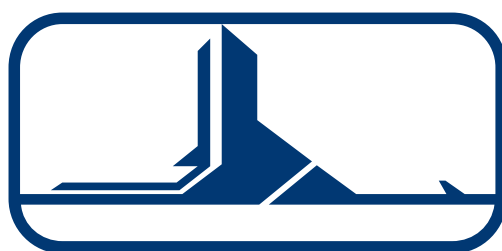




UKROBORONPROM

Ukrainian Defence Industry



State Enterprise Specialized Foreign Trade Firm

PROGRESS

30 YEARS
IN GLOBAL ARMS MARKET

CATALOGUE

**ROCKET
ARTILLERY WEAPONS
AND MUNITIONS**



State Enterprise Specialized Foreign Trade Firm

PROGRESS

State Enterprise Specialized Foreign Trade Firm "PROGRESS" (SE SFTF "PROGRESS") was established in 1990 as the first official exporter/importer of military goods and services in Ukraine and has long-term business experience on armament and military equipment markets. In accordance with the resolution of the Government of Ukraine SE SFTF "PROGRESS" is entitled with full rights to act as an exporter or importer of military and special purpose goods and services.

Nowadays, SE SFTF "PROGRESS" acts as an independent enterprise being equal member of State Concern "Ukroboronprom" – the consolidation of great number of diversified enterprises of military industry.

Ukraine has a strong industrial potential in arms and military equipment, the whole spectrum of which is offered for export by SE SFTF "PROGRESS". Having a broad geography of cooperation and trade during more than 25 years of the activity in the world armament the firm has fulfilled export and import supplies of military and special equipment, armament and services to more than 30 countries in the different regions of the world. The wide range of such sales includes a broad spectrum of military products, goods and technologies of dual use ammunition, various equipment and services.

SE SFTF "PROGRESS" deals with export of military equipment of current production (MBT, APCs, Antonov-type transport aircraft, modern navy ships, radar and communication systems), modern technologies and know-how.

SE SFTF "PROGRESS" has taken a comprehensive approach to the export of armaments and military equipment. We are pleased to offer mutually advantageous cooperation in the following areas:



State Enterprise Specialized Foreign Trade Firm

PROGRESS

- export and import of products and services of military and special purposes, including arms, ammunitions, military and special equipment, spare parts, explosives and other goods, which may be used for the creation and production of arms, military and special equipment;
- shipbuilding industry (design and construction of combat ships and civil vessels, repair and upgrade of marine equipment, component parts for shipboard systems and equipment, hydro-acoustic systems and complexes);
- aircraft engineering and maintenance (aircrafts, missiles, engines, equipment, repair services and aircraft modernization);
- modernization of armament and military equipment for foreign customers;
- rendering of services in repairing and maintenance of arms and military equipment;
- export of new technologies, project documentation and other scientific-technical products in military and civil areas;
- training of the foreign military staff in the basic training military institutions in Ukraine and in the countries of the customers;
- design of specialized factories and projects.

Our company together with Ukrainian shipbuilding centers has great experience in designing and construction of vessel of different displacement and purpose. We offer supply of coast guard boats, patrol boats, assault and Special Forces ships. Specified ships are intended for guarding and protection of water boundary and counteraction against poaching.

Ukrainian repair facilities are capable to perform complete overhaul and modernization of a series of military units and armaments of former and modern Ukrainian production.

For more than 30 years of activity on foreign markets SE SFTF "PROGRESS" has performed export deliveries of military and special equipment, armaments and services to more than 30 countries including countries of Europe, Middle East, Southeast Asia, Latin America and Africa.

Nowadays, SE SFTF "PROGRESS" is a dynamic developing enterprise which can offer a wide range of services. During the years its activity our company has built up the reputation of a reliable partner. The team of professional experts and full range of rendered services are a guaranty of effective mutually beneficial cooperation and fulfillment of our partners' requirements.

We are always open for a dialogue and mutually advantageous cooperation.

NEAR 80 000 EMPLOYEES

UKRAINIAN DEFENCE INDUSTRY MANAGEMENT HAS DEVELOPED A PROMISING MODEL OF INDUSTRY-SPECIFIC CLUSTERS WITH CLEAR SPECIALIZATION. WE ARE PROUD THAT UKRAINE IS ONE OF THE FEW COUNTRIES IN THE WORLD THAT HAS GREAT TECHNOLOGICAL KNOWLEDGE IN THE INDUSTRY AND A FULL PRODUCTION CYCLE.





ARMORED
MILITARY
VEHICLES



AVIATION
INDUSTRY



SHIPBUILDING AND
MARINE EQUIPMENT
INDUSTRY



RADAR, RADIO
COMMUNICATION AND AIR
DEFENCE SYSTEMS



ROCKET ARTILLERY
WEAPONS
AND MUNITIONS

ROCKET ARTILLERY WEAPONS AND MUNITIONS

RIGHT ON TARGET

We have a long history of successful cooperation with our Partners, offering affordable and highly tested missiles and missile systems. Our reputation is based on exceptional contractual performance and successful partnerships.

WE DO:

- /// customized designing and development, meeting specific customers needs
- /// production of missiles, rockets, ammunitions
- /// high-precision guided weapons
- /// various caliber artillery systems
- /// propelling charges, explosives, powder and blast initiation means
- /// development of ammunitions
- /// maintenance and recharging, shelf life prolongation and recycling of ammunitions

DCM

DIVISION COMMANDER MACHINE

The DCM battalion officer's crawler vehicle is a mobile battalion command post intended for use in the advanced battalion Automated Control System (ACS) that is part of MT&A tactical control system.

Remote control gadget that is part of DCM provides a functional backup of DCM processing, control and communication equipment in the event of their failure and operation from a remote command post.

**Tasks:**

Organizing an overall management of combat actions and battalion command

Defining one's own location coordinates and grid azimuths, landmark beacons and artillery command post survey in continuous mode

Surveillance, measuring the distance and azimuth, determining target coordinates

Interaction with attached reconnaissance assets

CSDM

CHIEF STAFF OF THE DIVISION MACHINE



The car of the Chief of Staff of the Division CSDM is designed to accommodate the headquarters of the division, which, in conjunction with commander cars DCM -1, DCM -2 and cars of senior officers of batteries CSDM provides control of combat operations of the division.

The car can be produced both on a wheel (for a trailer artillery) and on a crawler (for self-propelled artillery) chassis.

Tasks:

Definition of installations and other data for the shooting of the division

Meteorological training

Fire control of the division (adjusting the fire of the division)






Collecting and processing intelligence data

Maintaining communication with the control station of the senior artillery commander and units of the division (batteries)

PECHORA-2D

UPGRADED SURFACE-TO-AIR MISSILE (SAM) SYSTEM

Upgraded SAM System S-125-2D efficiently destroys low-flying and low-sized targets in conditions of heavy jamming and interference. S-125-2D system has service life of 15 years, increased target engagement envelope, increased efficiency and mobility, improved operation in conditions of heavy jamming.

-  Channels capacity, target **1**
-  Channels capacity, missile **2**
-  Target engagement time, s **2.5 – 3.0**
-  System start-up time, min **Up to 4**
-  Mean Repair Time, min **Up to 12**



Armament:

Maximum target detection range, bomber type, at altitude 7 km	not less than 100 km
Maximum target speed	closing in - 800 m/s, in pursuit - 300 m/s
Detection and stable tracking of targets with RCS of 0.1 sqm	21 km
Methods of guidance	Three point, half lead, optimal dynamic control
Number of simultaneously connected launchers	4



KVADRAT-2D

SURFACE-TO-AIR MISSILE SYSTEM 2K12M1-2D

Upgraded 2K12M1-2L Surface-To-Air (SAM) System (Kvadrat-2D) features improved performance and extended functional capabilities due to new algorithms of data processing and displaying, digital signal processing with software based MTI and automatic data read out and processing. 2K12M1-2D is offered as the upgraded follow-on to 2K12M1.

Main Specifications:

Capability to detect and destroy low-flying targets including VLO ("Stealth"). Improved operation in jamming conditions, in presence of reflections from underlying surface

Automation of control from Command Post, automation of detection and tracking, prelaunch preparation and launch of missiles, crew training

Increase of kill area and kill probability due to optimization of signal processing, increased detection and tracking range of low-flying targets

Reduced response time and firing cycle







MISSILE SYSTEMS

SKIF


MAN PORTABLE ANTITANK MISSILE SYSTEM

“Skif” man portable antitank missile system is intended to destroy man power, stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), as well as pinpoint targets, like weapon emplacements, lightarmoured objects and helicopters.



-  Guidance system
BY LASER BEAM WITH TARGET TRACKING IN AUTOMATIC MODE
-  Weight, launcher, kg:
32
-  Weight, guidance device, kg:
15
-  Weight, remote control, kg:
10
-  Rough weight, thermal imager, kg:
6
-  Operating temperature range, °C:
-40 TO +60



 The system's can guide the missile at a target from closed emplacements and shelters, reducing the risk of the gunner destruction by reply fire attack of the enemy. The system is equipped with 130mm and 152mm missiles in transport and launching containers with tandem hollow-charge (RK-2S, RK- 2M-K) and high-explosive fragmentation (RK-2OF, RK- 2M-OF) warheads.

RK-2S

		 29,5 kg	 1360 mm	 130 mm	 800 mm	 5 km
---	---	---	---	--	--	--

RK-2M

		 38 kg	 1435 mm	 152 mm	 1100 mm	 5,5 km
---	---	---	---	--	---	--

CORSAR

LIGHT PORTABLE MISSILE SYSTEM

“Corsar” light portable missile system is intended to destroy stationary and moving modern armoured targets and other objects with combined, carried or monolithic armour, including ERA (explosive reactive armour), as well as pinpoint targets such as weapon emplacements, light-armoured objects and helicopters. Firing can be carried out from the mount as well as from a trench parapet.



Maximum firing range, m:
2 500

Guidance system:
SEMIAUTOMATIC BY LASER BEAM

Weight, launcher, kg:
9.2

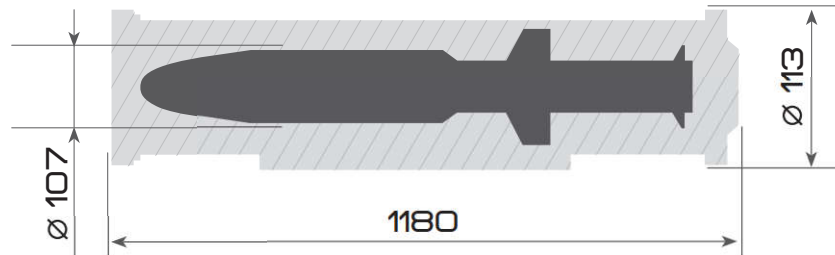
Weight, mount, kg:
6.3

Weight, missile in container, kg:
15.3

Operating temperature range, °C:
-40 TO +60

Main Specifications:

Warhead tandem hollow-charge, hollowcharge, armour penetration behind ERA, mm	not less than 550
Warhead high-explosive fragmentation with EFP, armour penetration, mm	not less than 50





GUIDED MISSILES

BAR'ER

VEHICLE-CARRIED ANTITANK MISSILE SYSTEM

“BAR'ER” Vehicle-Carried Antitank Missile System is mounted on a turret of a fighting vehicle (like ICV or APC) and is designed to destroy stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), as well as pinpoint targets such as weapon emplacements, light-armoured objects and helicopters.



-  Maximum firing range, m:
5 000
-  Flight time at maximum range, s:
23
-  Missile caliber, mm:
130
-  Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

Main Specifications:

Warhead:	
- tandem hollow-charge, armour penetration behind ERA, mm	not less than 800
- high-explosive fragmentation with EFP, armour penetration, mm	not less than 60
Weight, kg:	
- missile in container	29,5
- guidance device	14,6

BAR'ER-V




HELICOPTER ANTITANK MISSILE SYSTEM



“BAR'ER-V” helicopter antitank missile system is intended for modernization of Mi-24 helicopters, consists of an antitank guided missile in transport and launching container, laser control channel in optical and aiming station. The system is designed to destroy stationary and moving modern armored targets with combined, carried or monolithic armor, including ERA (explosive reactive armor) as well as pinpoint targets such as weapon emplacements, atank in a trench, light-armoured objects and helicopters.

Main Specifications:

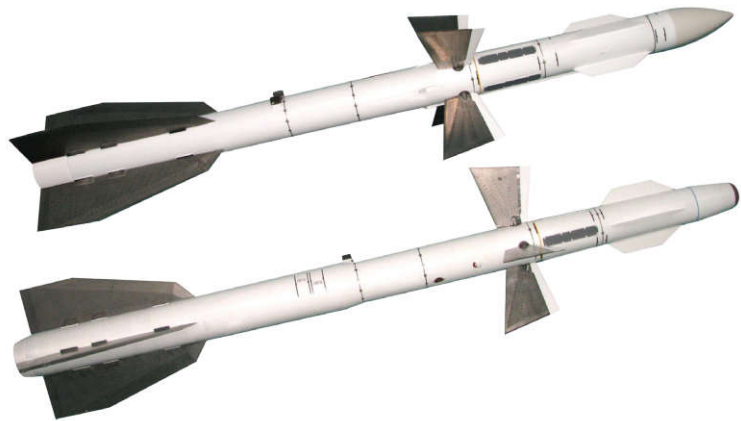
Weight of missile in container, kg	47
Armour penetration behind ERA, mm	not less than 800
Container length, mm	1917
Container outer diameter, mm	140

-  Maximum firing range, m:
7 500
-  Missile caliber, mm:
130
-  Guidance system:
**BY LASER BEAM WITH
TARGET TRACKING IN
AUTOMATIC MODE**

R-27

AIR-TO-AIR MISSILES

The R-27 is a medium range, guided air-to-air missile. It is designed to intercept and destroy hostile piloted aircraft, drone targets and cruise missiles in long-range and closein manoeuvrable air fight. It features a three-modular construction that incorporates the equipment and guidance section with a homing head, warhead, solid-propellant rocket motor and three hardpoints. It is compatible with the MiG and Su aircraft weapon systems.



Main Specifications:

Type of missile	R-27ER1	R-27R1	R-27ET1	R-27T1	R-27EP1	R-27P1
Launch weight, kg	350	253	343	245	346	248
Launch altitude, km	to 27	to 25	to 27	to 25	to 20	to 20
Maximum launch range, km head-on aspect / tail aspect	93 / 26	60 / 18	84 / 20	50 / 15	110 / -	78 / -
Guidance	Semi-active radar seeker with command updates		IR seeker		Passive guidance on radar and jammer	

GUIDED MORTAR ARMAMENT SYSTEM



Main Specifications:

Guidance system (on the end of trajectory)	laser semiautomatic homing
Warhead:	
■ type	high-explosive fragmentation
Target hit probability	0,75-0,80
Operating temperature range	from -40 to +60 °C

Guided mortar armament system is designed to destroy modern armoured and unarmoured, moving and stationary equipment as well as pinpoint engineering constructions.

The system includes:

- 120-mm high-precision guided mine;
- laser target designator range-finder;
- shot synchronization system;
- installable device that provides initial data input into the guided mine control system;
- radio stations that ensure digital and voice communication.

 Maximum firing range:
7500 m

 Weight of missile in container:
28,7 kg

 Guided mine calibre:
120 mm

 Container length:
1490 mm

KVITNYK-E

GUIDED ARTILLERY PROJECTILE WITH LASER SEMI-ACTIVE
HOMING GUIDANCE

"Kvitnyk-E" is intended for effective defeating of:

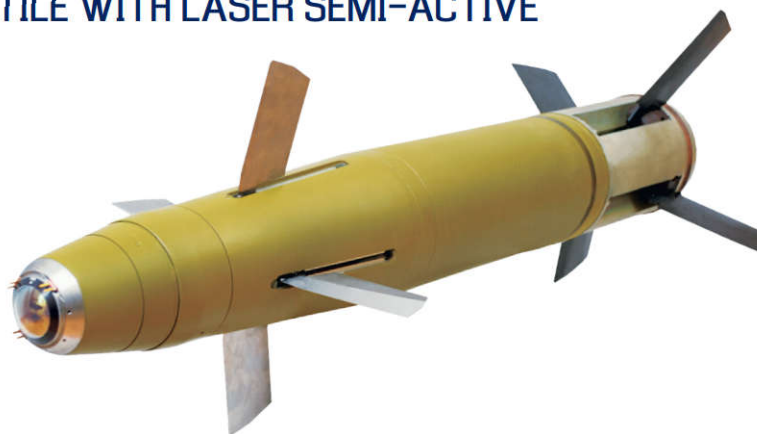
- tanks;
- IFVs;
- armored vehicles;
- multiple rocket launchers;
- self-propelled artillery systems;
- artillery pieces, both on the move and stationary, located in the open or in pits;
- command, control, communications centers;
- bridges, crossings, defensive fortifications.

Maximal range of shooting, km:
UP TO 20

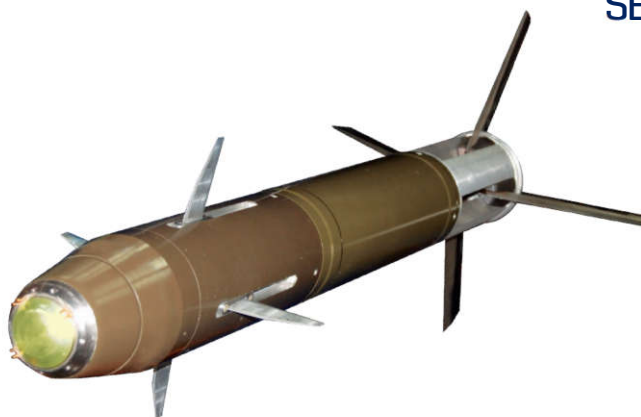
Explosive weight, kg:
8

Caliber, mm:
152/155

Projectile weight, kg:
50



KARASUK

GUIDED ARTILLERY PROJECTILES WITH LASER
SEMI-ACTIVE SELFGUIDANSE TYPE

"Karasuk" provides an effective defeat of tanks; Armored infantry vehicles; Armored vehicles; Missile launchers; Self-propelled artillery systems; Artillery pieces, stationary and moving, located openly or in shelters; Command, control centers, communications, computer and intelligence centers; Bridges, crossings, defensive fortifications; Surface targets (combat, landing or transport vessels), etc. With a high probability of hitting with one shot.

Range of fire, km:
before 12

Weight of explosive, kg:
not less than 5

Caliber, mm:
122

Projectile weight, kg:
not more than 28

STUGNA

ROUND COMPRISING ANTITANK GUIDED MISSILE

Round Comprising Antitank Guided Missile is intended to destroy, while firing from the tank T-55 or antitank artillery gun MT-12, stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), as well as against pinpoint targets like weapon emplacements, tank in a trench, light-armoured objects and helicopters.



Maximum firing range, m:
5 000

Flight time at maximum range, s:
16.8

Missile caliber, mm:
100

Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

Main Specifications:

Warhead:	
- type	tandem hollow-charge
- armour penetration behind ERA, mm	not less than 550
Round length, mm	1 196
Round weight, kg	not more than 24.5

KOMBAT

ROUND COMPRISING ANTITANK GUIDED MISSILE



Round Comprising Antitank Guided Missile is intended for firing from tanks T-80UD, T-84, T-72, upgraded T-64 against stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), and also against pinpoint targets like weapon emplacements, tank in a trench, light-armoured objects and helicopters.

Main Specifications:

Warhead:	
- type	tandem hollow-charge
- armour penetration behind ERA, mm	not less than 750
Main part length, mm	675
Tail part length	408
Round weight, kg	not more than 30.45

Maximum firing range, m:
5 000

Missile caliber, mm:
125

Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

GUIDED MISSILES

KONUS

ROUND COMPRISING ANTITANK GUIDED MISSILE

Round comprising antitank guided missile is intended for firing from tanks T-84-120, T-72-120, against stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), and also against pinpoint targets like weapon emplacements, a tank in a trench, light-armoured objects and helicopters.



Maximum firing range, m:
5 000



Missile caliber, mm:
120



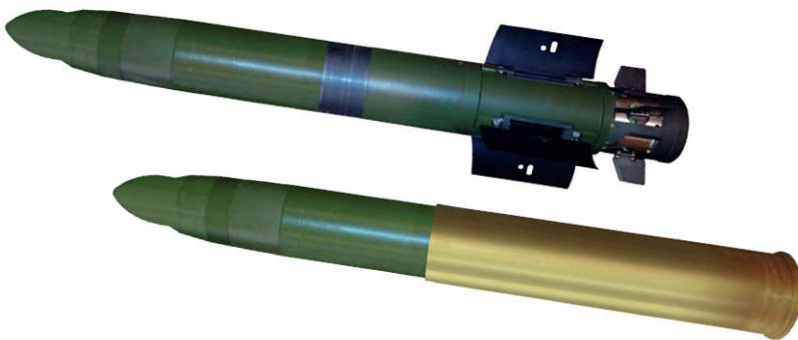
Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

Main Specifications:

Warhead:	
- type	tandem hollow-charge
- armour penetration behind ERA, mm	not less than 700
Round length, mm	1 074
Round weight, kg	28

FALARICK 90

ROUND COMPRISING ANTITANK GUIDED MISSILE



Round Comprising Antitank Guided Missile is intended for firing from the LCTS90 weapon system gun against stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), and also against pinpoint targets like weapon emplacements, tank in a trench, light-armoured targets and helicopters.



Maximum firing range, m:
4 000



Caliber, mm:
90



Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

Main Specifications:




Warhead	tandem hollow-charge
Armour penetration behind ERA, mm	not less than 550
Round length, mm	977
Round weight, kg	20

FALARICK 105

ROUND COMPRISING ANTITANK GUIDED MISSILE

Round Comprising Antitank Guided Missile is intended for firing from the CT-CVTM weapon system gun against stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), and also against pinpoint targets like weapon emplacements, tank in a trench, light-armoured targets and helicopters.



-  Maximum firing range, m
5 000
-  Caliber, mm:
105
-  Guidance system:
**SEMI-AUTOMATIC
BY LASER BEAM**

Main Specifications:

Warhead	tandem hollow-charge
Armour penetration behind ERA, mm	not less than 550
Round length, mm	1015
Round weight, kg	24



A3-100, A3-200

FOR PORTABLE AIR DEFENSE MISSILE SYSTEMS

Field of application: A3-100, A3-200 optical seekers are intended for usage in new PADMS and also in earlier made ones. Features:

- High-sensitive IR detectors.
- Noise selectors availability.
- Shaping of control signals for missile initial turn at its trajectory and for missile aiming point shifting to target vulnerable area.
- Digital processing of data signals (A3-200).

Main Specifications:


Characteristics: / Model:	A3-100	A3-200
Target types	Aircraft, helicopters, cruise missiles, UAVs	Aircraft, helicopters, cruise missiles, UAVs
Guidance	Proportional navigation	Proportional navigation
Working IR range	IR medium-wave	IR medium-wave, two-spectral
Aspect	All-aspect	All-aspect
Noise protection availability	Kinematic and amplitude selectors	Reprogrammable algorithms with extended selection logic
Action range (forward hemisphere): - aircraft	Up to 5...7 km	Up to 7...8 km
- helicopter	Up to 3.5 km	Up to 5 km
Autotracking angular velocity	Not less than 14 deg./sec.	Not less than 18 deg./sec.
Field of regard	±40°	±40°
Readiness time	<5 sec	< 5 sec
Caliber	70 mm	70 mm
Length	210 mm	190 mm
Mass	0.9 kg	1.1 kg

RS-80KO

UNGUIDED ROCKET WEAPON

Air-launched unguided rocket weapon RS-80KO with shapedcharge/ fragmentation warhead. It is intended to hit modern tanks, light-armored and armored military equipment and manpower.



-  Launch range, m:
1300 - 1400
-  Rocket speed, m/s:
450
-  Caliber, mm:
80
-  Armor penetration, mm:
400

Main Specifications:

Length, mm	1600
Rocket weight, kg	13
Warhead weight, kg	5
Weight of explosive, kg	1.0

CORRECTED AIR BOMB



The bomb is designed for destruction of the ground-based targets like railway bridges, concrete constructions, runways, radar stations, positions of operative and tactical missiles, antiaircraft missile systems as well as water-surface targets during the carrier's level flight, diving and pitch-up. It is equipped with a television seeker which ensures the targets locking-on under the aircraft and automatic target seeking in autonomous flight.

Main Specifications:

Operational range:	
- from the altitude of 0,5 km	up to 8 km
- from the altitude of 5 km	up to 20 km
Warhead type	high-explosive
Type of suspension	AKU-58

-  Diameter, mm:
400
-  Weight, kg:
850
-  Warhead weight, kg:
650

ZRN-01 MISSILE SYSTEM


The system is designed to protect military facilities and concentration of forces from unmanned aerial vehicles and to assist the Land Forces in:


- Detection and destruction of ground targets such as: infantry, light armored vehicles, command posts, fuel and ammunition depots,
- Detection and destruction of helicopters and light flying targets with low effective dispersion surface – mainly unmanned aerial vehicles.

Main Specifications:

operational range horizontal	7 000 m
operational range vertical	4 000 m
firing angle horizontal	360 °
firing angle vertical	-10° to + 80°
minimum guidance speed azimuth	1 mrad/s
minimum guidance speed elevation	1 mrad/s
maximum guidance speed azimuth	0.7 rad/s
maximum guidance speed elevation	0.7 rad/s
maximum angular acceleration azimuth	1 rad/s ²
maximum angular acceleration elevation	1 rad/s ²
guidance accuracy	1 mrad



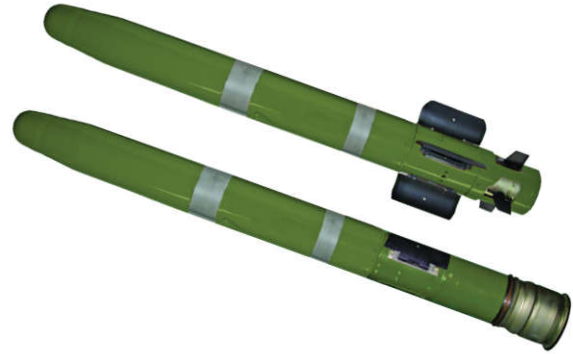
- 
Detection, Tracking and Targeting System
 - Radar detecting targets with low effective dispersion surface of a distance up to 6 km integrated with the surveillance and aiming payload GS400
 - Dual sensor surveillance and aiming payload GS400, which incorporates daylight and infrared cameras as well as a laser range finder

- 
Fire Control System
 - Fire Control System TOPAZ – build in inertial navigation with function of missiles heads programming

- 
Communication System
 - Digital Internal Communications System FONET
 - RADMOR COMP@N H08 radio with vehicle amplifier

ROUND COMPRISING ANTITANK GUIDED MISSILE FOR BMP-3

Round comprising antitank guided missile is designed for firing from the armoured vehicle BMP-3 against stationary and moving modern armoured targets with combined, carried or monolithic armour, including ERA (explosive reactive armour), and also against pinpoint targets like permanent fire positions, a tank in a trench, light-armoured objects and helicopters.



- Maximum firing range:
5500 m
- Flight time at maximum range:
not more than 20 s
- Round weight:
21,6 kg
- Missile calibre:
100 mm
- Round length:
1180 mm

Main Specifications:

Guidance system	semiautomatic by laser beam
Warhead:	
■ type	tandem hollow-charge
■ armour penetration behind ERA	not less than 550 mm
Operating temperature range	from -40 to +60 °C

SURFACE TO AIR GUIDED MISSILE



Surface to air guided missile (SAGM) is designed to destroy with high-explosive blast fragmentation manned and unmanned means of air attack that are flying at both subsonic and supersonic speeds on the head-on and pursuit courses. SAGM defeats targets at day-and-night time, under any aspect angle at front and aft hemisphere of a target, under ordinary and adverse weather conditions, under informational and manoeuvrable enemy's counteractions.

Main Specifications:

Impact area:	
■ by range, km	1,5 – 20,0 km
■ by altitude	0,025 – 10,000 km
Guidance system	radio command
SAGM maximum speed	850 m/s
SAGM maximum normal overload	25 g
SAGM launching mass	140 kg

- Weight SAGM with transport and launching container:
180 kg
- Weight warhead:
18 kg
- SAGM calibre:
130/260 mm
- Length SAGM:
3160 mm
- Length transport and launching container:
3235 mm

30MM BARREL OF KBA-2 AUTOMATIC CANNON

Designed to be used as a part of KBA-2, 2A72, ZTM-1, to equip combat moduls "Shkval", "Shturm", "Parus", which are to be mounted on armored vehicles.



	Caliber: 30 mm
	Length: 2413 mm
	Weight: 36 kg

Main Specifications:

Number of rifles	16
Pitch of rifling	715.5 mm
Barrel life	6000 shots

82 MM CALIBER MORTARS KBA48M (KBA48M1)



Designed to defeat manpower and enemy's facilities, especially those located outside the shelter: in trenches, gullies and at reverse hill slopes, to destroy fortifications. It is used in quick-reaction special units and infantry units of Land Forces.

Main Specifications:

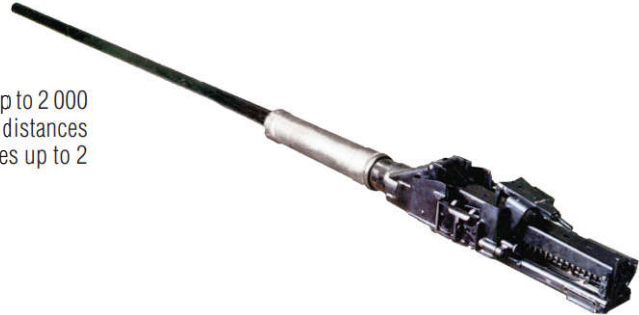
Rate of fire	10-15 shots/min
Firing range	100-4000 m
Gradient	45-85 degree
Crew	3 pers.

	Caliber: 82 mm
	Weight KBA48M: 51 kg
	Weight KBA48M1: 46 kg

ZTM-1

AUTOMATIC MACHINE GUN

It is designed for fighting against light armored targets at distance up to 2 000 m, ATMS mounts, non-armored means and enemy's manpower at distances up to 4 000 m, as well as against air low-flying targets with altitudes up to 2 000 m. Gun firing may be realized both single shoots and bursts.



-  Calibre:
30 mm
-  Number of rifles:
16
-  Rifle step:
715,5 (± 20) mm
-  Projectile muzzle velocity:
960 (+30/-10) m/sec
-  Gun weight:
not more than 86 kg
-  Barrel weight:
not more than 37 kg
-  Gun length:
not more than 3006 mm

Main Specifications:

Firing rate	not less than 330 rounds/min
Return intensification	not more than 60 (6000) kN (kgs)
Voltage supply of electro-startup from source of direct current	27 (+2, -5) W
Electro-startup input current	not more than 14,2 A
Gun feed	two belted
Reloading	manual or electromechanical
Warranty operating life	6000 shots

ZTM-2

AUTOMATIC MACHINE GUN

It is designed for fighting against light armored targets at distance up to 1 500 m, ATMS mounts, non-armored means and enemy's manpower at distances up to 4 000 m, as well as against air low-flying targets with altitudes up to 2 000 m. Gun firing may be realized both single shoots and bursts.



Main Specifications:

Firing rate	not less than 330 rounds/min
■ big	not less than 550 rounds/min
■ small	200 – 330 rounds/min
Return intensification	40-50 (4000-5000) kN (kgs)
Voltage supply of electro-startup from source of direct current	27 (+2, -5) W
Electro-startup input current	not more than 14,2 A
Gun feed	two belted
Warranty operating life	6000 shots

-  Calibre:
30 mm
-  Number of rifles:
16
-  Rifle step:
715,5 (± 20) mm
-  Projectile muzzle velocity:
960 (+30/-10) m/sec
-  Gun weight:
not more than 115 kg
-  Barrel weight:
not more than 38,5 kg
-  Gun length:
not more than 3027 mm

BARRELS

BARRELS OF AUTOMATIC GUN



Main Specifications:

BARRELS	KBA-02-01 for 30 mm automatic guns 2A72, ZTM1	KBA.113 for 30 mm automatic guns 2A42, ZTM2	23 mm barrel KBA40 for Zu-23-2
Caliber, mm	30	30	23
Number of rifles	16	16	10
Step of rifling, mm	715,5	715,5	690-1150
Length, mm	2413	2416	2045
Weight, kg	36	38	25,8

L-30, L-30-1







LINK



They are designed for formation of a cartridge belt, fill in it of cartridges of calibre 30 mm and used in the guns ZTM1, ZTM2, 2A42, 2A72.

Main Specifications:

Warhead	tandem hollow-charge
Armour penetration behind ERA, mm	not less than 550
Round length, mm	1015
Round weight, kg	24

-  Dimensions, mm, no more: **121X63X38**
-  Covering L-30: **ENAMEL**
-  Covering L-30-1: **PHOSPHATE AND VARNISH**
-  Weight, kg, no more: **0,130**
-  Effort of cave-in of a cartridge in a link, kgs: **80**
-  Warranty operating time: **12**

MORTARS

MOBILE MORTAR COMPLEX

Mobile Mortar Complex (hereinafter – MMK) is designed to support the actions of mechanized (mobile, mountain infantry) battalion-level units (company, platoon) in course of combat with mobile terroristic units and subversive and reconnaissance groups of regular forces in conditions of lack of roads, hard-to-reach regions, open territory.



Main Specifications:

Crew	3
Deployment time	35 s
Time of folding down	25 s
Re-aiming time after fire, not above	8 s
Maximum range of fire	7200 m
Fire speed	12 rounds per minute
Ammunition capacity	60 mines
Horizontal aiming angles	-60° to +60°
Vertical aiming angles	+45° to +80°



- Aiming system of one mortar - GIS (Geographic Information System)
- Topographic referencing - Automatic, GPS







M120-15

MORTAR

Mortar M120-15 is a smoothbore rigid system, charging is carried out from muzzle. The fuse from double charging and rear sight MPM-44M are installed on the muzzle part. Assignment: for defeating of enemy troops and destroying fortifications by plunging fire.



-  Range of fire, m:
7100
-  Rate of fire, shot / min:
12
-  Caliber, mm:
120
-  Weight in firing position, kg:
230

Main Specifications:

Elevation angles, degrees	45-85
Crew, persons	5
Wearable ammunition, rounds	48
Horizontal firing angles without bipod reinstalling, degrees	+/- 5




KBA48M1

82-MM MORTAR

Mortar is intended to defeat enemy's manpower and battle weapon, located behind covers, in trenches, ravines and reverse sides of hills, to destroy fortifications.

Main Specifications:

Elevation angles, degrees	45-85
Crew, persons	3
Wearable ammunition, rounds	18
Horizontal firing angles without bipod reinstalling, degrees	+/- 4

-  Range of fire, m:
100 - 4000
-  Rate of fire, shot / min:
10 - 15
-  Caliber, mm:
82
-  Weight in firing position, kg:
48.6

KBA.118

60-MM MORTAR

Mortar is intended to defeat enemy's manpower and weapon, located behind covers, in trenches, ravines and reverse sides of hills. It can be used for rapid deployment forces for special operations.

-  Maximum range of fire, m:
1 430
-  Rate of fire, shot / min:
15 - 20
-  Caliber, mm:
60
-  Weight in firing position, kg:
12.9



Main Specifications:

Elevation angles, degrees	45-85
Muzzle velocity, m/s	148
Horizontal firing angles without bipod reinstalling, degrees	7



Main Specifications:

Elevation angles, degrees	45-85
Muzzle velocity, m/s	244
Horizontal firing angles without bipod reinstalling, degrees	+/- 4

KBA.138

MORTAR


Mortar KBA.138 is intended to defeat enemy's manpower and battle weapon, located behind covers, in trenches, ravines and reverse sides of hills. It can be used for rapid deployment forces for special operations.

-  Maximum range of fire, m:
3 500
-  Rate of fire, shot / min:
15 - 20
-  Caliber, mm:
60
-  Weight in firing position, kg:
23

M60-16

MORTAR

Assignment: for arming the air assault infantry brigades and special operations teams.
Represents smooth-bore system of recharge is carried out from a barrel. The safety lock from double loading and the sight MPM 44M are established on a barrel.

-  Range of fire, m:
3500
-  Rate of fire, shot / min:
25
-  Caliber, mm:
60
-  Weight in firing position, kg:
23



Main Specifications:




Elevation angles, degrees	40-85
Crew, persons	3
Wearable ammunition, rounds	20
Horizontal firing angles without bipod reinstalling, degrees	+/- 4

M60

MORTAR

Represents smooth-bore system of recharge is carried out from a barrel. On the barrel the electronic scope is mounted which shows the distance to the target, slope angle and wind correction.



-  Firing range, m:
1 000
-  Rate of fire, shot / min:
25
-  Caliber, mm:
60
-  Weight in firing position, kg:
8

GRENADE LAUNCHERS

INGUL

PORTABLE ROCKET GRENADE LAUNCHER

Portable rocket grenade launcher is designed to destroy lightly-armored and unarmored equipment (launchers, radar, parked aircrafts, cars etc.), field-type constructions (permanent fire positions, earth-and-timber emplacements), as well as personnel located outdoor, in shelters, in stone, brick or concrete buildings and constructions.



-  Maximum firing range, m:
800
-  Minimum range of fire, m:
70
-  Sight distance, m:
UP TO 500

Main Specifications:

Warhead high-explosive fragmentation, armor penetration, mm	50
Warhead high-explosive fragmentation, number of fragments of less than 2 g weight, pcs.	250
Warhead thermobaric, overpressure in shock front at 10 m distance from the initiation point, kPA (kgf/cm ²)	20 (0.2)
Weight, kg, launcher with sight	8.2
Weight, kg, grenades in container	11.4

RPG M7





MAN PORTABLE ANTITANK GRENADE LAUNCHER



Assignment: fighting against enemy armored vehicle at average and near distance.

Main Specifications:

Weight of grenades, kg	2-4.5
Crew, persons	2
Wearable ammunition, rounds	5
Barrel length, mm	950
Barrel weight, kg	6.3





-  Firing range, m:
550
-  Caliber, mm:
40
-  Rate of fire, shot/min:
4 - 6
-  Weight in firing position, kg:
10

KBA.117

AUTOMATIC GRENADE LAUNCHER

Is designed to defeat enemy's manpower and fire weapons, located in the open terrain or entrenched. KBA.117 is used in a combat module, mounted on lightly armoured vehicles (ICVs, APCs, etc.).



-  Maximum firing range, m
1 700
-  Rate of fire, shots/min, not less than:
400
-  Caliber, mm:
30
-  Maximum ordinate of a trajectory, m:
905

Main Specifications:

Length, mm	840
Grenade muzzle velocity, m/s	185
Weight without ammunition box, kg	18
Weight of ammunition box with 29 grenades, kg	14.5

40MM UNDERBARREL GRENADE LAUNCHER



This 40mm Underbarrel Grenade Launcher is a soldier's individual antipersonnel weapon intended to destroy the enemy's manpower in open terrain, entrenchments, foxholes, or on hill back slopes. Underbarrel grenade launcher is used as part of 5.45/7.62 mm Kalashnikov assault rifle (of AKM, AKMC, AK-74, AKC-74 model) or independently with using a telescopic butt-stock. This Grenade Launcher is able to fire БОГ- 25/БОГ-25П grenades.

Main Specifications:

Main bore length	100 mm
Barrel rifling	12-groove
Overall length	280 mm
Weight, kg	1.55

-  Effective firing range, m
100 - 400
-  Rate of fire, shots/min:
5-6
-  Caliber, mm:
40

RIFLES

M4 WAC-47

AUTOMATIC RIFLE

The WAC-47 is a variant of the M4 assault rifle has been designed to replace Soviet-designed 5.45/7.62mm AK weapons in Ukrainian service. The WAC-47 is a modular assault rifle in 5.56mm calibre and can quick conversions to 7.62mmx39. Additionally, it is possible to adapt to the latest types of ammunition: .458 SOCOM or 6.8 mm Remington Special Purpose Cartridges.



Total length, mm:
940



Length of barrel, mm:
400



Caliber/grenade launcher:
7,62X39 / 40



Sighting range, m:
800



Initial speed of the bullet, m/s:
715



Effective fire range, m:
400



Gun capacity:
30



Weight, kg:
3,4



Speed of fire, shoot/min:
850



The WAC-47 main peculiarity is modularity, allowing to create various versions that best meet the needs of the soldiers. This allows switching calibers, increasing or reducing the length of the barrel, changing units of the weapon, from rifle butt and hilt up to the firing mechanism. The new rifle can be used as sniper rifle for infantry, equipped with a longer barrel and optical sight.







MALYUK

AUTOMATIC RIFLE

The Malyuk rifle has a bullpup design. The weapon features three Picatinny-style rails for mounting a different variety of optical and mechanical devices. A quickdetachable suppressor is also available. The magazine is mounted within a dedicated shaft. The barrel is cooled by air convection, resulting in a longer barrel life, which is twice that of Kalashnikov rifle. The Malyuk automatic rifle is designed to be ambidextrous for both right-hand and left-hand shooters.



-  Mass without magazine, kg:
3.2
-  Full length of the rifle, mm:
710
-  Caliber of cartridge used:
5.45/7.62x39, 5.56x45
-  Rate of fire, rds/min:
660

Main Specifications:

Length of the barrel, mm	415
Muzzle velocity, m/s	900/715/940
Effective range of fire, m	500
Magazine capacity, rounds	30/45







KM-7.62

INFANTRY GUN

KM-7.62 machine gun is designed to defeat enemy personnel and technical resources, as well as to engage aerial targets. Assignment: equipment of military units, for special forces units to maintain the military operations.

Main Specifications:

Muzzle velocity, m/s	825
Rifling	4 right-handed
Length, mm	1173
Mounting weight, kg	4,5

-  Bullets:
7,62X54
-  Rate of fire, rds/min:
650
-  Accuracy range, m:
1 500
-  Gun weight, kg:
9

MACHINE GUNS

KT-7.62

TANK MACHINE GUN

Assignment: mounting on the armor object as the additional tank armament, on the aircraft and other military vehicles.



-  Bullets: **7.62x54**
-  Rate of fire, rds./min.: **800**
-  Firing range, m: **2 000**
-  Weight with empty magazine , kg: **10.5**

Main Specifications:

Muzzle velocity	855 m/s
Lenght	1098 mm
Barrel length	722 mm
Rifling	4 grooves (right - handed)



KTM-7.62

MODERNIZED TANK GUN

Modernized tank gun – KTM-7.62 with Picatinny rail. Trigger switch and mechanical sight are mounted instead of electric trigger.

Assignment: is mounted on the armor objects as the additional tank armament, on the aircraft and other military technic.

Main Specifications:

Muzzle velocity	855 m/s
Lenght	1098 mm
Barrel length	722 mm
Rifling	4 grooves (right - handed)





-  Bullets: **7.62x54**
-  Rate of fire, rds./min.: **800**
-  Accuracy range, m: **2 000**
-  Weight with empty magazine , kg: **10.5**

DShK-M

UPGRADED MACHINE GUN

The machine gun is intended for employment against aerial and ground-based targets. The machine gun is fed with ammunition by means of a belt loaded with 50 cartridges. The cartridge belts are placed into boxes. The live cartridges for firing from the DShK-M machine gun are used with a B-32 armour-piercing incendiary bullet, as well as with a BZT armor-piercing incendiary traicing armour-piercing bullet.



-  Caliber, mm:
12.7
-  Rate of fire, rds/min:
550
-  Sight range of firing by means of a K10-T, m:
3 500
-  Weight, kg:
35.7

Main Specifications:

Length, mm	1 588
Feeding	belt for 50 cartridges
Cartridge	12.7x107
Barrel length, mm	1 070

MACHINE FOR FILLING CARTRIDGE BELTS









The machine for filling cartridge belts machine gun 7.62 mm, 12.7 mm, the ANC, NSV caliber guns and 23 mm and 30 mm.

K-12.7, KT-12.7 MACHINE GUN

It is designed for fighting against light armored targets at distance up to 800 m, enemy's manpower, firing means and low-flying targets at ranges up to 1 500 m.



-  Calibre:
12,7 mm
-  Fire rate:
700-800 rds/min
-  K-12, 7 Machine gun length:
not more than 1560 mm
-  KT-12, 7 Machine gun length:
not more than 1607 mm
-  K-12, 7 Machine gun weight:
not more than 25 kg
-  KT-12, 7 Machine gun weight:
not more than 26,8 kg

Main Specifications:

Combat firing rate	not more than 80-100 rds/min
Bullets used in cartridges	B-32, BZT-44 MDZ
Number of cartridges	250 cartridges
Bullet muzzle velocity	855 m/sec
Sighting range	2000 m
B-32 bullet maximum range	6000 m
Supply voltage from constant-current source	27 (+3, -5) W
Consumed voltage	not more than 5,7 A
Warranty operating life	10000 shoots

GR-1 GRENADE LAUNCHER



Designed to defeat unprotected enemy's manpower, located on open terrain, behind reverse hill slopes and other similar obstructions, by high-angle and low-angle fire. Highly effective against large-area unprotected targets and concentrated manpower. Mounted on modern combat vehicles and remote weapon stations (RWS), e.g. BMP-1M, BTR-3E1, BTR-4, 'KBA-105TB'1 RWS.

Main Specifications:






Effective range of fire	1,700 m
Weight without cartridge belt	18 kg
Cartridges	VOG-17, VOG -17A
Effective casualty radius	not less than 7 m

-  Caliber:
30 mm
-  Maximal rate of fire:
400 rounds/min
-  Weight of the fully loaded cartridge belt:
14.5 kg

UAG – 40 AUTOMATIC GRENADE LAUNCHER

Automatic grenade launcher with 40 mm bore shoots for the distance of over 2200 meters. It is intended for firing in enemy's infantry, light-armored vehicles and protected shelters.



-  Calibre:
40 mm
-  Fire rate:
370-400 shot/min
-  Length:
960 mm
-  Height:
210 mm
-  Weight (without grenade):
17 kg

Main Specifications:

Grenade launching speed	242+-6 m/sec
The maximum shooting range	2200 m
The maximum rifle range	1500 m
Weight with tripod	33 kg

SGM-12.7

LARGE CALIBER SNIPER RIFLE

Assignment: arming of snipers for defeating manpower and lightly armored vehicles. The design of the rifle allows the installation of all types of sighting devices day and night vision, regardless of country of origin, as well as installation of various muzzle devices (muzzle brake compensator, devices reduce the sound level).



-  Caliber: **12.7X108**
-  Firing range, m: **2 000**
-  Aiming range, m: **1 500**
-  Weight with empty magazine, kg: **12**

Main Specifications:

Length, mm	1550
Barrel length, mm	1000
Magazine capacity, cartridges	5

HOPAK





MODERNIZATION OF AKM TACTICAL AND PORTABLE RIFLE



"Hopak" rifle is designed on the basis of the AKM. "Hopak" rifle is designed to conduct hidden aimed fire in urban settings. There are various modifications according to the tactical tasks. If necessary, it can be equipped with special silencer.

Main Specifications:

Length with suppressor, mm	870
Length without suppressor, mm	720

-  Caliber: **7.62-39**
-  Rate of fire, rds/min: **30**
-  Firing range, m: **1 000**
-  Weight, kg: **4.7**

RIFLES

UBR-008

7,62MM SNIPER RIFLE UBR-008

The 7,62mm sniper rifle UBR-008 is excellent bolt-action rifle designed and producing by military industrial complex of Ukraine. The UBR-008 sniper rifle competes with top world sniper rifles in short action group of calibers. Original design gives less weight, higher durability and simple maintenance. Long upper rail allows use of various long range sights and night clip on sights. Sniper rifle is hand-built for greater long range accuracy.



Cartridges:
7,62x51 mm



Length:
approx. 1,07 m



Weight:
4,6 kg



Muzzle velocity:
Depending on ammunition



Rate of fire:
Depending on ammunition



Firing range:
Depending on ammunition

Main Specifications:

Caliber	7,62x51 mm
Operating principle	Bolt - action
Magazine capacity	10 - 20 rounds
Modes of fire	0 - 1
Open sight	At the customer's request
Optic (advisable in most cases)	Nightforce NXS
Buttstock	Fixed with adjustable cheek rest that remains in position independent from horizontal stock position, buttstock with
Length, min/max	approx./1,07 m
Width	approx./0,086 m
Height	approx./0,186 m
Barrel length	20-26"
Sight radius	500 mm
Weapon	4,6 kg (with barrel length 22»)*
Magazine	MAGPUL (308) 10 rounds - 0,11 kg MAGPUL (308) 20 rounds - 0,16 kg
Warranted accuracy with 10 rounds accuracy ammunition	≤0,5 MOA
Colour scheme	Black/RAL800/Coyote brown/Olive green
Suppressor	Available

* Weight of weapon without riflescope, bipods, magazines, muzzle brake, slings, tare and soft bags.









UAR-10

7,62MM SNIPER RIFLE UAR-10

The 7,62mm semiautomatic sniper rifle UAR-10 is the weapon used by operators in the designated marksman role. Produced in light (patrol) and standard modifications. Durability, outstanding performance, high quality and affordable price makes this marksman rifle number one choice between customers.



-  Cartridges:
7,62x51 mm
-  Length:
approx. 1,0 m
-  Weight:
4,6 kg
-  Muzzle velocity:
Depending on ammunition
-  Rate of fire:
Depending on ammunition
-  Firing range:
Depending on ammunition

Main Specifications:

Caliber	7,62x51 mm
Operating principle	Gas-operated
Magazine capacity	10 - 20 rounds
Modes of fire	0 - 1
Open sight	At the customer's request
Optic (advisable in most cases)	Leupold Mark 4
Buttstock	Fixed with adjustable cheek rest that remains in position independent from horizontal stock position, buttstock
Length, min/max	approx./1,0 m
Width	approx./0,071 m
Height	approx./0,186 m
Barrel length	20-26"
Sight radius	500 mm
Weapon	4,6 kg (with barrel length 22»)*
Magazine	MAGPUL (308) 10 rounds - 0,11 kg MAGPUL (308) 20 rounds - 0,16 kg
Warranted accuracy with 10 rounds accuracy ammunition	≤1,0 MOA
Colour scheme	Black/RAL800/Coyote brown/Olive green
Suppressor	Available
Patrol variant	Available

* Weight of weapon without riflescope, bipods, magazines, muzzle brake, slings, tare and soft bags.



RIFLES







UAR-15

5,56MM AUTOMATIC RIFLE UAR-15

5,56mm automatic rifle UAR-15 is an Ukrainian 12,5"-16" version of American rifles AR-15/M16 for Military, Border Guards and Law Enforcement. Free float match barrel with chrome-plated channel and cartridge chamber, made of CrMo-steel 4140. Wide cartridge chamber and length of barrel throat enable to use cartridges with specifications of .223 Rem and 5,56x45 mm. Barrel receivers are made with the forge method, being subsequently processed at the CNC machines. Material: aircraft duralumin 7076-T6. Coating: black-coloured hard anode of black. The assault carbine utilizes low-profile steel gas unit mounted with coupling screws (not with pins, for which cavities must be made in the barrel). Fore grip is made out of light alloy, has an integrated Picatinny rail for 12 hours, with the possibility of installation of single or double additional rails for 3, 6 and 9 hours. The automatic rifle UAR-15 is stocked with a single-stage trigger and firing mechanism, rear two-sided swivel, buttstock tube and buttstock (military type), detachable collapsible sighting equipment and rubber-coated pistol grip.



Main Specifications:

	Cartridges: 5,56x45 mm (7,62x35 mm)
	Length: approx. 0,760/0,860 m
	Weight: 2.85 kg
	Muzzle velocity: Depending on ammunition
	Rate of fire: Depending on ammunition
	Firing range: Depending on ammunition





Caliber	5,56x45 mm (7,62x35 mm)
Operating principle	Gas-operated
Magazine capacity	30-60 rounds
Modes of fire	Safe - Semi automatic - Full automatic
Open sight	At the customer's request
Optic (advisable in most cases)	Aimpoint Micro T2
Buttstock	Telescopic, adjustable
Length, min/max	approx. /0,760/0,860 m
Width	approx./0,067 m
Height	approx. /0,181 m
Barrel length	12,5" -16"
Sight radius	430 mm
Weapon	2.85 kg (with barrel length 14,5")
Magazine	30 rounds plastic - 0,105 kg 30 rounds steel - 0,220 kg
Warranted accuracy with 10 rounds accuracy ammunition	≤2,0 MOA
Colour scheme	Black/RAL800/Coyote brown/Olive green
Suppressor	Available

AKMS SB

UPGRADING OF AKM ASSAULT RIFLE (WITH SIDE-FOLDING BUTSTOCK)

AKMS Sb assault rifle 7,62 x 39 is designed for regular military and special forces units.



-  Caliber, mm:
7,62x39
-  Rate of fire, rds/min:
600
-  Firing range, m:
1 000
-  Weight, kg:
4.3

Main Specifications:

Length, mm	870
Muzzle velocity, m/s	715

AKMS SN





UPGRADING OF AKM ASSAULT RIFLE (WITH DOWN-FOLDING BUTSTOCK)

AKMS Sn assault rifle 7,62 x 39 is designed for regular military and special forces units.



Main Specifications:





Length, mm	870
Muzzle velocity, m/s	715

-  Caliber, mm:
7,62x39
-  Rate of fire, rds/min:
600
-  Firing range, m:
1 000
-  Weight, kg:
4.3

“FORT-600”

GRENADE LAUNCHER

Grenade launcher “Fort-600” is designed for shooting by ball grenades (low velocity high explosive, high explosive, hollow charge grenade or other) with goal to engage live targets and fire objects at a distance from 50 to 400 m.

-  Caliber: **40 mm**
-  Barrel length: **up to 280 mm**
-  Weight without grenade: **up to 2,8 kg**
-  Maximum firing range: **400 m**
-  Minimum firing range: **50 m**



Main Specifications:

Dimensions with butt-stock extended, mm (LxHxW)	670x196x54
Dimensions with butt-stock folded, mm (LxHxW)	365x196x89
Type of butt-stock	Telescoping side-folding with damper

“FORT-500MS”






PUMP ACTION SHOTGUN

“Fort-500MS” is the pump action smoothbore shotgun of 12/76 mm caliber with manual reloading. Shotgun is equipped with set of Picatinny rails for installing of tactical accessories and also to the barrel can be attached special devices for shooting gas grenades and lock breaking.



Main Specifications:



Magazine capacity	4 rds
Type of butt-stock	Telescoping

-  Caliber: **12/76 mm**
-  Barrel length: **up to 345 mm**
-  Weight with an empty magazine: **up to 4,1 kg**
-  Length with folded butt-stock: **878 mm**
-  Length with extended butt-stock: **780 mm**

“FORT-19”

PISTOL

“Fort-19” is modification of the pistol “Fort-14PP” of 9 mm Luger caliber. In design of this model widely were used highly durable polymers. As a result the weight of the pistol was decreased significantly without damage to the combat characteristics.

-  Caliber:
9 mm Luger
-  Overall length:
207 mm
-  Barrel length:
up to 112 mm
-  Weight with an empty magazine:
up to 0,82 kg
-  Accuracy range:
25 m



Main Specifications:

Operation mode	Short recoil system
Magazine capacity	16 rds
Practical rate of shooting/min	50
Rifling	6 grooves

“FORT-14PP”






TACTICAL COMPLEX

Tactical complex includes pistol “Fort-14PP”, device for lowering sound level of shot and tactical light “LT 6A”. Pistol “Fort-14PP” was designed for more powerful cartridge cal. 9 mm Luger. Pistol operation mode is short recoil system. “Fort-14PP” operates flawlessly in even the most adverse conditions.



Main Specifications:

Magazine capacity, rds	16 rds
Practical rate of shooting/min	50
Rifling	6 grooves

-  Caliber:
9 mm Luger
-  Overall length:
218 mm
-  Barrel length:
up to 116 mm
-  Weight with an empty magazine:
up to 0,95 kg
-  Accuracy range:
25 m

SEMIACTIVE HOMING
HEAD AND
AERODYNAMIC GUIDANCE

9B-1101K

INERTIAL SEMIACTIVE HOMING HEAD

It is the list of air-launched missile equipment for air-to-air type R27R1 and used as integrated ordnance packing for MIG-29, SU-27 aircrafts.



 Body diameter, mm:
219

 Length along of aerodynamic shroud nose, mm
1173

 Mass, kg (up to):
33.5

Functionality:

target lock-on at the altitude range 0,02-25 km with maximum exceeding (reducing) 10 km subject to target speed up to 3500 km/h and g factor 8

time of inertial targeting with radio correction under the maximum distance out of carrier up to 25 km – 30s

simultaneous two missiles launch at two targets

missile control in the inertial zone upon self-direction mode

operational readiness in 2 s elapsed since target lock-on by the control system of the carrier type MIG-29, SU-27

ADROS BAU-01KT

AERODYNAMIC GUIDANCE ASSEMBLY



It is dedicated to assure efficient bombing adjustment in order to hit the mark of the stationary, pinpoint and shield ground targets. It is in use of air bomb armament set for weapon yields 100, 250 and 500 kg.

Functionality:

Bombing can be made out of the Tactical Air Force aircrafts' external ejector racks

Adjusted bombing is provided by aerodynamic guidance assembly "ADROS" BAU-01KT installed into the main hub to the detonating fuze and to the ocean-bottom aviation impactdetonated fuze

Implementation of the aerodynamic guidance assembly "ADROS" BAU-01KT enhances hit the mark likelihood at 1,5 - 3 times with decreasing of aerial bomb outgoings at 6 - 30 times, depending on mark type

 Body diameter, mm:
200

 Length along of aerodynamic shroud nose, mm:
873

 Mass, kg:
35

0705

Function: Packaging radiolocation head, comprises a guided missile of class "surface-to-air" 9M317, according to the American terminology (NATO SA-N-12 Grizzly)



Main Specifications:

Material	sital AC-418
max., surface temperature	to 800 °C
diameter	340 mm
height	890 mm
weight	14,3 kg

470-1.0111-0



Function: Packaging radiolocation head, comprises a guided missile of class "air-to-air" P-27, according to the American terminology (NATO AA-10 Alamo)

Main Specifications:

Material	sital AC-418
max., surface temperature	to 800 °C
diameter	219 mm
height	486 mm
weight	4,45 kg

PГT-27C, PГT-27C2

HAND THERMOBARIC GRENADE

Hand thermobaric grenade intended for combined destruction of enemy personnel in shelters of different type, in open terrain and to incapacitate vehicles and lightly armored materiel.



Main Specifications:

Weight of the thermobaric mixture	300 g
Weight of the bursting charge	33 g
Height of fire cloud	2 m
Width of the fire cloud	2.8 m
Fire cloud period	4 s
Approximate temperature in the explosion zone	2500 – 3000 °C

EQUIPPING OF VARIOUS TYPES
OF AMMUNITION

Equipping of various types of ammunition for the Ministry of Defense and for export:





- Tandem warhead anti-tank guided rockets caliber 125, 130 mm ("Combat", RK-2S) by the unpressing briquettes of okfola in the body with a density of at least 1,74 g / cm³;
- Assembly of anti-tank guided rockets with tandem and high-explosive warheads parts FALARICK 90, FALARICK 105, "Combat", "Stugna", RK-2S, RK-20F;
- Assembly of R-27-air-to-air class guided aviation missiles.

0Φ29

HIGH EXPLOSIVE ARTILLERY SHELL

A new high explosive artillery shell is designed to destroy the living force, artillery and various enemy fire units, as well as to destroy the enemy's fortifications and objects. It is intended for firing from the most long-range artillery systems that are armed with the Ukrainian Army, namely, howitzers and self-propelled artillery units of the "Hyacinth" type. These characteristics enable the Ukrainian Army carry out fire missions at the distance up to 30 km.



-  Caliber, mm:
152
-  Shell length, mm:
724
-  Weight of explosive, kg:
6,4
-  Shell weight, kg:
46

Main Specifications:

Fuse	B-429
Damage zone radius, m	30
Temperature range of operation, °C	-50...+50
Quantity of items in the box, pcs	1



GD-1

SMOKE (AEROSOL) GRENADE

Smoke (aerosol) grenade GD-1 intended for rapid making aerosol curtain with the purpose of visual protection of armored technology and also protection of it in laser and IR ranges of waves lengths.

INITIATING MEANS FOR EXPLOSIVE CHARGES & AMMUNITION ELEMENTS

The main specialization of the State Enterprise "Shostka State Plant "Impulse" is the production of initiating means for explosive charges, pyrotechnics and ammunition elements, as well as supplies of initiating means for explosion to extractive enterprises for industrial explosive works. The management system is certified according to ISO 9001-2008. The main types of industrial products are certified according to European standards.



CM

SIGNAL MINE



Signal mine CM is designed for mining areas for the purpose of warning his troops about the appearance of the enemy in the area or obstacles on approaches to protected objects, providing opportunities unit performing their assigned tasks. Signal mine can also be used to simulate during military exercises.

TRINITROTOLUENE MILITARY

GOST: B 7059 (CORRESPONDS TO MIL-DTL-248D, TYPE 1)

Use: Flaked trinitrotoluene military is used for large size ammunition.
Packaging / Transportation: Polypropylene bags with polyethylene inserts of no more than 40 kg, cardboard boxes with polyethylene insert on a tray, corrugated board boxes on a tray with packed bags of up to 40 kg.



Main Specifications:

Quality indicators	MIL-DTL-248D	RPE «Zarya» Ltd.
Solidification temperature, °C, min	80,2	80,2 - 80,4
Moisture and volatile content, %, max	0,07	0,04-0,06
Content of substances insoluble in organic solvent, % max	0,05	0,05
Acidity in terms of H ₂ SO ₄ , % max	0,010	0,004-0,007

PYROXILINE POWDERS



97VA, 127V, 151TR VA, 161TR VA, 181TR VA, 41, 67, 81TR, 97, 47CGR, VT, 67P-5BPFL, P-125, VTX-10 VTX20, 57 CFL, P-125.

Pyroxiline powders designed for manufacturing of propellants for ammunition and small-caliber weapons, close combat weapons, mortars, land and naval artillery.

SKIF-UTS1.10

TRAINING SIMULATOR

The Simulator is intended for training, formation and improvement of practical skills to work with the "SKIF" man portable antitank missile system in classroom conditions.



Readiness time for operation, min:
not more than 5



Power source voltage, V:
220 +/-20



Weight, remote control panel, kg:
14



Weight, PC (laptop), kg:
not more than 3,9

Main Specifications:

Type of computing device	IBM compatible personal computer
Operational system	WINDOWS 7
Language of training	Ukrainian, Russian, English
Operating temperature range	from +5 to +40 °C

GURT-M

SYSTEM



Upgraded "GURT-M" system ensures:

- control and preparation for application of more than 50 various modifications of air missiles and corrected air bombs;
- missile outgoing inspection at manufacturing plants;
- failure diagnosis while missiles repairing;
- forecast of missiles technical state while prolonging their service life.

"GURT-M" system advantages:

- dimensions and weight of AKPA are reduced;
- characteristics of operational reliability are improved;
- up-to-date methods of visualization and documenting of the test results are introduced. The usage of the modern industrial computer allows to document the results in various languages and also to correct the check routines while in operation;
- long-term storage of results of missiles testing for the whole operation period is secured that allows to forecast their technical state while prolonging their service life.

CONTROL SYSTEMS AND SERVO ELECTRIC CONTROL SURFACE ACTUATORS

Control systems can be single-channel, double-channel and three-channel. They have changeable adaptive structure and ensure high guidance accuracy.

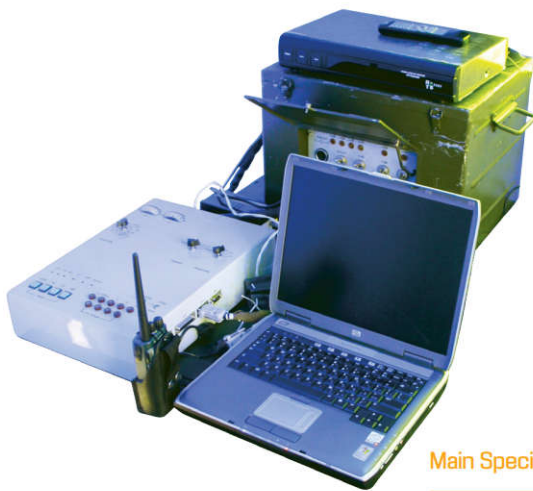
Executive control elements:

- aerodynamic,
- gas-dynamic control surfaces
- combined control elements



Main Specifications:

Maximum torque on control surfaces	from 1,2 to 150,0 N•m
Range of reproduced frequencies of control surfaces oscillations	up to 35 Hz
Angular rate of turn of control surfaces	up to 2000 °/s
Weight of electric control surface actuators units	from 1 to 25 kg
Calibre (outer diameter)	from 100 to 400 mm



KTK1

TRAINING AND CHECKING KIT

KTK1 training and checking kit is intended for acquisition of professional skills by a gunner to aim guided missiles without ammunition use.

Main Specifications:

Range of action	not less than 6000 m
Time of non-stop work	not less than 6 h
Operating temperature range	from -40 to +60 °C

