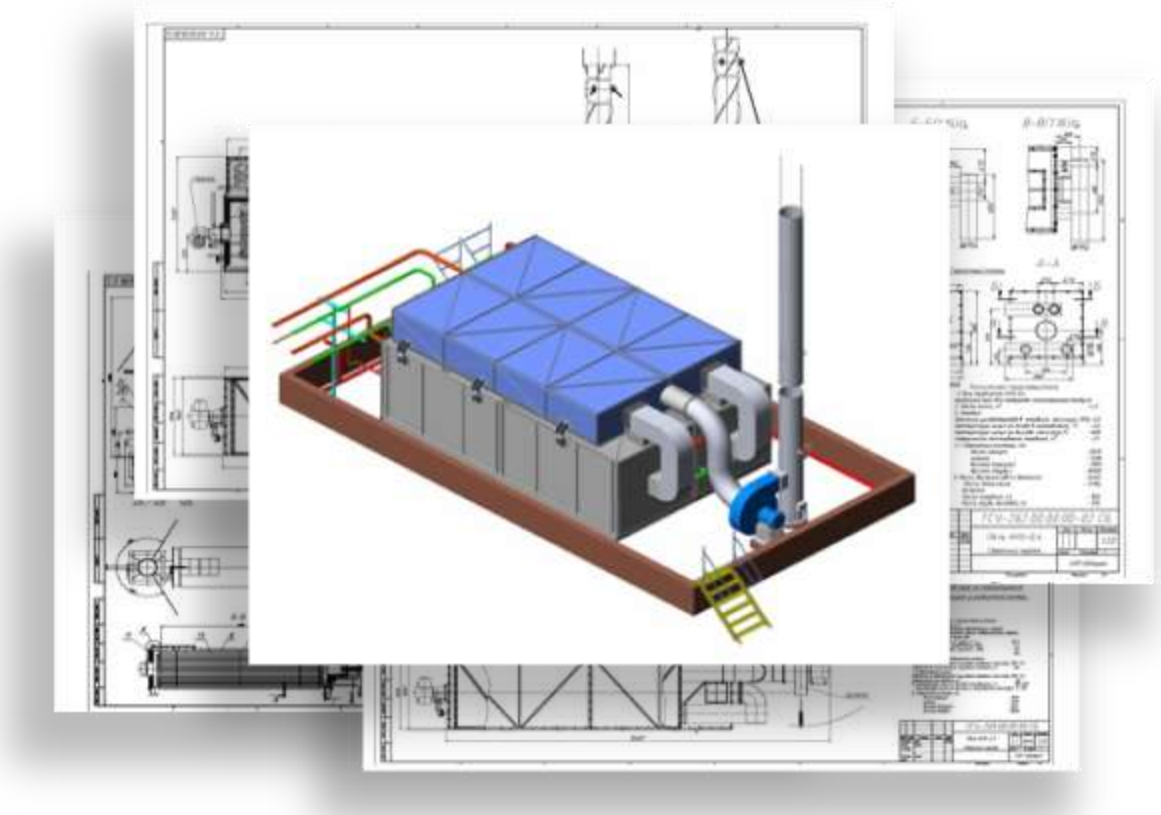
Catalog of process furnaces heating oil and petroleum products Production LLC NPE «NOUprom»



Furnaces for heating liquid hydrocarbons **Furnaces for heating liquid hydrocarbons**

Furnaces for gas heating **Furnaces for “burnout” oxidation gases**

The certificate number № ТС RU.CT-RU-МЮ62.B.00126

The declaration of conformity ТС № D-RU MD 62.B.00810

Website: nouprom-npz.ru **e-mail: nouprom.world@gmail.com**

Russia , city Krasnodar

LLC NPE «NOUprom »
Manufacture

Photo furnace in object

Photo furnace in object

Models of furnaces

Furnaces for heating liquid hydrocarbons

Heated medium: oil, gasoline fractions, diesel fractions, vacuum gasoil, fuel oil, tar.

Page 8

System for heating thermal oil

Heated medium: heating oil of different composition.

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Furnaces for gas heating

Heated medium: hydrocarbon gases (C1-C5), air, rare gases.

Page 44

Furnaces for “burnout” oxidation gases

Heated medium: oxidation gases of bituminous installation.

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LLC NPE "NOUprom" is a scientific production enterprise which works since 1991. Great experience in developing and manufacturing of technological furnaces for oil and petroleum products heating, allow us to manufacture reliable equipment for stable work even in harsh conditions. Furnaces produced by LLC NPE "NOUprom" work over than 150 enterprises of the world in different oil and chemical process.

What is the feature of our equipment

The furnaces are CERTIFIED
Certificate № ТС RU.СТ-RU-МІО62.В.00126
Declaration of conformity ТС № D-RU MD 62.B.00810
International certification TUF ID 15 100 1710040

Furnaces produced by LLC NPE "NOUprom" are used in dangerous productions

Full set

If desired you can order full set furnaces with burner, smoke exhauster and sensors

High reliable

Equipment is characterized by a long life due to using of high quality materials

Furnaces can used harsh climate conditions

High efficiency

For internal lining and thermal insulation of furnaces high quality materials are used for efficiency not less than 85%

Individual approach

- Calculation and development for individual order
- Change in design of furnaces with its adoption by customer needs
- Installation of burners of different types and manufactures
- Delivery, installation, commissioning work, maintenance

Processes in which furnaces produced by LLC NPE "NOUprom" are used

- Process of primary oil distillation
- Process of vacuum distillation
- Process of catalytic isomerization oil fractions
- Process of “zeofining” oil fractions
- Process of “reforming” oil fractions
- Process of hydrotreatment diesel fractions
- Process of catalytic cracking
- Process of tar direct oxidation with bitumen production
- Process of “burnout” acid gases of oxidation
- Process of oil gas heating in chemical production
- Heat of heating oil to provide with thermal energy

Companies which use furnaces produced by LLC NPE "NOUprom"

- Oil industry enterprises
- Chemical and petrochemical industry enterprises
- Gas industry enterprises
- Food industry enterprises

Furnaces for heating liquid hydrocarbons

Summary table of furnaces' specifications for heating liquid hydrocarbons

Furnaces rated thermal power from 0.6 to 2.5 MW

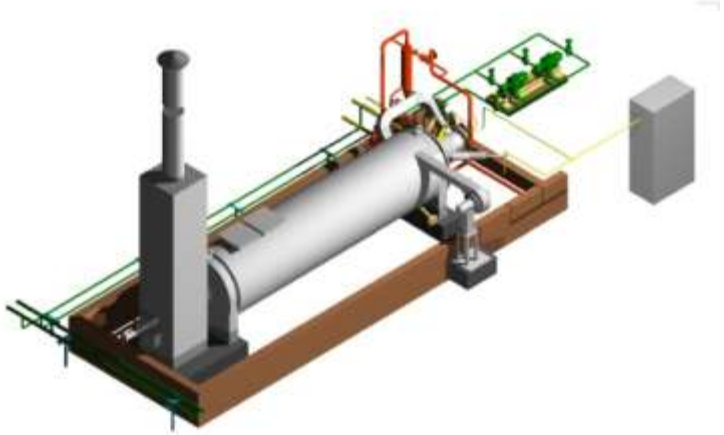
Name	ANU-0.8B	ANU-1.2B	ANU-1.2	ANU-1.5	ANU-2.0	ANU-2.5
Nominal thermal power, MW	0.6	0,9	1.0	1.3	1.7	2.1
Power burner, MWт	0.6-0.8	1.0-1.2	1.0-1.2	1.3-1.5	1.8-2.0	2.2-2.5
Productivity, kg / h	2 000	4 000	4 000	5 000	7 500	9 500
The range of heating raw, C	160-360*	160-360*	160-360*	160-360*	160-360*	160-360*

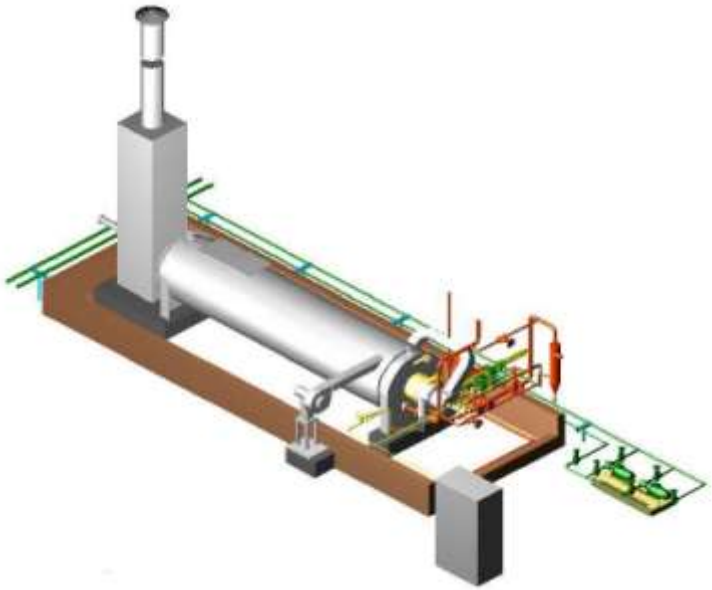
Furnaces rated thermal power from 3.0 to 9.0 MW

Name	ANU-3.0	ANU-3.8	ANU-4.5	ANU-6.0	ANU-9.0
Nominal thermal power, MW	2.6	3.4	4	5.2	7.65
Power burner, MW	2.5-3.0	3.5-4.0	1,5*3	2* 3.0	3*3.0
Productivity, kg / h	12 500	15 000	18 000	24 000	36 000
The range of heating raw, C	160-360*	160-360*	160-360*	160-360*	160-360*

*Furnace capacity for a given heating interval

Furnace ANU-0.8B





Furnace ANU-0.8B is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	0.6
Burner power, MW	0.6-0.8
Efficiency,%	80
Heated medium	Oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber ,m²	28
Diameter coil, mm	50
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Productivity, kg / h	2 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	12 000
Explosive safety valve	Yes
Body heat insulation, lining	No
Body cooling	Air
Total weight, kg	4 190
Body overall dimensions • Length, mm • Width, mm • Height, mm	 4570 1200 1400

*Furnace productivity for a given heating interval

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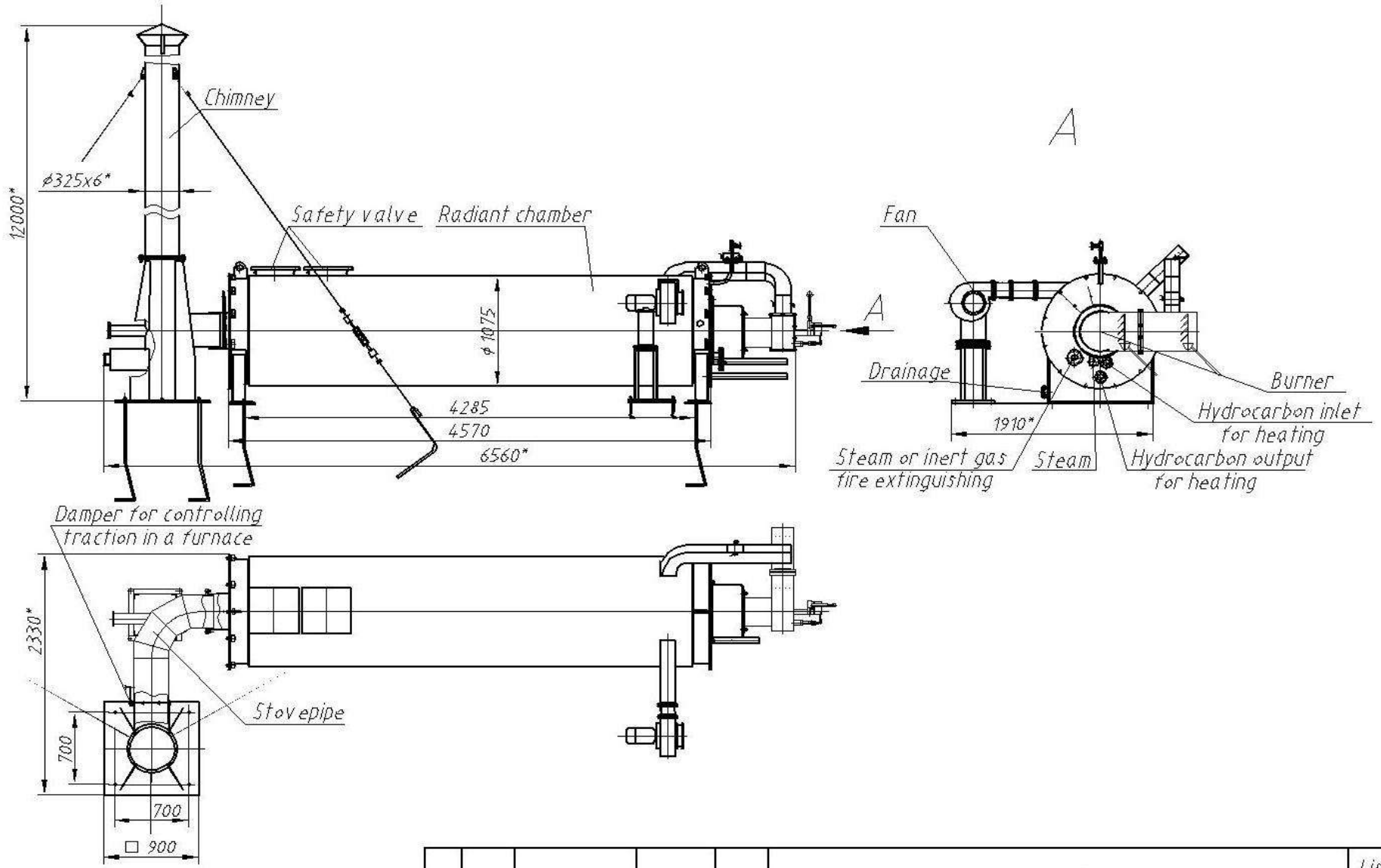
Furnace for heating oil and petroleum products ANU-0,8-B



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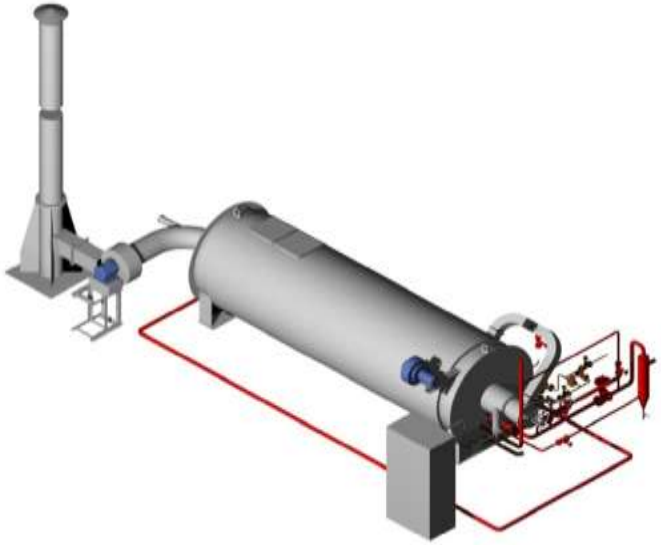
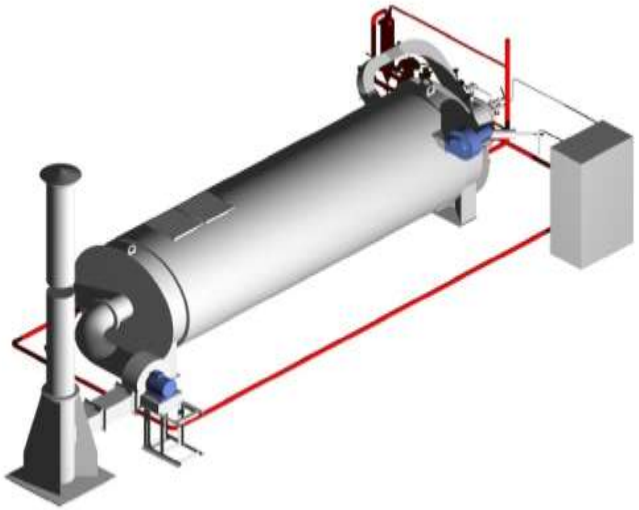
Furnace ANU-1.2B





Furnace ANU-1.2B is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	0,9
Burner power, MW	1.0-1.2
Efficiency, %	80
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber ,m²	52
Diameter coil, mm	65
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Productivity, kg / h	4 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Flue gas temperature is not higher, C	300
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40 (-70)
Height of the chimney, mm	12 000
Explosive safety valve	yes
Body heat insulation, lining	no
Body cooling	Air
Total weight, kg	7 800
Body overall dimensions • Length, mm • Width, mm • Height, mm	 6020 1500 1700

*Furnace productivity for a given heating interval

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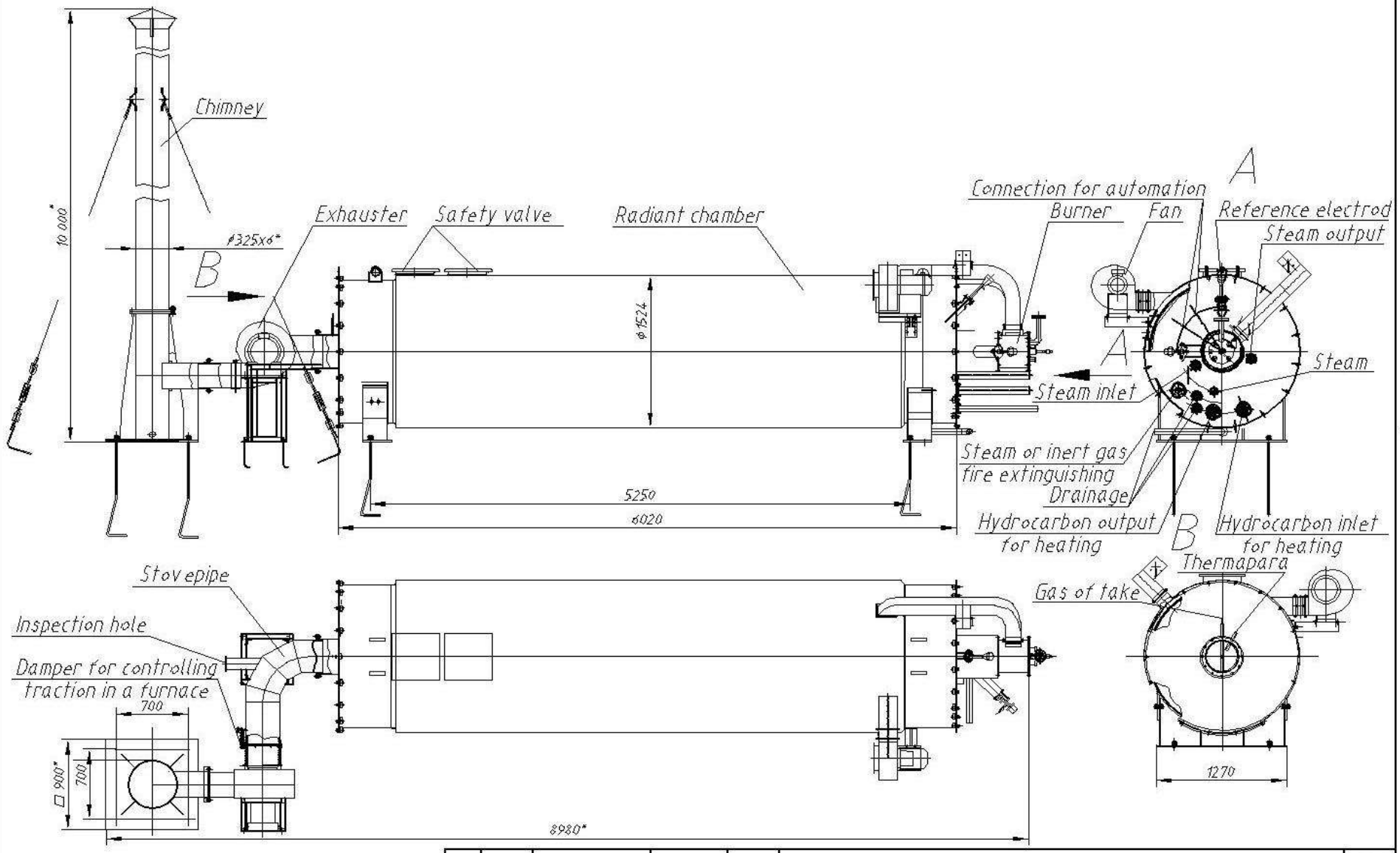
Furnace ANU-1,2-B is designed for heating oil



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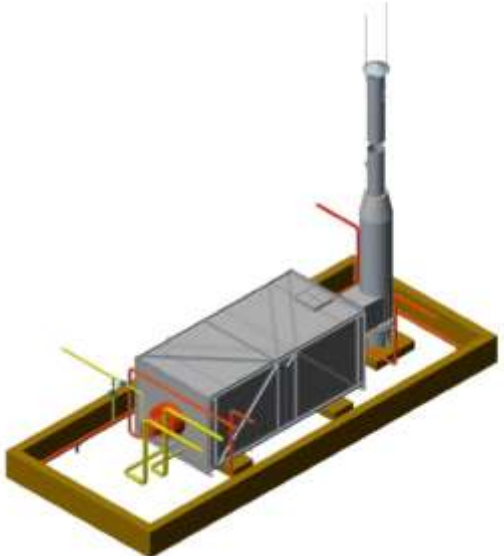
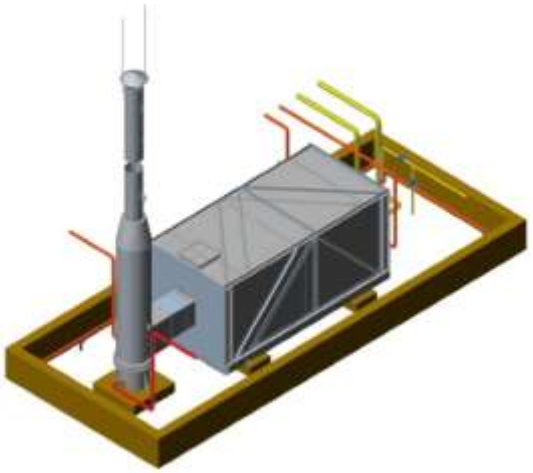
Furnace ANU-1.2





Furnace ANU-1.2 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	1.0
Burner power, MW	1.2
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	42
Diameter coil, mm	65
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Productivity, kg / h	4 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Flue gas temperature is not higher, C	300
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	9 020
Body overall dimensions • Length, mm • Width, mm • Height, mm	 5000 2000 2124

*Furnace productivity for a given heating interval

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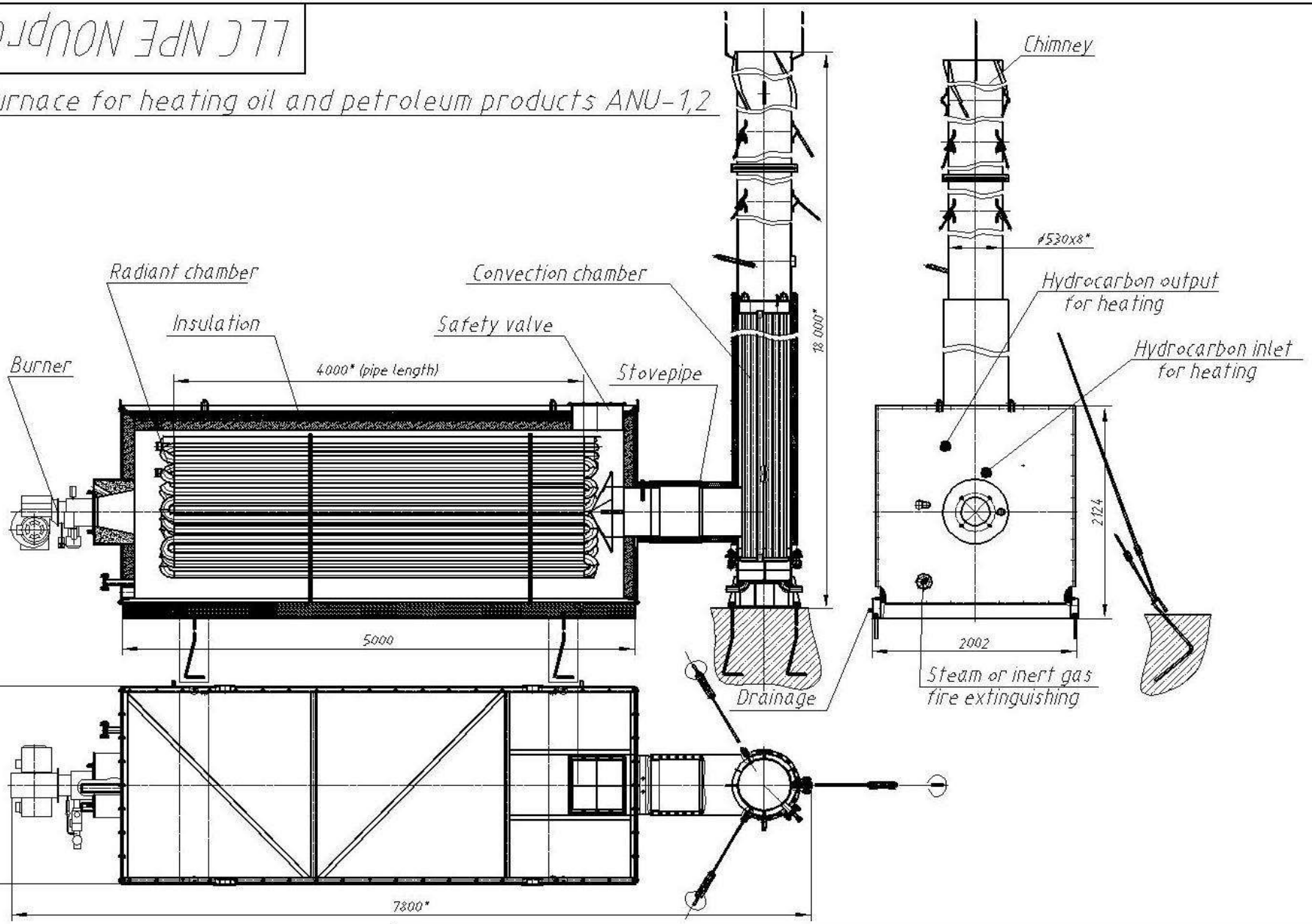
Furnace for heating oil and petroleum products ANU-1,2



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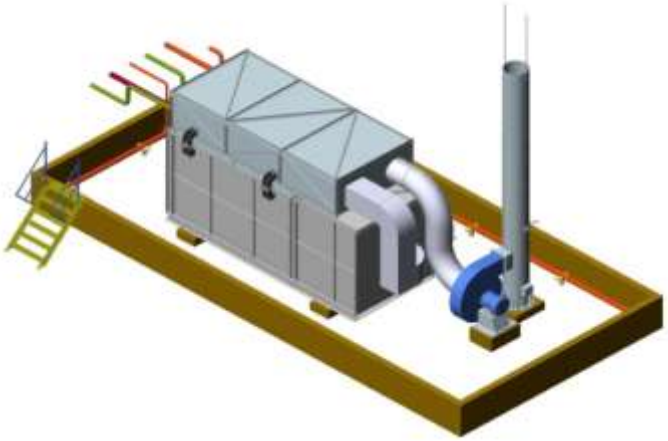
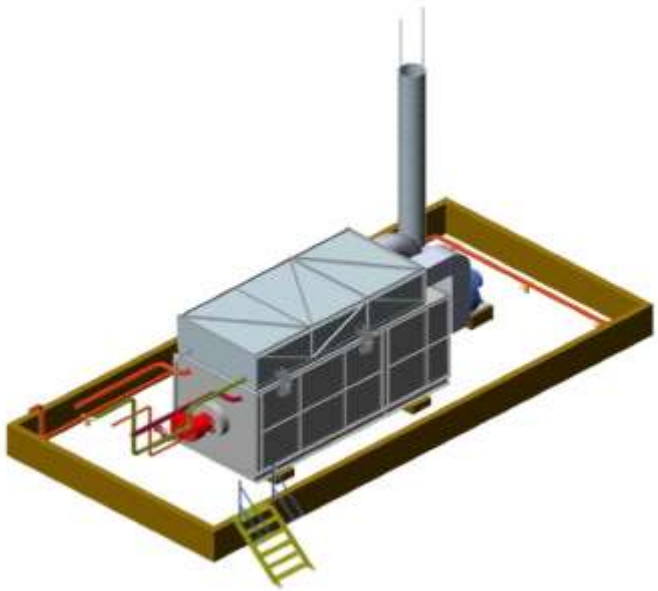
Furnace ANU-1.5





Furnace ANU-1.5 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	1.2
Burner power, MW	1.5
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	42
Area coil convective chamber, м²	21
Diameter coil, mm	65
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Productivity, kg / h	5 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Flue gas temperature is not higher, C	300
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air, C	-40
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	10 300
Body overall dimensions • Length, mm • Width, mm • Height, mm	 5000 1758 2760

*Furnace productivity for a given heating interval

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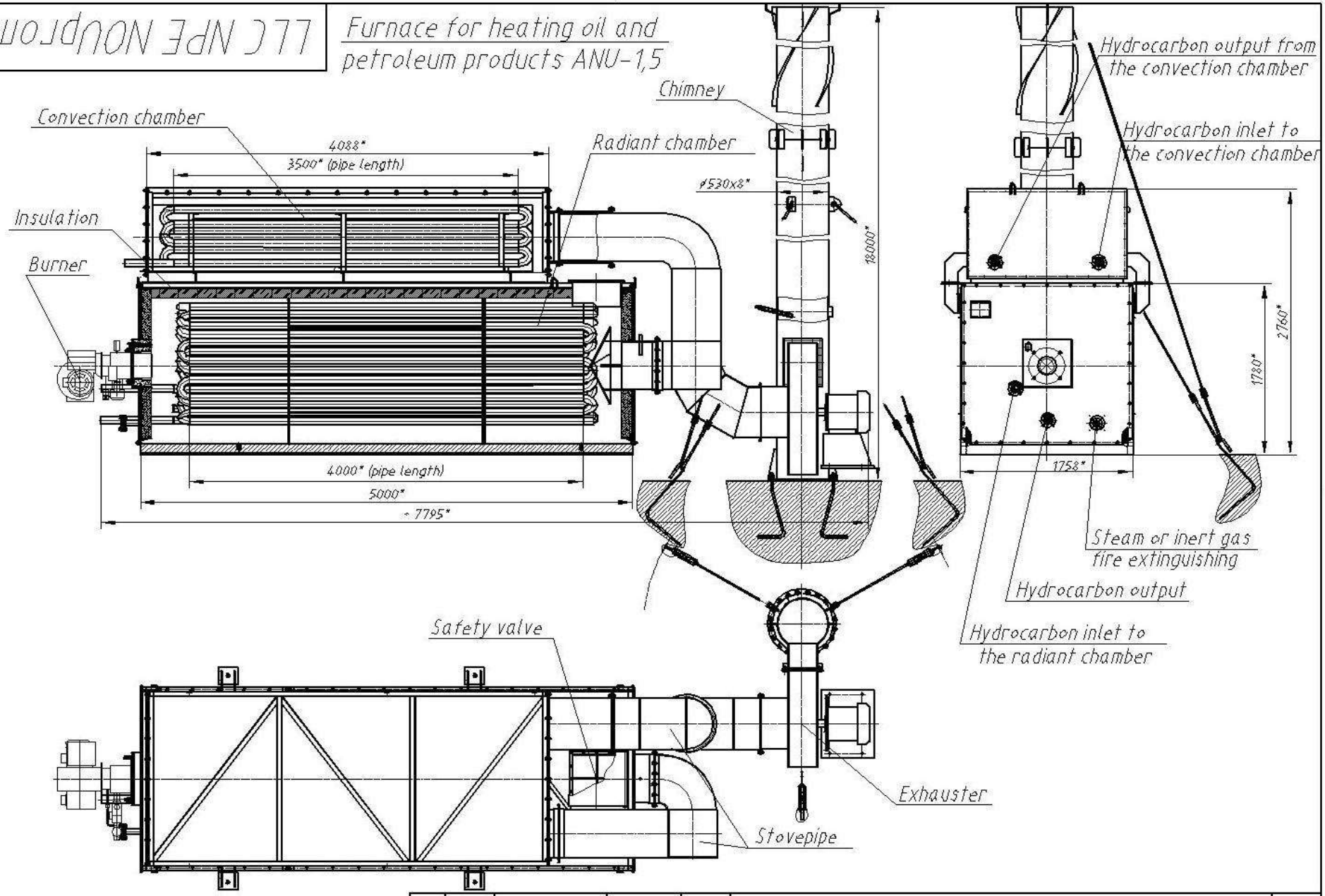
Furnace for heating oil and petroleum products ANU-1,5



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List

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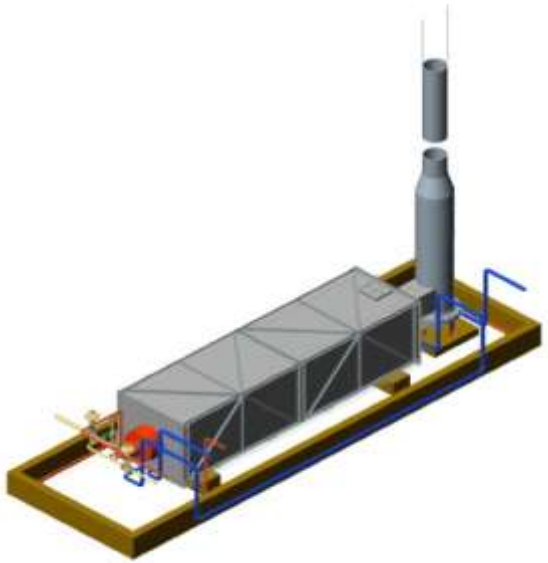
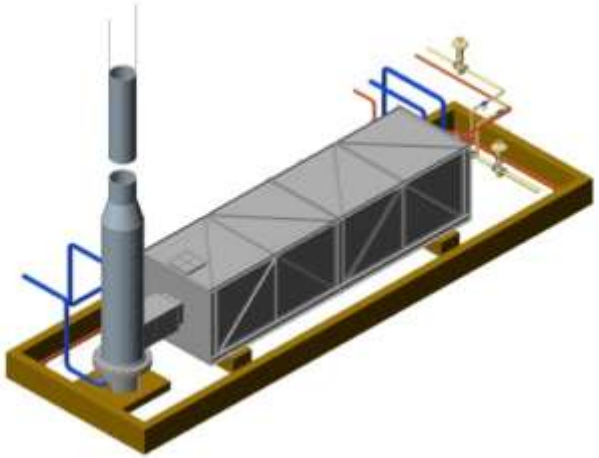
A4

Furnace ANU-2.0





Furnace ANU-2.0 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	1.7
Burner power, MW	1.8-2.0
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	62
Area coil convective chamber, м²	8
Diameter coil, mm	65
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	7 500
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40 (-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	12 985
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7000 1980 1790

*Furnace productivity for a given heating interval

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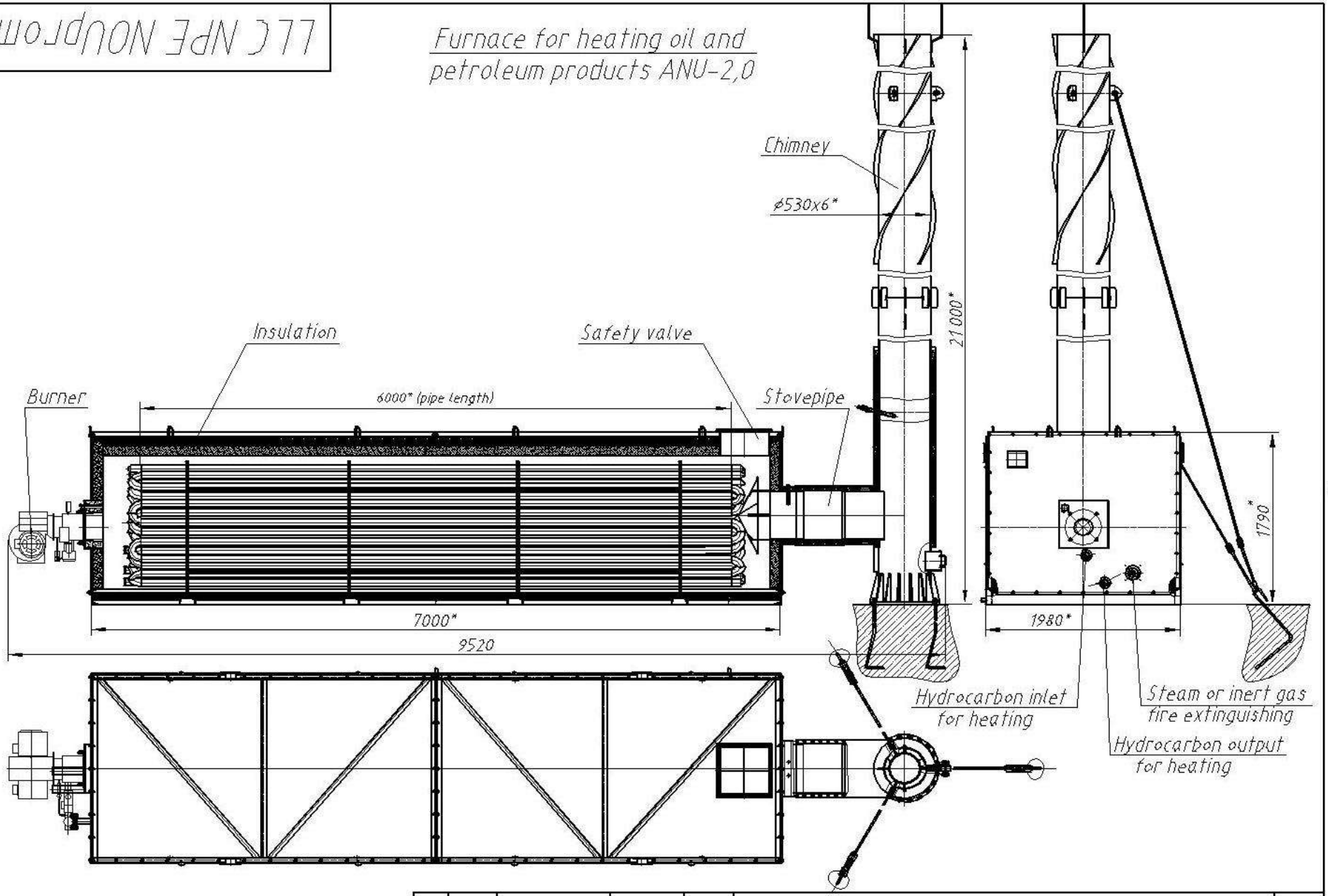
Furnace for heating oil and petroleum products ANU-2,0



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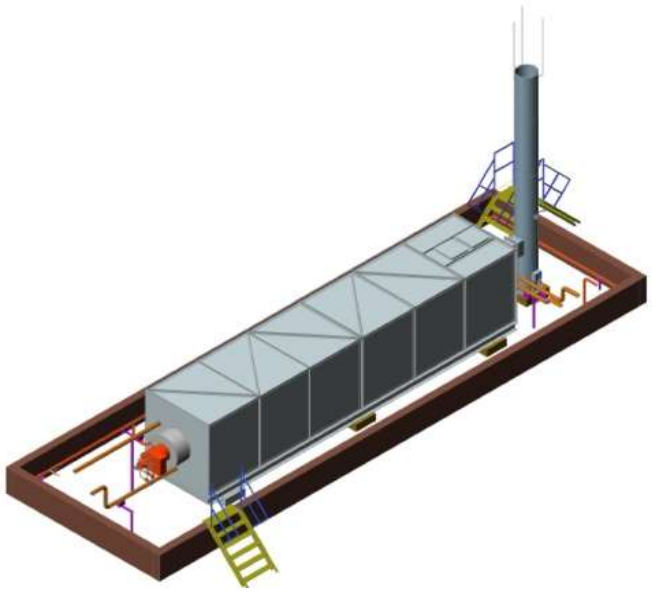
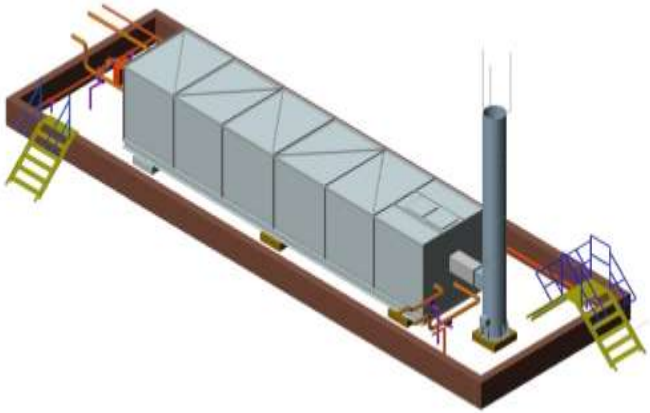
Furnace ANU-2.5





Furnace ANU-2.5 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	2.2
Burner power, MW	2.3-2.5
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	61
Area coil convective chamber, м²	19
Diameter coil, mm	65
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	8 500
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40
Explosive safety valve	Yes
Height of the chimney, mm	21 000
Body heat insulation, lining	yes
Total weight, kg	16 835
Body overall dimensions • Length, mm • Width, mm • Height, mm	 9430 2000 2160

*Furnace productivity for a given heating interval

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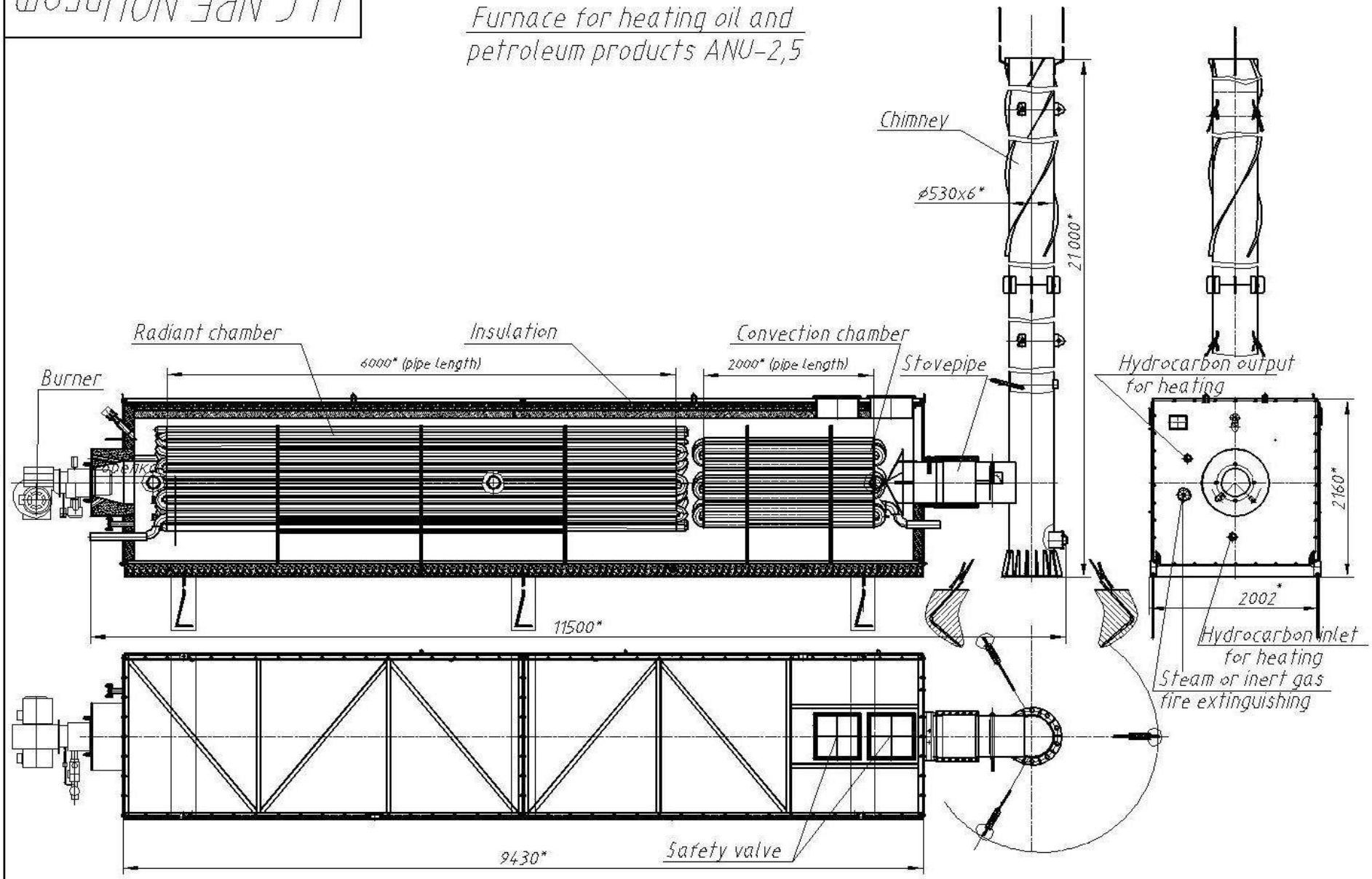
Furnace for heating oil and petroleum products ANU-2,5



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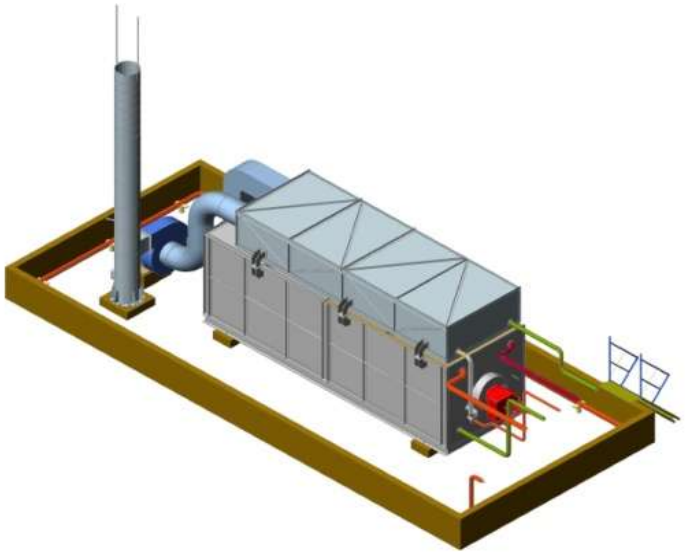
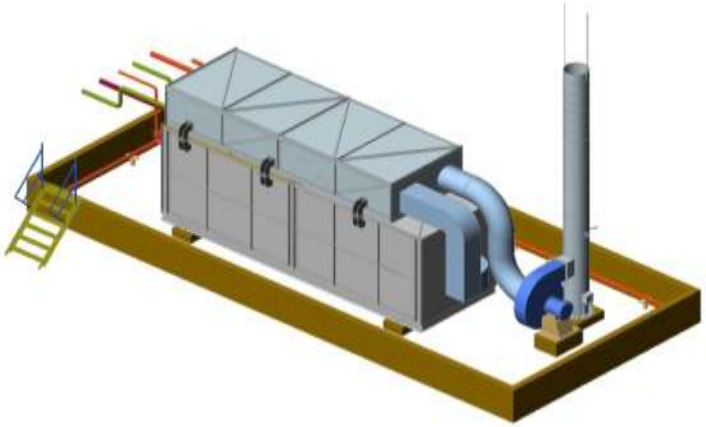
Furnace ANU-3.0





Furnace ANU-3.0 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	2,7
Burner power, MW	2.8 - 3.0
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	76
Area coil convective chamber, м²	36
Diameter coil, mm	80
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	12 500
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	21 070
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7000 2300 3280

*Furnace productivity for a given heating interval

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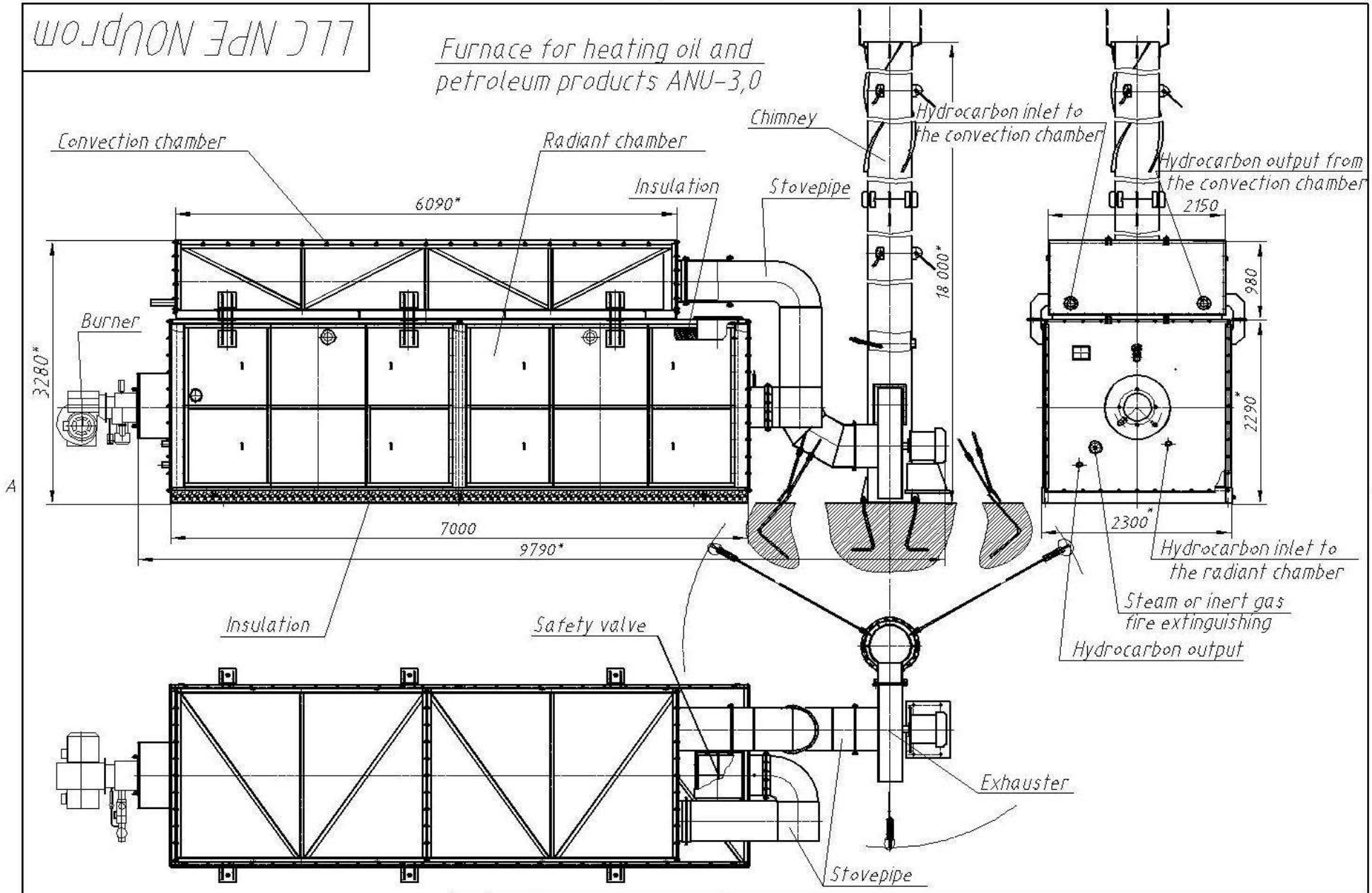
Furnace for heating oil and petroleum products ANU-3,0



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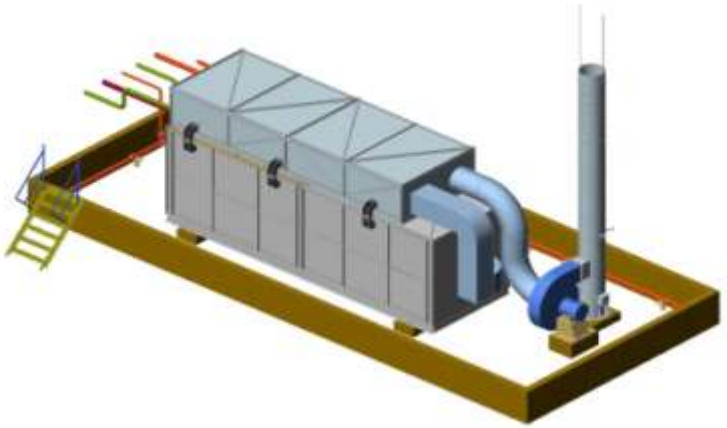
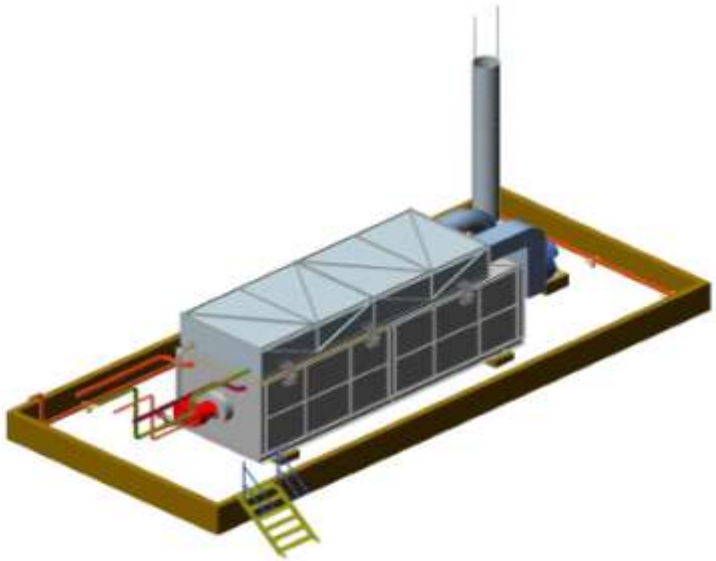
Furnace ANU-3.8





Furnace ANU-3.8 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	3.3
Burner power, MW	3.5 - 3.8
Efficiency, %	85
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	86
Area coil convective chamber, м²	47
Diameter coil, mm	100
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	15 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air . C	-40
Height of the chimney, mm	18000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	24 550
Body overall dimensions • Length, mm • Width, mm • Height, mm	 9000 2300 3365

*Furnace productivity for a given heating interval

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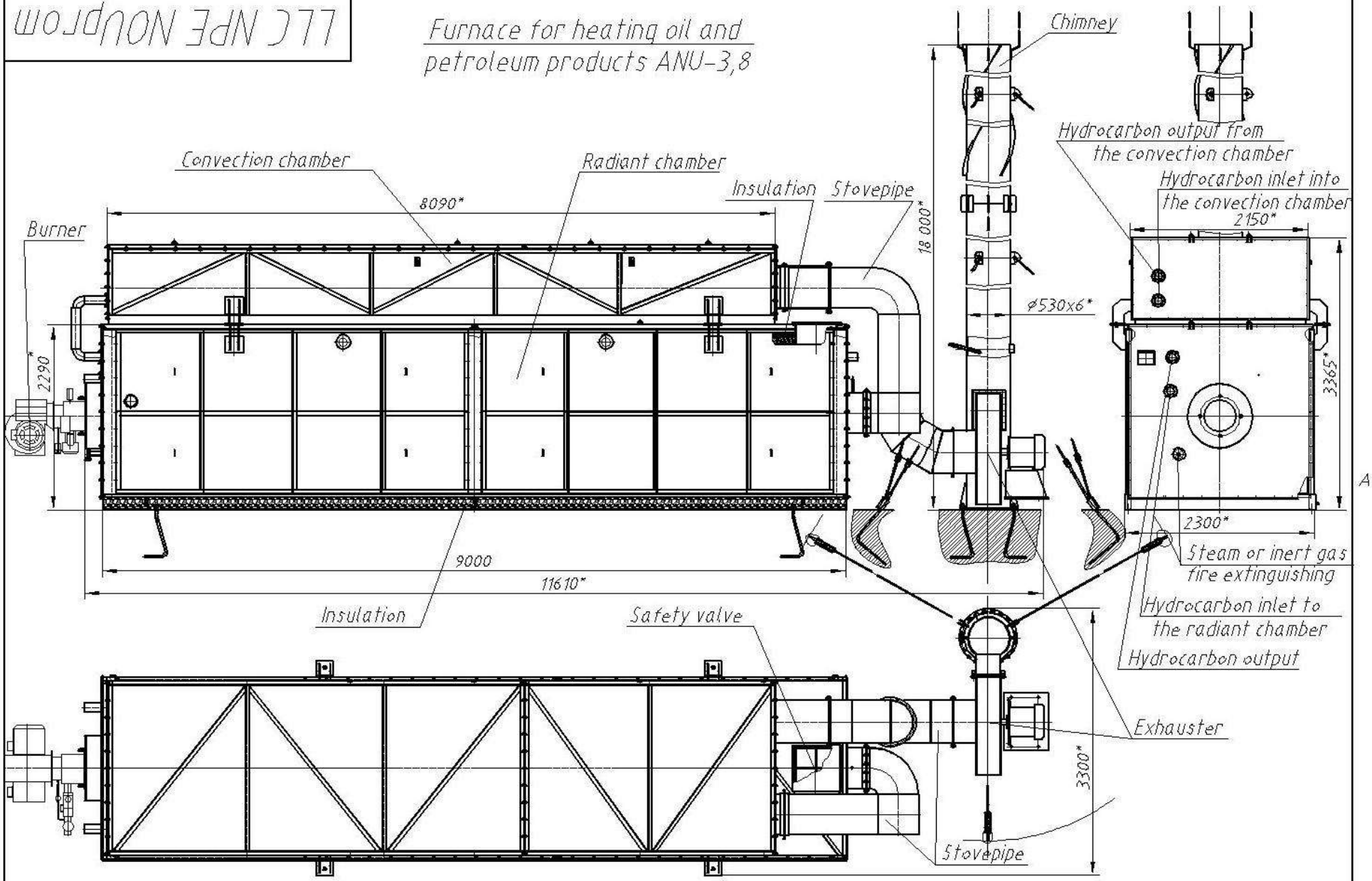
Furnace for heating oil and petroleum products ANU-3,8



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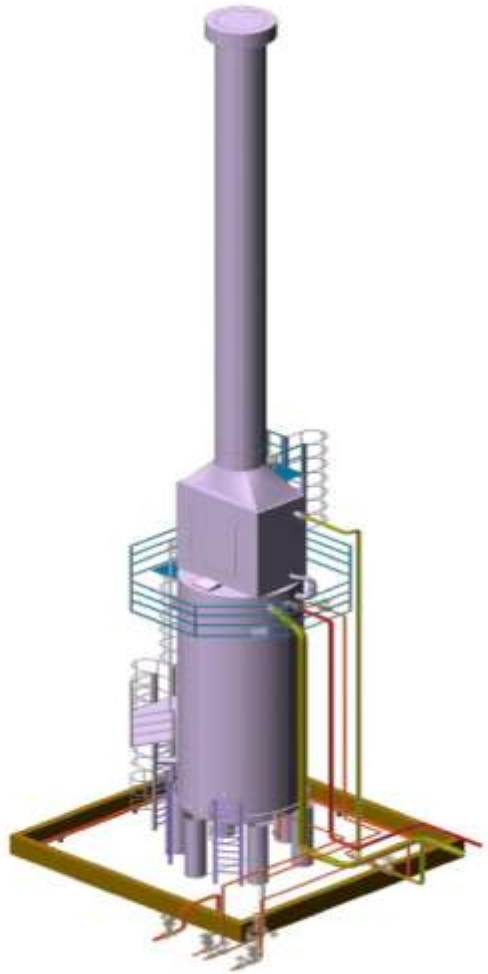
Furnace ANU-4.5



Furnace ANU-4.5 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	4.0
Burner power, MW	3.5 -3.8
Efficiency, %	90
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	91
Area coil convective chamber, м² with fins	250
Diameter coil, mm	200
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	18 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air , C	-40
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	32 000
Body overall dimensions • Length, mm • Width, mm • Height, mm	 3400 3200 34000

*Furnace productivity for a given heating interval

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andex.ru

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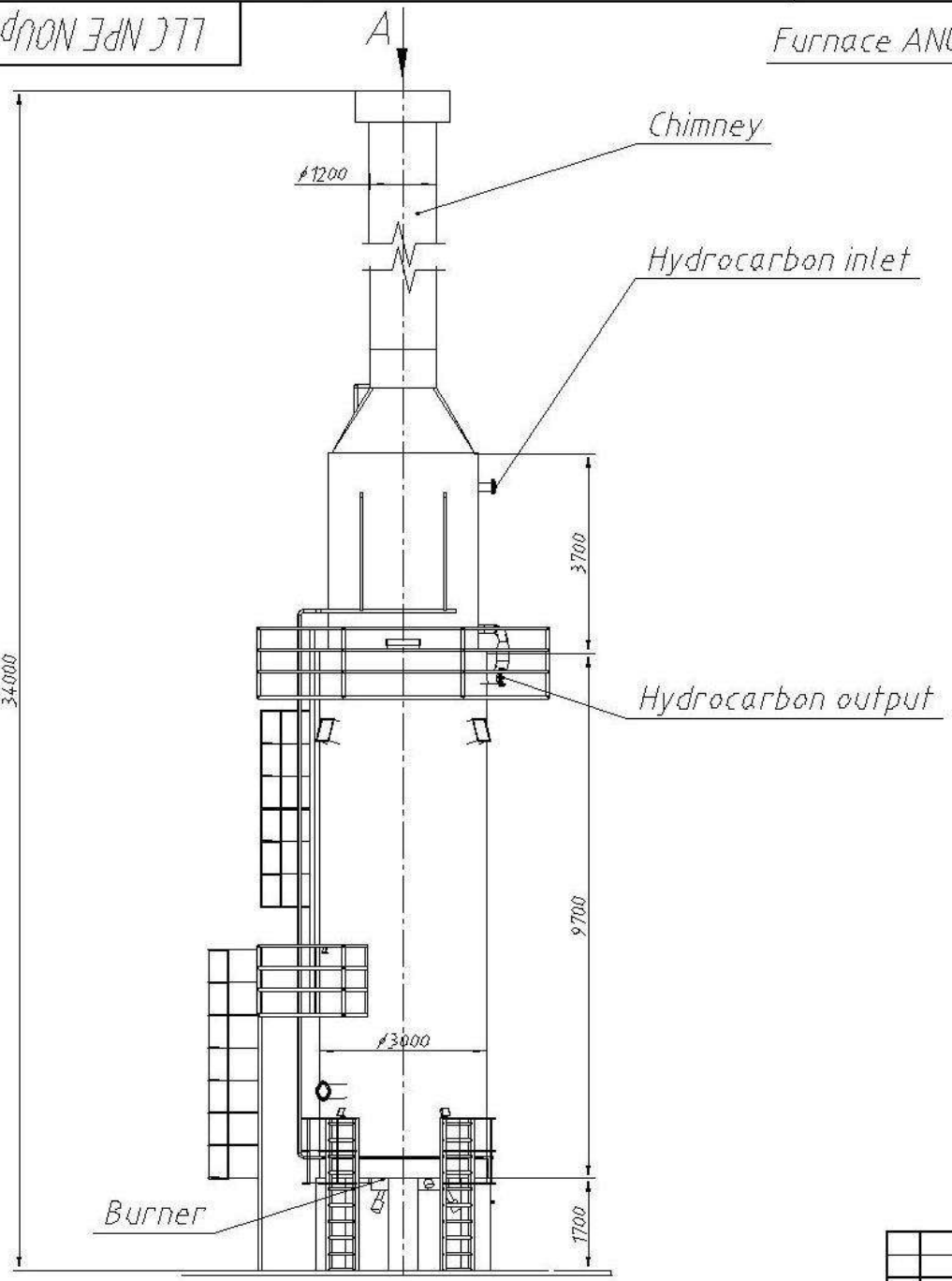
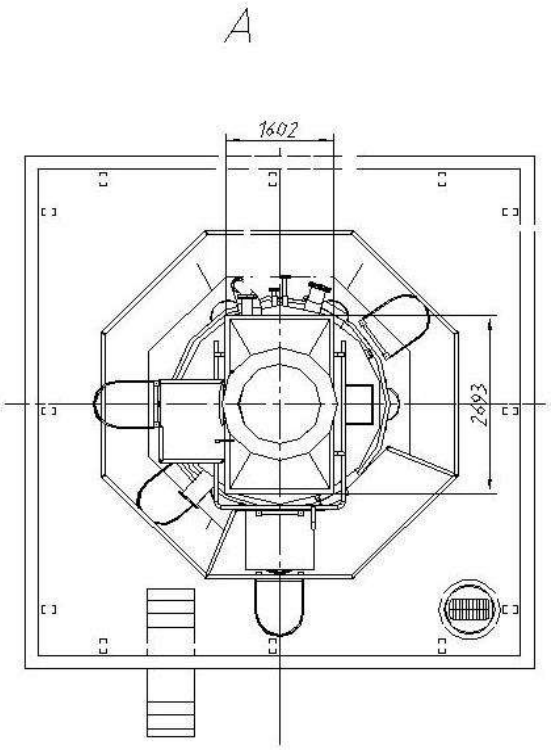
Furnace ANU-4,5 for heating oil and petroleum products

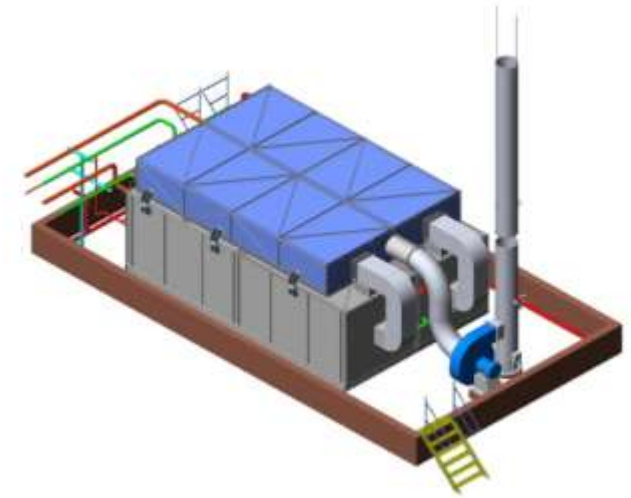


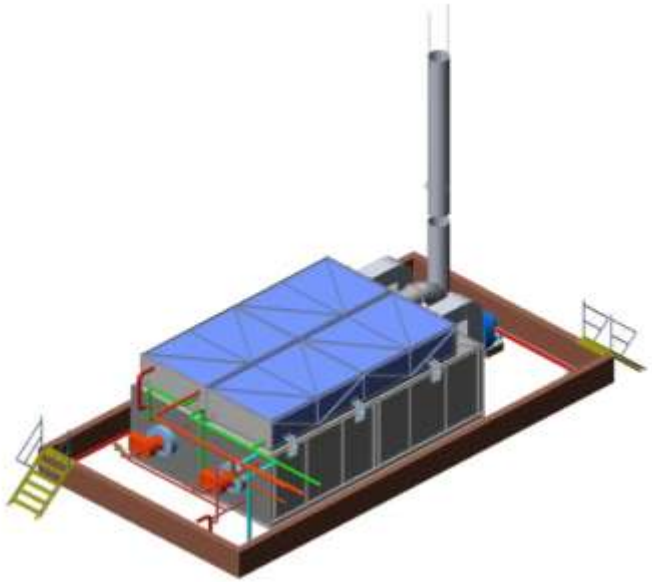


					LLC NPE NOUprom	List

A3

Furnace ANU-6.0





Furnace ANU-6.0 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	5.2
Burner power, MW	6.0
Efficiency,%	87
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	130
Area coil convective chamber, no fins, м²	57
Diameter coil, mm	100 (125)
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	18 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	34 500
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7020 4050 3400

*Furnace productivity for a given heating interval

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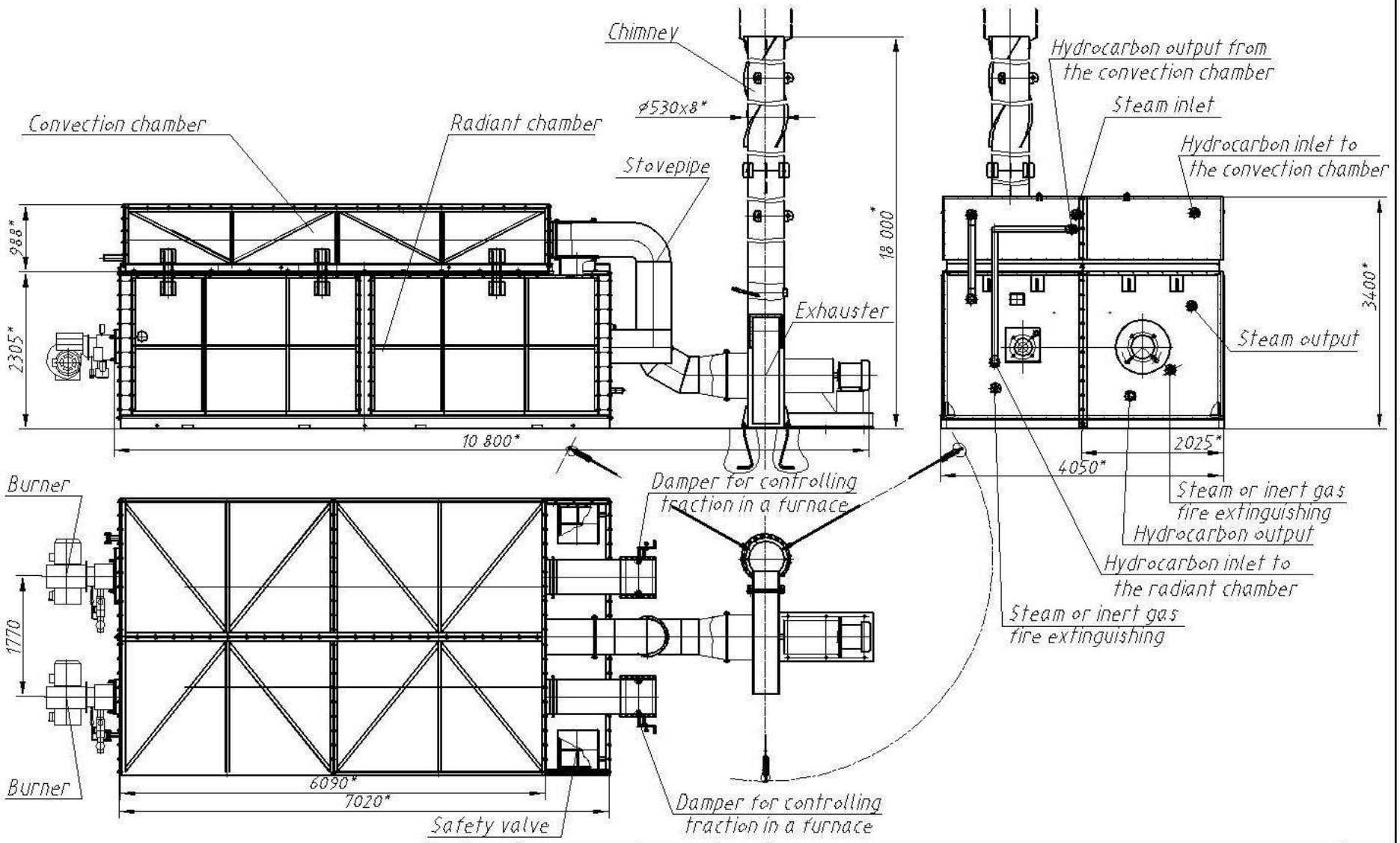
Furnace for heating oil and petroleum products ANU-6,0



					LLC NPE NOUprom	List

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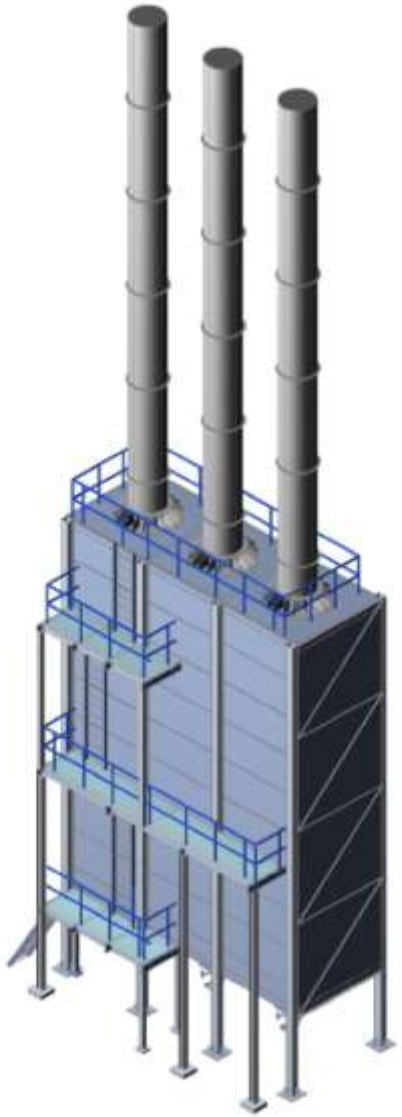
A4

Furnace ANU-9.0



Furnace ANU-9.0 is designed for heating oil, gasoline, diesel, fuel oil, vacuum gasoil, tar and other hydrocarbons at hazardous production facilities.

Name	Capacity
Nominal thermal power, MW	8.0
Burner power, MW	9.0
Efficiency,%	88
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	190
Area coil convective chamber, no fins, м²	160
Diameter coil, mm	100 (125)
Feedstock inlet temperature, C	160
Feedstock outlet temperature, C	360*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Productivity, kg / h	42 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	47 500
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7020 2400 29700

* Furnace productivity for a given heating interval

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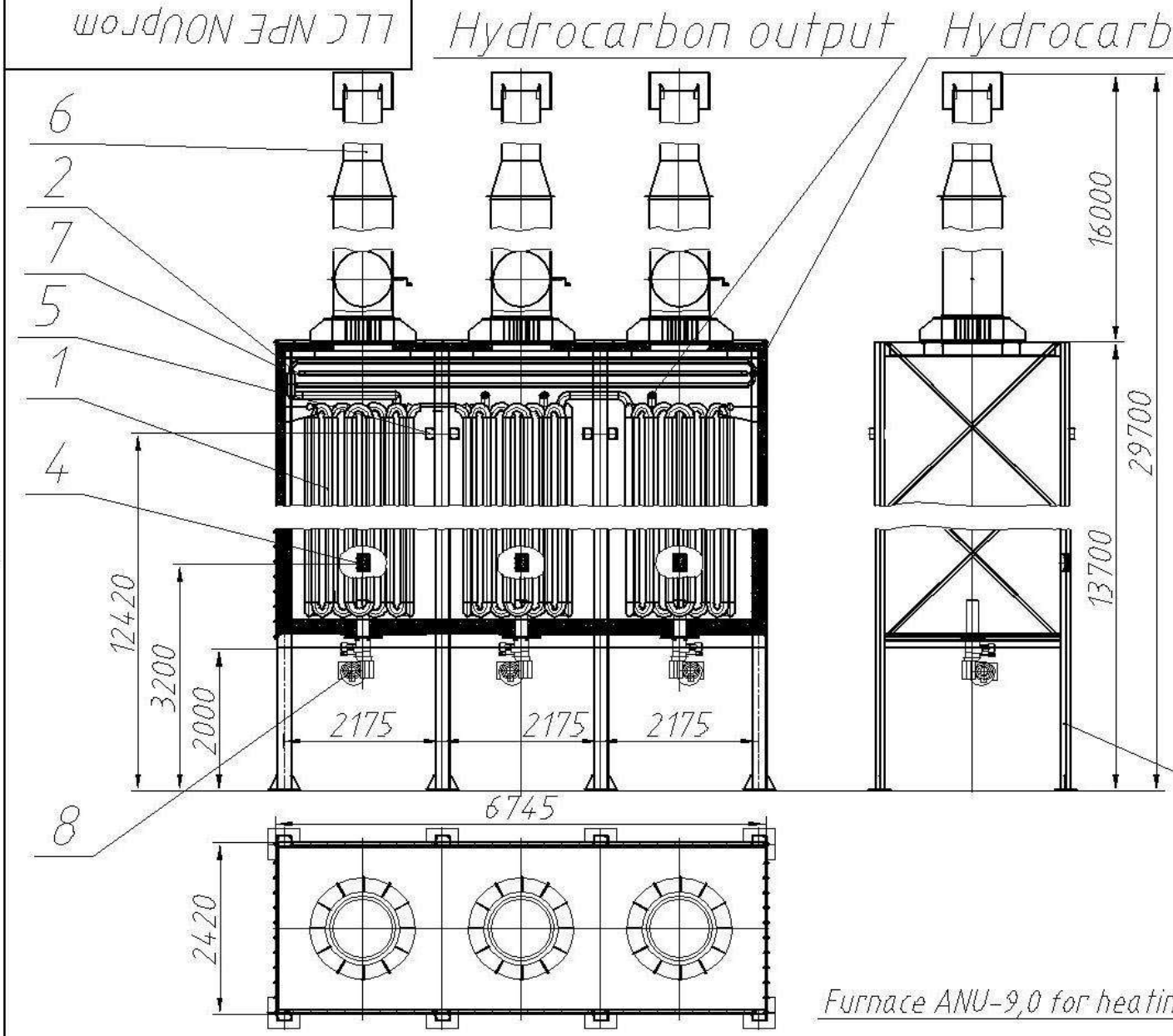

N°	Name	Q-ty
1	Coil radiant	3
2	Coil convective	1
3	Metal skeleton	1
4	Window llookout	3
5	Window safety	4
6	Smoke pipe	3
7	Lining	1
8	Burner	3

Furnace ANU-9,0 for heating oil and petroleum products

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List

System for heating thermal oil

Furnace for heating thermal oil is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities. Large volume of thermal oil passing through the lining.

Furnace for heating thermal oil can be distributed with expansion tank, stop valves and pumping equipment.

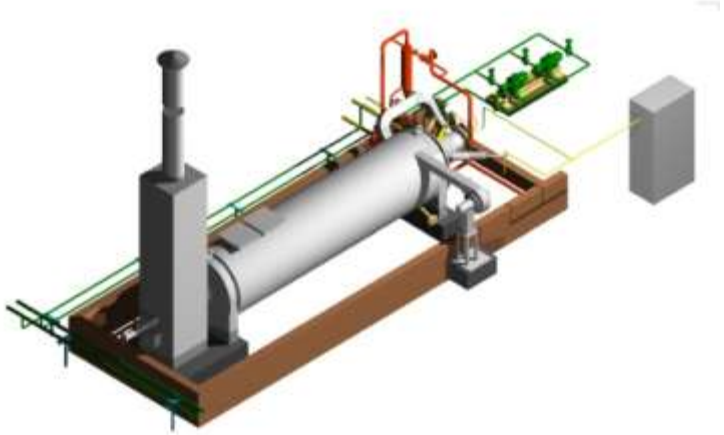
System for heating thermal oil rated thermal power from 0.6 to 7.5 MW

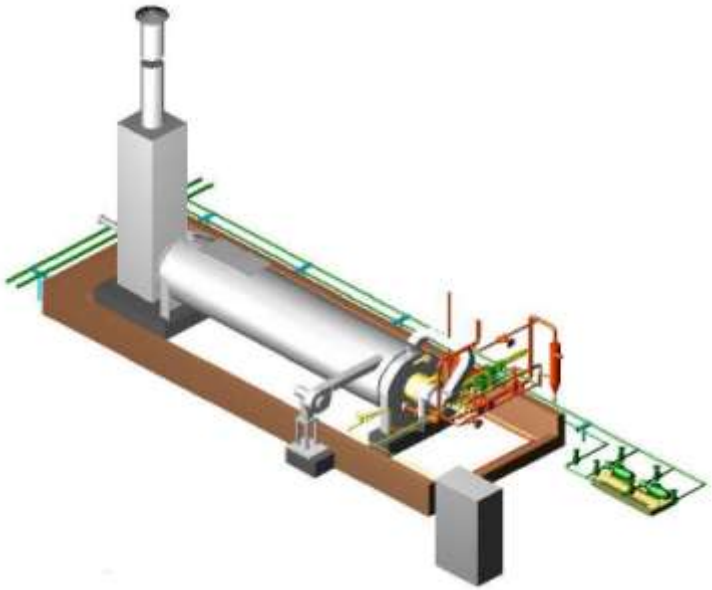
Summary table of furnaces' specifications for heating thermal oil

Name	ANU-0.6-M	ANU-1.2-M	ANU-2.0-M	ANU-3.0-M	ANU-4.0-M	ANU-7.5-M
Nominal thermal power, MW	0.45	1.0	1.7	2.5	3.5	6.0
Burner power, MW	0.6-0.8	1.2	2.0	3.0	4.0	2,5*3
Burner power, MW	7 000	14 000	24 000	34 000	48 000	85 000
The range of heating raw, C	140-250*	140-250*	140-250*	140-250*	140-250*	140-250*

*Furnace productivity for a given heating interval

Furnace ANU-0.6-M





Furnace ANU-0.6-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	0.45
Burner power, MW	0.6
Efficiency,%	80
Heated medium	Thermal oil
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	22
Diameter coil, mm	50
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250
Productivity, kg / h	7 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	12 000
Explosive safety valve	Yes
Body heat insulation, lining	No
Cooling of the housing	Air
Total weight, kg	4 070
Body overall dimensions • Length, mm • Width, mm • Height, mm	 4570 1200 1400

*Furnace productivity for a given heating interval

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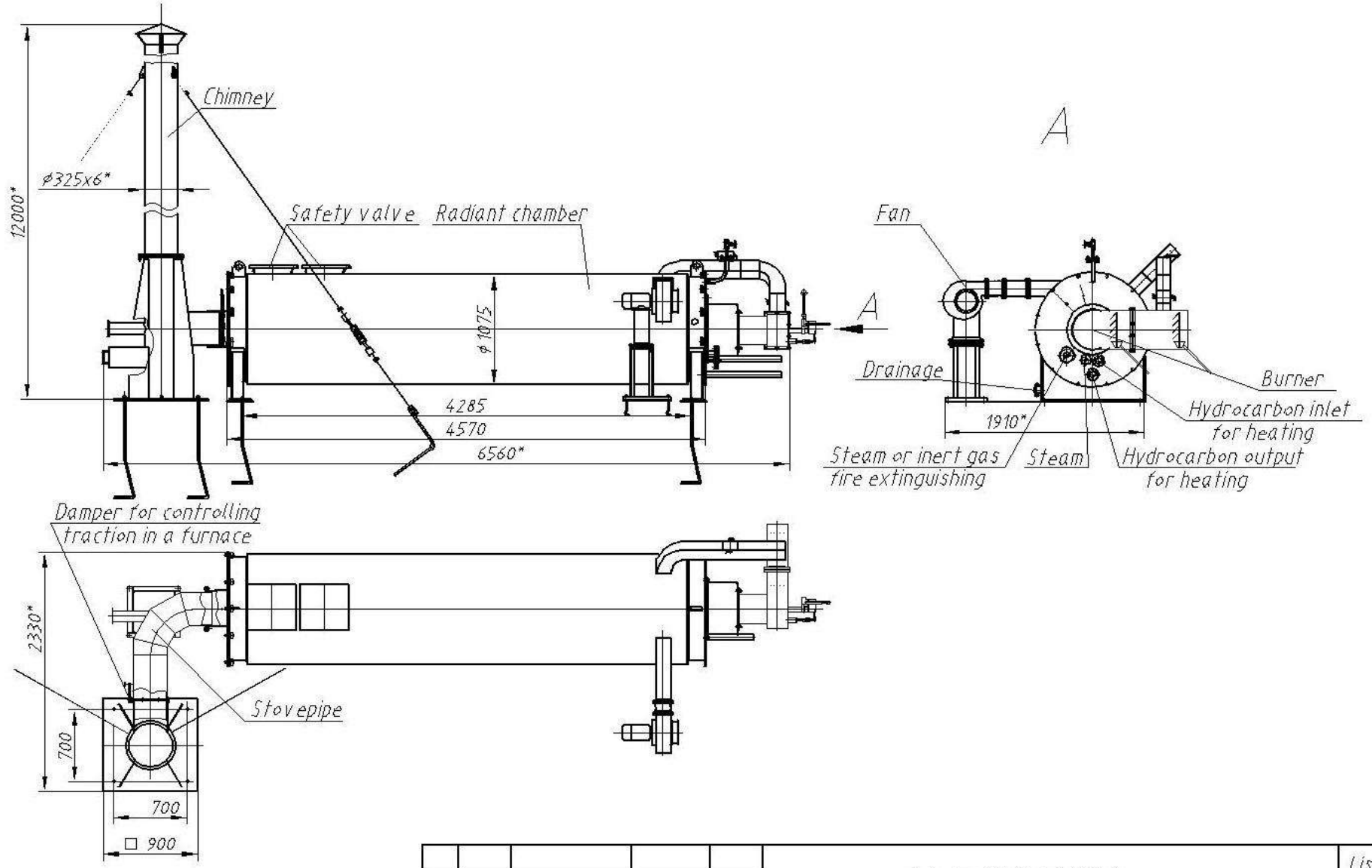
Furnace for heating thermal oil ANU-0,6-M



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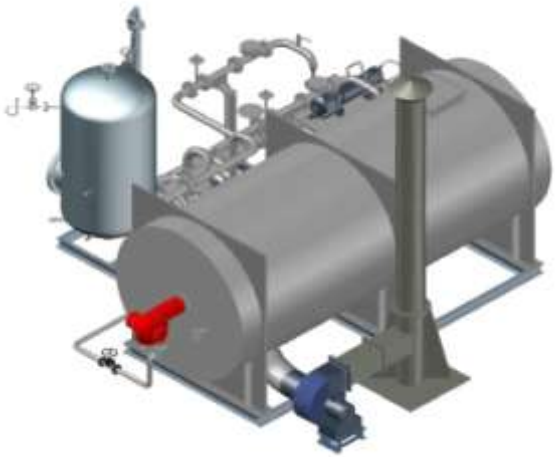
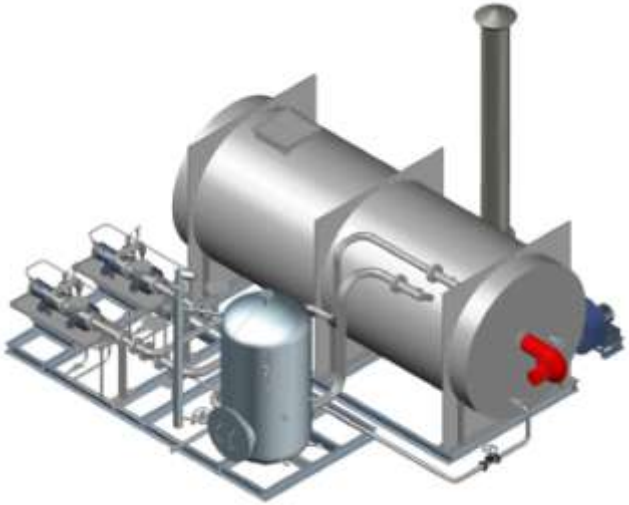
Furnace ANU-1.2-M





Furnace ANU-1.2-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	1.0
Burner power, MW	1.2
Efficiency,%	85
Heated medium	Thermal oil
Fuel	Natural gas , fuel oil, diesel
Area coil radiant chamber, м²	30
Area coil convective chamber, м²	40
Diameter coil, mm	65
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	14 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	13200
Body overall dimensions • Length, mm • Width, mm • Height, mm	 4650 1980 2270

*Furnace productivity for a given heating interval

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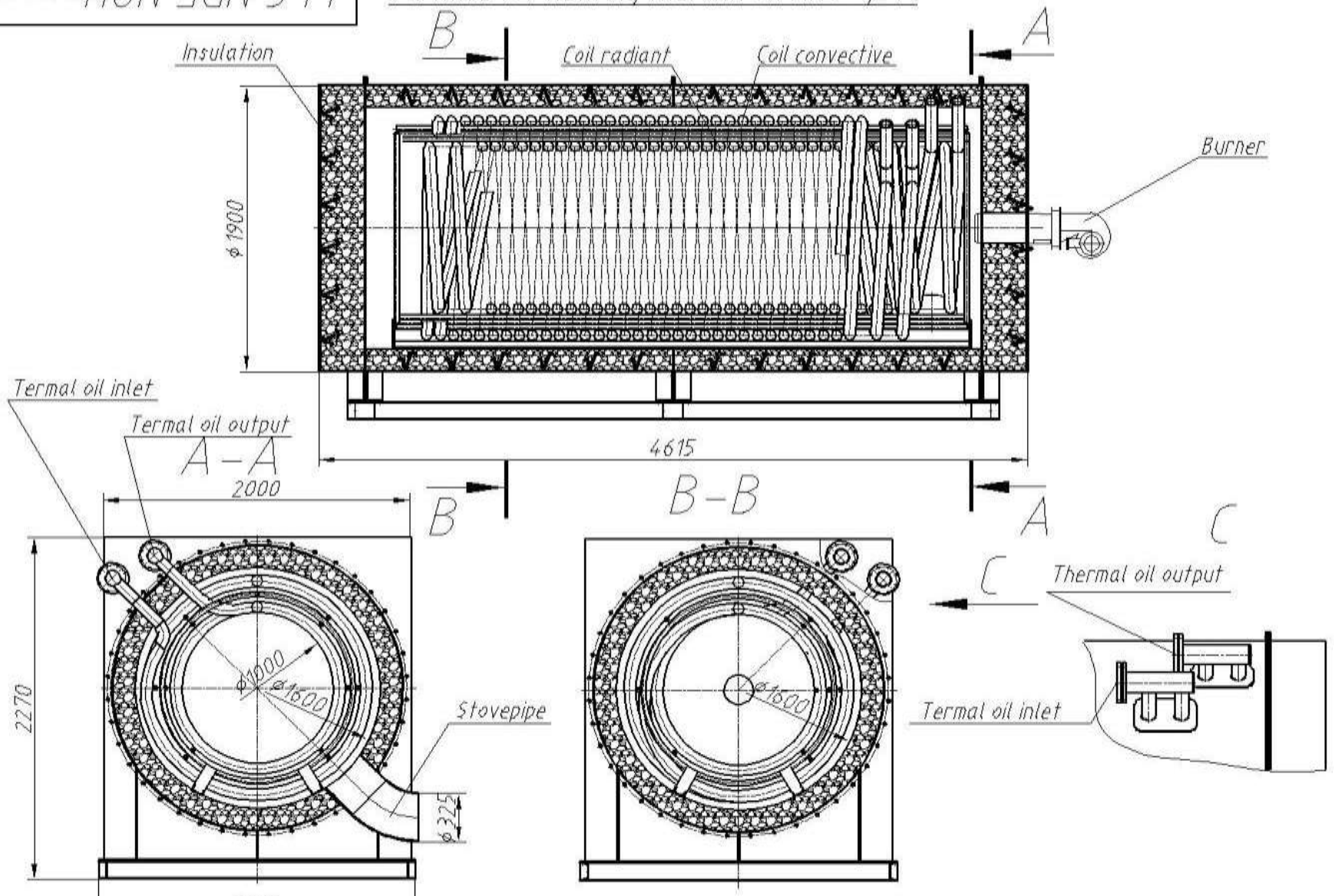
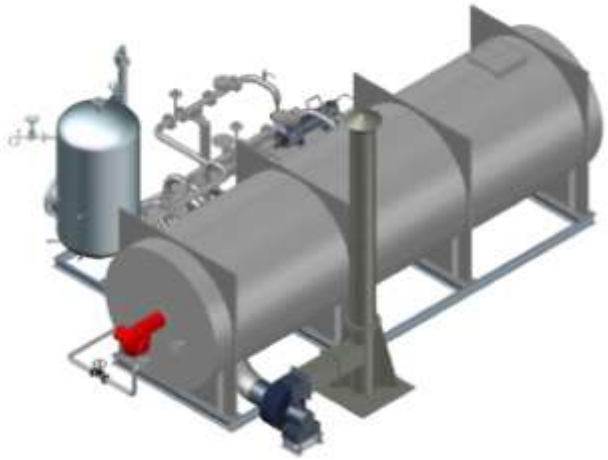
Furnace for heating thermal oil ANU-1,2 M

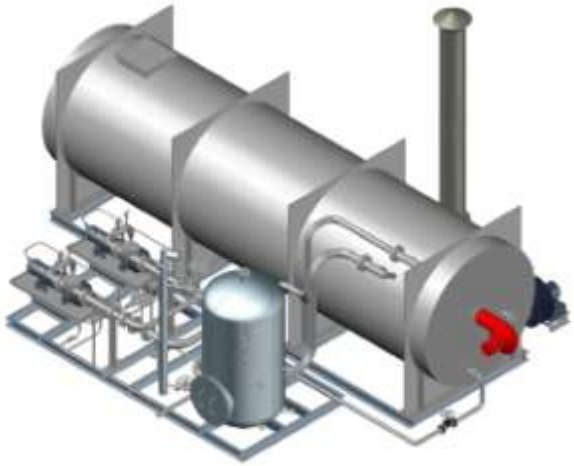


					LLC NPE NOUprom	List

A4

Furnace ANU-2.0-M





Furnace ANU-2.0-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	1,7
Burner power, MW	2.0
Efficiency,%	85
Heated medium	Thermal oil
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	48
Area coil convective chamber, м²	62
Diameter coil, mm	65*2
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	24 000
Allowable temperature of the furnace shell is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	18350
Body overall dimensions • Length, mm • Width, mm • Height, mm	 6240 1980 2270

*Furnace productivity for a given heating interval

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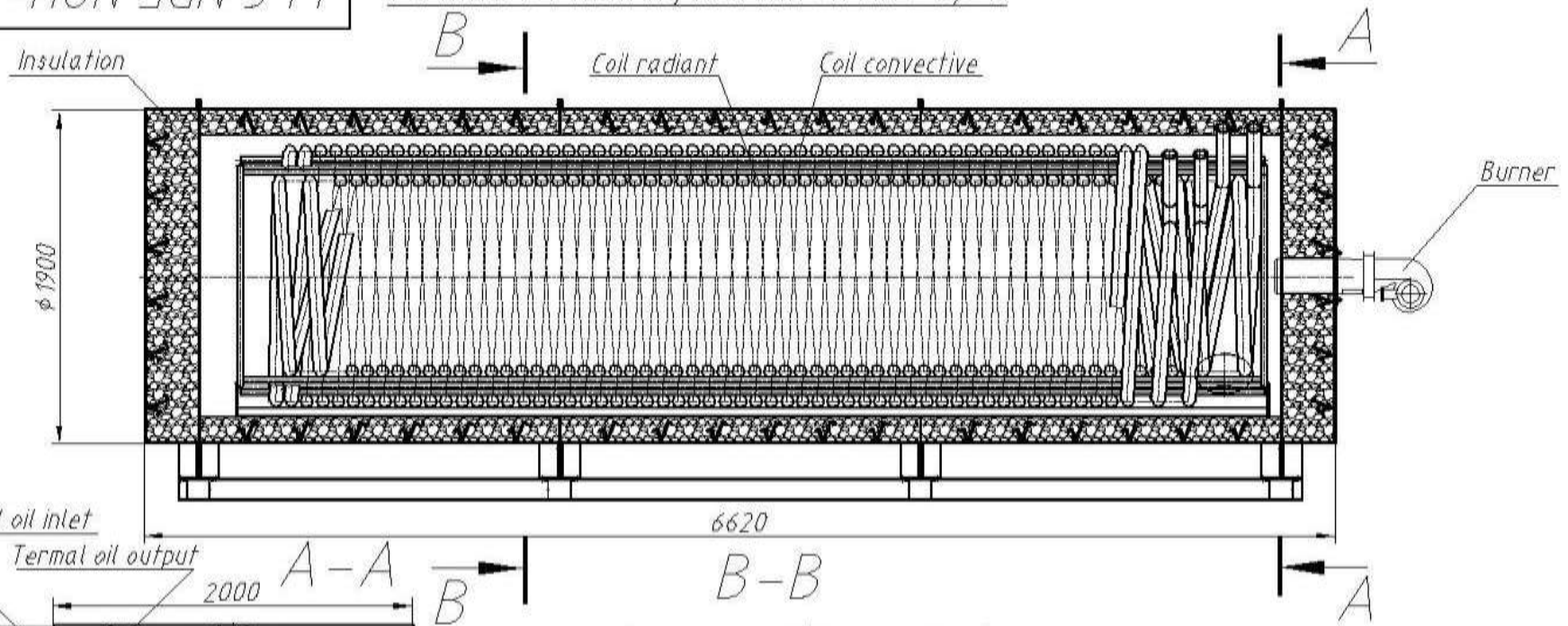
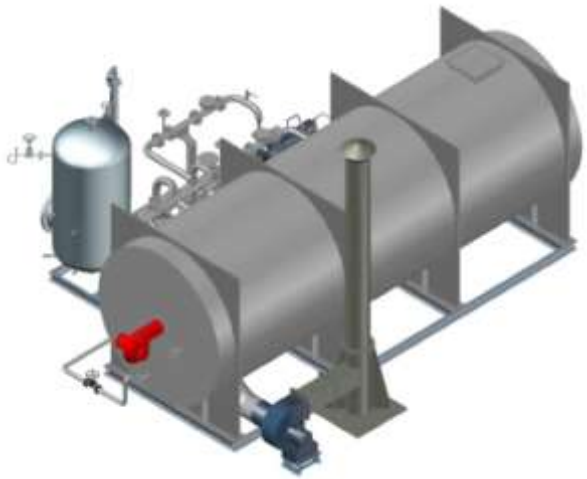
Furnace for heating thermal oil ANU-2,0 M

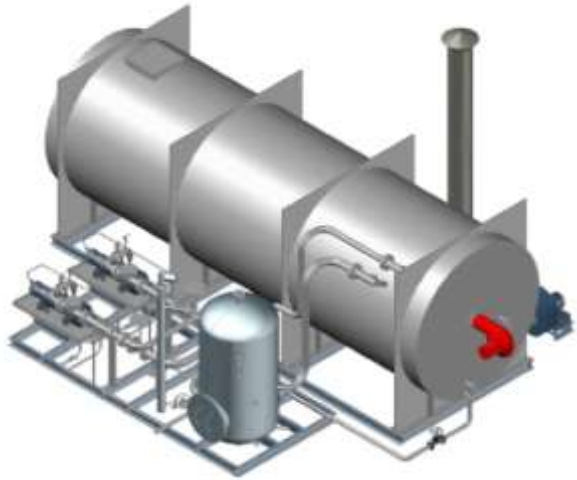


					LLC NPE NOUprom	List

A4

Furnace ANU-3.0-M





Furnace ANU-3.0-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	2,6
Burner power, MW	3.0
Efficiency,%	87
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	60
Area coil convective chamber, with fins, м²	78
Diameter coil, mm	80*2
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	30 000
Flue gas temperature is not higher, C	300
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40(-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	22530
Body overall dimensions • Length, mm • Width, mm • Height, mm	 6240 2340 2580

*Furnace productivity for a given heating interval

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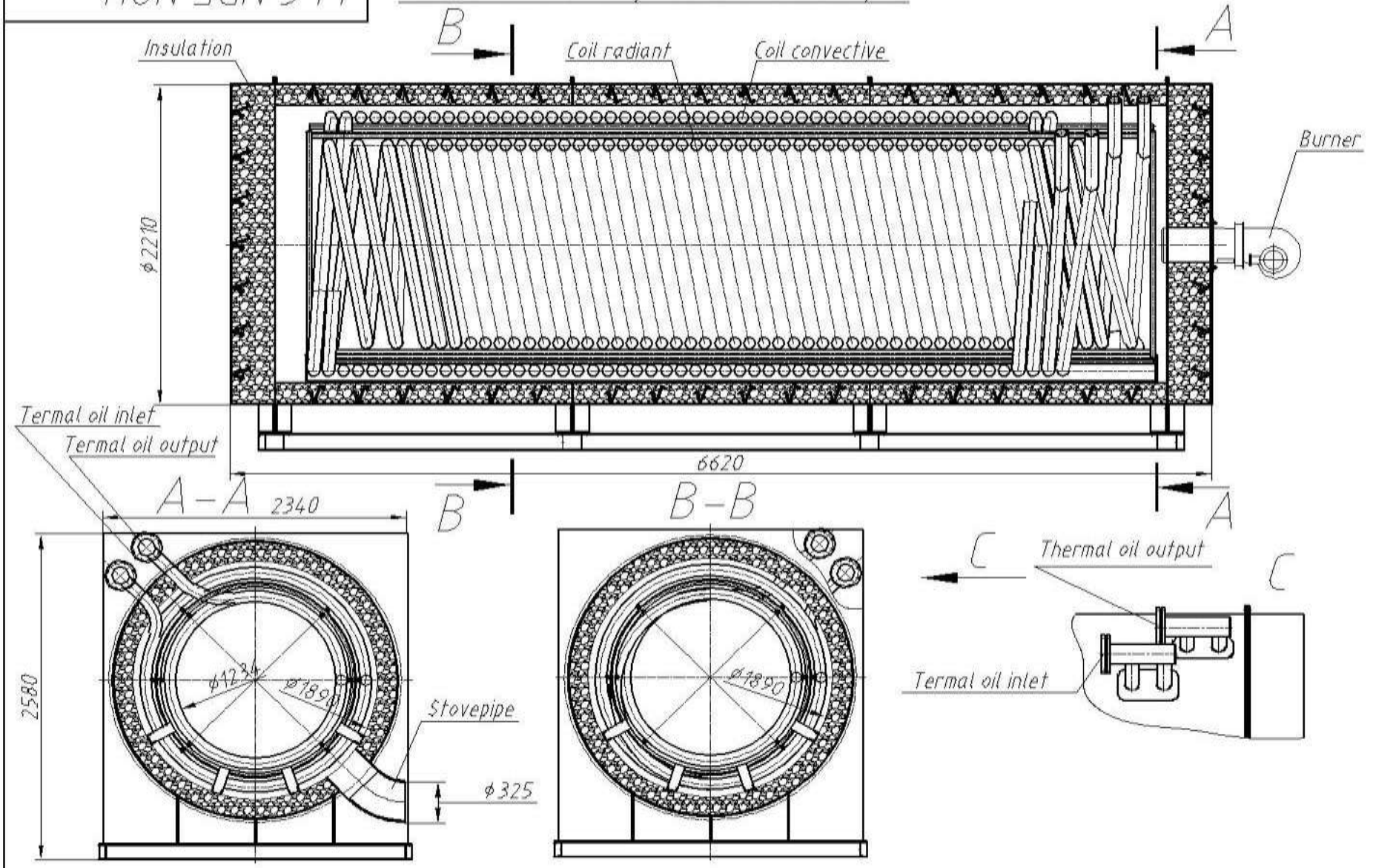
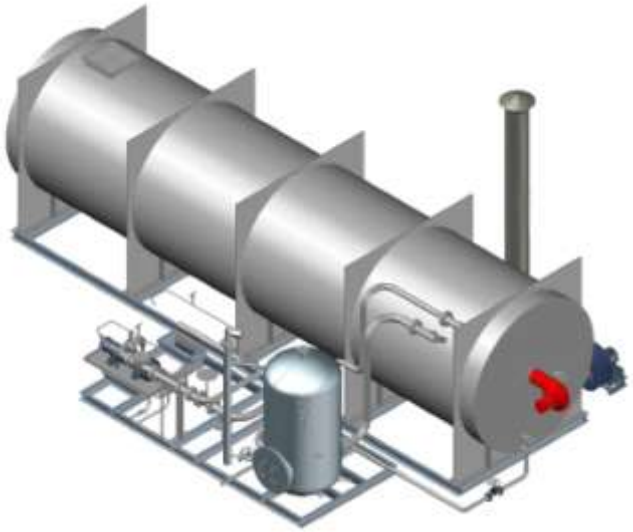
Furnace for heating thermal oil ANU-3,0 M

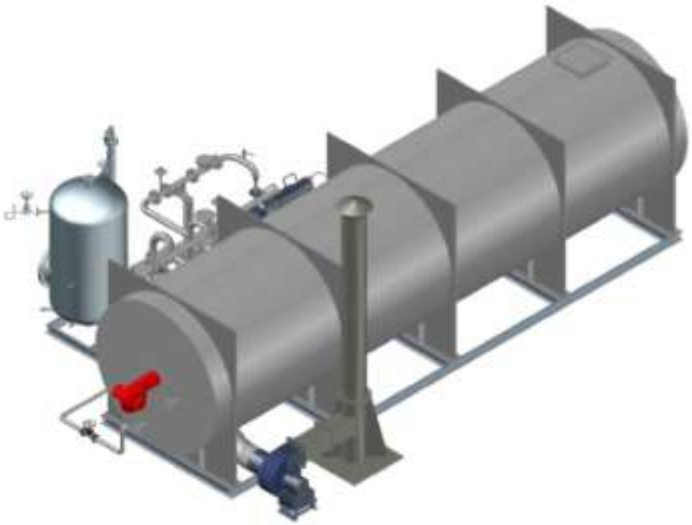


					LLC NPE NOUprom	List

A4

Furnace ANU-4.0-M





Furnace ANU-4.0-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	3,5
Burner power, MW	4
Efficiency,%	87
Heated medium	Crude oil, oil product
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	80
Area coil convective chamber, with fins, м²	105
Diameter coil, mm	80*2
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	48 000
Flue gas temperature is not higher, C	300
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40(-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	28910
Body overall dimensions • Length, mm • Width, mm • Height, mm	 8245 2340 2580

*Furnace productivity for a given heating interval

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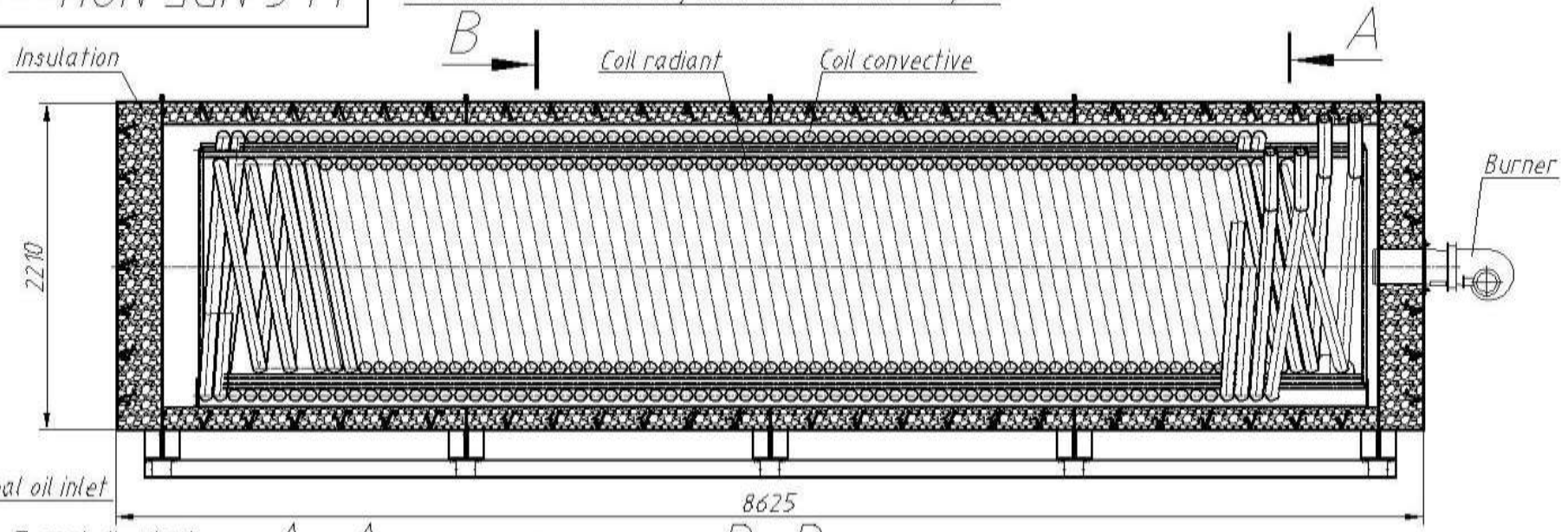
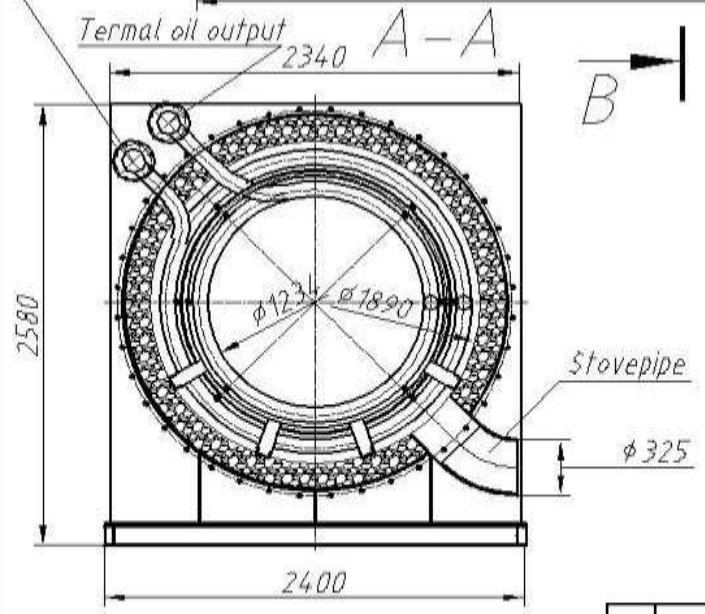
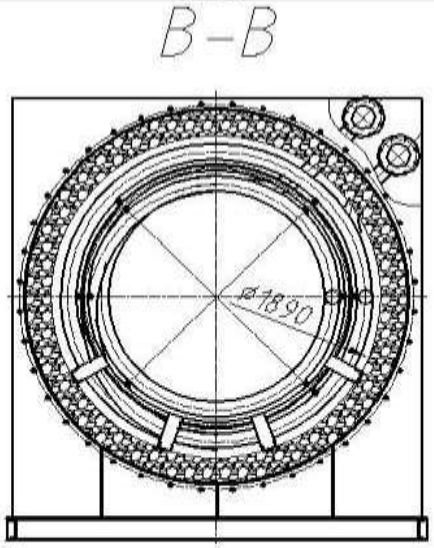
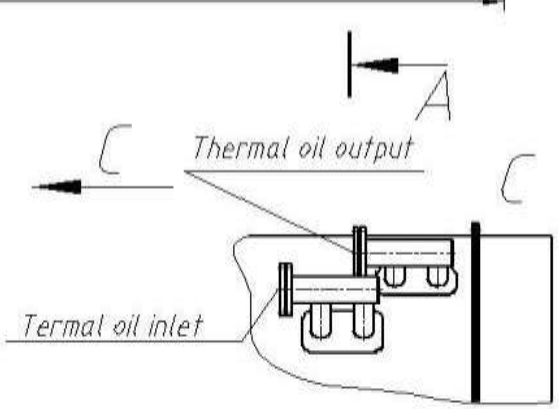
Furnace for heating thermal oil ANU-4,0 M





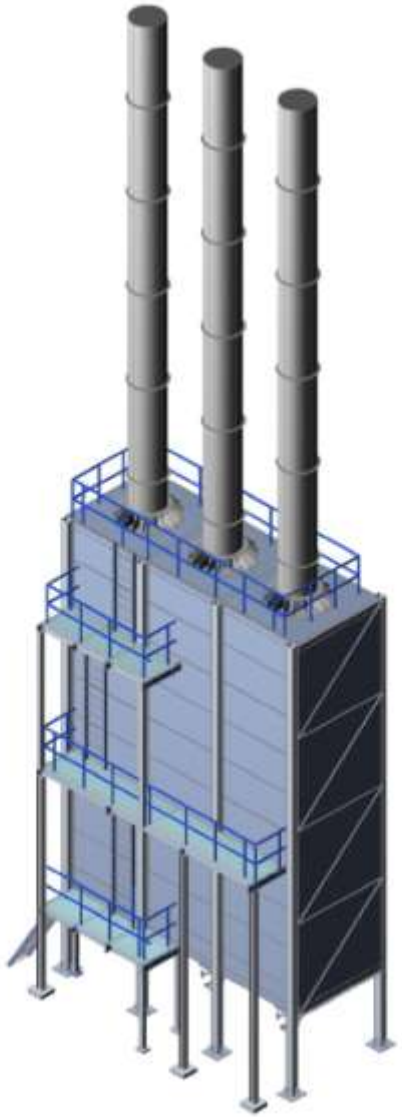




					LLC NPE NOUprom	List

A4

Furnace ANU-7.0-M



Furnace ANU-7.0-M is designed to heat thermal oil of different chemical composition at hazardous and safety production facilities.

Name	Capacity
Nominal thermal power, MW	6.2
Burner power, MW	7.0
Efficiency,%	88
Heated medium	Thermal oil
Fuel	Natural gas, fuel oil
Area coil radiant chamber, м²	170
Area coil convective chamber, no fins, м²	130
Diameter coil, mm	2*125
Feedstock inlet temperature, C	140
Feedstock outlet temperature, C	250*
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Productivity, kg / h	85 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	46 500
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7000 2040 29700

*Furnace productivity for a given heating interval

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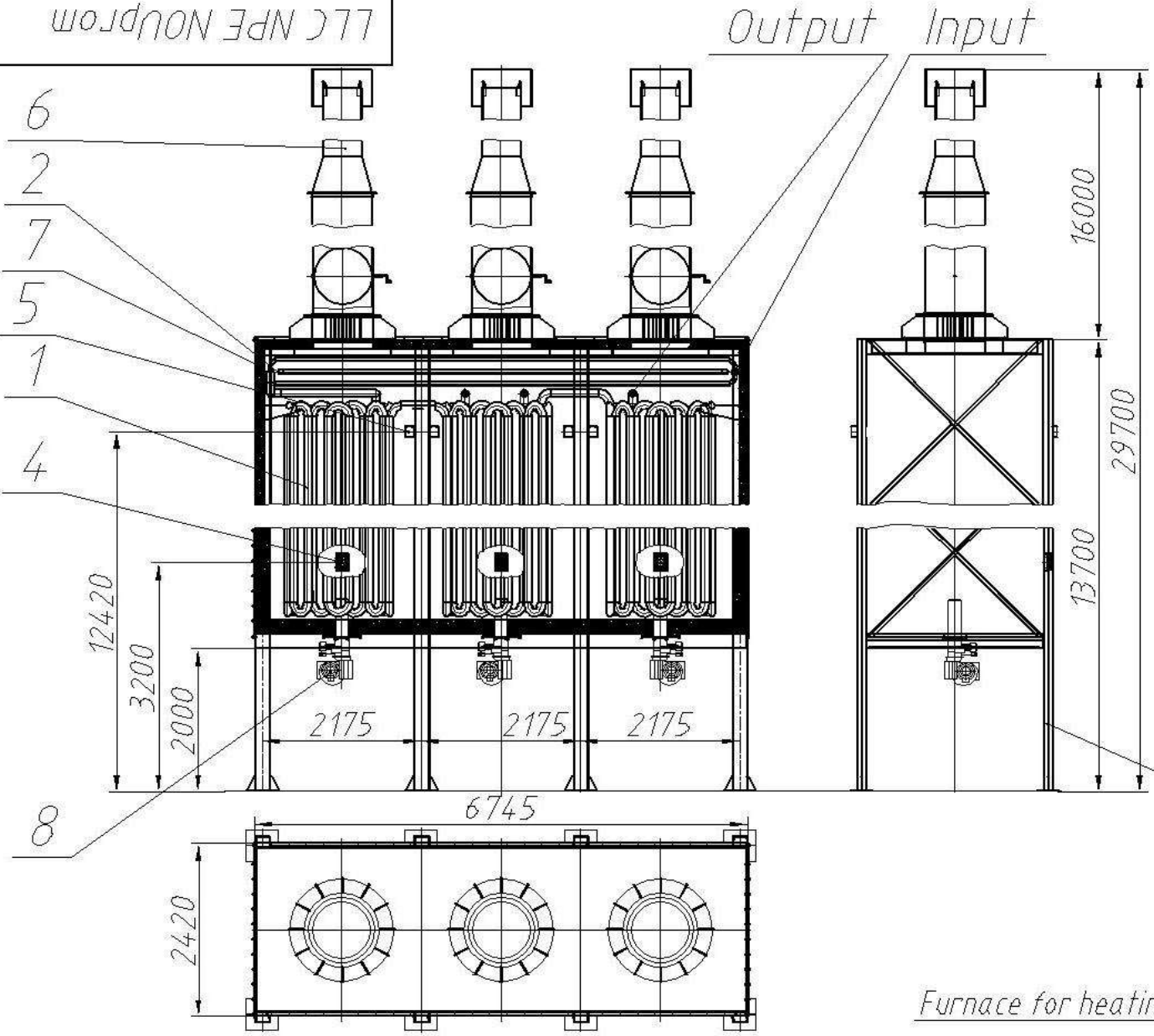

N°	Name	Q-ty
1	Coil radiant	3
2	Coil convective	1
3	Metal skeleton	1
4	Window llookout	3
5	Window safety	4
6	Smoke pipe	3
7	Lining	1
8	Burner	3

Furnace for heating thermal oil ANU-7,0-M

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List

Furnaces for gas heating

Furnaces for gas heating is designed to heat hydrocarbons and inert gas of different chemical composition at hazardous and safety production facilities. Stands out its special developed surface due to devices inside the lining.

Furnaces rated thermal power from 0.6 to 6.0 MW

Summary table of furnaces' specifications for gas heating

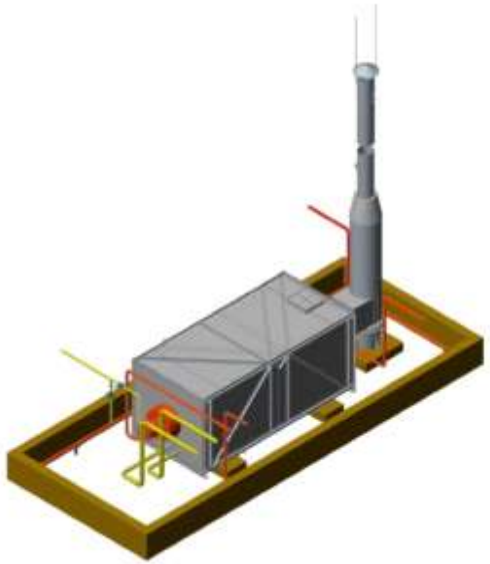
Name	ANU-0.6-G	ANU-5.0-G
Nominal thermal power, MW	0.45	4.0
Burner power, MW	0.6	5.0
Productivity, m^3 / h	10 000*	55 000*
Heating interval, C	40-500**	40-500**

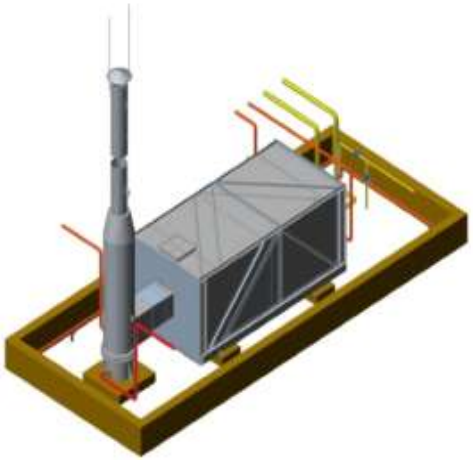
*Gas density accepted at 20 °C and atmosphere pressure

**Furnace capacity for a given heating interval

Adaptation is available for any furnaces from the catalog for gas heating

Furnace ANU-0.6-G





Furnaces ANU-0.6-G is designed to heat hydrocarbons and inert gas of different chemical composition at hazardous and safety production facilities. Stands out its special developed surface due to devices inside the lining.

Name	Capacity
Nominal thermal power, MW	0.45
Burner power, MW	0.6
Efficiency,%	75
Heated medium	Hydrocarbon gas
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	21
Diameter coil, mm	200
Feedstock inlet temperature, C	40
Feedstock outlet temperature, C	500*
Gas Productivity , kg / h	10 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yes
Total weight, kg	6 100
Body overall dimensions • Length, mm • Width, mm • Height, mm	 5000 1200 1300

*Furnace productivity for a given heating interval

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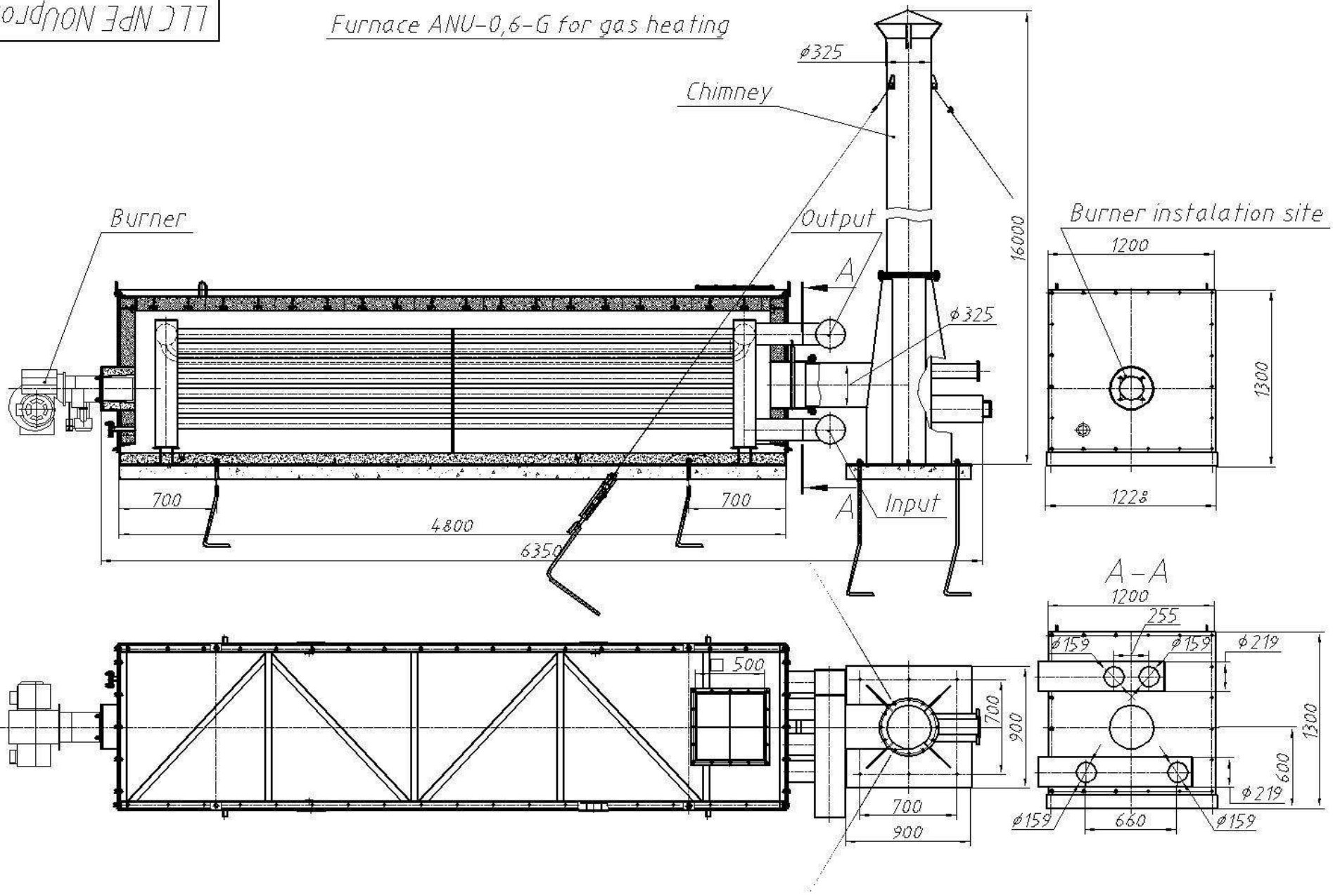
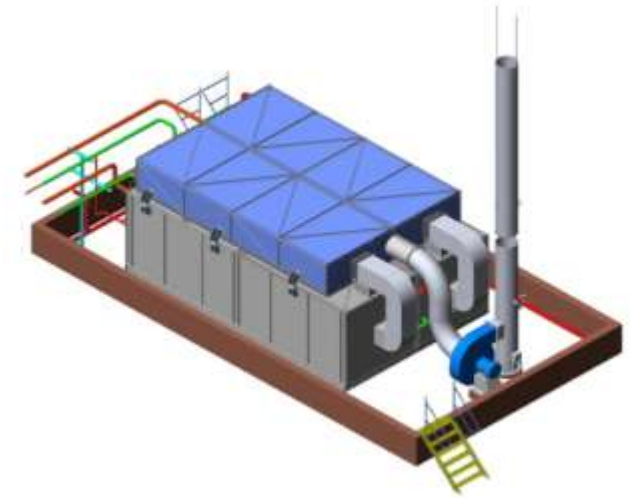
Furnace ANU-0,6-G for gas heating

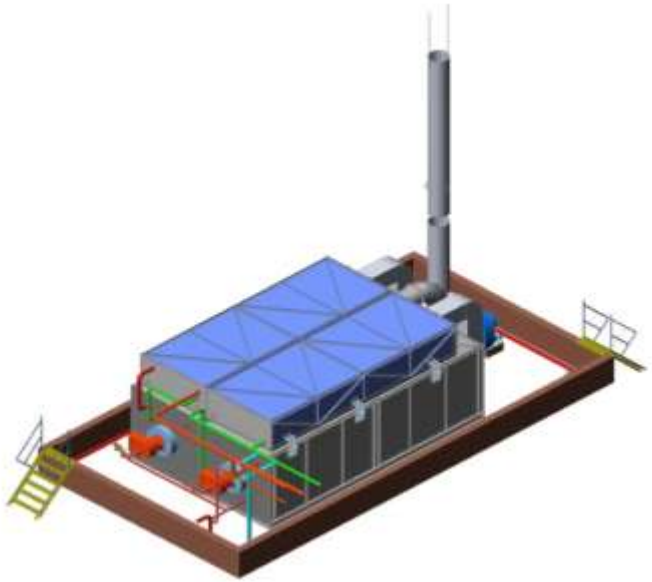


					LLC NPE NOUprom	List

A3

Furnace ANU-5.0-G





Furnaces ANU-5.0-G is designed to heat hydrocarbons and inert gas of different chemical composition at hazardous and safety production facilities. Stands out its special developed surface due to devices inside the lining.

Name	Capacity
Nominal thermal power, MW	4.0
Burner power, MW	5.0
Efficiency,%	80
Heated medium	Hydrocarbon gas
Fuel	Natural gas, fuel oil, diesel
Area coil radiant chamber, м²	98
Area coil convective chamber, no fins, м²	103
Diameter coil, mm	300 (159*4)
Feedstock inlet temperature, C	20
Feedstock outlet temperature, C	500*
Allowable pressure in the coil at the maximum temperature, MPa	1,0 (6.0)
Gas Productivity, м³/ч h	55 000
Flue gas temperature is not higher, C	350
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Height of the chimney, mm	18 000
Explosive safety valve	Yes
Body heat insulation, lining	Yea
Total weight, kg	36 400
Body overall dimensions • Length, mm • Width, mm • Height, mm	 7020 4050 3400

*Furnace productivity for a given heating interval

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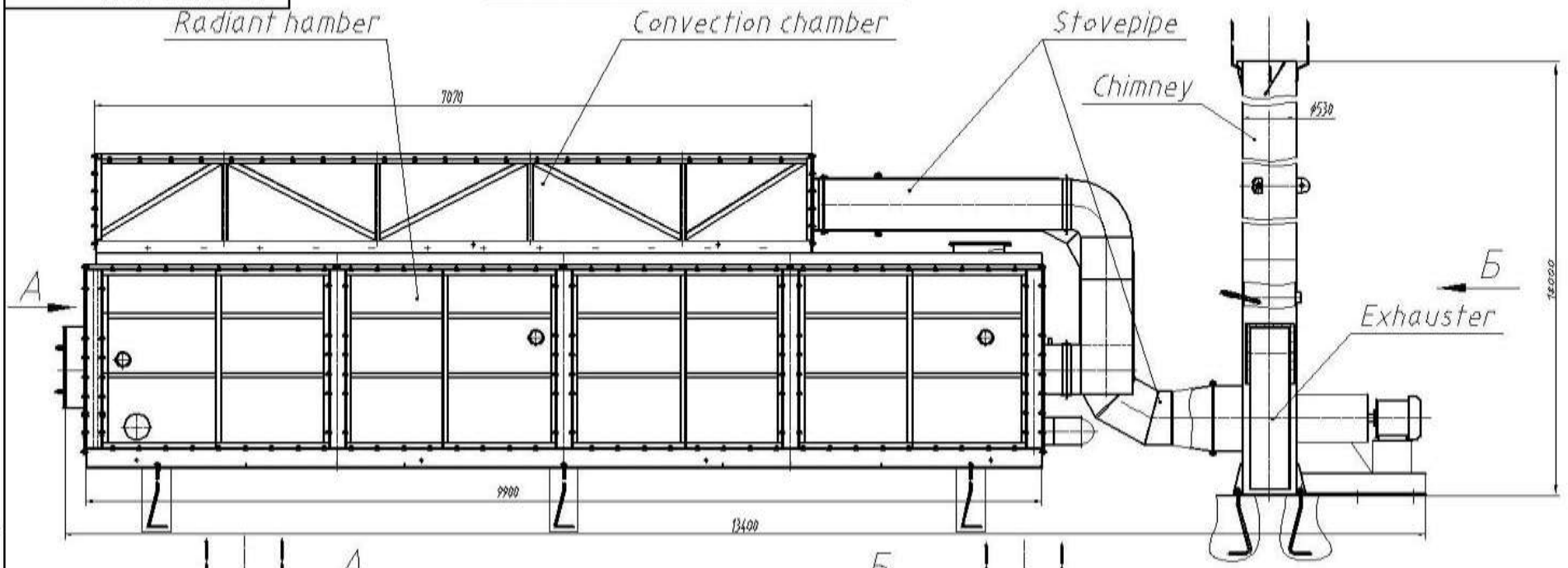
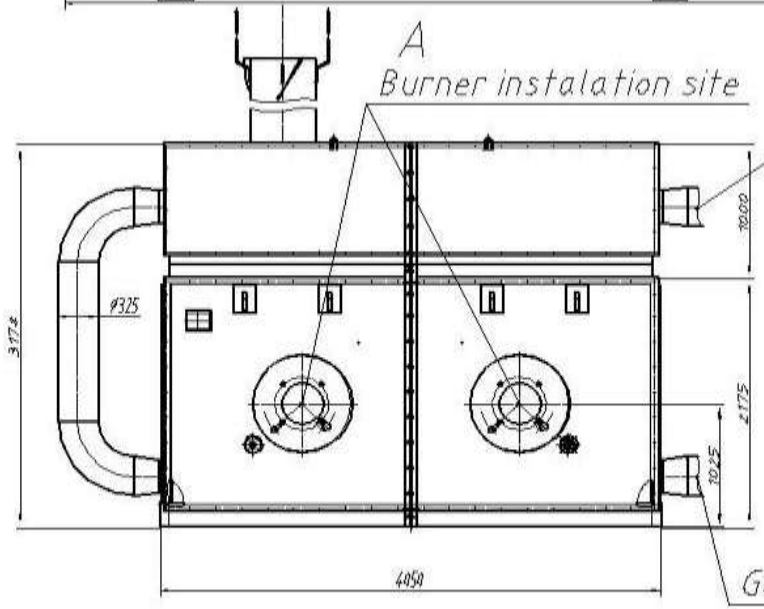
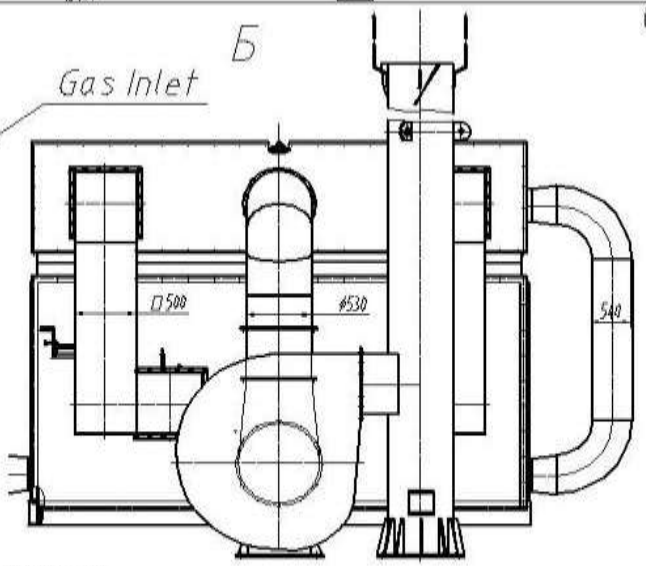
Furnace ANU-5,0-G for gas heating







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Furnace for “burnout” oxidation gases

Furnace for “burnout” oxidation gases is designed for recycling of low calorie gas appeared in the process of bitumen production. Can be used at hazardous and safety production facilities. Stands out of having **catalytic grid** where the pre heating of gas is and also the coil with heating for recycling the heat.

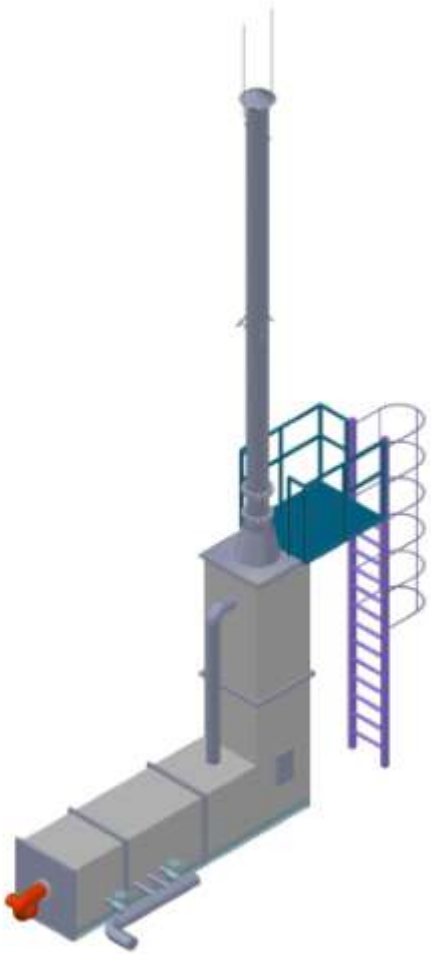
Furnaces rated thermal power from 0.6 MW

Specification of furnace for “burnout” oxidation gases

Name	ANU-0.6-D
Nominal thermal power, MW	0.45
Burner power, MW	0.6
Productivity, m^3 / h	500
The range of heating raw,° C	150-250

In basic equipment the furnace for burnout oxidation gases is completed with coil of thermal oil heating.
The coil can be excepted if needed.

Furnace ANU-0.6-D



Furnace ANU-0.6-D is designed for recycling of low calorie gas appeared in the process of bitumen production.

Name	Capacity
Burner power, MW	0.6
Utilization medium	Oxidation gas
Heated medium	Thermal oil
Fuel	Naturel gas, fuel oil, diesel
Heating temperature of combustion gas, C	800
Catalytic grid	Yes
Area coil convective chamber, м²	18
Inlet oil temperature, C	150
Outlet oil temperature, C	250*
Productivity for oxidation gas, м³/ h	500
Productivity for thermal oil, kg/h	3 000
Allowable pressure in the coil at the maximum temperature, MPa	1,0
Flue gas temperature is not higher, C	400
Allowable temperature of the furnace shell is not higher, C	60
The minimum temperature of ambient air C	-40 (-70)
Combustion efficiency , %	99
Explosive safety valve	Yes
Body heat insulation, lining	yes
Total weight, kg	5 250
Body overall dimensions • Length, mm • Width, mm • Height, mm	 4500 1000 16600

*Furnace productivity for a given heating interval

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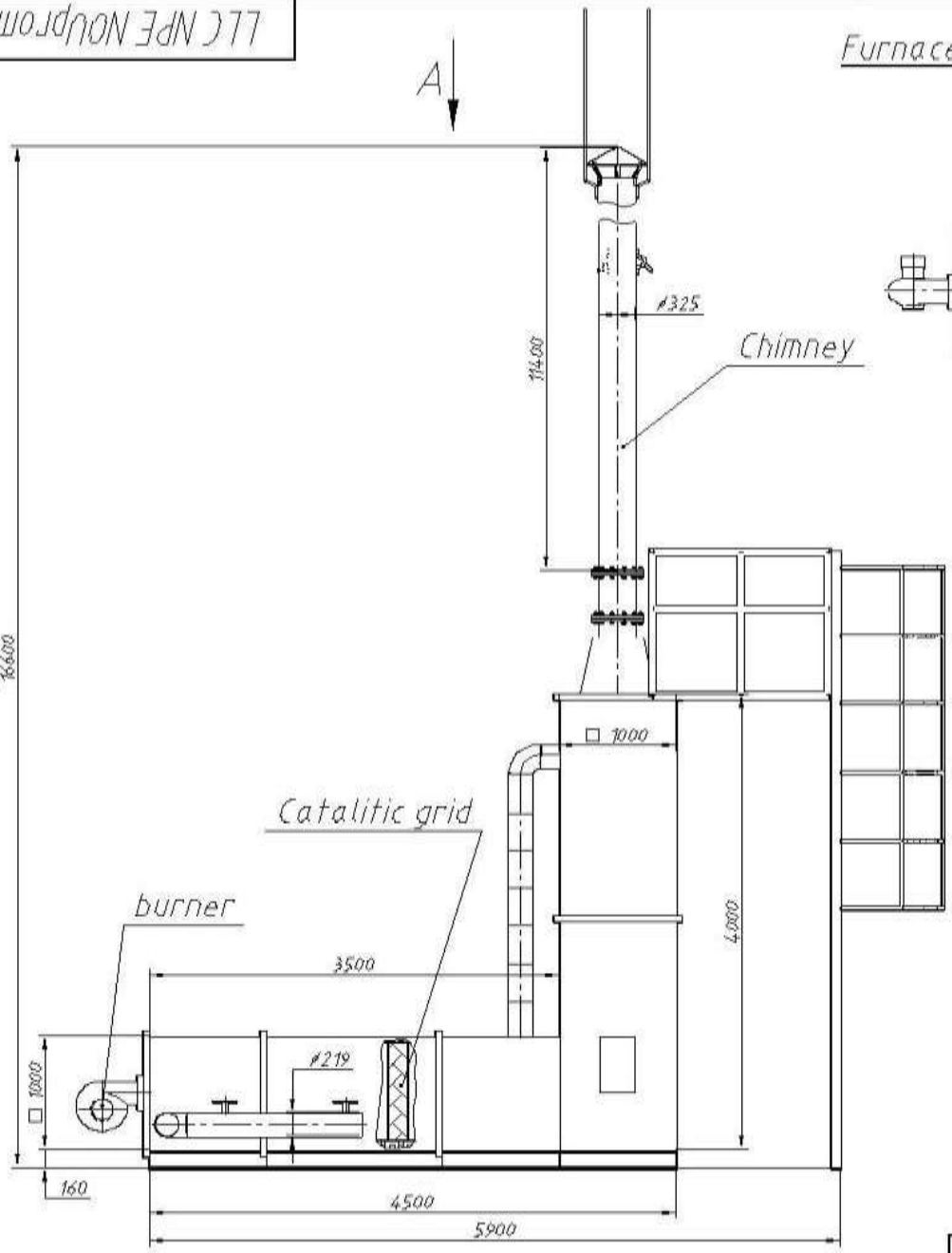
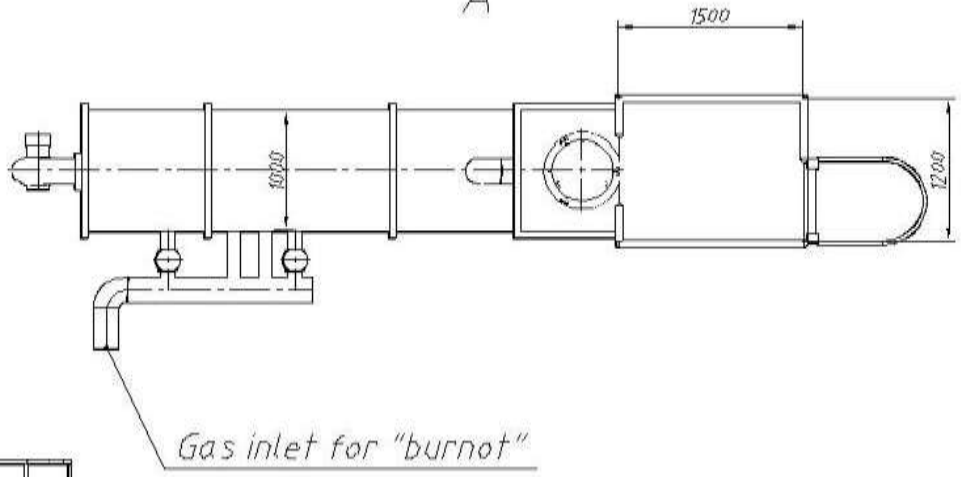
Furnace ANU-0,6-D for "burnout" oxidation gases





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ПРОЕКТИРОВАНИЕ И ИЗГОТОВЛЕНИЕ
ЗАВОДОВ ПО ПЕРЕРАБОТКЕ НЕФТИ

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