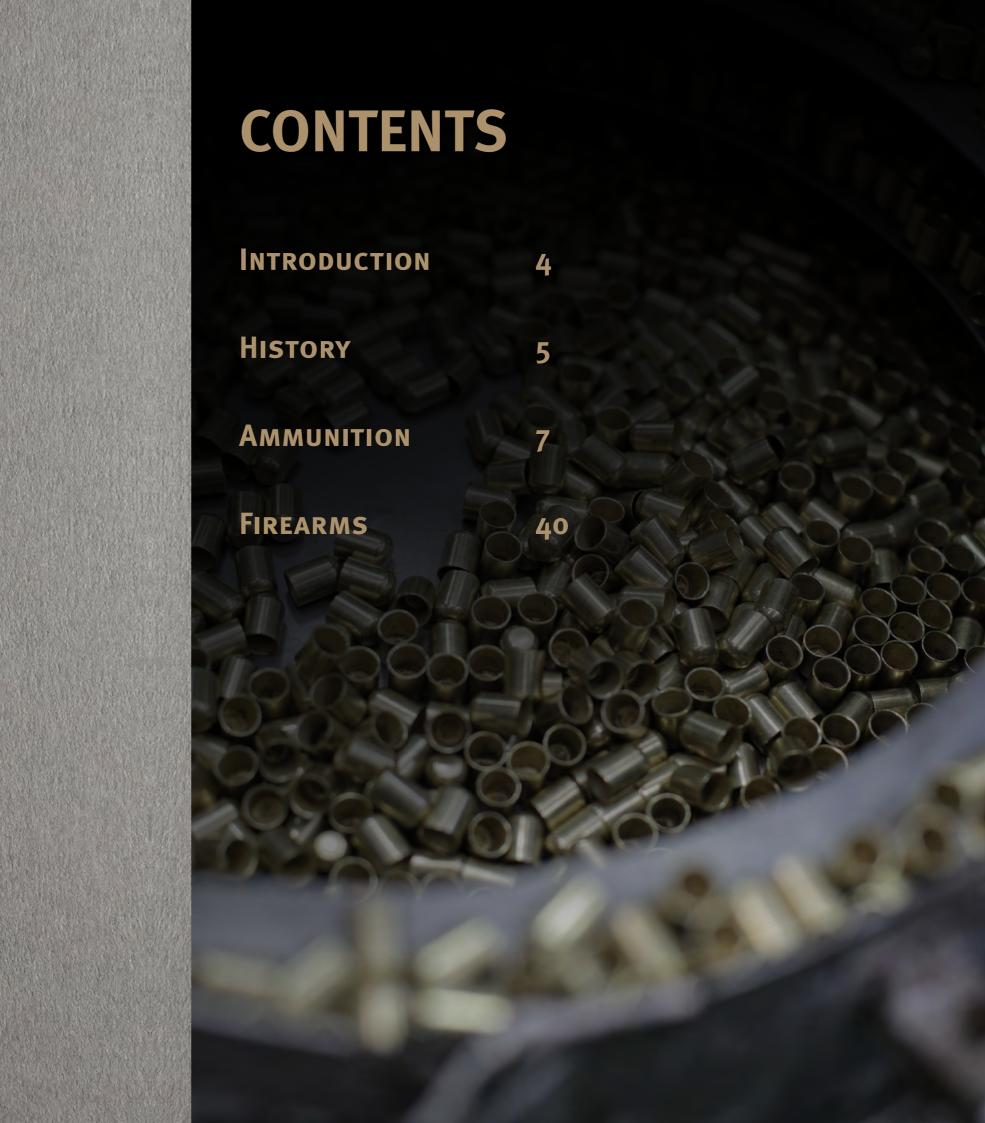




MARAC ARMS INDUSTRY





INTRODUCTION

According to the policy of the Ministry of Defense which promotes research and development work and defense industry, the implementation on the strategy of science and technology development for defense industry, Ministry of Defense B.E. 2560 – 2579 focused on the collaboration of various sectors both in domestic and international level would be able to expand research and develop to manufacturing for government use and commercial distribution in order to be sustainable self-reliance and reduce imports from foreign countries.

The armaments obtained from the research & development will be applied in the army concretely and become a part of armament arrangement rate of the unit including seeking for cooperation from all sectors both in domestic and international level under the government's Thailand 4.0 policy.

The main missions of Narac Arms Industry Co., Ltd. are described as follows.

- 1. Supporting the army's defense industry development policy
- 2. Focusing on research and development of the products which high technology applied
- 3. Contributing to the empowerment of the military
- 4. Increasing alternatives and savings of military budgets for import of weapons
- 5. Strengthening knowledge, proficiency and experience to the defense industry personnel
- 6. Cooperating with government agencies and other private sectors in order to develop the defense industry structure
- 7. Supporting the activities related to the military personnel welfare

Narac Arms Industry Co., Ltd. has determination to develop and improve the standard control system of manufactured products. Therefore, the company initiated to apply ISO 9001:2008 system into the product control system, and the UNITED REGISTRAR OF SYSTEMS Institution which is an ISO certification institution approved and guaranteed that Narac Arms Industry Co., Ltd has passed through the operation system in the ISO 9001:2008 quality system and received Certification of Registration.

In addition, Narac Arms Industry Co., Ltd. also has intention to research and develop weapon parts and arms in order to strengthening the capacity of national security agencies which are the products belong to Thai people, Thailand and Thai army under the policy "Best Quality Serves The Country".



HISTORY BACKGROUND

Narac Arms Industry Co., Ltd. formerly known as Yone Enterprise Co., Ltd. that operated plastic mold business. After that, the company had an opportunity to participate in the research and development project of artillery shell (the size of 105 mm.) with the Weapon Production Administration Center Munition and Bomb Plant, Lopburi. At that time, General Watna Naracarm who was the chairman of the board hold the position of commander of the army's Weapon Production Administration Center, and the mentioned weapon development project was successful resulting in the executive initiatives to operate defense industry business. Therefore, the documents were collected in order to submit to request for the permission to establish the factory for making, assembling, repairing or changing of weapon features. Furthermore, the name of the company was officially changed to



"Narac Arms Industry Co., Ltd.". The company was approved and allowed to establish the factory for making, assembling, repairing or changing of weapon features from the Ministry of Defense on 28th September B.E.2553. For this reason, the company selected the location for new weapon manufacture factory situated at 119 Moo 13, Khao Khlung, Ban Pong District, Ratchaburi Province.



After moving to the new location, the company operated the production line started from antiaircraft artillery shell casings (the size of 37 mm., Type 74 and Type 76 followed by cartridges and bullets (the size of .45" ACP), artillery shell (the size of 105 mm.), complete shotgun ammunition (the size of 12 Gauge) and pistols of all sizes which licensed under the brand.



AMMUNITION

The company has plans to develop production processes continuously. During the company operated all production lines as approved by the Ministry of Defense, the company also had a chance to participate in the research project with the Defence Industry and Energy Centre for the production of ammunition (the size of 30 mm., 30x165). The project has succeeded and the company is now able to produce this type of products to support the army, reduce imports of weapons and prevent the problem of undue profit from foreign countries. The company would like to be a part of the Ministry of Defense in order to manufacture weapons to support the army and co-researching to increase military capability and strengthen the combat power equal to international level.

PRODUCTION LIST

- .22 LRN 40 grain
- 9 MM. LUGER LHP 124 grain
- 9 MM. LUGER FMJ 124 grain
- 9 MM. LUGER LRN 135 grain
- 9 MM. LUGER LTC 124 grain
- 9 MM. LUGER JTCHP 124 grain
- .38 SPECIAL FMJ 158 grain
- .38 SPECIAL DEWC 148 grain
- .38 SPECIAL LRN 158 grain
- .38 SUPER FMJ 129 grain
- .375 MAGNUM SJSP 158 grain

- .45 FMJ 230 grain
- .45 LRN 230 grain
- .45 SWC 200 grain
- 900 BUCK
- Shotshell 60 pellets
- Shotshell 140 pellets
- Shotshell SLUG
- 5.56x45 mm (69gr) BTHP
- 7.62x51 mm (168gr) BTHP
- .50 Browning cartridge
- 30 X 165 TP (Training)

- 30 X 173 TP MK44 (Training)
- 30 X 173 TP MK30 (Training)
- Case 37 mm. Type 74 (Training)
- Case 37 mm. Type 76 (Training)
- Artillery Case, Arc Trajectory 105 mm.
 (Maneuver)
- Artillery Case, Arc Trajectory 105 mm.
 B 4 M 14
- FUZE
- 30 X 173 mm. (Linked)
- 30 X 165 mm. (Linked)







.22 LRN 40 grain

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Shellcase	.22 NRC Brass Case
Bullet	40 grain Lead Round Nose
Primer	Rimfire
Accuracy	Round spreading not over 0.4". Firing testing: 10 shots to the target Tested with a 24-inch barrel, a 40-yard range from the rim of the barrel
Velocity	1,020 – 1,100 ft/sec at the distance 15 feet from the rim of the barrel
_	
Pressure	2,414 bar Max.
Bullet Pull	2,414 bar Max. 16 Lb. Min.
Bullet Pull	
Bullet Pull Bullet Push	16 Lb. Min.

9 AM. LUCER LHP 124 grain

Shellcase	9 MM. LUGER Brass Case
Bullet	124 grain Lead Hollow Point
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	1,050-1,060 ft/sec
Pressure	2,462 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	27.85 - 27.95 mm.





9 AM. LUGER FAJ 124 grain

Shellcase	9 MM. LUGER Brass Case
Silettease	9 MM. LOULK Blass Case
Bullet	124 grain Full Metal Jacket.
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25 m. Round spreading not over 3 inches at the distance of 45 m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	1,060-1,100 ft/sec
Pressure	2,462 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	28.7 ± 0.5 mm.

9 AM. LUGER LRN 135 grain

Shellcase	9 MM. LUGER Brass Case/Steel Case
Bullet	135 grain Lead Round Nose
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25 m. Round spreading not over 3 inches at the distance of 45 m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	985 – 1,050 ft/sec
Pressure	2,462 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection with automatic scale 100%
Loaded Round Length	28.35 ± 0.50 mm.





9 AM. LUGER LTC 124 grain

Shellcase	9 MM. LUGER Brass Case
Bullet	124 grain Lead Tangential Cut.
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45 m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	1,050 – 1,600 ft/sec
Pressure	2,462 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	27.85 – 27.95 mm.

9 AM. LUGER JTCHP 124 grain

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Shello	case	9 MM. LUGER Brass Case
Bullet		124 grain Jacketed Tangential Cut Hollow Point.
Prime	r	Centerfire
Accura	acy	Round spreading not over 2 inches at the range of 25m. Round spreading not over 3 inches at the range of 45m. 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Veloci	ity	1,090 - 1,110 ft/sec
Pressi	ure	2,462 bar Max.
Bullet	Pull	20 Lb. Min.
Bullet	Push	25 Lb. Min.
Prope	llant	Propellant powder filling with automatic scale 100%
Visual	linspection	100% visual inspection in the final process before packing
Loade	ed Round Length	29.43 ± 0.25 mm.





.38 SPECIAL FAJ 158 grain

Shellcase	.38 SPECIAL Brass Case
Bullet	158 grain Full Metal Jacket
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	967-1,033 ft/sec
Pressure	1,379 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	39.00 ± 0.5 mm.

.38 SPECIAL DEWC 148 grain

Shellcase	.38 SPECIAL
Bullet	148 grain Double Ended Wad-cutter
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	656-721 ft/sec
Pressure	1,103 bar Max.
Pressure Bullet Pull	1,103 bar Max.
	1,103 bar Max.
Bullet Pull	1,103 bar Max. Propellant Powder filling with automatic scale 100%
Bullet Pull Bullet Push	-





.38 SPECIAL LRN 158 grain

Shellcase	.38 SPECIAL Brass Case
Bullet	158 grain Lead Round Nose
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	738-836 ft/sec
Pressure	1,103 bar Max.
Bullet Pull	100 Lb. Min.
Bullet Push	50 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	39.0 ± 0.5 mm.

.38 SUPER FALJ 129 grain

Shellcase	.38 SUPER COMP Brass Case
Bullet	129 grain Full Metal Jacket
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	1,131-1,197 ft/sec
Pressure	2,483 bar Max.
Bullet Pull	100 Lb. Min.
Bullet Push	50 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	32.00 ± 0.5 mm.





.357 AAGNUM SJSP 158 grain

Shellcase	.357 Brass Case
Bullet	158 grain Semi Jacket Soft Point
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	1,080 - 1,360 ft/sec
Pressure	2,413 bar Max.
Bullet Pull	35 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	40.4± 0.5 mm.

.45 FMJ 230 grain

Shellcase	.45 ACP Brass Case
Bullet	230 grain Full Metal Jacket
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	754-820 ft/sec
Pressure	1,372 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	32.0 ± 0.5 mm.





.45 LRN 230 grain

Shellcase	.45 ACP Brass Case
Bullet	230 grain Lead Round Nose
Primer	Centerfire
Accuracy	Round spreading not over 2 inches at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	688-754 ft/sec
Pressure	1,372 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	32.0 ± 0.5 mm.

.45 SWC 200 grain

Shellcase	.45 ACP Brass Case
Bullet	200 grain Semi Wad-cutter
Primer	Centerfire
Accuracy	Round spreading not over 1 inche at the distance of 25m. Round spreading not over 3 inches at the distance of 45m. Firing Testing: 10 shots to the target, tested with a 6-inch barrel from the rim of the barrel
Velocity	721-787 ft/sec
Pressure	1,372 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	25 Lb. Min.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	30.60 ± 0.5 mm.





9 00 BUCK

Shellcase	Plastic
Bullet	Ø 8.6 mm. 32 grams
Primer	Centerfire
Accuracy	Round spreading not over 30 inches at the distance of 36m. Firing Testing: 10 shots to the target, tested with a 28-inch barrel from the rim of the barrel
Velocity	1,095 - 1,185 ft/sec
Pressure	896 bar Max.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	56.0-58.0 mm.

Shotshells 60 pellets

Shellcase	Plastic
Bullet	Ø 4.5 mm. 32 grams
Primer	Centerfire
Accuracy	Round spreading not over 30 inches at the distance of 36m. Firing Testing: 10 shots to the target, tested with a 28-inch barrel from the rim of the barrel
Velocity	1,095 - 1,185 ft/sec
Pressure	896 bar Max.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	56.o-58.o mm.





Shotshells 140 pellets

Shellcase	Plastic
Bullet	Ø 3.5 mm. 32 grams
Primer	Centerfire
Accuracy	Round spreading not over 30 inches at the distance of 36m. Firing Testing: 10 shots to the target, tested with a 28-inch barrel from the rim of the barrel
Velocity	1,095 – 1,185 ft/sec
Pressure	896 bar Max.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	56.0-58.0 mm.

Shotshells SLUG

Shellcase	Plastic
Bullet	SLUG 32 grams
Primer	Centerfire
Accuracy	Round spreading not over 30 inches at the distance of 36m. Firing Testing: 10 shots to the target, tested with a 28-inch barrel from the rim of the barrel
Velocity	1,095 – 1,135 ft/sec
Pressure	896 bar Max.
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	56.0-58.0 mm.





5.56x45 mm (69gr) BTHP

Shellcase	Brass Case
Bullet	69 grain Boat Tail Hollow Point
Primer	Centerfire
Accuracy	Round spreading not over 200mm. at the distance of 550m. Firing Testing: 10 shots to the target, tested with a 24-inch barrel from the rim of the barrel
Velocity	2,470 ± 30 ft/sec
Pressure	3,875 bar Max.
Bullet Pull	120 Lb. Min.
Bullet Push	100 Lb. Min.
Propellant	Propellant powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	57.05 ± 0.05 mm.

7.62x51 mm (168gr) BTHP

Shellcase	Brass Case
Bullet	168 grain Boat Tail Hollow Point
Primer	Centerfire
Accuracy	Round spreading not over 200mm. at the distance of 550m. Firing Testing: 10 shots to the target, tested with a 23.8-inch barrel from the rim of the barrel
Velocity	2,300 ± 30 ft/sec
Pressure	3,310 bar Max.
Bullet Pull	20 Lb. Min.
Bullet Push	14-20 Lb. Min.
Propellant	Propellant powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	71.05 ± 0.05 mm.





.50 Browning cartridge

Shellcase	Brass Case
Round length	138 mm.
Case Length	99.33 mm.
Rim Diameter	20.3 mm.
Bullet diameter	12.96 mm.
Round weight	c. 115 g
Bullet weight	42-45 g
Muzzie Velocity (MV)	887 m/s (24 m from muzzle)
Muzzie energy	c. 17000 J
Maximum chamber pressure	380 Mpa (55000 psi)
Maximum ballistic range	7000 m (approx)

30 X 165 TP (Training)

Shellcase	30 X 165 Steel/Brass Case
Bullet	400 grams Turning Point
Primer	Centerfire Primer
Accuracy	Mean Impact Point ≤ 2.353 mil. or 400 mm. @ 170 m.
Propellant Weight	≤ 120 g. , SD ≤ 0.3 g.
Velocity	950 – 980 m/s, S.D. ≤ 25 m/s.
Pressure	≤ 380 Mpa
Bullet Pull	> 20 KN
Propellant	Propellant powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process
Loaded Round Length	291 mm. Max





30 X 173 TP **MK44** (Training)

Shellcase	30 X 173 Steel Case
Bullet	365 grams Turning Point MK44
Primer	Centerfire Primer
Accuracy	Mean Impact Point ≤ 2.353 mil. or 400 mm. @ 170 m.
Propellant Weight	≤ 140 g., SD ≤ 0.3 g.
Velocity	1,000 - 1,060 m/s, S.D. ≤ 25 m/s.
Pressure	≤ 380 MPa
Bullet Pull	> 7.5 KN
Propellant	Propellant Powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	290 mm. Max

30 X 173 TP AK30 (Training)

Shellcase	30 X 173 Brass Case
Bullet	365 grams Turning Point MK30
Primer	Centerfire Primer
Accuracy	Mean Impact Point ≤ 2.942 mil. or 500 mm. @ 170 m.
Propellant Weight	≤ 140 g., SD ≤ 0.3 g.
Velocity	1,023 - 1,047 m/s, S.D. ≤ 25 m/s.
Pressure	≤ 460 MPa
Bullet Pull	> 7.5 KN
Propellant	Propellant powder filling with automatic scale 100%
Visual inspection	100% visual inspection in the final process before packing
Loaded Round Length	289 ± 1.5 mm.

32 NRC Catalog NRC Catalog





Case 37 mm. Type 74 (Training)

Shellcase	37 mm. Brass Case	
Material Brass contents equivalent to UNS C 26000		
Primer	Centerfire (Press Type)	
Hardness	Casing base hardness ≤ 180 HV	
Length	252 - _{o.6} mm.	
Forming	A workpiece that is extruded from the same metal, there are no internal nor external joints welded	

Case 37 mm. Type 76 (Training)

Shellcase	37 mm. Brass Case	
Material	Brass contents equivalent to UNS C 26000	
Primer	Centerfire Primer (Press Type)	
Hardness	Casing base hardness ≤ 180 HV	
Length	203 - _{0.6} mm.	
Forming	A workpiece that is extruded from the same metal, there are no internal nor external joints welded	





Shellcase	Salute 105 Brass Case	
Material	Brass contents equivalent to UNS C 26000	
Primer	Centerfire Primer	
Hardness	The harness of the surface around primer end hole ≤ 65 HRB	
Reload	The case can be reapplied at least 4 times.	
Length	204.5 _{-0.3} mm.	



Artillery Case, Arc Trajectory 105mm B 4 A 14

Shellcase	105mm. Steel Case	
Material	Anti-rust steel plate. The rolls are hollow cylindrical, extruded, assembled into the end plate and extruded with casing (Collar)	
Primer	Centerfire (Press Type)	
Coating	Surface coating 7.62 - 25.40 micron	
Length	371.86 _{-25.47} mm.	





Fuze

Material	Brass, Steel and Aluminium	
Functional Test	Rotate to produce the centripetal force which triggers to arm when there is a rotating force, 10,000 to 14,000 rounds per minute. 50 tests shot at normal speed, shoot to the AU-4G target at a distance of 50m. and 150m. The trigger must explode with every shot. Spreading no more than 60 cm from the target.	
Trajectory Test Mechanical Shock Test	Without tracer, must be an explosion in the barrel or during firing	
Vibration test for resistant test to shock control. Must withstand the impact of 1, Jolt Test all three dimensions. The total weight of trailer hitch does not exceed 3.6 kg (8lb) In this test, fuze must not be operated		
Jumble Test	Fuze readiness testing by rotating fuze 30 rounds per minute for 3,600 rounds or 120 minutes.	

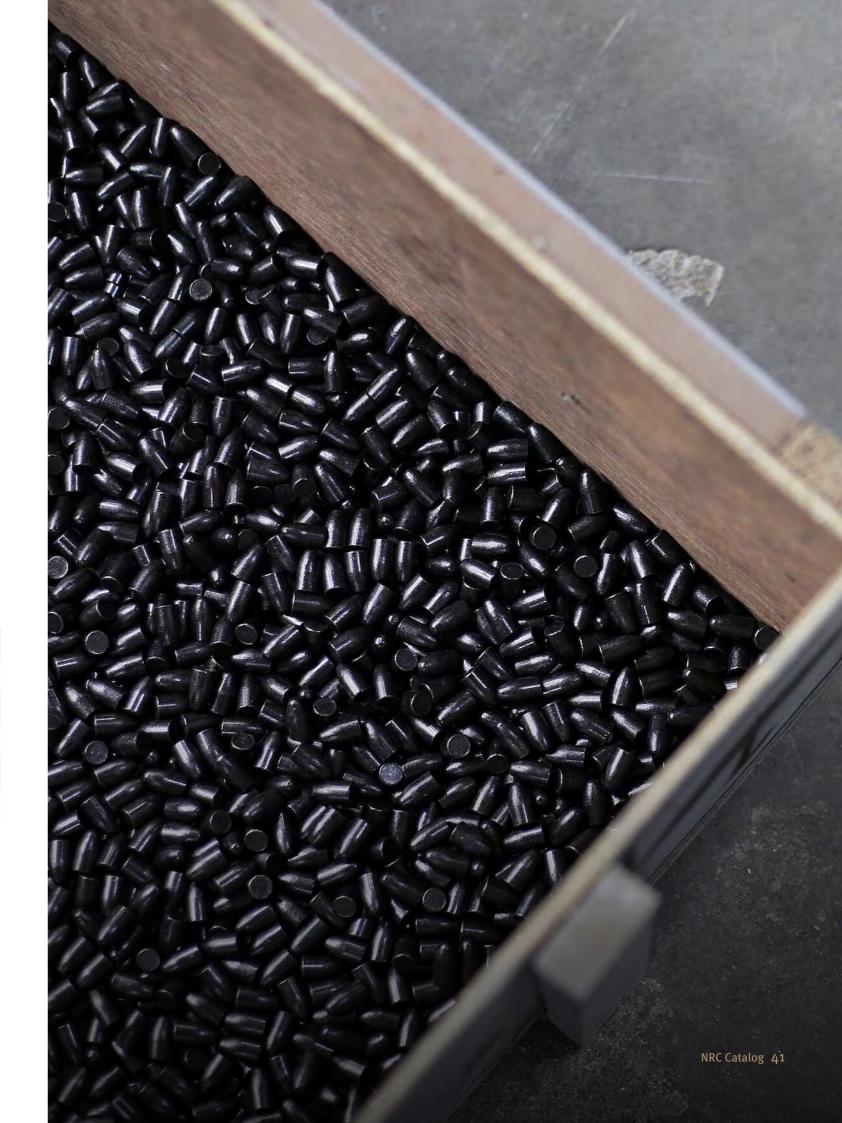
30 X 173 mm. (Linked)

Material	Steel, cold rolled steel sheet grade SK 85 M or equivalent 47 - 50 HRC	
Hardness		
Forming	A workpiece extruded from same metal; no joints welded, no sharp end	
Coating	Surface coating for anti-rust	
Capacity	35,000 ea./year	



30 X 165 mm. (Linked)

Material	Steel, cold rolled steel sheet grade SK 85 M or equivalent	
Hardness	47 - 50 HRC	
Forming	A workpiece extruded from the same metal; no joints welded, no sharp end	
Coating	Surface coating for anti-rust	
.	Surface County for unit 1950	
Capacity	35,000 ea./year	



MRAC556 20"

Without magazine	3.42 kg
Length	101 cm
Barrel	20"
Barrel width	.220"
Sighting radius	Adjustable
Operation	Gas Piston
Mechanism	Rotating bolt
Cooling	Air
Ammunition	5.56x45mm. Ball M193, M855
Firing system	Safe, Single, Auto
Magazine type	20,30 ea



MRAC556 14.5"

Without magazine	2.9 kg
Lenght	101 CM
Barrel	14.5"
Barrel width	.220"
Sighting radius	Adjustable
Operation	Gas Piston
Mechanism	Rotating Bolt
Cooling	Air
Ammunition	5.56x45mm. Ball M193, M855
Firing system	Safe ,Single,Auto
Magazine type	20, 30 ea





CONTACT US

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