Your Partner in Power Industry

Company Profile G – Team a.s.

Equipment for power and heat generation industry
G-Team, a.s. founded in 1992 is an engineering and manufacturing company. From its beginning, G-Team is involved in the area of heating plant industry and fossil-fuel power stations and nuclear power plants. We are the leading supplier in power generation sector specializing in steam and condensate equipment. Our broad spectrum of supplies and production covers boilers, steam turbines, valves, pipeline systems, drainage and condensate systems. Using an integrated approach in production process includes customer support in engineering (projects) and wide range of services, in particular installation of machine rooms, boiler plants and pipeline systems.

About G-Team, a.s.

Fields of application:

- Fossil-fuel and nuclear power plants
- Water industry
- Chemistry industry
- Food and Beverage industry
- Engineering:
  - Field services in power generation and nuclear industries
  - Consultancy
  - Project financing
- Services:
  - Commissioning of energy equipment
  - Engineering services
  - Consultancy
  - Project financing
- Measurement and control:
  - Control and optimization of energy processes
  - Control of pressure, temperature and amount
  - Monitoring and protection of energy devices
  - Occupational health and safety management systems (BOSP)
  - Installation and setting of servo-actuators
  - Vibration and movement of rotary machines – Reutlinger
  - Diagnosis of steam traps operation

Identification data:
- Legal form: Joint-Stock Company
- Company registered in the Commercial Register maintained by the Regional Court in Plzeň, Section B, Insert 1319
- Ident. No. (IČO): 45358028, VAT ID (DIČ): CZ 45358028

www.g-team.cz
Micro Steam Turbines (TR)

Classification

TR with frequency converter
TR Hi 150:
- G-Team, a.s. self-construction
- gearbox replaced with high-frequency generator and frequency converter
- compact design
- only to drive high-frequency generator integrated in turbine

G-Team, a.s. self-construction
- gear box replaced with high-frequency generator and frequency converter
- efficiency optimization due to partial arc of admission
- compact design
- only to drive generator integrated in turbine

TR with “overhung” impeller
TR100, TR320, TR560 and TRM3:
- basic construction
- long service life
- mechanical and electronic regulation
- efficient optimization due to partial arc of admission
- compact design
- only to drive generator, feedwater pumps, ventilators and sugar-cane mills

TR with “between bearings” impeller TRm:
- classic construction
- long service life
- mechanical and electronic regulation
- compact design
- high overall thermal efficiency
- service life — min. 25 years
- simple operation and maintenance
- suitable for drives, feedwater pumps and ventilators
- simple installation

For mechanical drives
- TR Hi 150
- TR 100
- TR 320
- TR 560
- TRM 3
- TRm

With integrated gearbox
- TR Hi 150
- TR 100
- TR 320
- TR 560
- TRM 3
- TRm

Maximum operating parameters
- inlet steam pressure up to [MPa (a)]
- inlet steam temperature up to [°C]
- output turbine mean pressure up to [MPa (a)]
- output turbine mean temperature up to [°C]
- power output up to [kW]

<table>
<thead>
<tr>
<th>Model</th>
<th>p. 7</th>
<th>p. 8</th>
<th>p. 9</th>
<th>p. 10</th>
<th>p. 11</th>
<th>p. 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 150</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>TR 100</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>TR 320</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>TR 560</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>TRM 3</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>TRm</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

For mechanical drives:
- TR Hi 150: ✗
- TR 100: ✗
- TR 320: ✗
- TR 560: ✗
- TRM 3: ✗
- TRm: ✗

With integrated gearbox:
- TR Hi 150: ✗
- TR 100: ✗
- TR 320: ✗
- TR 560: ✗
- TRM 3: ✗
- TRm: ✗

Inlet steam pressure up to [MPa (a)]:
- TR Hi 150: 4
- TR 100: 4
- TR 320: 4
- TR 560: 6
- TRM 3: 4
- TRm: 4

Inlet steam temperature up to [°C]:
- TR Hi 150: 420
- TR 100: 420
- TR 320: 550
- TR 560: 420
- TRM 3: 420
- TRm: 420

Output turbine mean pressure up to [MPa (a)]:
- TR Hi 150: 0.6
- TR 100: 0.6
- TR 320: 0.6
- TR 560: 0.6
- TRM 3: 0.6
- TRm: 0.6

Output turbine mean temperature up to [°C]:
- TR Hi 150: 225
- TR 100: 225
- TR 320: 225
- TR 560: 225
- TRM 3: 225
- TRm: 225

Power output up to [kW]:
- TR Hi 150: 80
- TR 100: 150
- TR 320: 700
- TR 560: 3,000
- TRM 3: 5,000
- TRm: 1,200

Equipment for power and heat generation industry
Microturbine TR100 is particularly designed for drive generators with following power generation.

- Gearbox with fixed-on stator of TR100 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

Microturbine TR HI 150 is intended and designed for pressure reduction of water vapour and extremely low steam flow complying the requirements for safe and mechanical operation together with high efficiency. Turbine casing with electric generator stator form a unit without coupling and secondary rotary parts.

- Impeller is “overhung” type on rotor of high-frequency electric generator. Mechanical face seals provided reduce steam leaks effectively. Complete oil system is included to supply lubricating and governor oil.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

- Microturbine TR HI 150 is intended and designed to drive generators with following power generation:
  1. Steam inlet
  2. Steam outlet
  3. Turbine casing
  4. Base frame
  5. High-frequency generator

- Steam inlet
  - Power output up to 80 kW

- Steam outlet
  - Generator speed 30 000 rpm

- Turbine casing
  - Inlet steam pressure up to 4,0 MPa (a)

- Base frame
  - Exhaust steam pressure up to 0,6 MPa (a)

- High-frequency generator
  - Inlet steam temperature up to 420 °C

Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

- Microturbine TR100 is particularly designed for drive generators with following power generation:
  1. Steam inlet
  2. Steam outlet
  3. Turbine casing
  4. Gearbox
  5. Asynchronous generator
  6. Base frame

- Steam inlet
  - Power output up to 150 kW

- Steam outlet
  - Generator speed 3 000 rpm

- Turbine casing
  - Inlet steam pressure up to 4,0 MPa (a)

- Gearbox
  - Exhaust steam pressure up to 0,6 MPa (a)

- Asynchronous generator
  - Inlet steam temperature up to 420 °C

- Base frame
  - Partial admission of impeller

- Microturbine TR 100 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

- Microturbine TR HI 150 is intended and designed for pressure reduction of water vapour and extremely low steam flow complying the requirements for safe and mechanical operation together with high efficiency. Turbine casing with electric generator stator form a unit without coupling and secondary rotary parts.

- Impeller is “overhung” type on rotor of high-frequency electric generator. Mechanical face seals provided reduce steam leaks effectively. Complete oil system is included to supply lubricating and governor oil.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

- Microturbine TR HI 150 is intended and designed to drive generators with following power generation:
  1. Steam inlet
  2. Steam outlet
  3. Turbine casing
  4. Base frame

- Steam inlet
  - Power output up to 80 kW

- Steam outlet
  - Generator speed 30 000 rpm

- Turbine casing
  - Inlet steam pressure up to 4,0 MPa (a)

- Base frame
  - Exhaust steam pressure up to 0,6 MPa (a)

- High-frequency generator
  - Inlet steam temperature up to 420 °C

Microturbine TR100 is particularly designed for drive generators with following power generation:

- Gearbox with fixed-on stator of TR100 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

- Microturbine TR HI 150 is intended and designed to drive generators with following power generation:
  1. Steam inlet
  2. Steam outlet
  3. Turbine casing
  4. Base frame

- Steam inlet
  - Power output up to 80 kW

- Steam outlet
  - Generator speed 30 000 rpm

- Turbine casing
  - Inlet steam pressure up to 4,0 MPa (a)

- Base frame
  - Exhaust steam pressure up to 0,6 MPa (a)

- High-frequency generator
  - Inlet steam temperature up to 420 °C

Microturbine TR HI 150 is intended and designed to drive generators with following power generation:

- Gearbox with fixed-on stator of TR100 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

- Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.
Microturbine TR560 is particularly designed for isentropic enthalpy drop $\Delta h$ higher than 120 kJ·kg$^{-1}$ with two possible partial admissions. Machine unit may be used in both backpressure and condensate systems.

- Gearbox with fixed-on stator of TR560 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.

Microturbine TR560 may be used in both systems – backpressure and condensate. The choice depends on the customer and his needs leading to heat and power generation or to use microturbine TR just for power generation.

Microturbine TR320 is particularly designed to drive generators with following power generation.

- Gearbox with fixed-on stator of TR320 reduces the speed of impeller to comply with the electric asynchronous generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Mechanical face seals provided reduce steam leaks effectively.

Microturbine is used for automatic steam reduction to required value in connection with steam extraction which determines electric output of generator.
This type of microturbine may be used with gearbox or without gearbox with possibility of more blade stages. Mechanical and electronic regulation is suitable for this type of turbine.

Microturbine consists of welded base frame providing support for turbine body, drive machine (generator, pump or second gearbox for sugar-cane mill), oil system and oil tank. Rotor is placed between two friction bearings. Flexible coupling provides connection of rotor shaft and gearbox. Mechanical face seals provided reduce steam leaks effectively and also conducts seal steam.

Shaft speed is automatically governed by microturbine depending on the driven machine requirements. No regulation of exhaust steam pressure for mechanical actuators.

Microturbine TRM3 is particularly designed for isentropic enthalpy drop \( \Delta h \) higher than 400 kJ/kg with possible one up to three steam extractions. Machine unit may be used in both backpressure and condensate systems.

Turbine casings I., II. and III. stage are fixed to gearbox to reduce turbine wheels speed to comply with generator speed. Base frame including entire oil system and gearbox connected to propelled machine by means of flexible coupling. Driven machine is separately placed on concrete foundation. Mechanical face seals provided reduce steam leaks effectively and also conducts seal steam.

### Steam inlet
- Power output: up to 5,000 kW

### Steam outlet
- Speed: 1,500 rpm

### Turbine casing
- Inlet steam pressure: up to 9,0 MPa (a)
- Exhaust steam pressure: up to 0,07-1,4 MPa (a)
- Inlet steam temperature: up to 640 °C

### Driven machine
- Inlet steam temperature: up to 640 °C

### Base frame
- Controlled extraction after the I. Stage

### Steam inlet
- Power output: up to 1,200 kW

### Steam outlet
- Speed: 5,000 rpm

### Turbine casing
- Inlet steam pressure: up to 6,0 MPa (a)
- Exhaust steam pressure: up to 0,9 MPa (a)
- Inlet steam temperature: up to 550 °C

### Driven machine
- Inlet steam temperature: up to 640 °C

### Base frame
CONTROL VALVES

1/ Nominal size
   DN100÷DN400 / DN350÷DN1400

2/ Nominal pressure
   up to PN100

3/ Max. Temperature [°C]
   450

4/ Valve body
   Angle

5/ Connection
   Weld end / Flange

6/ Standard
   ČSN, EN (connection acc. To ANSI, GOST)

7/ Body material
   Cast: GP240GH, G17CrMo5-5
   Forged: P245GH, 13CrMo4-5, 16Mo3

8/ Kvs [m³/h]
   125÷4000

9/ Actuator
   Electric, Pneumatic, Hydraulic

AZR 450

AZR 610

AZZ 450

AZZ 610

AZ 23

AZZ 450

AZZ 610
### VCHA VCHT

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>DN (Nominal size)</th>
<th>Nominal pressure</th>
<th>Max. Steam temperature</th>
<th>Connection</th>
<th>Body material</th>
<th>Operating range</th>
<th>Min. steam temperature after cooling</th>
<th>Min. ( \Delta p ) injected water and cooled steam</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/</td>
<td>Name &amp; code</td>
<td>DN80÷DN700</td>
<td>PN16÷PN100</td>
<td>610</td>
<td>Weld-end / Flange</td>
<td>P245GH, 16Mo3, 13CrMo4-5, 10CrMo9-10</td>
<td>10% ÷ 100% of rated flow</td>
<td>Saturation temp. + 7 – 11 °C</td>
<td>2 bar</td>
<td>Reducing and Cooling (Desuperheating) stations; Bypass stations; Steam for technological processes</td>
</tr>
<tr>
<td>2/</td>
<td>Nominal size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/</td>
<td>Min. Steam temperature</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/</td>
<td>Max. Steam temperature</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/</td>
<td>Connection</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/</td>
<td>Body material</td>
<td>DN80÷DN700</td>
<td>PN16÷PN100</td>
<td>610</td>
<td>Weld-end / Flange</td>
<td>P245GH, 16Mo3, 13CrMo4-5, 10CrMo9-10</td>
<td>10% ÷ 100% of rated flow</td>
<td>Saturation temp. + 7 – 11 °C</td>
<td>2 bar</td>
<td>Reducing and Cooling (Desuperheating) stations; Bypass stations; Seal steam; Steam for low pressure boiler</td>
</tr>
<tr>
<td>7/</td>
<td>Operating range</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/</td>
<td>Min. steam temperature after cooling</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/</td>
<td>Min. ( \Delta p ) injected water and cooled steam</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/</td>
<td>Application</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PRCH TCH-RT CHP

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>DN (Nominal size)</th>
<th>Nominal pressure</th>
<th>Max. Steam temperature</th>
<th>Connection</th>
<th>Body material</th>
<th>Operating range</th>
<th>Min. Steam temperature after cooling</th>
<th>Min. ( \Delta p ) Injected Water and cooled steam</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/</td>
<td>Name &amp; code</td>
<td>DN80÷DN700</td>
<td>PN16÷PN100</td>
<td>610</td>
<td>Weld-end / Flange</td>
<td>P245GH, 16Mo3, 13CrMo4-5, 10CrMo9-10</td>
<td>10% ÷ 100% of rated flow</td>
<td>Saturation temp. + 7 – 11 °C</td>
<td>2 bar</td>
<td>Reducing and Cooling (Desuperheating) stations; Bypass stations; Seal steam; Steam for low pressure boiler</td>
</tr>
<tr>
<td>2/</td>
<td>Nominal size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/</td>
<td>Min. Steam temperature</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/</td>
<td>Max. Steam temperature</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/</td>
<td>Connection</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/</td>
<td>Body material</td>
<td>DN80÷DN700</td>
<td>PN16÷PN100</td>
<td>610</td>
<td>Weld-end / Flange</td>
<td>P245GH, 16Mo3, 13CrMo4-5, 10CrMo9-10</td>
<td>10% ÷ 100% of rated flow</td>
<td>Saturation temp. + 7 – 11 °C</td>
<td>2 bar</td>
<td>Reducing and Cooling (Desuperheating) stations; Bypass stations; Seal steam; Steam for low pressure boiler</td>
</tr>
<tr>
<td>7/</td>
<td>Operating range</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/</td>
<td>Min. Steam temperature after cooling</td>
<td>610</td>
<td>550</td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/</td>
<td>Min. ( \Delta p ) Injected Water and cooled steam</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/</td>
<td>Application</td>
<td></td>
<td></td>
<td></td>
<td>Weld-end / Flange</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BYPASS STATION

1/ Nominal size DN100÷DN400 / DN350÷DN1400
2/ Nominal pressure up to PN500
3/ Main References EN / ISO
4/ Valve body Angle, “Z” – form
5/ Connection Weld end / Flange
6/ Standard DIN, EN (connection acc. to ANSI, GOST)
7/ Body material Cast: GP240GH, G17CrMo5-5, G17CrMoV5-10
   Forged: P245GH, 13CrMo4-5, 10CrMo9-10, X10CrMoVNb9-1
8/ Kvs [m³/h] up to 6300
9/ Actuator Electric, Pneumatic, Hydraulic

EXTRACTION CHECK VALVES – FGT

1/ Nominal size DN80÷DN1200
2/ Nominal pressure up to PN100
3/ Max. Temperature [°C] up to 550
4/ Connection Weld end / Flange
5/ Standard DIN, EN (connection acc. to ANSI, GOST)
6/ Body material UP240GH, G17CrMo5-5, G17CrMoV5-10
7/ Actuator Pneumatic / hydraulic / self-acting (without actuator)
8/ Application Turbine extraction system

www.g-team.cz
Design Engineering

of pipeline systems
in power generation and industry

- technical feasibility study, ideal balance design of energy equipment and units,
- comprehensive project documentation for planning permission (basic design), building design (detail design) and actual design of technological equipment and operation sets for power plants, heating plants and industrial estates in compliance with valid law and technical regulations,
- project documentation of repairs and reconstructions of selected technological equipment and operation sets of nuclear power plants classified as B2 and B3 acc. to Notice 132/2008 in conformity with requirements of Notice 309/2005,
- 3D design and space visualization of technological equipment and pipeline systems including safety valves exhausts, steam trap, draining and air-vent in 3D CAD Solid Edge and Smap3D Plant Design,
- calculation, piping and instrumentation diagram/drawing showing pipeline components, valves, energy equipment and instrumentation (VII) including position of pipeline and auxiliary steel constructions,
- design and calculation verification of unnormalized pipeline components through SW ANSYS PROFESSIONAL,
- piping flexibility analysis through SW CAESAR II,
- design of pressure and pressure-free vessels, reducing, desuperheating (cooling) and bypass stations including safety pressure equipment in compliance with valid law,
- project documentation of pressure tests and cleaning processes after installation,
- control algorithm design for regulation, warming-through and commissioning of technological equipment, creation of operating regulations,
- G-Team ACADEMY – trainings and seminars.
Experimental and Development Department

- Control valves testing
  - Testing route designed according to ČSN EN 60534-2-3 provides flow characteristics and nominal flow coefficients of control valves – DN15 – DN150, up to kv = 100 m³/h.

- Desuperheaters testing
  - Testing route designed for nozzle optimization of mixing cooler of superheated steam,
  - Practical verification of newly designed desuperheaters with possibility of size measuring of atomized drops,
  - Testing parameters of reheated inlet steam – temperature up to 240°C, pressure approx. 12 bar(g), amount up to 4÷6 t/h,
  - Testing parameters of inlet cooling water – temperature 15÷100°C, pressure up to 20 bar(g), amount up to 2÷3 t/h.

- Microturbine testing
  - Testing route designed for verification of TR service availability (online research & customer choice of operating parameters and oil temperature in bearings),
  - Testing parameters of inlet steam – temperature 240°C, pressure 12 bar(g), flow 4÷6 t/h.

Equipment for power and heat generation industry
Installation

- Steam turbine installation
  - Condensing steam turbines
  - Backpressure steam turbines
  - Microturbines
  - Gearbox installation
  - Heavy manipulation into and into installation area
- Turbine Current and overhaul repair
  - Spare parts supply
- Generator installation
  - Generator cooling systems
- Pipeline system installation
  - Pipeline installation from P91, noncorrosive and carbon material
  - Pipeline of systems
  - Water-steam pipelines
  - High-pressure hydraulic pipelines
  - Industrial gas systems
  - Installation and adjustment of control valves
  - Installation and adjustment of servo-actuators
- Additional installations
  - Installation of hydrogen system
  - Installation of oil system
  - Installation of integrated oil system
  - Installation of pumps and feed pumps
  - Installation of coolers (heat exchangers)
  - Installation of heaters, fuel and pressure vessels
  - Installation of steam turbine condensers
  - Measurement of energy quantities
  - Measurement of vibrations and movements
  - Diagnosis of steam turbines operation

Equipment for power and heat generation industry
G-Team a.s. provides manufacturing its own products without dependence on further suppliers. Manufacturing process is controlled by information system from drawing documentation through technology, standardisation and planning up to workshop with monitoring of each manufacturing procedure including bar-code reader terminals.

- **Milling (Machining)**
  G-Team a.s. provides milling on modern CNC machines. CAM system assures programming with 3D simulation. CNC machines allow milling process of hardness up to 400 HV.
  Machine components:
  - 5-axis CNC milling machines
  - CNC lathes
  - CNC turning machines

- **Welding procedure:**
  - Methods: TIG, MIG, MAG, MMA
  - Certification according to EN-ISO 3834-2 meets the requirements of Not. 132/2008 up to BT2 category incl.

- **Heat treatment:**
  - Digital annealing furnaces
  - Local preheating and digital resistance annealing

- **Sandblasting**
- **Varnishing**

---

Production

G-Team a.s. provides manufacturing its own products without dependence on further suppliers. Manufacturing process is controlled by information system from drawing documentation through technology, standardisation and planning up to workshop with monitoring of each manufacturing procedure including bar-code reader terminals.

- **Milling (Machining)**
  G-Team a.s. provides milling on modern CNC machines. CAM system assures programming with 3D simulation. CNC machines allow milling process of hardness up to 400 HV.
  Machine components:
  - 5-axis CNC milling machines
  - CNC lathes
  - CNC turning machines

- **Welding procedure:**
  - Methods: TIG, MIG, MAG, MMA
  - Certification according to EN-ISO 3834-2 meets the requirements of Not. 132/2008 up to BT2 category incl.

- **Heat treatment:**
  - Digital annealing furnaces
  - Local preheating and digital resistance annealing

- **Sandblasting**
- **Varnishing**

---

Equipment for power and heat generation industry
Equipment for power and heat generation industry

Headquarters and the Production

Gold Medal - MSV
Brno 2009 (TR Hi150)
ISO 9001:2008
ČSN EN ISO 14001:2005
ČSN EN ISO 3834 – 2:2006

Workplace Conditions Assessment (WCA)
Approved Partner ČEZ

Office
Petrská 2
110 00 Prague 1
Czech Republic
www.g-team.cz

Červený mlýn
330 23 Pilsen – Vochov
Ph: +420 377 822 401
Fax: +420 377 822 425
E-mail: gteam@g-team.cz

Ph: +420 377 822 410