

Miilux general information

Miilux Poland Sp. z o. o. is part of the Miilukangas group which was established in 1967. Our production facilities are located in Poland, Finland and Turkey, where we have excellent transport connections by sea and by land.

The company's activities and quality are managed using documented operating system based on ISO 9001 (quality), ISO 14001 (environment), ISO 3834-2 (welding) and OHSAS 18001 (safety) as well as the goals set by the management of the company.

Miilux Poland has also implemented the WSK system (Internal Control System) and has a Concession of the Ministry of the Interior and Administration to conduct business activity in the field of production and trade of products and technology for military or police purposes (licence No. B-069/2018).



Miilux Oy Finland Ruonankatu 1 92100 RAAHE Finland



All information regarding the properties and use of the materials and products mentioned in this brochure is for reference only.



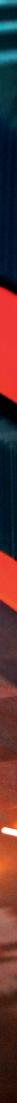


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> **Miilux Turkey** Organize Sanayi Bölgesi No:16 Hasan Türek Cd., 45030 Keçiliköy Osb Manisa Merkez/Manisa Turkey

MILUX BALLISTIC STEEL CENTRE

Miilux®OY









Armor solutions

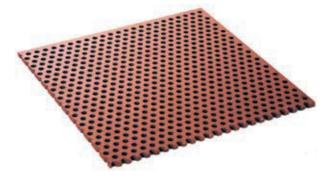
Miilux Protection armor steels are high-quality steels designed in Finland for the demanding ballistic protection applications, such as:

- protective elements of buildings, e.g. shooting ranges, ATMs, banks, safes, etc.,
- special vehicles, e.g. police and military vehicles, bank cars, limousines, bulletproof vehicles, etc.,
- many other applications in the defense industry.

Miilux manufactures armor steel plates and precision elements made to the required dimensions, ready for assembly, with short delivery times.

Miilux Protection steel plates and elements are anti-corrosion protected on the surface – plates with a thickness of more than 5.0 mm are usually covered with a primer (priming) paint, but they can be also supplied purified by shot blasting and coated with a corrosion inhibitor (also applies to thinner sheets).





Quick deliveries worldwide

We make quick deliveries directly from our warehouses in Tarnowskie Góry – Poland, Raahe - Finland, Manisa- Turkey and Dubai – United Arab Emirates.

For most of the armored plates stored in our warehouses, we have ballistic tests results for each steel heat (according to standards, among others: STANAG 4569, VPAM PM2007 or EN1522).

Ready-to-install products, made of armored steel Miilux Protection can be delivered as components cut by plasma, laser or water jet, they can also be bent, welded, machined and surface treated.

Armor steel components can be made from any grades of Miilux Protection, as requested and according to customer specific requirements.





Miilux Protection steels

- Miilux armor steels are produced in the following grades: 380, 400, 400T, 450, 500 and 600, and are available in the thickness range of 2.5-60 mm, where the maximum sheet dimensions are 2500x6000mm.
- Miilux Protection armor steels are tested according to such standards as: PM2000, VPAM PM2007, EN1522, STANAG 4569, MIL-DTL-12560 and MIL-A-46100D.
- Miilux Poland cooperates with several ballistic laboratories in many countries all over the world and is able to carry out any test and make deliveries according to customer specific requirements.
- More information on the results of carried out tests and certificates, as well as implementation possibilities of specific requirements, please refer to our website www.miilux.pl or contact us directly.

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	Zertifikat - Čertific			
	S 17 0029 02 / Z	ale		
	Durchschusshemmendes p Bullet resistant sheet material	lattenartiges Material		
	Antragsteller	Miilux Oy		
	Hersteller	FI-92100 Raahe		
	Manufacturer	Millux Oy FI-92100 Raahe		
	Ort und Datum der Prüfung Location and test date (d.m.y.)	89081 Ulm, 16.03.2017		
	Prüfanforderung und Verfahren Test requirement and method	VPAM - PM 2007 Fassung 2, Stand 31.01.2014 Edition 2, of 31-01-2014		
	Gegenstand der Zertifizierung Item under certification	Stahlblechplatte		
		500 x 500 x 6,80 mm		
	Typenbezeichnung Product reference	Millux Protection 500 Chargen-Nr. / Batch-number: 67899-59-18		
	Zugeordnete Widerstandsklasse Resistance class achieved	PM 2007 Fassung 2, Stand 31.01.2014		
		PM 7 MH; 90° (0° Nato)		
	D	MH = MutRix 90* (0* Nato) = Auftrefininist / Angle of impact		
	Details siehe Prüfbericht-Nr. Details see test report number	S 17 0029 02 / B		
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Technical specification Miilux Protecion 500 and 600

Steel grade	Norm	Thickness	Thread	Bullet weight	Shooting distance	Striking velocity
Protection 500	EN1522 FB3	2.5 mm	.357 Mag	10.7 g	5 m	430 +/- 10 m/s
Protection 500	EN1522 FB4	3.0 mm	.44 Mag	15.6 g	5 m	440 +/- 10 m/s
Protection 500	EN1522 FB4+	4.2 mm	7.62 x 39 mm AK-47 M43	8.0 g	10 m	720 +/- 10 m/s
Protection 500	EN1522 FB5	6.0 mm	5.56 x 45 mm SS109 (M855)	4.0 g	10 m	950 +/- 10 m/s
Protection 500	EN1522 FB6	6.0 mm	7.62 x 51 mm M80 Nato Ball	9.5 g	10 m	830 +/- 10 m/s
Protection 500	EN1522 FB7	14.0 mm	7.62 x 51 mm P80 Nato AP	9.5 g	10 m	820 +/- 10 m/s
		6.0 mm	7.62 x 51 mm M80 Nato Ball	9.5 g	30 m	833 +/- 20 m/s
Protection 500	Stanag 4569	6.0 mm	5.56 x 45 mm SS109 (M855)	4.0 g	30 m	900 +/- 20 m/s
	Level 1	9.0 mm	5.56 x 45 mm M193	3.5 g	30 m	937 +/- 20 m/s
Protection 500	Stanag 4569					
	Level 2	12.0 mm	7.62 x 39 mm AK-47 API BZ	7.7 g	30 m	695 +/- 20 m/s
Protection 500	Stanag 4569	16.0 mm	7.62 x 54R mm B32 API	8.4 g	30 m	930 +/- 20 m/s
	Level 3	24.0 mm	7.62 x 51 mm AP (WC)	10.3 g	30 m	854 +/- 20 m/s
Protection 600	Stanag 4569 Level 2	8.0 mm	7.62 x 39 mm AK-47 API BZ	7.7 g	30 m	695 +/- 20 m/s
Protection 600	VPAM PM 2007	0.0 11111		1.7 5	00111	070 17 2011/3
	PM9	10.0 mm	7.62 x 51 mm P80 Nato AP	9.7 g	10 m	820 +/- 10 m/s
Protection 600	Stanag 4569					
	Level 3	20.0 mm	7.62 x 51 mm AP (WC)	8.4 g	30 m	930 +/- 20 m/s

