



FEROSAFE

Next generation material for defending physical security products.

What is FEROSAFE?

FEROSAFE is the next generation material for defending security products from physical threats. FEROSAFE is a weldable composite material that effectively resists high power angle grinders and drills at lower thicknesses and weights than what is possible with conventional materials.

The material is therefore well suited to increase security performance on safes, locks and any other security devices without increasing weight or altering overall dimensions. Being weldable with standard welding equipment ensures a high degree of flexibility, cost efficient manufacturing and secure fastening with no specialist training required.

Typical Applications

- Safes
- ATMs
- Security Doors
- Lock Boxes
- Bike Locks

Customer Benefits

- Use conventional welding equipment
- Reduce weight of product
- Increase safety performance without adding weight
- Effectively prevent any grinding or drilling attacks

Key Features

- Weldable
- Highly resistant to angle grinders
- Highly resistant to drills
- Relatively tough to prevent chiselling

Physical Properties.



Property	Units	FEROSAFE
Ultimate Tensile Strength	MPa	110
Ultimate Compressive Strength	MPa	1850
Flexural Strength	MPa	440
Coefficient of Thermal Expansion	W/mK	12-14 x 10 ⁶
Bulk Hardness	HRC	45-55
Bulk Density	g/c ³	8.7-9.3

Sizes

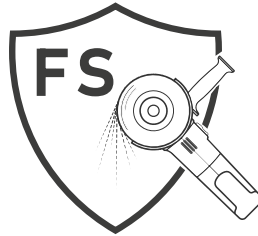
Thickness (mm)	Width (mm)	Length (mm)
4	8	40
4	15	40
4	25	60
4	40	40
4	8	200
4	15	200
4	25	200
4	60	200
4	200	200

Welding

Welding FEROSAFE creates a strong joint, capable of reaching 360 MPa shear strength which is stronger than a typical braze joint. Welding FEROSAFE maintains hardness of host metal, with a minimal heat affected zone. By maintaining hardness of the underlying steel, the resilience of the entire system is ensured.

FEROSAFE is a very effective product when used and welded correctly. Below are some guidelines to assist you:

- MIG/stick weld, 120 amps, dissimilar wire/rod gives best result.
- Clamp tile down when tacking,
- Tack in the middle of tile length if needed, weld outwards from the middle,
- Don't hesitate when welding, so as to avoid heat build up,
- Do no quench after welding,
- If risk of weld exposure to threat, chamfer host metal so welds can be hidden.



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ANTI-CUTTING TECHNOLOGY



CORPORATE HQ

Tenmat Ltd.
Ashburton Rd West
Trafford Park
Manchester M17 1TD
England

+44(0)161 872 2181
wpsales@tenmat.com
www.tenmat.com

NORTH AMERICA

Tenmat Inc.
23 Copper Drive
Newport, DE 19804
USA

+1 302-633-6600
info@tenmatus.com
www.tenmatus.com

FRANCE

Tenmat
56 Avenue Foch
77370 Nangis
France

+33 (0) 1 60 58 56 56
info@tenmat.fr
www.tenmat.fr

GERMANY

Ludwig-Erhard-Allee
10, 76137 Karlsruhe,
Germany

+49 (0) 7151 1338468
info@tenmat.de
www.tenmat.de

ITALY

Tenmat
Via Dante, 2/48
16121 Genova
Italy

+39 (0) 10 5451343
info@tenmat.it
www.tenmat.it

CZECH REPUBLIC

diamorph hob certec,
s.r.o.
Tovarni 739, 330 12
Horní Bříza, Czechia

+420 378 010 910