$  mm, A106 Gr.B, tubes  $\varnothing 88,9 \times 5,49$  mm, outlet manifold  $\varnothing 457,2 \times 12,8$  mm, A358 Gr304H; cross-over piping: Alloy 800HT



# SELECTED PROJECTS 2021

- Technip Parallel Reformer (TPR), OD = 2,4 m, L = 23,5 m, W: 150 t, material: SA387GR11/GR12, reaction tubes, refractory lined, ASME VIII. Div. 1./API 934/API 936, Technip Energies, India, 2021



# SELECTED PROJECTS 2022

- Atmospheric heater F1 – AVD – 5, tubes  $\varnothing$  168,3 x 7,11 mm,  $\varnothing$  141,3 x 6,55 mm (finned),  $\varnothing$  323,8,3 x 7,11 mm, mat. A335 P9 + radiant coil and convection module of heater B103.101, tubes  $\varnothing$  114,3 x 19,5 mm, mat. A213 TP347H, refinery Slovnaft, MOL (time-lapse video of the heater replacement: [https://www.youtube.com/watch?v=VP017q\\_gOm8](https://www.youtube.com/watch?v=VP017q_gOm8))



# SELECTED PROJECTS 2022 + 2024

- Refractory lined outlet header (RLOH) of hydrogen reformer package, Ø 1016 mm, L=16000 mm, W = 26,5 t, mat. A387 Gr.11/ B409-N08810/A608/B564-N08811, Assiut refinery, T.EN
- Refractory lined outlet header (RLOH) of HPU reformer unit 09, Ø 1067 mm, L=13350 mm, W = 24,5 t, mat. A387 Gr.11/ B409-N08810/A608/B564-N08811; outlet pigtails, mat. B-407 UNS N08811, Middle East Oil Refinery (MIDOR), Egypt, T.EN



# SELECTED PROJECTS 2023

- HP steam convection tube bank incl. header box with refractory, mat. SA-106 Gr. B finned tubes, A335 P11, total weight 55 t, radiant section reformer tubes assemblies, mat. HTE+ET45Micro, S+C for YPF & Dow Chemical, Argentina



# SELECTED PROJECTS 2023

- Convection coils, inlet system and pigtails, convection section modules assembly incl. refractory installation, mat. SA-106 Gr. B, SA-312 Gr. TP347H, SA-335 Gr. P11, total weight aprx. 300 t, Assiut refinery Egypt, T.EN  
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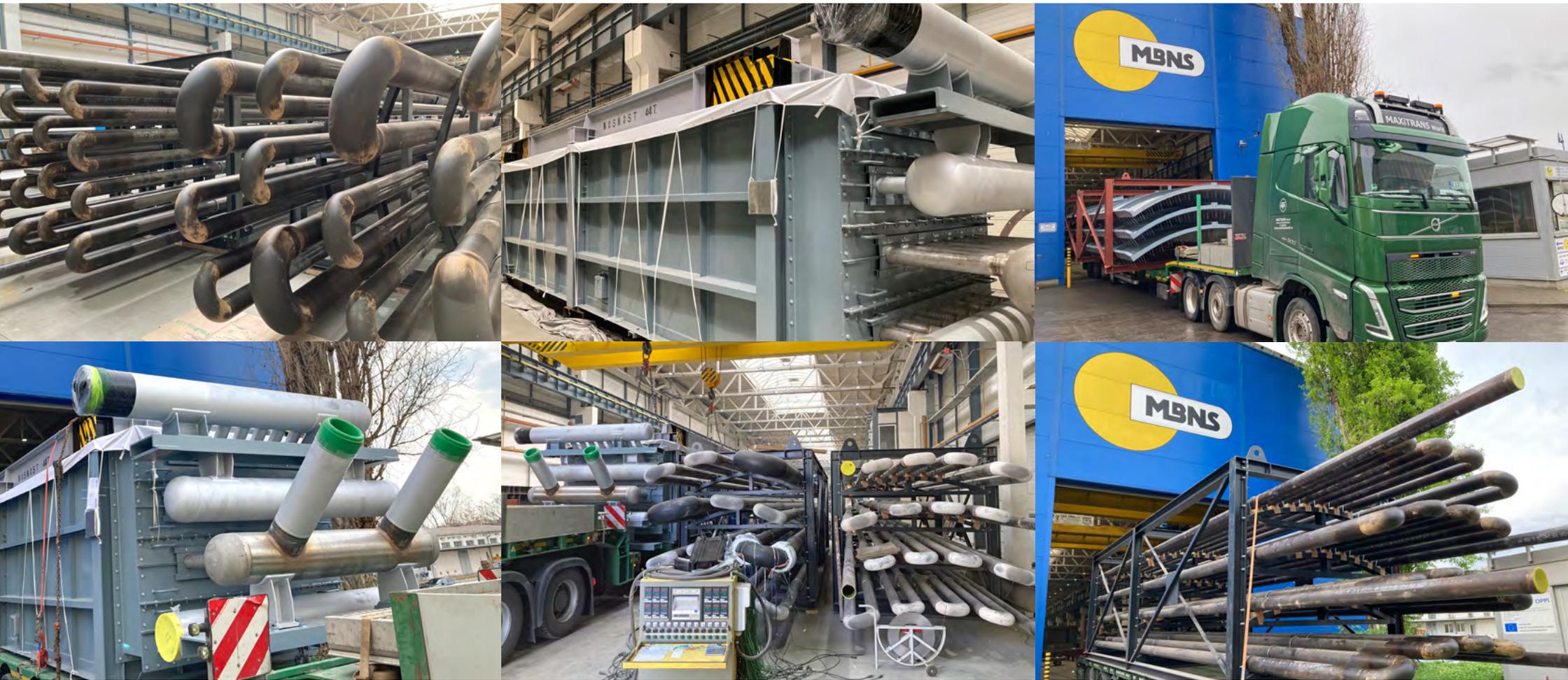
# SELECTED PROJECTS 2023

- 6pcs of Primary Decoke Cyclones + 6pcs of Secondary Decoke Cyclones, mat. HARDOX / RELIA 400, WRS wear resistant material, weight aprx. 12t each, incl. FEA analysis, T.EN



# SELECTED PROJECTS 2024

- radiant coils and convection section of the heater F2, mat. A335 P9/ A335 P5/ A312 TP304, refinery Slovnaft, MOL



# SELECTED PROJECTS 2024

- decarbonization cylindrical fired heater of Dow Chemical plant in Stade, mat. 13CrMo4-5/X8CrNi25-21/S355J2, AD2000 Merkblatt, Air Liquide/Novargi



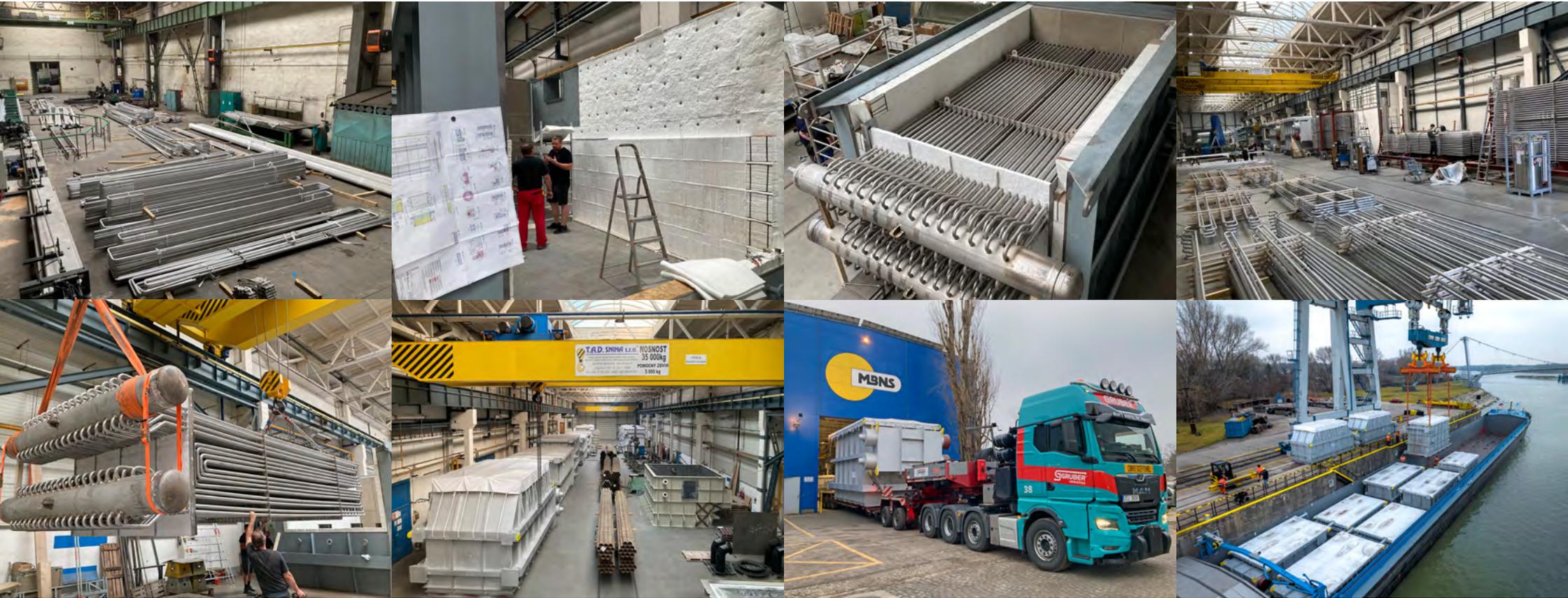
# SELECTED PROJECTS 2023 + 2025

- spare parts of CDU heater B101, stack damper, explosion doors, observation doors, access doors, other casted items, Baiji, Iraq
- steam preheater headers  $\varnothing$  219 mm, 10CrMo9-10, tube coils of the heater 401-B, 10CrMo9-10, Baiji, Iraq



# SELECTED PROJECTS 2024

- 2 units of Waste Heat Recovery Systems of gas reforming plants belonging to a 5000t/day methanol synthesis plants consisting of 2x E-1010 feed preheaters for steam reformers, 2x E-1012 feed preheaters for pre-reformers, 2x E-1009II, E-1009IA, E-1009IB feed preheaters for auto thermal reformers, 2x E-1013 Natural gas feed preheaters, interconnecting piping OD406,4x16,7 SS 304, refractory for Flue Gas Waste Heat Recovery System H-1002, total 160 tons of seamless tubes OD42,4x3,6/3,2 SS 304H + finned tubes OD42,4x3,6 SA213 T11, headers OD406,4x32 304H + OD406,4x21,44 SA335 P11, total weight 520 tons



# MBNS STRENGTHS

## Benefits of cooperation with MBNS:

### COMPETENCE

- core MBNS fabrication commodities are fired heaters and its parts (convection modules, coils, WHRSs, RLOHs, collectors, transfer lines, pigtails, stacks, structures etc.) = long-term experience, know-how, references (Technip Energies, Chempex-HTE, Vergaengineering, Novargi, Schmidt Clements, Furnace Engineering, APEX Group, PURAGLOBE, Dow Chemical, Air Liquide, MOL, Orlen etc.)
- MBNS work shop has been adapted to meet heater fabrication requirements incl. panels straightening, refractory installation etc.

### QUALITY

- high technological production quality, compact and clean fabrication process, qualified and skilled staff
- materials exclusively from EU suppliers – Italy, Spain, Germany, Austria, CZ, Netherlands etc.  
(MBNS does not use materials from China & India)

### FLEXIBILITY

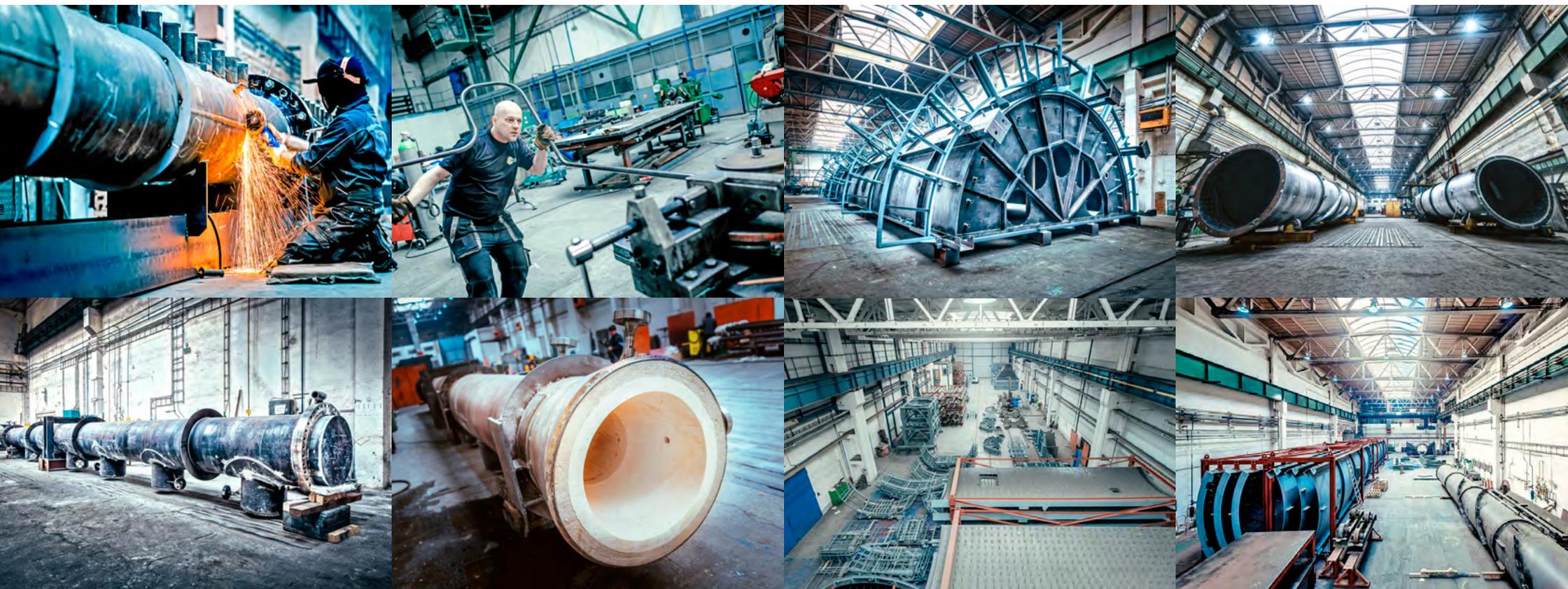
- small-sized enterprise – flexible and adaptive to any changes and issue solving
- meeting deadlines – OTD (On-Time Delivery Rate) 2020: 93,3 %, 2021: 100 %, 2022: 90,5 %, 2023: 95,3 %, 2024: 93,2%

### DETAIL ENGINEERING

- strength analysis calculations, shop drawings – 3D design (AUTOCAD, TEKLA, SOLIDWORKS, VISUAL VESSEL DESIGN, AUTOPIPE)



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