

## Information about the company Denasmash

We have been present in the mechanical engineering market for over 40 years, offering our customers new solutions to for industrial and production purposes. We are constantly mastering new production areas, forming a closed-cycle production of a closed cycle.



Denasmash - is an ambitious manufacturing company with a well-known name and a long history of formation and success a manufacturer with a well-known name and a long history development and success

Today we can confidently say that we are professionals in the following areas:

- 1 Production, sale, repair of gearboxes and gearmotors of any complexity;
- (2) Production of biomass pelletizing and briquetting lines;
- Production, sale, installation and maintenance of solid fuel boilers for domestic and industrial premises of any size;

Our products are known and successfully operate at more than thousands of enterprises in Ukraine, Poland, Moldova, Azerbaijan, Georgia, Romania, and Finland.

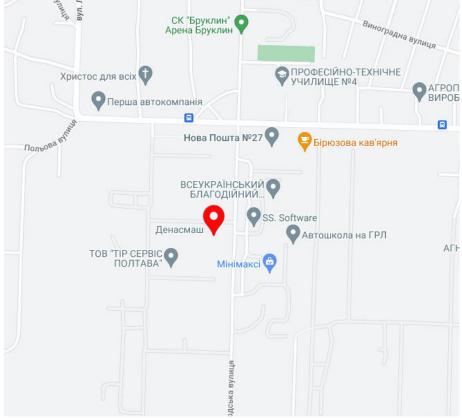
Among the clients of Denasmash LLC are both large enterprises and individuals, budget organizations and government agencies.

We try to pay as much attention as possible to our customer, we are looking for **an individual approach** to each order and do our best to realize all ideas to be realized.





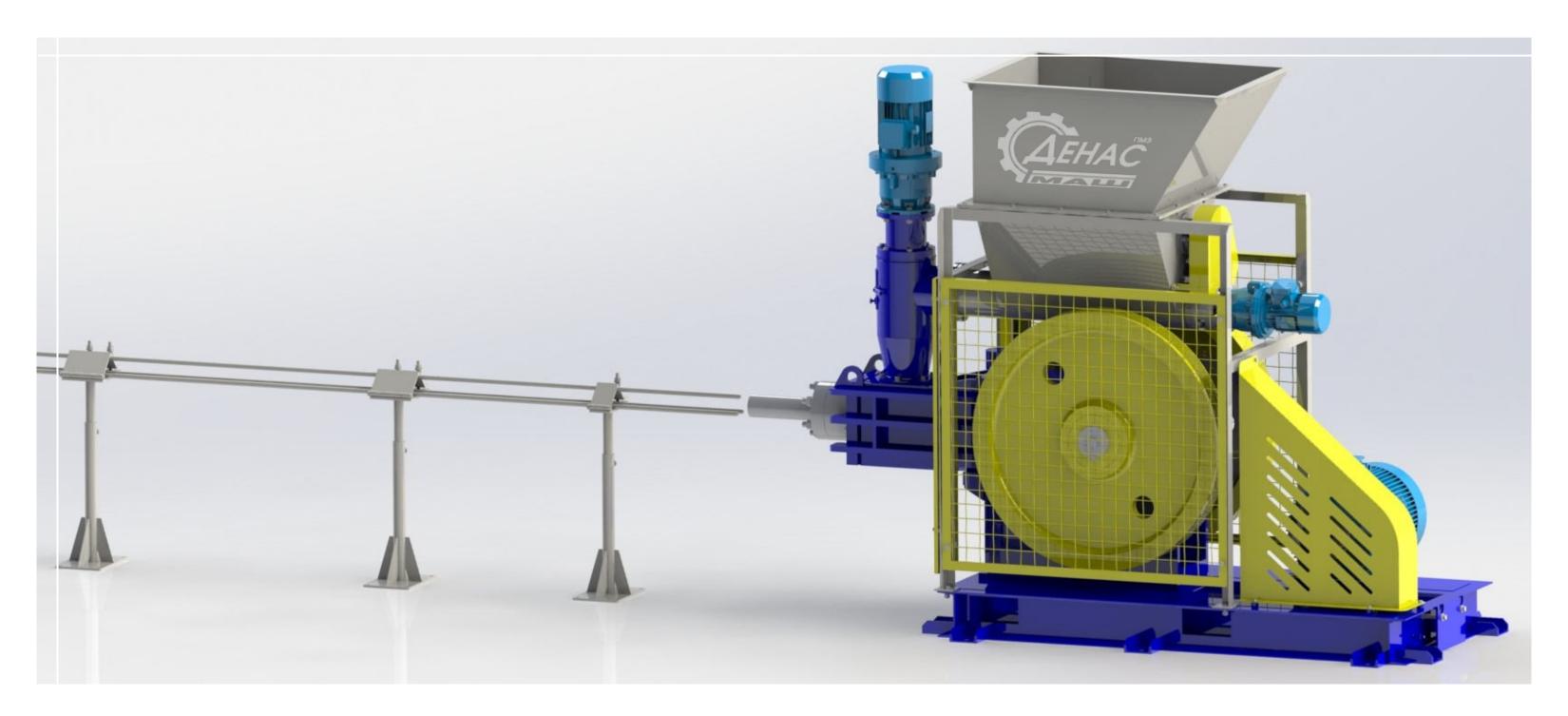






### BRIQUETTING PRESS PB-48

is designed for the production of fuel briquettes with a diameter of 48-50 mm from sawdust of soft and hard wood, sunflower husk and other plant waste (waste grain crops, waste from flax, buckwheat, rice, oats, corn processing, straw, etc.) without the use of any binders.



### Requirements for all types of raw materials:

- optimal humidity from 6 to 12%
- optimal fraction 6-12 mm

When using raw materials of higher moisture content and fraction, additional equipment for grinding (crusher) and drying (drying complex) is installed.

The briquettes are pressed by **rigid molding** in a cylindrical guide with the feedstock supply. The material is sintered under pressure into a solid mass in the form of a sleeve without the addition of binders. components.

All spare parts and components are constantly available from the manufacturer.

The sintering process takes place at a temperature of 170-220 degrees, with no need for for forced heating of the pressing zone, which significantly reduces energy consumption.

The temperature helps to melt the surface of the briquettes, which becomes stronger, which improves its transportability.

The electrical equipment of the press provides control and smooth adjustment of mechanisms in optimal modes and the necessary protection. After entering to the operating mode, the equipment operates almost in an almost automatic mode.

In the event of an emergency (excess of the operating current over the set current, phase failure, phase asymmetry, overheating of the main motor, voltage deviation from the norm, etc.), the press stops and the screw feeder stops automatically. feeder automatically stops.

CHARACTERISTICS		UNIT OF MEASUREMENT	VALUE
Capacity	straw, sawdust of wood, sunflower husks, flax waste, tops	kg/h	up to 400
Briquette diameter		mm	50
Briquette length		mm	50-250
Punch stroke		mm	112
Punch stroke rate		rpm	280
Power of main drive motor		kW	15
Power of raw material feed motor to the pressing area		kW	2,2
Motor power of feeding mechanism		kW	1,1
Overall dimensions:	length	mm	2560
	width		800
	height		1920
Weight of the PB-48 briquetting press		kg	1600 ± 5%
Weight of the briquette cooling unit (length about 5 m)		kg	85 ± 5%
Number of service personnel		1 person	

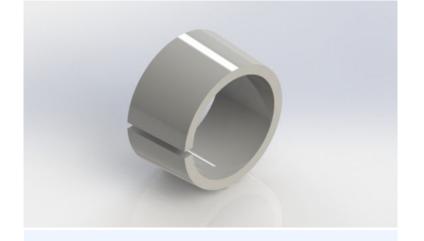
# MAIN COMPONENTS AND SPARE PARTS AFHAC AFHA

### **STANDARD EQUIPMENT:**

- 1 Press
- (2) Feeder
- 3 Fuel briquette cooling line
- 4 Control panel

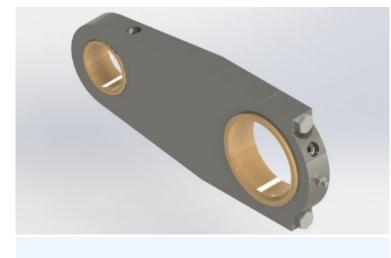
### **OPTIONAL EQUIPMENT OF THE BRIQUETTING LINE:**

- 1) Screw feeder
- 2 Unit for loading the finished material into the container (big-bag type bag, capacity 1000-1200 kg)

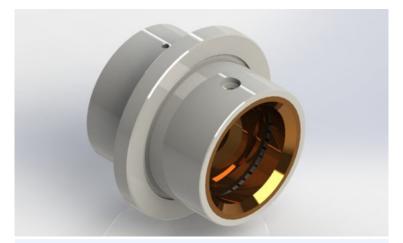


PM1-50.00.017 Collet

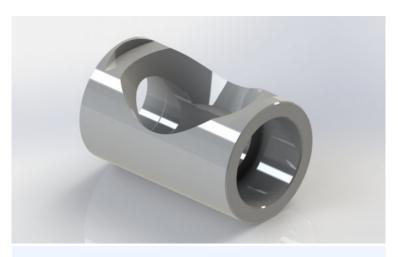
CONSUMABLE



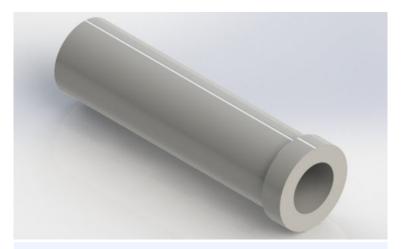
PM-50.02.000 Connecting rod



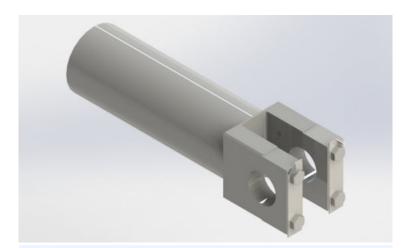
**PM1-50.03.000**Sleeve



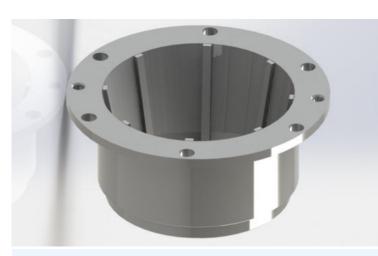
PM1-50.00.011 CONSUMABLE Receiving sleeve



PM1-50.00.020 CONSUMABLE Shank



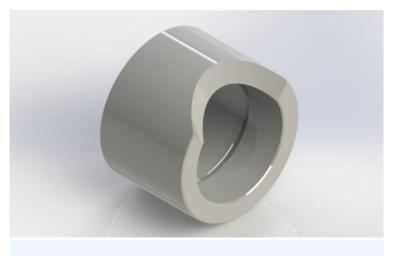
PM1-50.04.000 Stem



PM1-50.22.000 Insert



PM1-50.00.019 CONSUMABLE Forming sleeve



PM1-50.00.069 CONSUMABLE Clamp hub



PM1-50.00.001 Crankshaft



**PM1-50.00.005** Finger



PM1-50.00.033 CONSUMABLE Punch



PM1-50.00.018
Pressure ring

## BRIQUETTING PRESS PB-75

designed for the production of fuel briquettes with a diameter of 75 to 80 mm from sunflower husk, soft and hard wood sawdust, straw and other plant waste (grain crops, flax, buckwheat processing, etc.), without the use of any binders.



### Requirements for all types of raw materials:

- optimal humidity from 6 to 12%
- optimal fraction 6-12 mm

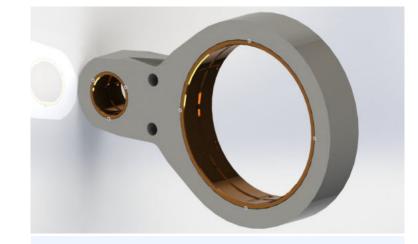
### The advantages of the PB-75 impactmechanical press:

- 1 It is manufactured in compliance with all current standards and regulations;
- The design provides full access to components and assemblies, which allows for maintenance, inspection, and repair in the shortest possible time, in safe conditions.
- All spare parts and components are constantly available from the manufacturer.
- The number of parts and components that wear out quickly is minimized.
- The electrical equipment of the press provides control and smooth adjustment of mechanisms in optimal modes, and the necessary protection.

  After entering the operating mode, the equipment operates almost automatically.
- In the event of an emergency (excessive operating current, phase failure, phase asymmetry, overheating of the main phase failure, phase asymmetry, overheating of the main overheating of the main motor, voltage deviation from the norm, etc.) the press stops and automatically stops the screw feeder.
- 7 All technological processes of production on the PB-75 briquetting press are automated to the maximum extent possible. automated, the work is controlled by by frequency converters.

CHARACTERISTICS		UNIT OF MEASUREMENT	VALUE
Capacity	straw, sawdust of wood, sunflower husks, flax waste, tops	kg/h	up to 600
Briquette diameter		mm	75
Briquette length		mm	50-250
Punch stroke		mm	130
Punch stroke rate		rpm	220
Power of main drive motor		kW	30
Power of raw material feed motor to the pressing area		kW	4,0
Motor power of feeding mechanism		kW	2,2
Overall dimensions:	length	mm	2900
	width		1550
	height		1150
Weight of the PB-75 briquetting press		kg	3800 ± 5%
Weight of the briquette cooling unit (length about 5 m)		kg	140 ± 5%
Number of service personnel		1 person	

## MAIN COMPONENTS AND SPARE PARTS AFHAC AFHA



PB-75.01.03.000 Connecting rod

### **STANDARD EQUIPMENT:**

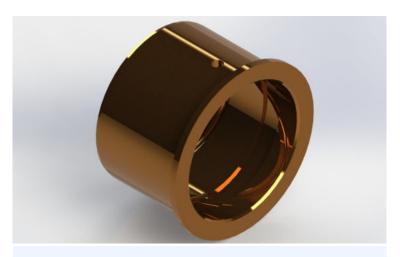
- 1) Press
- 2 Fuel briquette cooling line
- 3 Storage hopper
- (4) Control panel

### OPTIONAL EQUIPMENT OF THE BRIQUETTING LINE:

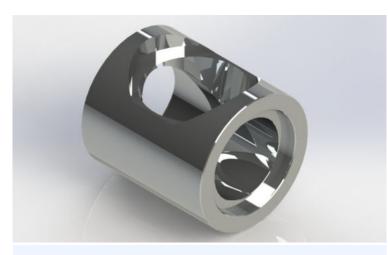
- 1 Screw feeder
- 2 Unit for loading the finished material into the container (big-bag type bag, capacity 1000-1200 kg)



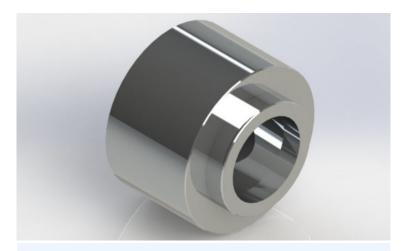
PB-75.01.02.000 Stem



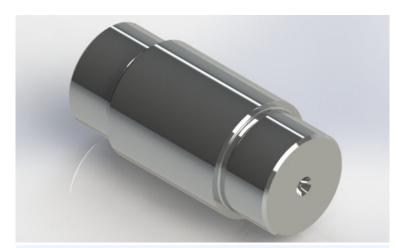
**PB-75.01.00.015**Sleeve



PB-75.01.00.002 CONSUMABLE Receiving sleeve



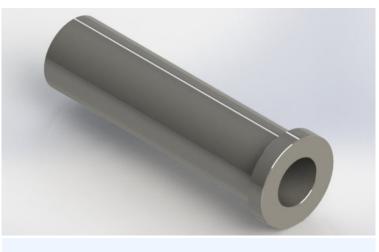
PB-75.01.00.003 CONSUMABLE Forming sleeve



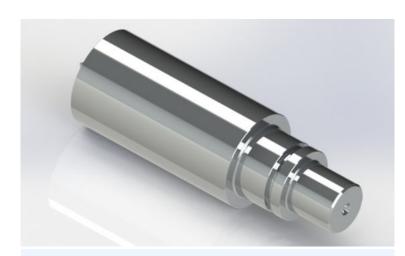
PB-75.01.00.022 Finger



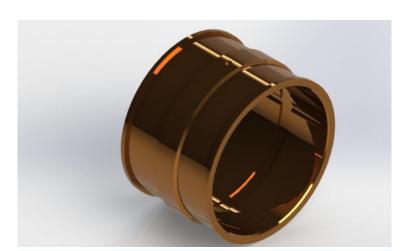
PB-75.01.00.007 Shaft



PB-75.01.00.004 CONSUMABLE Shank



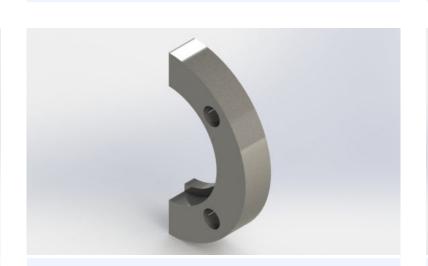
PB-75.01.00.001 CONSUMABLE Punch



PB-75.01.00.014
Support liner



PB-75.01.00.008 Eccentric



PB-75.01.00.013 Half ring



PB-75.02.00.001 Insert

### **HISTORY OF DENASMASH PLANT**



### 1998 year

Denasmash started to develop actively in 1998. The company was engaged in machining of metal products, production and sale of spur and worm gears.



### 2003 year

We started manufacturing planetary gearmotors of 3 standard sizes. We actively developed our own production: in 1998, we produced only 30% of the parts ourselves, but in 2003, the depth of our own production was 100%. The entire production cycle was carried out at the enterprise.



### 2004 year

We purchased a horizontal boring machine and began processing cylindrical gearbox housings with sizes up to 1000 mm and weighing 500 kg. We mastered the technology of chemical polishing.



### 2005 - 2006 years

We created our own design department and started designing our own models. We designed and started manufacturing extruders (presses) for the production of fuel briquettes. Manufactured the first sample of a drum dryer for plant waste.



### 2007 - 2008 year

We purchased a large lathe for processing shafts with a diameter of up to 600 mm and a length of up to 3 meters. We doubled the production area and machine tool fleet. We manufactured the first solid fuel air heating boiler. We mastered the production of impact-mechanical presses for the production of briquettes with a diameter of 50 mm.



### 2009 - 2010 years

The company started production of impactmechanical briquetting presses with a capacity of 600 kg/hour, which is twice as large.



### 2011 year

The company started production of impactmechanical briquetting presses with a capacity of 700 kg/hour, which is twice as large.



### 2012 year

The number of customer enterprises in Ukraine has exceeded 1000! Motor-Sich Kryukiv Carriage Works, Kernel Group, Yablunevyi Dar, KMZ Industries, OdesaCable, Kharkiv Lifting and Transport Equipment Plant, Novokramatorsk Machine-Building Plant, Korolivskyi Smak, Kremenchuk Steel Plant, Poltava Mining

We actively exported our products



### 2013 year

Increased production facilities and machine park several times, purchased a CNC milling machine and a bending machine with a rotary table. Started production of large industrial hot water boilers. Mastered the production of a wide range of worm gearboxes.



### 2014 year

We modernized the heat treatment area by installing a 120 kW microwave oven, which is the most modern and powerful in Poltava, and there are only 4 of them in Ukraine. We purchased a thermal furnace for processing parts 800 mm by 1200 mm. We produced hot water boilers of 20, 30, 100, 250 kilowatts.



### 2015 year

The company's design department has grown to 10 people For boilers with vertical heat exchangers, a unique built-in system for cleaning heat exchanger tubes without stopping the boiler was developed. We started producing boilers with a capacity of 500 kW, 800 kW, and 1 megawatt.

Purchased a Czech CNC plasma metal cutting machine: metal thickness up to 200 mm, sheet size 2x6 meters.



### 2016 - 2017 years

Denasmash produces:

- $\cdot$  7 models of worm gearboxes
- $\cdot\,$  8 standard sizes of planetary gearboxes.
- 50+ models of spur gearboxes
- 15 models of boilers

Production of air heat generators was launched.



### 2018 year

A program for technical re-equipment and development of the enterprise for the period 2018-2021 was adopted.

HAAS EC-1600 milling and boring center with unique technical characteristics for Ukraine was put into operation.

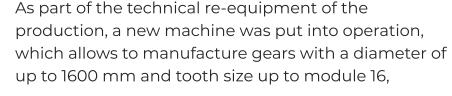


### 2019-2021 years

The European Union was chosen as a priority destination for briquetting and pelletizing equipment. Currently, deliveries are underway to several Eastern European countries. We expanded the range of boiler equipment. We started production of block-modular boilers.

We developed and put into production

- · a pellet mill GR-1 with a belt drive,
- a straw bale breaker (bale up to 1.5 m, weight up to 500 kg) with a crusher with a capacity of 1 ton per hour
- a DM-110 hammer mill with a capacity of 110 kW and a productivity of 6 tons per hour.



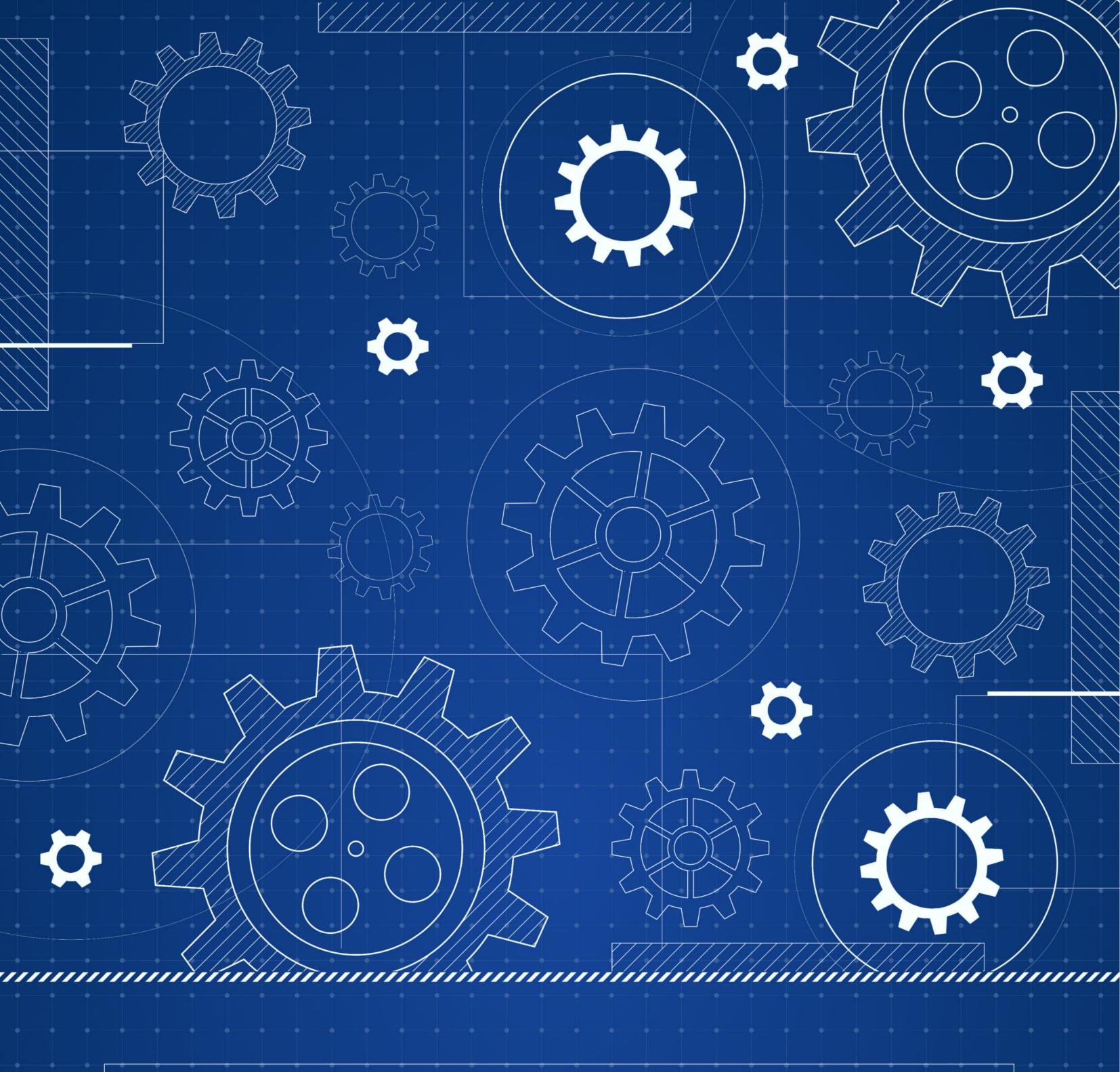
the fleet of horizontal boring machines was expanded.

As a result, we mastered the production of 10 new models of large-sized gearboxes weighing up to 6 tons.



### 2022 year

Since the beginning of the Russian invasion, we have been fighting for the energy security of the people of Ukraine. We keep the line. Glory to Ukraine!



SALES DEPARTMENT

+38 (050) 369-11-88

+38 (050) 369-11-99

market@denasmash.com

SUPPLY DEPARTMENT

+38 (050) 369-11-66

snab@denasmash.com

PRESS BRIQUETTING MACHINES, GRANULATORS, BOILERS

+38 (050) 369-11-33

+38 (050) 369-11-77

press@denasmash.com

SECRETARY

+38 (0532) 519-023

WE WORK FOR YOU

Monday through Friday from 8:00 a.m. to 5:00 p.m

MAILING ADDRESS

36007, Ukraine, Poltava, st. Zavodska, 3

OUR WEBSITE

www.denasmash.com