



World class armoring steel for human protection

Specialty Steel presents Protection 500

A world class armoring steel to keep you safe from blasts, explosions, and direct impacts.

Protection 500 is continuously tested according to international standards and has proven to be a good solution for both civil and military applications, where safety matters.

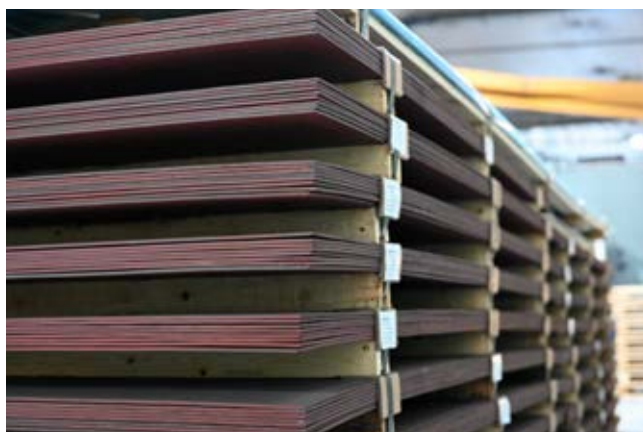


Chemical composition (max. % ladle analysis) thickness 2,5 – 40,0 mm

C	Si	Mn	P	S	Cr	Ni	Mo	B
0.30	0.70	1.70	0.030	0.015	1.50	0.80	0.50	0.004

Typical mechanical properties thickness 2,5 – 40,0 mm

Yield strength Rp 0.2 N/mm ²	Tensile strength Rm N/mm ²	Elongation A5 %	Impact Charpy-V -40 °C Kv Joule	Hardness range HBW	CEV
1250	1600	8	20	480-560	0.64



Protection 500 sheets and plates are available from Specialty Steel Stock in various thicknesses. Non-stock dimensions can be produced and delivered with short lead times.

Ask your Specialty Steel contact for Workshop Recommendations for cutting, bending, welding and other workshop processes.

Protection 500 is delivered in quenched condition, with superior hardness and toughness, from edge to edge.

Technical specifications

Class	Test thickness	Weapon	Calibre	Bullet	Bullet weight	Shooting distance	Bullet speed V2,5 (m/s)
EN 1522 FB3	2,5 mm	Revolver	357 Mag.	Full jacket; coned bullet; soft core	10,2 g	5 m	430 (± 10 m/s)
EN 1522 FB4	3,0 mm	Revolver	44 Rem. Mag.	Full jacket; flat nose; soft core	15,6 g	5 m	440 (± 10 m/s)
-	4,2 mm	Rifle	7,62 x 39 mm	AK-47 M43	8,0 g	10 m	720 (± 10 m/s)
EN 1522 FB5	6,0 mm	Rifle	5,56 x 45 mm	SS109 (M855)	4,0 g	10 m	950 (± 10 m/s)
EN 1522 FB6	6,0 mm	Rifle	7,62 x 51 mm	M80 Nato Ball	9,5 g	10 m	830 (± 10 m/s)
EN 1522 FB7	14,0 mm	Rifle	7,62 x 51 mm	P80 Nato AP	9,5 g	10 m	820 (± 10 m/s)
Stanag 4569 ^{Level 1}	6,0 mm	Rifle	7,62 x 51 mm	M80 Nato Ball	9,5 g	30 m	833 (± 20 m/s)
	6,0 mm	Rifle	5,56 x 45 mm	SS109 (M855)	4,0 g	30 m	900 (± 20 m/s)
	9,0 mm	Rifle	5,56 x 45 mm	M193	3,5 g	30 m	937 (± 20 m/s)
Stanag 4569 ^{Level 2}	12,0 mm	Rifle	7,62 x 39 mm	API BZ	7,7 g	30 m	695 (± 20 m/s)
Stanag 4569 ^{Level 3}	24,0 mm	Rifle	7,62 x 51 mm	AP (WC Core)	8,4 g	30 m	930 (± 20 m/s)
	16,0 mm	Rifle	7,62 x 54R mm	B32 API	10,3 g	30 m	854 (± 20 m/s)

Application examples



All information supplied by Vogel Stahl BV, also acting under its registered trade name Specialty Steel Sheet and Plate, in relation to its products, the characteristics and properties of its products and their possible application whether in the form of data, recommendations or otherwise, as contained in this publication has been compiled with care. However, Vogel Stahl BV gives no warranties of any kind, expressed or implied, and Vogel Stahl BV assumes no liability whatsoever in respect of application, processing, use of, or reliance on the aforementioned information or products or any consequence thereof.