







www.zsrpatlayici.com



ZSR Patlayıcı Sanayi has a total production capacity of 468.925m² in 40.000m² closed area in Balıkesir.

Our company conducts its activities in four major and two subsidiary fields since 1995, investing continuously.

The production is conducted pursuant to ISO, TSE, CE, C.I.P., SEVESO, NATO/ National Facility Security Clearance.







zsr





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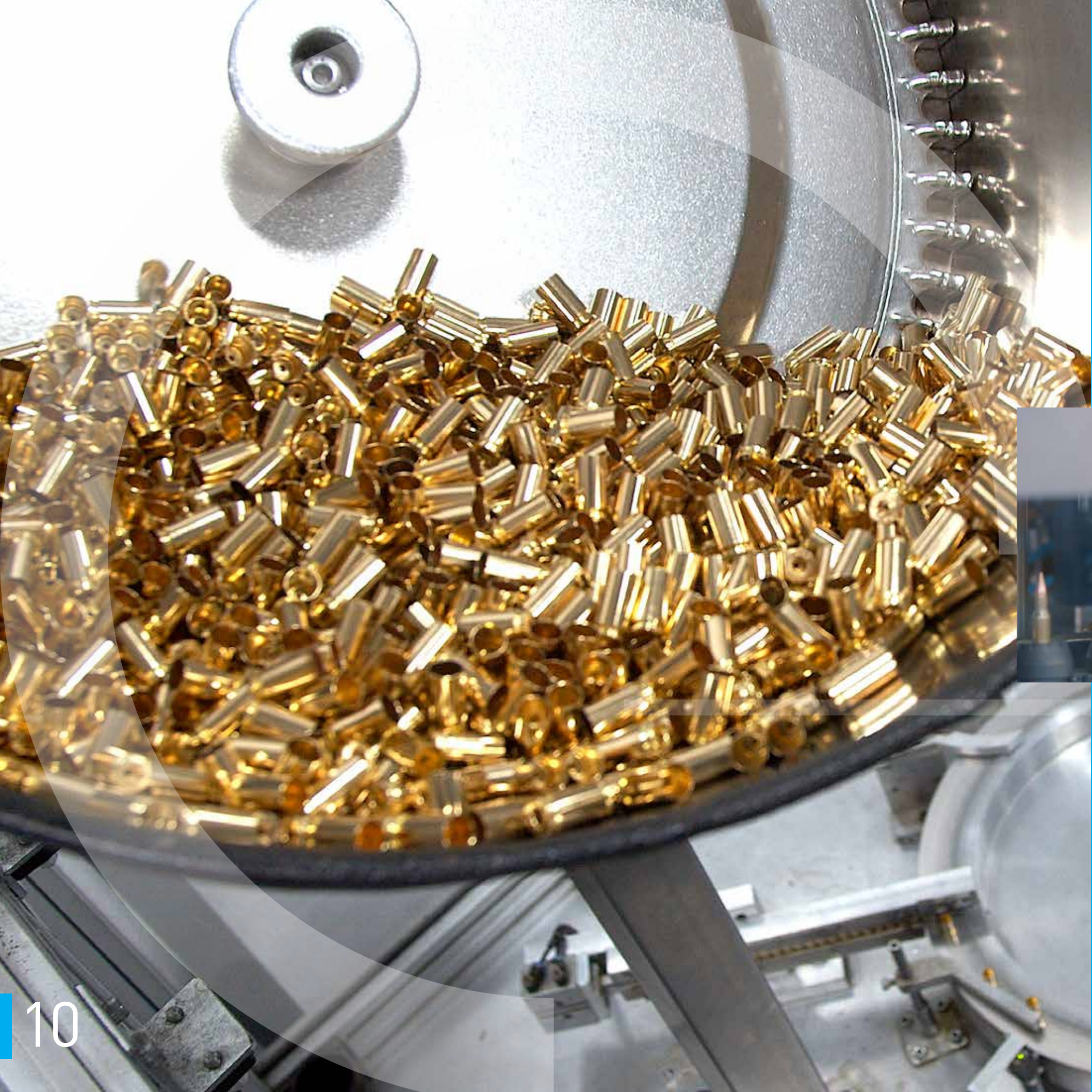
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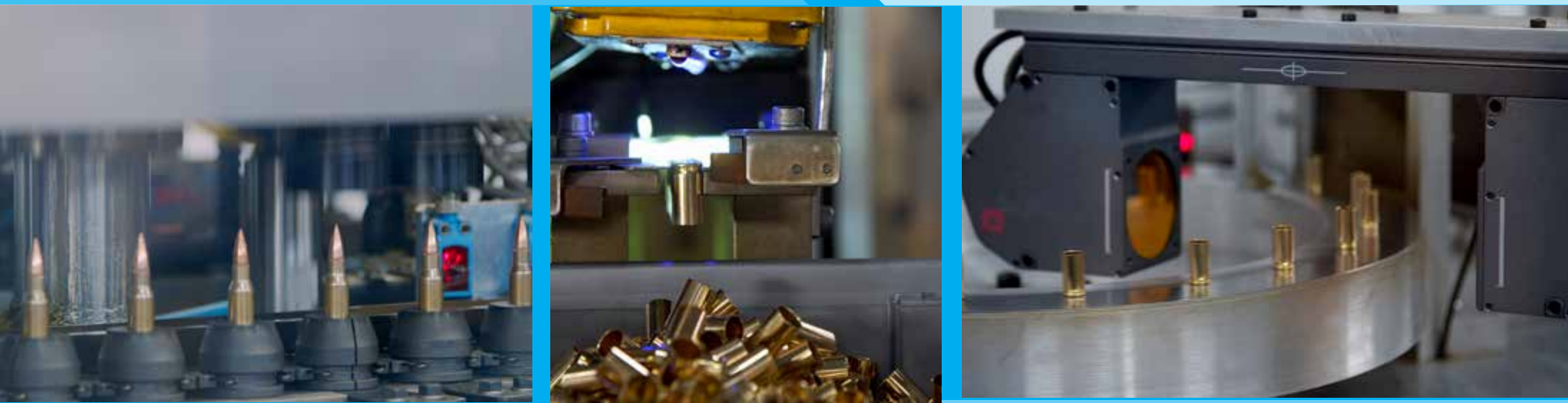
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Blasting Services



WE ARE TAKING FIRM STEPS TOWARDS BECOMING A WORLD BRAND



The goal of ZSR is having superfine standarts and reliability.
Production is carried out on the cutting edge technology.
High quality components are selected elaborately and every
stage of production is performed by taking high-level security measures.





CERTIFICATIONS

Facility Security Clearance

TS EN ISO 9001:2008

Conformite European (CE)

C.I.P.

SEVESO Security Report





and cover should stay when
using this equipment. Please do
operator's manual.

70403-824
07-034





NEW GENERATION PRODUCTS
WITH HIGH TECHNOLOGY





AMMUNITION

9x19 Parabellum



9x19 mm

PREMIUM PERFORMANCE AMMUNITION

TECHNICAL PROPERTIES

	9 mm PARABELLUM	9 mm LUGER
Bullet	FMJ, 124 gr (8 g)	FMJ, 115 gr (7.5 g)
Bullet Material	Jacket - Tombac / CuZn30 Core - Lead Antimony	Jacket - Tombac / CuZn30 Core - Lead Antimony
Case Material	Brass CuZn30	Brass CuZn30
Case Weight	~ 3.9 g	~ 3.9 g
Primer	Small pistol, boxer, non corrosive	Small pistol, boxer, non corrosive
Propellant	Double base powder	Double base powder
Cartridge Weight	~ 12.5 g	~ 12 g
Velocity (m/s) at 16m	370 ± 10	350 ± 10
Pressure (bar)	Pmax + 3Sd < 2850 bar	Pmax + 3Sd < 2850 bar
Accuracy at 46 m	Max. 5 cm	Max. 5 cm
Extraction Force	≥ 250 N	
Waterproof	Applied	
Temperature Range	-54°C to +52°C	
Term of Reference	MCMOPI	

PACKING 1
50 rounds in cardboard box
10 cardboard boxes (500) in PVC bag
3 PVC bag (1500) in carton box

PACKING 2
50 rounds per cardboard box
20 cardboard boxes per carton box (1000)



5,56x45

5,56x45mm

PERFORMANCE AMMUNITION

TECHNICAL PROPERTIES

	M193 Bullet Ball	M196 Tracer	M855 (SS109) Ball	M856 (L110) Tracer
Bullet Weight	55 gr (~3,56 g)	54 gr (~3.50 g)	62 gr (~4.0 g)	61 gr (~3.92 g)
Bullet Material	Jacket - Tombac Core - Lead Antimony	Jacket- Tombac plated steel Strip or copper washer steel strip Strip Core - Lead Antimony Tracer - Tracer Comp.	Jacket - Tombac Core 1- Lead Antimony Core 2- Steel	Jacket- Tombac plated steel Strip or copper washer steel strip Strip Core - Lead Antimony Tracer - Tracer Comp.
Bullet Lenght	19,17 mm	23,2 mm	23,4 mm	28,45 mm
Case Material	Brass CuZn30			
Case Lenght	44.7 mm			
Primer Type	5,56 mm Boxer Primer			
Powder	Double Base Powder			
Chamber Pressure	Pmax + 3Sd < 4450 Bar			
Port Pressure	Port - 3Sd > 1030 Bar			
Velocity (m/s) at 24m	965±15	950±15	920±15	900±15
Accuracy Rs	Max. 5,08 cm at 200 m	Max. 12,7 cm at 200 m	Max. 25 cm at 550 m	Max. 30 cm at 550 m
Action Time	< 3 ms			
Extraction Force	Min. 20,4 kgf			
Cartridge Lenght	57,4 mm			

Penetration (M855/SS109): The bullet of the sample cartridges shall demonstrate complete penetration of 3,5 mm thickness AISI 1020 steel plate target with hardness between min. RB55 and max. RB70 that located 570 meters from the weapon.

PACKING 1

30 rounds in cardboard box
15 cardboard boxes (450 rounds) in PVC bag
5 PVC (2.250 rounds) bags in wooden case

PACKING 2

200 rounds in metal link belt M27
4 metal link belts in metal box M2A1 (800 rounds)
2 metal boxes M2A1 (1600 rounds)
in wire bound wooden box



7,62x51

7,62x51mm

PERFORMANCE AMMUNITION

TECHNICAL PROPERTIES

	M80 Bullet Ball	M62 Tracer	M61 AP
Bullet Weight	149 gr (~9,67 g)	146 gr (~9.46 g)	150 gr (~9.75 g)
Bullet Material	Jacket - Tombac Core - Lead Antimony	Jacket- Tombac Core - Lead Antimony Tracer - Tracer Comp.	Jacket - Tombac Core 1- Lead Antimony Core 2- Steel
Bullet Lenght	29,46 mm	34,29 mm	32,2 mm
Case Material	Brass CuZn30		
Case Lenght	51,18 mm		
Primer Type	7,62 mm Boxer Primer		
Powder	Double Base Powder		
Chamber Pressure	Max. 3800 bar		
Port Pressure	Min. 550 Bar		
Velocity (m/s) at 16m	833±10	817±10	838±10
Accuracy Rs	Max 12.7cm at 550 m	Max 38 cm at 550 m	Max 19 cm at 550 m
Action Time	< 4 ms		
Extraction Force	Min. 27 kgf		
Cartridge Lenght	71,12 mm		

Penetration (AP M61): The bullet of the sample cartridgees shall demonstrate complete penetration of 6 mm thick nickel-chromium steel plate target located 100 meters from the weapon.

- PACKING 1**
20 rounds in cardboard box
10 cardboard boxes (200 rounds) in PVC bag
5 PVC (1.000 rounds) bags in wooden case

- PACKING 2**
250 rounds in metal link belt M13
2 metal link belts in metal box M2A1
2 metal boxes M2A1 (1000 rounds)
in wire bound wooden box



7,62x39



24

7,62x39mm

PERFORMANCE AMMUNITION

TECHNICAL PROPERTIES

	M67 Bullet Ball	AP BULLET
Bullet Weight	123 gr (~ 8.00 g)	123 gr (~8.00 g)
Bullet Material	Jacket - Tombac Core - Lead Antimony	Jacket- GMCS Core 1 - Steel Core 2 - Lead Antimony
Bullet Lenght	23,9 mm	25,3 mm
Case Material	Brass CuZn30 / Steel / GMCS	
Case Lenght	38,65 mm	
Primer Type	7,62 mm Boxer Primer	
Powder	Double Base Powder	
Chamber Pressure	Max. 2550 bar	
Velocity (m/s) at 16m	715±10	715±10
Accuracy Rs	≤15 cm at 300m	≤20 cm at 300m
Action Time	< 4 ms	
Extraction Force	Min. 30 kgf	
Cartridge Lenght	55,8 mm	

PACKING
20 rounds in cardboard box
10 cardboard boxes (200 rounds) in PVC bag
10 PVC (2000 rounds) bags in wooden case



12,7x99 mm

TECHNICAL PROPERTIES

M33 Ball

Bullet Weight	653 gr [-42.31 g]
Bullet Material	Jacket - Tombac Core - Steel
Bullet Length	58.67 mm
Case Material	Brass CuZn30
Case Length	99.31 mm
Primer Type	Boxer non corrosive
Powder Type	Double Base Powder
Chamber Pressure	$P_{max} + 3Sd < 4500 \text{ Bar}$
Velocity (m/s) at 24 m	$887 \pm 10 \text{ m/s}$
Accuracy (Standart Deviation)	Max. 300 mm at 550 m
Action Time	$< 4.5 \text{ ms}$
Extraction Force	Min. 90 kgf (880N)
Cartridge Length	57,4 mm
Waterproofness	Applied
Temperature Range	-54 °C to +52°C
Reference Document	NATO STANAG 4383/NATO STANDARD AEP-97

PACKING 1

30 rounds in cardboard box
15 cardboard boxes (450 rounds) in PVC bag
5 PVC bags (2.250 rounds) in wooden case

PACKING 2

100 rounds in metal link belt M9
1 metal link belt in metal box M2A1
2 metal boxes M2A1 (200 rounds) in wire bound wooden box



ZSR

4.4 SP BOXER PRIMERS

TECHNICAL PROPERTIES	Position	Material identification	Dimensions		
	Cup	CuZn30	0,42	+ 0,02 0	mm
	Anvil	CuZn30	0,99	0 - 0,03	mm
	Cover	Paper disc	0,10	0 - 0,03	mm
	Primer Lacquers	Nitrolacquer green	-		
	Mixture	Sinoxide, non corrosive, without Hg	0,023	± 0,002	g
SENSITIVITY	Ball weight	55g			
	Upper statistical limit	$\bar{H} + 4S \leq 279,4\text{mm}$ (11")			
	Lower statistical limit	$\bar{H} - 2S \leq 25,4\text{mm}$ (1")			
	Firing pin	Ø 2mm; R1, 28mm			
	Testing in cartridge case	8mm; 9mm			
	Packing details	100 pcs. per box, 10 boxes for a total for of 1000 primers for reloading			



BLANK CARTRIDGES



BLANK CARTRIDGES

TECHNICAL PROPERTIES

	9x22mm Gold	9x22 mm Iron
Case Material	Steel	Steel
Case Coating	Brass	Nickel
Type of Bullet	Plastic	Plastic
Colour of Bullet	Green	Green
Bullet Weight	0,03 gr.	0,01 gr.
Primer Type	4.4 Boxer Primer	Shotshell Primer
Powder	Double Base Powder	Nc Powder
Pressure	Max. 400 bar	Max. 400 bar

PACKING
50 rounds in cardboard box
50 cardboard boxes (2500 rounds) in carton box



RUBBER CARTRIDGES



TECHNICAL PROPERTIES

	YAS 9 mm RUBBER	YAF 12 CAL. ONE RUBBER BALL	YAF 12 CAL. TWO RUBBER BALL	YAF 12 CAL. THREE RUBBER BALL
Overall Lenght	22,2 mm (±0,1)	57,5 ± 0,5 mm	57,5 ± 0,5 mm	61,5 ± 0,5 mm
Type of Bullet	Rubber	Rubber	Rubber	Rubber
Colour of Bullet	Black	Black	Black	Black
Diameter of bullet	8.60 mm ±0,1	18,2 ± 0,1 mm	18,2 ± 0,1 mm	8.60 mm ± 0,1
Bullet Weight	0,63 gram ±0,01	4,2 ± 0,05 gram	8,4 ± 0,05 gram	1,52 ± 0,05 gram
Pressure	Max 400 Bar	4,2 ± 0,05 gram	Max 220 Bar	Max 220 Bar
Velocity (m/s)at 3,5 m	430 ± 20 m/sn	300 ± 20 m/sn	300 ± 20 m/sn	450 ± 20 m/sn
Energy (Joule)	Between 50-60 joule	Between 150-200 joule	Between 350-400 joule	Between 150-200 joule

TECHNICAL PROPERTIES

	YAF 12 CAL. NINE RUBBER BALL	YAF 12 CAL. EIGHTEEN RUBBER BALL	YAF 12 CAL. CYLINDER RUBBER BALL
Overall Lenght	61,5 ± 0,5 mm	62 ± 0,5 mm	59,5 ± 0,5 mm
Type of Bullet	Rubber	Rubber	Rubber
Colour of Bullet	Black	Black	Black
Diameter of bullet	8.60 mm ± 0,1	8.60 mm ± 0,1	18 mm ± 0,1
Bullet Weight	4,52 ± 0,05 gram	9 ± 0,05 gram	11,5 ± 0,05 gram
Pressure	Max 220 Bar	Max 220 Bar	Max 350 Bar
Velocity (m/s)at 3,5 m	450 ± 20 m/sn	475 ± 20 m/sn	300 ± 20 m/sn
Energy (Joule)	Between 425-475 joule	Between 1000-1100 joule	Between 500-550 joule







HUNTING & SPORTING CARTRIDGES



CONSTANTLY RENEWED PRODUCTS

IN OUR MODERN FACILITIES



YAF
12 cal. 28g.



Product Code	YAF 1228
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	28 g.
Wad	Plastic
Lead Shot Size	05-04-....-10-11
Velocity	400m/s
Case&Box	25/250 pcs.

YAF
12 cal. 30g.



Product Code	YAF 1230
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	30 g.
Wad	Plastic
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12cal. 32g.



Product Code	YAF1232
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Plastic
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 34g.



Product Code	YAF 1234
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Plastic
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 34g.



Dispersante

Product Code	YAF 1234D
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Dispersante
Lead Shot Size	4 - 5 --10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 36g.



Product Code	YAF 1236
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	36 g.
Wad	Plastic
Lead Shot Size	05-04-.....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal.
34g.



Test Cartridges

Product Code	YAF 1234T
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	32 g. & 34 g.
Wad	Plastic
Lead Shot Size	1-2-.....-10-11
Pmax	1000-1500 BAR
Case&Box	25/250 pcs.

YAF
12 cal.



Sound Cartridges

Product Code	YAF 12SC
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	-
Wad	Plastic
Lead Shot Size	-
Velocity	-
Case&Box	25/250 pcs.

YAF
12cal. 40g.



Super Shot

Product Code	YAF1240SS
Caliber	12 mm.
Brass Height	25 mm.
Case Height	70 mm.
Gram	40 g.
Wad	Plastic
Lead Shot Size	05-04-....-1011
Velocity	400 m/s
Case&Box	10/200 pcs.

YAF
12cal. 50g.



Magnum

Product Code	YAF 1250M
Caliber	12 mm.
Brass Height	25 mm.
Case Height	76 mm.
Gram	50 g.
Wad	Plastic
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	10/200 pcs.

YAF
12 cal. 30g.
FELT



Product Code	YAF1230F
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	30 g.
Wad	Felt
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 31g.
FELT



Product Code	YAF1231F
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	31 g.
Wad	Felt
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 32g.
FELT



Product Code	YAF 1232F
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Felt
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 33g.
FELT



Product Code	YAF 1233F
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	33 g.
Wad	Felt
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 34g.
FELT



Product Code	YAF 1234F
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Felt
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 28g.
BIOR



Product Code	YAF1228B
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	28 g.
Wad	Bior
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 30g.
BIOR



Product Code	YAF 1230B
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	30 g.
Wad	Bior
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 31g.
BIOR



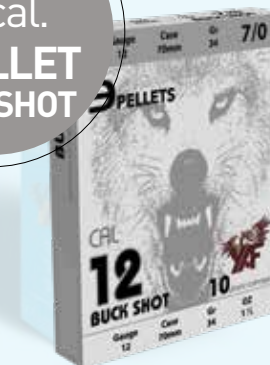
Product Code	YAF 1231B
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	31 g.
Wad	Bior
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal. 33g.
BIOR



Product Code	YAF 1233B
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	33 g.
Wad	Bior
Lead Shot Size	05-04-....-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
12 cal.
9 PELLET BUCKSHOT



Product Code	YAF 129P
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Bior
Lead Shot Size	8,6 mm.
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
9 PELLET
BUCKSHOT
GOLD



Gold

Product Code	YAF 129PG
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Bior
Lead Shot Size	8,6 mm. GOLD
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
12 PELLET
BUCKSHOT



Product Code	YAF 1212P
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Bior
Lead Shot Size	7,8 mm.
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
12 PELLET
BUCKSHOT
GOLD



Gold

Product Code	YAF 1212PG
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Bior
Lead Shot Size	7,8mm. GOLD
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
27 PELLET
BUCKSHOT



Product Code	YAF 1227P
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	38 g.
Wad	Bior
Lead Shot Size	6,2 mm.
Velocity	415 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
27 PELLET
BUCKSHOT



Product Code	YAF 1227PG
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	38 g.
Wad	Bior
Lead Shot Size	6,2mm. GOLD
Velocity	415 m/s
Case&Box	10/200 pcs.

YAF
16cal.
9 PELLET
BUCKSHOT



Product Code	YAF 169P
Caliber	16 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	25 g.
Wad	Bior
Lead Shot Size	7,8 mm.
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
16 cal.
9 PELLET
BUCKSHOT
GOLD



Gold

Product Code	YAF 169PG
Caliber	16 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	25 g.
Wad	Bior
Lead Shot Size	7,8 mm. Gold
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
20 cal.
9 PELLET
BUCKSHOT



Product Code	YAF 209P
Caliber	20 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	22 g.
Wad	Bior
Lead Shot Size	7,4 mm.
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
20 cal.
9PELLET
BUCKSHOT
GOLD



Gold

Product Code	YAF 209PG
Caliber	20 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	22 g.
Wad	Bior
Lead Shot Size	7,4 mm. Gold
Velocity	420 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
SLUG



Product Code	YAF12S
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Plastic
Lead Shot Size	Standart
Velocity	440 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
SLUG
GOLD



Gold

Product Code	YAF 12SG
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	33 g.
Wad	Plastic
Lead Shot Size	Standart Gold
Velocity	440 m/s
Case&Box	10/200 pcs.

YAF
12 cal.
Speedy Slug



Product Code	YAF 12SS
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Plastic
Lead Shot Size	Gualandi Model
Velocity	450 m/s
Case&Box	10/200 pcs.

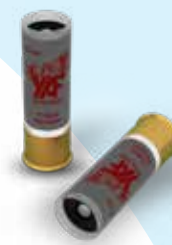
**YAF
12 cal.
DOUBLE
ACTION
SLUG**



Double - Action

Product Code	YAF12DA
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	24 g.
Wad	Plastic
Lead Shot Size	14mm. x 2
Velocity	430 m/s
Case&Box	10/200 pcs.

**YAF
12 cal.
TRIBLE
ACTION
SLUG**



Trible - Action

Product Code	YAF 12TA
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	30 g.
Wad	Plastic
Lead Shot Size	11mm. x 3
Velocity	430 m/s
Case&Box	10/200 pcs.

**YAF
12 cal.
SHOCK
STAR
SLUG**



Shock Star

Product Code	YAF 12SHK
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Bior
Lead Shot Size	18 mm.
Velocity	450 m/s
Case&Box	10/200 pcs.

**YAF
12 cal.
TURBO
ACTION
SLUG**



Turbo - Action

Product Code	YAF 12TRB
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	33 g.
Wad	Bior
Lead Shot Size	Turbo Model
Velocity	440 m/s
Case&Box	10/200 pcs.

**YAF
16 cal.
SLUG**



Product Code	YAF 16S
Caliber	16 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	25 g.
Wad	Plastic
Lead Shot Size	Standart
Velocity	440 m/s
Case&Box	10/200 pcs.

**YAF
16 cal.
SLUG
GOLD**



Gold

Product Code	YAF 16SG
Caliber	16 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	26 g.
Wad	Plastic
Lead Shot Size	Standart Gold
Velocity	440 m/s
Case&Box	10/200 pcs.

**YAF
20 cal.
SLUG**



Product Code	YAF 20S
Caliber	20 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	22 g.
Wad	Plastic
Lead Shot Size	Standart
Velocity	440 m/s
Case&Box	10/200 pcs.

**YAF
36 cal.
SLUG**



Product Code	YAF 36S
Caliber	36 mm.
Brass Height	16 mm.
Case Height	63 mm.
Gram	7,5 g.
Wad	Plastic
Lead Shot Size	Standart
Velocity	460 m/s
Case&Box	25/500 pcs.

YAF
16 cal.
28g.



Product Code	YAF 1628&1630
Caliber	16 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	28 g. & 30 g.
Wad	Plastic
Lead Shot Size	05-04-...-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
20 cal.
25g.& 28g.



Product Code	YAF 2025&2028
Caliber	20 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	25 g. & 28 g.
Wad	Plastic
Lead Shot Size	1-2-3-...-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
20 cal.
25g. & 28g.
BIOR



Product Code	YAF 2028B
Caliber	20 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	25 g. & 28 g.
Wad	Bior
Lead Shot Size	1-2-3-...-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
28 cal. 16 g.



Product Code	YAF 2816
Caliber	28 mm.
Brass Height	08 mm.
Case Height	65 mm.
Gram	16 g.
Wad	Plastic
Lead Shot Size	3-4-5-...-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
28 cal. 22g.



Product Code	YAF 2822
Caliber	28 mm.
Brass Height	08 mm.
Case Height	65 mm.
Gram	22 g.
Wad	Plastic
Lead Shot Size	3-4-5...-10-11
Velocity	400 m/s
Case&Box	25/250 pcs.

YAF
36 cal. 12g.
BIOR



Product Code	YAF 3612
Caliber	36 mm.
Brass Height	16 mm.
Case Height	63 mm.
Gram	12 g.
Wad	Bior
Lead Shot Size	3-4-5...-10-11
Velocity	400 m/s
Case&Box	25/500 pcs.

YAF
12 cal.
YAF 1
TRAP



Product Code	YAF F1TRP
Caliber	12 mm.
Brass Height	25 mm.
Case Height	70 mm.
Gram	24 g.
Wad	Plastic
Lead Shot Size	7,5
Velocity	420 m/s
Case&Box	25/250 pcs.

YAF
12 cal.
SUPER
TRAP



Product Code	YAF SPTRP
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	24 g.
Wad	Plastic
Lead Shot Size	7,5
Velocity	400 m/s
Case&Box	25/250 pcs.

**YAF 12
Super
Skeet**



Product Code	YAF SPSKT
Caliber	12 mm.
Brass Height	12 mm.
Case Height	70 mm.
Gram	24 g.
Wad	Plastic
Lead Shot Size	9,5
Velocity	400 m/s
Case&Box	25/250 pcs.

**YAF
12 cal. 32g.
Premium**



Mandarin

Product Code	YAF 1232M
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Plastic
Lead Shot Size	6
Velocity	430 m/s
Case&Box	10/200 pcs.

**YAF
12 cal. 32g.
Premium**



Redleg

Product Code	YAF 1232R
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	32 g.
Wad	Plastic
Lead Shot Size	6
Velocity	430 m/s
Case&Box	10/200 pcs.

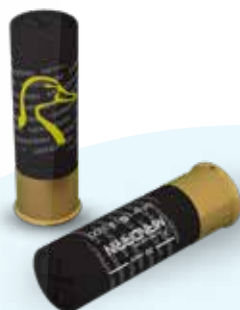
**YAF
12 cal. 34g.
Premium**



Lepus

Product Code	YAF 1234L
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Plastic
Lead Shot Size	3 - 4
Velocity	430 m/s
Case&Box	10/200 pcs.

YAF
12 cal. 34g.
Premium



Lepus

Product Code	YAF 1234L
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Plastic
Lead Shot Size	3 - 4
Velocity	430 m/s
Case&Box	10/200 pcs.

YAF
12 cal. 34g.
Premium



Redleg

Product Code	YAF 1234R
Caliber	12 mm.
Brass Height	16 mm.
Case Height	70 mm.
Gram	34 g.
Wad	Plastic
Lead Shot Size	6
Velocity	430 m/s
Case&Box	10/200 pcs.

LEPUS
MANDARIN
REDLEG







EXPLOSIVES



QUALITY PRODUCT'S SECRET IS HIDDEN IN ITS DETAILS



BALEX GOLD 150



DESCRIPTION

BALEX Gold 150 is a dynamite equivalent explosive resistant to water. BALEX Gold 150 is a new generation emulsion explosive designed for difficult conditions. It's produced for underground and surface mining, tunnel excavation Works especially for small diameter blastholes. It provides high efficiency and safety under every kind of rock conditions.

AREAS OF USAGE

- All kinds of underground and tunnel blasts
- Open quarry blasting
- All construction projects
- Pre-splitting applications
- Boulder placing
- All custom blasting applications

ADVANTAGES

- Provides high fragmentation thanks to its high detonation velocity.
- Reliable operation with its high sensitivity.
- Reliable use against friction and impacts.
- Low gas output after the blast.
- Excellent resistance against water.

SAFETY & APPLICATION

Compared to its equivalents which are Nitroglycerin-based explosives, BALEX Gold 150 provides an environment against friction and impacts. Having excellent resistance to water, and gases are quite low after blasting underground applications. In the classification of smoke output BALEX Gold 150 is a first Class product.Used as a booster in all underground and surface placing, boulders, smooth blasting, pre-splitting, deck and channel blasting.

PACKAGING & PRODUCT SIZE

Both sides clipped cartridges are produced in high density PE listed below. Cartridges are packed in carton boxes 20 kg each.

STORAGE & TRANSPORT & ATTENTION

Must be stored and protected according to the rules in a dry, well-ventilated warehouse. BALEX Gold 150; absolutely should not be used in underground operations where explosive gases such as methane are present.

UN Classification : Explosives Type E
UN No : 0241
IMDG (sea) Code/Class : 1.1 D

Standart Cartridge Sizes (mm)	Cartridge Weight (gr)	Cartridge in Per Box (price)
27x235	160	125
32x265	250	80
32x425	400	50
34x230	250	80
34x360	400	50
36x215	250	80
36x420	500	40
38x370	500	40
40x340	500	40

Thermodynamic Technical Properties	Unit	BALEX Gold 150
VOD at 40mm steel tube case	m/s	5000 - 5500
Energy of explosion	kJ/kg	4455
Ideal Detonation Temperature	°K	2950
Gas Volume	lt/kg	890
Density	g/cm3	1.18-1.20
Water Resistance	-	Excellent

BALEX GOLD 100



DESCRIPTION

BALEX Gold 100 is a dynamite equivalent explosive resistant to water. It is produced for underground and surface mining projects, usually with the purpose of a booster in large diameter blastholes.

AREAS OF USAGE

- Open quarry blasting
- Aboveground coal mining production - stripping
- Aboveground metal mining production - stripping
- Quarry production blasting
- Dam and road construction projects
- Special blasting applications

ADVANTAGES

- Provides high fragmentation thanks to its high detonation velocity.
- Reliable operation with its high sensitivity.
- Reliable use against friction and impacts.
- Low gas output after the blast.
- Excellent resistance against water.

SAFETY & APPLICATION

Used as a booster explosive for all types of underground and surface deck leaps, boulder and channel explosions. Has excellent water resistance. Produced in various diameters and lengths, it provides the ability to perform massive solid boosting. It's an ideal emulsion explosive for Anfo and all other booster sensitive explosives.

PACKAGING & PRODUCT SIZE

Both sides clipped cartridges are produced in high density PE listed below. Cartridges are packed in carton boxes 20 kg each.

STORAGE & TRANSPORT & ATTENTION

Must be stored and protected according to the rules in a dry, well-ventilated warehouse. BALEX Gold100; absolutely should not be used in underground operations where explosive gases such as methane are present.

UN Classification : Explosives Type E

UN No : 0241

IMDG (sea) Code/Class : 1.1 D

Standart Cartridge Sizes (mm)	Cartridge Weight (gr)	Cartridge in Per Box (price)
50x220	500	40
50x430	1000	20
65x255	1000	20
65x485	2000	10
75x190	1000	20
75x280	2000	10
90x150	1000	20
90x260	2000	10

Thermodynamic Technical Properties	Unit	BALEX Gold 100
VOD at 40mm steel tube case	m/s	5000 - 5500
Energy of explosion	kJ/kg	3670
Ideal Detonation Temperature	°K	2515
Gas Volume	lt/kg	958
Density	g/cm ³	1.20
Water Resistance	-	Excellent

HEAVY ANFO BALEX

- 1000 • 6000
- 6500 • 7500
- 8000



DESCRIPTION

Produced with the new generation emulsion technology, BALEX 1000, 6000, 6500, 7500 and 8000 consists of a mixture with different ratios of emulsion and anfo to be used in different rock structures. It shows excellent performance, especially with watery formations.

SAFETY & APPLICATION

BALEX booster sensitive emulsion explosives are produced as the standard PE plastic cartridges in different diameters. Explosives which are selected according to different rock structures and the blasthole diameter are detonated by Dynamite or the equivalent high explosives which are sensitive to shock tubes.

PACKAGING & PRODUCT SIZE

BALEX emulsion explosives are produced as standard PE one sided clipped cartridges listed below. Cartridges are packed in special boxes 20 kg each.

TRANSPORT

Must be stored and protected according to the rules in a dry, well-ventilated warehouse.

UN Classification : Explosives Type E
UN No : 0241
IMDG (sea) Code/Class : 1.1 D

Thermodynamic Technical Properties	Unit	BALEX 1000	BALEX 6000	BALEX 6500	BALEX 7500	BALEX 8000
VOD at 125mm. Cartridge as Unconfined	m/s	5000 - 5500	4000 - 4500	4500 - 5000	4500 - 5000	4500 - 5000
Ideal Detonation Temperature	°K	2240	2815	2390	2325	2300
Density	g/cm ³	1.23 - 1.24	1.24 - 1.25	1.26 - 1.28	1.26 - 1.28	1.26 - 1.28
Water Resistance	-	Excellent	Excellent	Excellent	Excellent	Excellent
Recommended for use in Rock Type	-	Extra Hard	Soft	Medium - Hard	Hard	Extra Hard

Standart Cartridge Sizes (mm)	Cartridge Weight (kg)	Cartridge in Per Box (price)
65 x 500	2.00	10
75 x 450	2.50	8
85 x 570	4.00	5
125 x 650	10.00	2
140 x 520	10.00	2

ANFO



DESCRIPTION

BALEX Anfo, is a mixture made up of 94% porous prill ammonium nitrate and 6% diesel oil with the purpose of high quality explosions. This mixture has a density of free-flowing nature and is to be used in boreholes with consideration of the oxygen balance factor.

AREAS OF USAGE

- Open quarry blasting
- Aboveground coal mining production - stripping
- Aboveground metal mining production - stripping
- Quarry production blasting
- Dam and road construction projects
- Special blasting applications

SAFETY & APPLICATION

As the main explosive charger in boreholes, BALEX Anfo has been designed for usage in areas such as all the mining, quarrying, and construction industries. This explosive mixture with high offset energy

is not recommended to be used in blastholes with a diameter less than 50 mm. Due to its fluidal nature of free-flowing prills, vertical blastholes can be loaded easily. BALEX Anfo is a booster sensitive explosive. It is detonated by Dynamite or the equivalent high explosives which are sensitive to shock tubes.

PACKAGING & PRODUCT SIZE

BALEX Anfo is packed in 25 kg double-layer PP / PE bags. Other packaging dimensions can be provided based on special orders for special applications.

STORAGE & TRANSPORT & ATTENTION

Must be stored and protected according to the rules in a dry, well-ventilated warehouse.

UN Classification : Explosives Type B
UN No : 0082
IMDG (sea) Code/Class : 1.1 D

Thermodynamic Technical Properties	Unit	BALEX ANFO
Ideal Detonation Velocity	m/s	4796
VOD at 125mm. Cartridge as Unconfined	kJ / kg	3500 - 4000
Ideal Detonation Pressure	Gpa	4.87
Ideal Detonation Temperature	°K	3049
Density	g/cm ³	0.78 - 0.80
Water Resistance	-	Nothing

ANFO - UP



DESCRIPTION

BALEX Anfo UP is; a mixture of porous prill ammonium nitrate, diesel oil, and emulsion with consideration of the oxygen balance factor, for use in boreholes. BALEX Anfo UP is a type of booster sensitive explosive. BALEX Anfo UP; is a suitable mixture of explosives used for boreholes when the power of high explosives are required. It is a special explosive mixture formulated to stick in upside down blast holes which prevents it from pouring back down during underground applications. BALEX Anfo UP can be charged with air compression charger tools (pneumatically loaded).

ADVANTAGES

BALEX Anfo UP; helps to achieve optimum blasting values by spreading out to the entire blasthole diameter.

- BALEX Anfo UP; are easy to use and reliable type of explosives.
- BALEX Anfo UP; enables vertical upside down boreholes to be loaded fast and efficiently with compressed pneumatic charging.

SAFETY & APPLICATION

During the compressed pneumatic loading of BALEX Anfo UP the shock tube to be used must be ensured to have anti-static properties. Strictly do not load with compressed air if the primary charge shock tubes are not protected. BALEX Anfo UP can only be used in boreholes.

PACKAGING & PRODUCT SIZE

BALEX Anfo is packed in 30 kg double-layer PP / PE bags. Other packaging dimensions can be provided based on special orders for special applications.

STORAGE & TRANSPORT & ATTENTION

Must be stored and protected according to the rules in a dry, well-ventilated warehouse.

UN Classification : Explosives Type B
UN No : 0082
IMDG (sea) Code/Class : 1.1 D

Thermodynamic Technical Properties

Ideal Detonation Velocity
VOD at 125mm. Cartridge as Unconfined
Density
Water Resistance

Unit

m/s
kJ / kg
g/cm³
-

BALEX ANFO UP

5000
3500 - 4000
0.90
Nothing

ANFO - LD



DESCRIPTION

BALEX Anfo LD is; a mixture of porous prill ammonium nitrate, diesel oil, emulsion with consideration of the oxygen balance factor, for use in boreholes. It is a type of booster sensitive explosives which has a density of free-flowing nature. BALEX Anfo LD; is a suitable mixture of explosives used for boreholes when the power of high explosives are not required. BALEX Anfo LD can be charged with air compression charger tools (pneumatically loaded) as can be charged with cast boosters.

ADVANTAGES

- BALEX Anfo LD; helps to achieve optimum blasting values by spreading out to the entire blasthole diameter.
- BALEX Anfo LD; are easy to use and reliable type of explosives.
- BALEX Anfo LD; allows open excavation blasting by minimizing vibration values that enables the use of blasting excavation works near residential areas.
- BALEX Anfo LD; enables horizontal and vertical boreholes to be loaded fast and efficiently with compressed pneumatic charging.

SAFETY & APPLICATION

During the compressed pneumatic loading of BALEX Anfo LD the shock tube to be used must be ensured to have anti-static properties. Strictly do not load with compressed air if the primary charge shock tubes are not protected. BALEX Anfo LD can only be used in boreholes.

PACKAGING & PRODUCT SIZE

BALEX Anfo LD is packed in 15 kg double-layer PP / PE bags. Other packaging dimensions can be provided based on special orders for special applications.

TRANSPORT

Must be stored and protected according to the rules in a dry, well-ventilated warehouse.

UN Classification : Explosives Type B
UN No : 0082
IMDG (sea) Code/Class : 1.1 D

Thermodynamic Technical Properties

	Unit	BALEX ANFO - LD
Ideal Detonation Velocity	m/s	3500
VOD at 125mm. Cartridge as Unconfined	kJ / kg	3000 - 3500
Density	g/cm ³	0.50 - 0.52
Water Resistance	-	None

SPLITTER



DESCRIPTION

It is an emulsion explosive designed for pre-splitting applications on surface blast for slope control or for smooth blasting applications in underground mining operations for the purpose of ensuring the surroundings and environment of opened gaps. BALEX Splitter is produced in a special tube with smaller diameter than the blast hole, providing homogeneous distribution along the blast hole, therefore ensures smoother and less disturbed surfaces. It is water resistant and can be used safely in wet boreholes.

ADVANTAGES

- Due to BALEX Splitters high detonation velocity and low energy, it reduces explosive damage to the walls and ceiling to a minimum, leaving a smooth and less disturbed surface.
- BALEX Splitter is water proof and can also be detonated in damp blastholes.
- BALEX Splitter provides shorter ventilation time due to its low gas output after the underground blasts.

SAFETY & APPLICATION

BALEX Splitter cartridges are sensitive to number 8 standard detonators. Thanks to its 45° wings it centers the cartridge in the blasthole. The opened wings hold on to the blasthole walls during the blast, which prevents the cartridge to change position. BALEX Splitter tubes should be charged by attaching to each other. The head link should be inserted into the slot at the end of the other tube and twisted, thus allowing the shoulders at the head link to fit in the slots holes.

PACKAGING & PRODUCT SIZE

BALEX Splitter is produced in hard plastic tubes with 19 mm diameter and 710 mm length. Cartridges are packed in carton boxes 20 kg each.

STORAGE & TRANSPORT & ATTENTION

Must be stored and protected according to the rules in a dry, well-ventilated warehouse. BALEX Splitter; absolutely should not be used in underground operations where explosive gases such as methane are present.

UN Classification : Explosives Type E
UN No : 0241
IMDG (sea) Code/Class : 1.1 D

Standart Cartridge Sizes (mm)	Cartridge Weight (gr)	Cartridge in Per Box (price)
19x710	220	167

Thermodynamic Technical Properties	Unit m/s	BALEX Splitter
VOD at 40mm steel tube	g/cm ³	4200
Density	-	1.15
Water Resistance		Excellent



DESCRIPTION

BALEX Seismic is a new generation detonator sensitive emulsion explosive in a plastic cartridge. It has been produced for Seismic blasts. BALEX Seismic has high detonation velocity, which provides good sensitivity with a high detonation pressure.

SAFETY & APPLICATION

BALEX Seismic, are produced in standard sizes with matching interlocking plastic cartridges. These cartridges have a detonator chamber allowing the detonator to be mounted easily. It can be ignited with No. 8 (ordinary) detonator ignition power.

PACKAGING & PRODUCT SIZE

The following dimensions are packed as 20 kg boxes.

STORAGE & TRANSPORT & ATTENTION

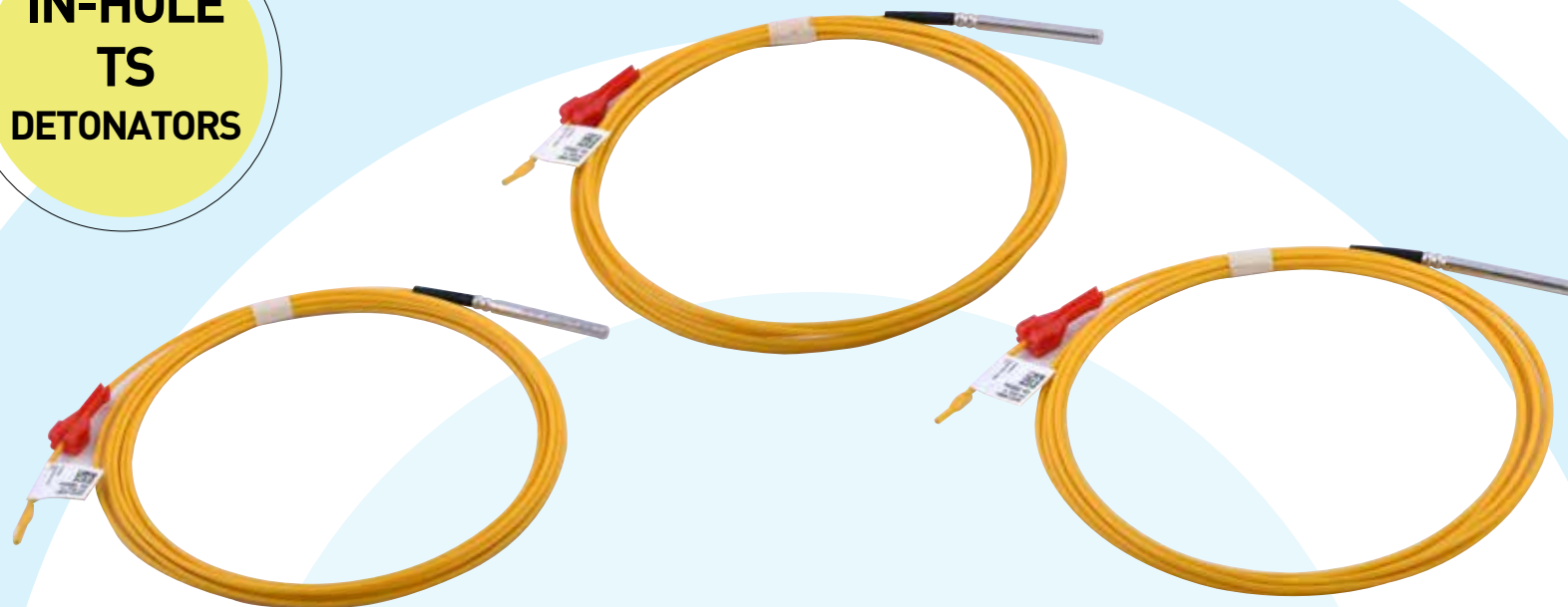
Must be stored and protected according to the rules in a dry, well-ventilated warehouse.

UN Classification : Explosives Type E
UN No : 0241
IMDG (sea) Code/Class : 1.1 D

Standart Cartridge Sizes (mm)	Cartridge Weight (gr)	Cartridge in Per Box (price)
50 x 225	500	40
50 x 450	1000	20

Thermodynamic Technical Properties	Unit	BALEX Seismic
VOD at 40mm steel tube	m/s	5200 - 5700
Density	g/cm ³	1.20
Water Resistance	-	Excellent

IN-HOLE TS DETONATORS



BALEX NONEL In-Hole TS Detonators

BALEX NONEL IN-HOLE TS (Tunnel Series) non-electric detonators are designed to be used as in-hole detonators for the initiation of cap sensitive explosives.

Designed for use in underground mines as well as tunnels, shafts, trenches and other surface work where long delays are required to provide sufficient time for rock movement. It provides perfect pulse control by allowing the blasting to be fully accurate. This product is not affected by aqueous environments, underground conditions, radio waves and static electricity and ensures safe use. It helps to reduce air shock and ground shake levels.

BALEX Nonel In-Hole TS detonator products are available in a sequence of 26 delays from 100 ms to 8500 ms. For initiation by detonating cord they can be fitted with a T-connector. This product can be ignited with surface detonators, electric detonators and minimum quantity of 5 g/m detonating cords.

They are used to ignite the explosive charge in the column charge placed in the hole without doing any harm of its sensibility. The quantity of 800 mg PETN charge in caps is sufficient for blasting activation energy.

The shock tube winding is fixed and wrapped so it does not allow confusion and knot that provides fast and easy connection.

Shock Tube Qualifications

Outside Diameter	3,1 ± 0.15 mm
Inside Diameter	1.2 ± 0.1 mm
Explosive Charge	15-20 mg/m
Type	3 layers
VOD	2.000 m/s ± 100 m/s
Tube Colour	Yellow
Tube Length	Optionally

UN Codes

UN Name	Nonelectric Detonator
UN No	0360
Class	1.1 B

**IN-HOLE
MS
DETONATORS**



BALEX NONEL In-Hole MS Detonators

BALEX NONEL IN-HOLE MS non-electric detonators are designed to be used as in-hole detonators for the initiation of cap sensitive explosives.

They are used as in-hole detonators at all kinds of surface blasting applications (road construction, mines, quarries and foundation excavations, etc.). This product is not affected by aqueous environments, harsh weather conditions, radio waves and static electricity and ensures safe use.

We mostly use 500 ms delay caps for these kind of products, but if any customer wants another choices, we can offer delays are available in a sequence of 20 delays from 25 ms to 500 ms.

For initiation by detonating cord they can be fitted with a T-connector (available on request). This product can be ignite with surface detonators, electric detonators and minimum quantity of 5 g/m detonating cords.

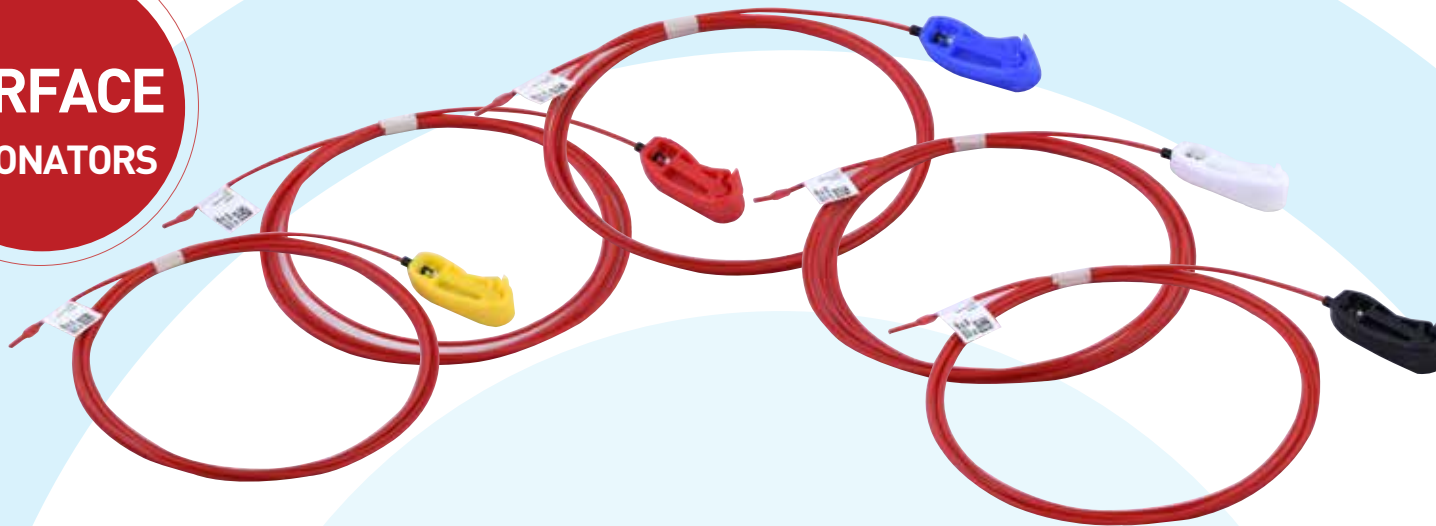
They are used to ignite the explosive charge in the column charge placed in the hole without doing any harm of its sensibility. The quantity of 800 mg PETN charge in caps is sufficient for blasting activation energy.

The shock tube winding is fixed and wrapped so it does not allow confusion and knot that provides fast and easy connection. Manufactured with yellow shock tube for easy differentiation from surface detonators when inspecting the connected blast pattern.

Shock Tube Qualifications	
Outside Diameter	3,1 ± 0.15 mm
Inside Diameter	1.2 ± 0.1 mm
Explosive Charge	15-20 mg/m
Type	3 layers
VOD	2.000 m/s ± 100 m/s
Tube Colour	Yellow
Tube Length	Optionally

UN Codes	
UN Name	Nonelectric Detonator
UN No	0360
Class	1.1 B

**SURFACE
DETONATORS**



BALEX NONEL Surface Detonators

BALEX NONEL Surface Detonators are especially designed for the initiation of other shock tube detonators and to introduce a delay between holes. It is not used to ignite cap-sensitive explosives.

Surface Detonators are equipped with connector blocks able to contain 5 outgoing shock tubes. The connectors have a lowered base charge to reduce noise levels and eliminate shrapnel cut-off concerns. It can be ignited by another surface detonator or electric detonator.

It helps to reduce the levels of air shock and ground shake as it provides the possibility of giving each hole a separate delay. This product is not affected by aqueous environments, harsh weather conditions, radio waves and static electricity and ensures safe use. BALEX Nonel Surface Detonator products are available 5 kinds of delays: 9-17-25-42-67 ms. It has a color coding according to the delay time of the detonator. The color codes are listed in the following table.

Delay times	Connector Colour
9 ms	Black
17 ms	Yellow
25 ms	Red
42 ms	White
67 ms	Blue

The shock tube winding is fixed and wrapped so it does not allow confusion and knot that provides fast and easy connection. Manufactured with red shock tubing for easy differentiation from in-hole detonators when inspecting the connected blast pattern.

Shock Tube Qualifications	
Outside Diameter	3,1 ± 0.15 mm
Inside Diameter	1.2 ± 0.1 mm
Explosive Charge	15-20 mg/m
Type	3 layers
VOD	2.000 m/s ± 100 m/s
Tube Colour	Red
Tube Length	Optionally

UN Codes	
UN Name	Nonelectric Detonator
UN No	0360
Class	1.1 B

DOUBLE DELAY DETONATORS



BALEX NONEL Double Delay Detonators

BALEX NONEL Double Delay detonators for surface application combine in-hole MS detonator (delays 450 or 500 ms) and Surface Detonator (25 ms delay). This combination offers convenience for storage and inventory management of one product instead of two. In this way, it reduces space requirements for transportation. It provides ease of use especially in long series blasting such as channel blasting.

Connecting of blast patterns is faster with Double Delays as fewer connections are required in total. As fewer individual products are used in the blast pattern the clutter at connection points is reduced and visual inspections are easier.

This product is not affected by aqueous environments, harsh weather conditions, radio waves and static electricity and ensures safe use. They are used to ignite the explosive charge in the column charge placed in the hole without doing any harm of its sensibility. The quantity of 800 mg PETN charge in caps is sufficient for blasting activation energy.

The delay of the detonator on both sides can be produced as desired. The color of the surface connector is coded according to the delay times.

The shock tube winding is fixed and wrapped so it does not allow confusion and knot that provides fast and easy connection. Manufactured with yellow shock tube for easy differentiation from surface detonators when inspecting the connected blast pattern.

Shock Tube Qualifications

Outside Diameter	3,1 ± 0.15 mm
Inside Diameter	1.2 ± 0.1 mm
Explosive Charge	15-20 mg/m
Type	3 layers
VOD	2.000 m/s ± 100 m/s
Tube Colour	Yellow
Tube Length	Optionally

UN Codes

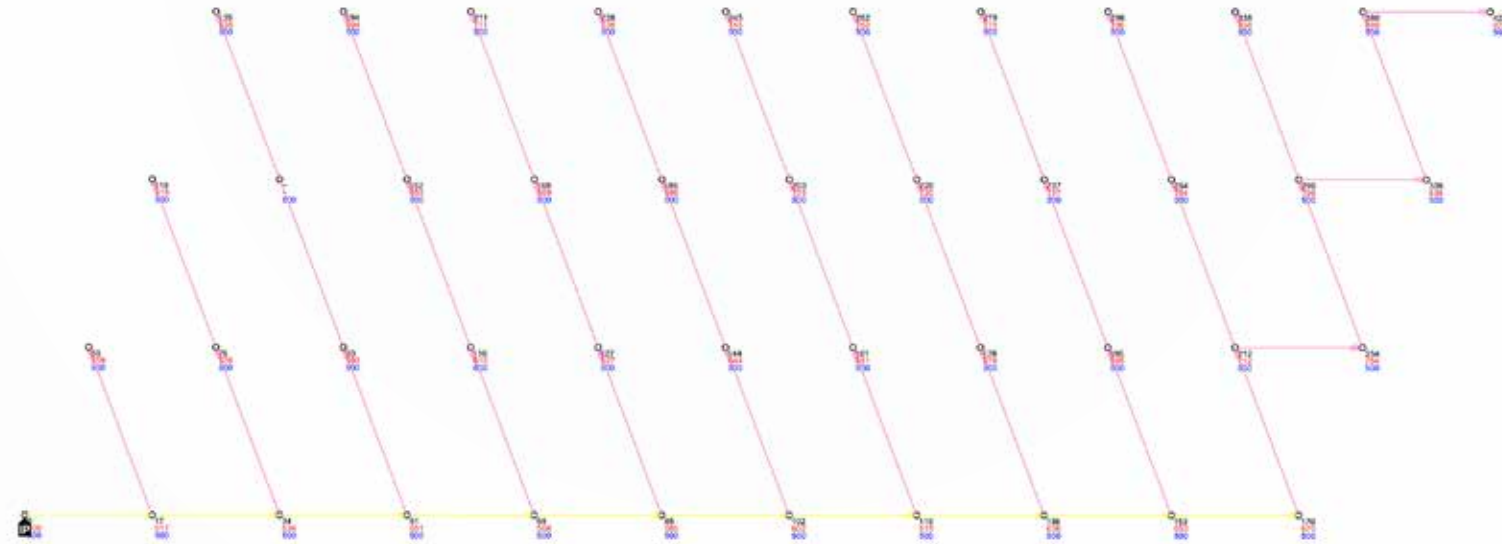
UN Name	Nonelectric Detonator
UN No	0360
Class	1.1 B

BLASTING SERVICE



Major blasting excavation operations are inevitable as the modern world continues to demand the making of great construction facilities and as the mining resources are produced and processed for our everyday needs. Being aware of this, BALEX Power Team staff continues to perform the most important function of mining and construction which is the blasting, as we operate under all kinds of mining and construction site conditions with knowledge, experience, prioritizing environmental and human safety.

BLASTING SERVICE



ZSR Company the first 100 % native explosive manufacturer in Turkey, is not only explosive supplier of it's customer but also technical support and service supplier to them with it's highly qualified and experience technical staff of BALEX Marketing Force. BALEX Marketing Force provides to costumers with essential blasting pattern, proper delay sequence, special controlled blasting design and ground vibration control and measure.

CONTROLLED BLASTING & SPECIAL APPLICATION



Besides the consistently applied production blasting performed in the mining and construction industries, controlled blasts and special custom blasts are needed for a variety of reasons including vibration and slope control. As BALEX Power Team we are proud to successfully complete and continue to provide services for special applications such as pre-split and smooth blasting in the mining, road construction, and dam and tunnel construction industries.

BULK OPERATION



In order to reduce weaknesses and costs of time loss, work and employee safety and mining and construction companies which achieve high production amounts with large blasthole diameters; specially designed Anfo and Emulsion charging truck successfully perform Anfo , Emulsion and Anfo+Emulsion charges. Thanks to our BALEX Power Team staffs knowledge and long years of experience in this regard so that operations are performed with our Anfo and Emulsion charging trucks product and equipped with the latest technology.



Kavaklı Mahallesi Kavaklı Sokak No:1/B
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