

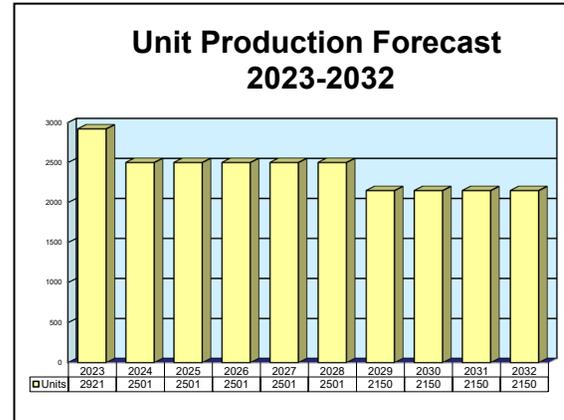
ARCHIVED REPORT

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Wasp

Outlook

- In serial production for French and Greek procurement, as well as limited export
- Since the contractors run the program as a private venture, export sales generally go unreported
- Forecast reflects French and Greek procurement only, as data regarding export sales remain unavailable



Orientation

Description. A man-portable anti-armor weapon.

Sponsor. The prime contractor and licensee sponsor the Wasp program as a private venture.

Status. Development through serial production.

Total Produced. Through 2022, we estimate the prime contractor and licensee produced at least 577,046 Wasp weapons.

Application. A lightweight, man-portable, shoulder-fired, anti-armor multipurpose weapon system, optimized for close-range use by infantrymen on the move.

Price Range. In 2023 U.S. dollars, the Wasp reportedly maintains a unit price of \$3,958 in quantity buys.

Contractors

Prime

Nexter Munitions	http://www.nexter-group.fr , Route de Villeneuve, La Chapelle, Saint-Ursin, France, Tel: + 33 02 48 68 71 71, Fax: + 33 02 48 68 70 54, Prime
Hellenic Defence Systems (EAS) SA (EBO-PYRKAL)	1 Ilioupoleos Ave, Hymettus, Athens, Greece, Tel: + 30 210 979 0900, Fax: + 30 210 979 0800, Email: info@eas.gr , Licensee

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Subcontractor

Rheinmetall Waffe Munition GmbH , Branch Nico Trittau	http://www.rheinmetall-defence.com, Bei der Feuerwerkerei 4, Trittau, Germany, Tel: + 49 4154 805 0, Fax: + 49 4154 805 222, Email: info-wm@rheinmetall.com (Wasp 18mm Subcaliber Training System)
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Contractors are invited to submit updated information to Editor, International Contractors, Forecast International, 75 Glen Road, Suite 302, Sandy Hook, CT 06482, USA; rich.pettibone@forecast1.com

Technical Data

Design Features. The Wasp projectile fires from a disposable launcher. The weapon employs the Davis principle to allow firing from an enclosed space.

Dimensions. The data for the projectile reflect the basic 70mm round with a 58mm High Explosive Anti-Tank (HEAT) warhead.

	<u>SI Units</u>	<u>U.S. Units</u>
Projectile length	38.0 cm	14.96 in
Total length	80.0 cm	31.49 in
Projectile diameter	70.0 mm	2.76 in
Warhead diameter	58.0 mm	2.28 in
Total diameter	102.5 mm	4.04 in
Projectile weight	0.615 kg	1.35 lb
Total weight	3.0 kg	6.6 lb
Finspan	58.0 mm	2.28 in
Cone standoff	3.1 cal	3.1 cal

Performance. The HEAT round's armor perforation data (against rolled homogeneous armor) are extracted from the prime contractor's published promotional material.

	<u>SI Units</u>	<u>U.S. Units</u>
Speed	250 mps	820.2 fps
Altitude	Line of sight	Line of sight
Effective range	250 m	273.4 yd
Armor perforation	30+ cm	11.81 in

Propulsion. The Wasp employs a solid-fuel rocket motor. The weapon employs the Davis countershot principle, with a plastic fiber countermass to enable firing from an enclosed space.

Launcher Mode. The Wasp launcher is a glass-fiber-reinforced plastic launch tube with integral sighting and firing mechanisms. The operator disposes of the entire launcher after firing.

Control & Guidance. Fixed fins at the end of the projectile provide aerodynamic stabilization for the round in flight.

Warhead. The composition of the 58mm Wasp HEAT warhead, designated AC, is unknown at this time. Research indicates that the prime contractor based the complete projectile on the 58mm Luchaire model AC 58 light rifle grenade.

Variants/Upgrades

Variants. None.

Modernization and Retrofit Overview. Not generally applicable. The contractors integrate any product improvements as production cut-ins.

Program Review

Background. In the early 1980s, Luchaire began developing a light anti-armor system to replace its highly successful Lance Roquette de 89 (STRIM) weapon.

Inexpensive, Simple, and Effective

From the outset of the Wasp 58 program, Luchaire designed the new weapon to be an inexpensive, simple, effective weapon for use by support troops and frontline personnel. As a true light weapon of this class is generally ineffective against modern main battle tanks, the contractor specifically intended the new weapon for the destruction of light armored vehicles up to the BMP-2 threat level. The weapon cannot defeat explosive reactive armor.

At the 1987 Satory weapons fair, Luchaire unveiled the Wasp 58 anti-armor weapon. Development continued; the contractor first offered the Wasp 58 on the international market in 1989. The Wasp 58 reportedly scored its first export sale (to an undisclosed customer) around 1992. Subsequently, the contractor secured additional large sales to the French Army and at least three unidentified export customers. In addition, Greece secured a licensed-production agreement for the weapon.

Corporate Evolution

In 1991, Giat Industries absorbed Luchaire; the contractor became a component of Giat's Euroimpact Division, which then operated as Giat's Weapons and Ammunition Division. With this reorganization, the Manurhin Défense SA component of Giat assumed production responsibilities for the weapon, now known simply as the Wasp.

In October 2006, Giat Industries approved a reorganization and an associated name change to Nexter. Under the restructuring, the group maintained four core operations:

- Nexter Systems
- Nexter Munitions
- Nexter Electronics
- Nexter Mechanics

The move better prepared the firm for consolidation in the future with another corporate entity.

In 2015, Krauss-Maffei Wegmann and Nexter – after years of on-again, off-again discussion – signed an agreement on a merger plan.

As part of the process, the two companies contributed their shares to a newly incorporated joint holding company based in the Netherlands. They each received 50 percent of the shares of this company, which became the sole shareholder in KMW and Nexter. Completion of the merger of KMW and Nexter was formally announced in January 2016.

The newly merged firm is the third-largest land defense contractor in the world, behind General Dynamics and BAE Systems. Ownership is split between the French government's Giat Industries holding company and KMW parent the Wegmann Group (controlled by Germany's Bode family). At the time of the merger, the single entity employed around 6,000 people and had an order book of approximately EUR6.5 billion (\$8.2 billion), with turnover of around EUR2 billion.

Description. The Wasp projectile launches from a fixed glass-fiber-reinforced plastic launch tube.

A Modified Davis System

The weapon employs a modified Davis recoilless system. Upon firing, the weapon propels a 900-gram (1.98-lb) counter mass of soft plastic flakes to the rear, allowing the operator to fire the Wasp safely from within an enclosed space. For more information on the Davis system, see Appendix I of this forecast, "Glossary of Military Vehicle/Ordnance/Munitions Technology."

The launch tube mounts a simple optical sight; the trigger assembly mounts immediately behind the sight unit. The weapon is compatible with left- and right-handed operators without modification.

The Wasp comes as a complete round. The entire launch tube, which is watertight and highly resistant to environmental effects and rough handling, is disposable after use.

Sequence of Operation

From the outset, the contractor designed the Wasp for quick and easy operation. To ready the weapon for use, the operator removes the end covers from the launch tube. He then activates the battery circuit and releases the mechanical safety lock. Once the operator acquires the target through the sight unit, he presses the arming switch to fire the weapon. After firing, the operator discards the expended launcher.

Nico 18mm Training Device

Rheinmetall Waffe Munition, Nico Trittau – formerly NICO-Pyrotechnik (Trittau, Germany) – provides a training device for the Wasp. This device consists of an

Wasp

18mm barrel that mounts within an expended Wasp launch tube. The reusable unit fires 18x86mm ammunition that mimics the standard Wasp projectile in terms of firing sequence, ballistics, and accuracy.

Operational Analysis. The Wasp suffers from a limitation common to most weapons of this class. Like most non-tandem HEAT warheads, the Wasp round cannot successfully engage explosive reactive armor. This limitation renders the Wasp generally ineffective against modern main battle tanks and armored fighting vehicles.

However, as the contractor designed the Wasp only to engage the conventional rolled homogeneous armor of vehicles up to the BMP-2 threat level, this limitation is something of a moot point. The Wasp is better suited for specialized urban and demolition applications. Its ability to safely fire from an enclosed space makes it an ideal weapon for military operations in urban terrain (MOUT) – especially in counterterrorist operations, where engaging heavy armor is usually not an issue.



Wasp with 18mm Subcaliber Training Device

Source: Nexter Systems/Rheinmetall Waffe Munition GmbH

Funding

The prime contractor and licensee fund their respective programs as private ventures.

Worldwide Distribution/Inventories

Export Potential. The Wasp faces stiff competition from a number of systems in this class. Nevertheless, the Wasp has reportedly scored a significant level of sales. While hardly a market leader, the Wasp can still provide Manurhin/Nexter Systems with a respectable share of the international man-portable anti-armor weapons market.

Countries. France, Greece, and at least four unidentified customers have purchased the Wasp.

Forecast Rationale

Although Nexter aggressively promotes the Wasp for export sales, this anti-tank/multipurpose weapon faces stiff competition from a number of systems in the class, such as the Instalaza C-90-C and the Nammo Defense M72 LAW.

Nevertheless, the Wasp has been successful in terms of sales. In addition to French and Greek procurement, at

least four unidentified export customers (most likely former French colonies) have purchased the Wasp.

An International Player

While hardly a market leader, the Wasp can still provide Nexter Systems with a respectable share of the international market for man-portable anti-armor and bunker buster weapons. The Forecast International

Wasp

Weapons Group expects that over the next 10 years, this Nexter program will account for 2.1 percent of all man-portable anti-armor weapon production worldwide, worth 2.93 percent of the total market value.

French and Greek Procurement

Nexter Systems and Hellenic Defence Systems continue serial production of the Wasp, primarily for procurement by France and Greece. As the contractors

have not released contractual information or identified clients, the Forecast International Weapons Group cannot evaluate the export sales potential of this weapon.

Regardless of export prospects, French and Greek procurement alone will keep the Wasp in full-rate production. In addition, we expect the Wasp to continue to score a moderate level of unreported export sales, most likely to former French colonies.

Ten-Year Outlook

ESTIMATED CALENDAR YEAR UNIT PRODUCTION												
Designation or Program	High Confidence					Good Confidence			Speculative			
	Thru 2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Nexter Munitions												
Wasp Tube												
	577,046	2921	2501	2501	2501	2501	2501	2150	2150	2150	2150	24,026
Total	577,046	2921	2501	2501	2501	2501	2501	2150	2150	2150	2150	24,026