

A new shield.

To save and protect is the core business of InterDam. Protecting lives and assets with fire and blast resistant doors, walls, windows and cladding. High-quality products that meet the strictest possible worldwide safety standards.

## To shield from harm.

But such standards are not enough. Not for us. We want to raise the game and take standards even further. We have innovated our products to make them fire proof post blast. To create the safest working conditions for professionals in hazardous environments around the globe.





## Saving.

We have reunited two leading Dutch manufacturers of fire and explosion resistant products: Van Dam and InterDam. In 2007 InterDam started as a spin-off of Van Dam. In 2020 they have joined forces again under one name: InterDam.

InterDam and Van Dam share a history in fire and blast shielding that saves lives and installations. Both companies have accumulated a tremendous amount of knowledge and experience. By combining them, the new InterDam can offer more products and services and be an even more reliable supplier. Two rich histories that make a safer future.

## Protecting.

We provide the ultimate fire and blast protection with an unparalleled portfolio of architectural products. To protect lives and property at offshore wind substations, at LNG and petrochemical installations, at offshore oil and gas platforms, at naval vessels and defense installations and at tunnels.

The new InterDam is a stronger company. It has more expertise, better enhanced research capabilities and faster innovation than before. It is the extra step that is needed to enhance protection. To be the shield in the field for our customers.







The new InterDam is bigger and better. Able to comply to all certification demands. Able to optimize supply chains. Able to shorten delivery times. And offering the widest range of certified products and the best fit-for-purpose solutions in the industry. InterDam products are leading the field of fire and blast protection. We create the safest area possible for people and equipment working in hazardous environments. We can be your shield in any field.

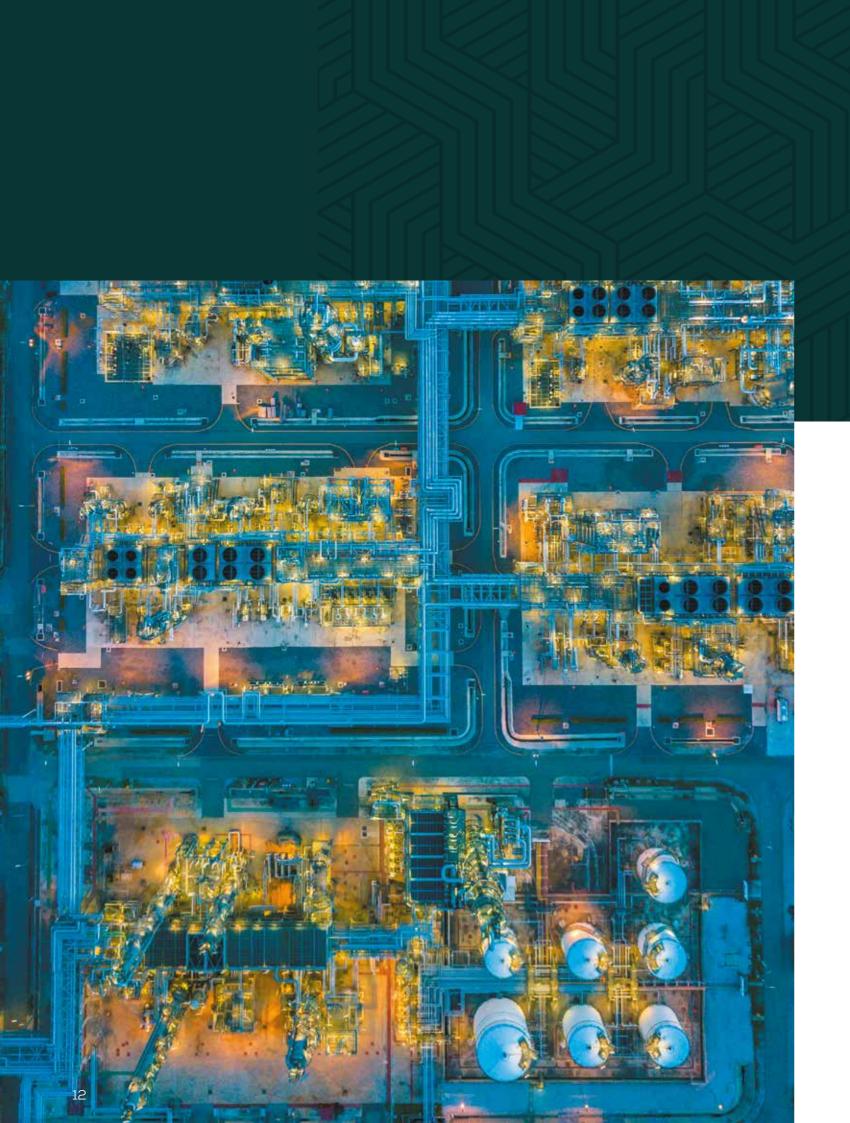




InterDam offers innovative products for offshore oil and gas platforms, offshore wind substations and naval vessels. With optimal protection for topsides and generator rooms, driller's cabins, electrical buildings and living quarters. Our modular designed panels and doors notably bring down the weight of a structure or vessel and reduce costs, while ensuring maximum safety of crews.







## On land.

LNG and petrochemical installations, defense installations and tunnels benefit from InterDam's onshore solutions. Our specially designed tunnel doors can resist shockwaves created by passing traffic. And our other products can offer jet fire resistance, high pressure blast relief or acoustic insulation. All designed for varying climate conditions, from tropical regions to the arctic tundra and even hurricane prone areas.





# We keep your shields up.

We provide high quality products across the globe. That is why we always anticipate on the constantly developing safety regulations when we design and manufacture standard or customized products. In this process we cover the total scope: from engineering, to production, to installation, to maintenance and repair. So either onshore, inside, at a yard, on board, quayside or offshore, you can rely on us to keep your shields up.



## InterDam products.

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	PRODUCT			MAR	KETS			FIRE RATING								
CATEGORY		Offshore Wind	FNG	Petrochemicals	Oil & Gas	Defense	Infra	⋖	I	Ш	ס	UL/ULC	Gost/TRSU	USCG	Max. blast rating (Bar)	BENEFITS
WALL	G21 fire and blast panels	•													1.0	Bolted wall panels, easy installation, low weight and increased cost-efficiency, blast relief
	Propanels			•				•		•					1.0	Easy to install bolted blastwalls, Fire-Post-Blast certified
	Gen II walls	•	•	•	•			•		•			•	•	5.0	Welded ms/ss corrugated fire and blast restistant insulated walls including fire post blast capabilities
REMOVABLE PANEL	Removable panels							•		•		•	•	•	1.0	Enables non frequent of large equipment through certified fire barrier
ROOF	Roof panels											٠			0.3	Bolted insulated roof panels, fire tested including 200 kg/m² live load, easy installation
DOOR	SLH/DLH-HD		•											٠	2.5	Standardized heavy duty hinged doors with design matrix for fire-post-blast certification
	SLH/DLH-DS	•						•							2.5	Extra gas tight offshore wind energy doors, fully certified
	SLH/DLH-MD-FP	•	•	•	•										0.3	Low cost fire and light blast proof hinged onshore doors
	SLS-HD	•	•	•	•										1.0	Manual (Ergo Latch), pneumatic and electronical operable sliding doors
	Gadam 1, 2		•	•	•								•	•	1.0	Heavy duty doors hinged doors produced especially for and in the middle east
	UL-SLH/DLH		•	•								•			0.5	UL certified hinged doors, certified including vision panels and medium blast resistance
	SLH-INT	•	•	•	•										0.2	Extra smooth looking, high end internal hinged doors
	SLS-XXL					•		•							1.0	Extra large, up to 4,000 x 4,000 mm external sliding doors
	XL and XXL doors		•	•	•										1.0	Enables frequent transport of large equipment through certified fire barrier
	Special Doors	•	•	•		•									3.0	Special duty doors including rollershutters, folding, wicket and with fire-post-blast resistance
	Nadam 3					•									4.0	Medium duty blast resistant hinged ship doors, low maintenance, easy to operate
	Nadam 4 MkII					•		•							10	Light weight rocket impact resistant, shock proof hinged naval doors
	HPB High performance blast doors					•									100	Extra large explosion proof sliding and hinged bunker doors
WINDOW	WU-H120		•												2.5	Largest tested H120 fire rated fixed windows globally available, tested with maximum glass clear view dimensions of 1,400 x 1,400 mm
	WU-A60														2.5	Fire-post-blast certified fixed windows
CLADDING	Profile VI														0.4	Heat shield / wind shield with unique lock-form connection - with J-bolts blast relief-
LOUVRE	Louvres														0.4	Boxed in louvres and loose louvre blade options SS and MS

Check InterDam.com website for in depth product specific technical information



## The next standard.

Once again we have set a new standard for protecting people and assets: fire-post-blast protection. Our revolutionary sandwich wall panels can resist fires after surviving an explosion and offer several advantages over traditional solutions. They are extremely easy to install, are cost-efficient, have minimum weight and are easy for post-installation of penetrations. All the while remaining fully fire resistant. A simple and cost efficient solution, tested and fully certified. At InterDam, we have invented a new type of shield for many fields: fire-post-blast protection. Because we need to keep improving. It is our vision to stay at the forefront of innovation.

## Innovations.

There is an urge to innovate. Safety regulations get ever stronger in a growing number of regions. We need to take the next step in fire and blast protection. That is why we use our combined knowledge and expertise to take standards to an even higher level. To make fire and blast protection more safe and more simple. To make it available to anyone without compromise. InterDam offers the best certified, most up-to-date and fit-for-purpose solutions. We are one step ahead in all our markets and industries. Because day after day, we keep improving ourselves and our products to create the safest working conditions.





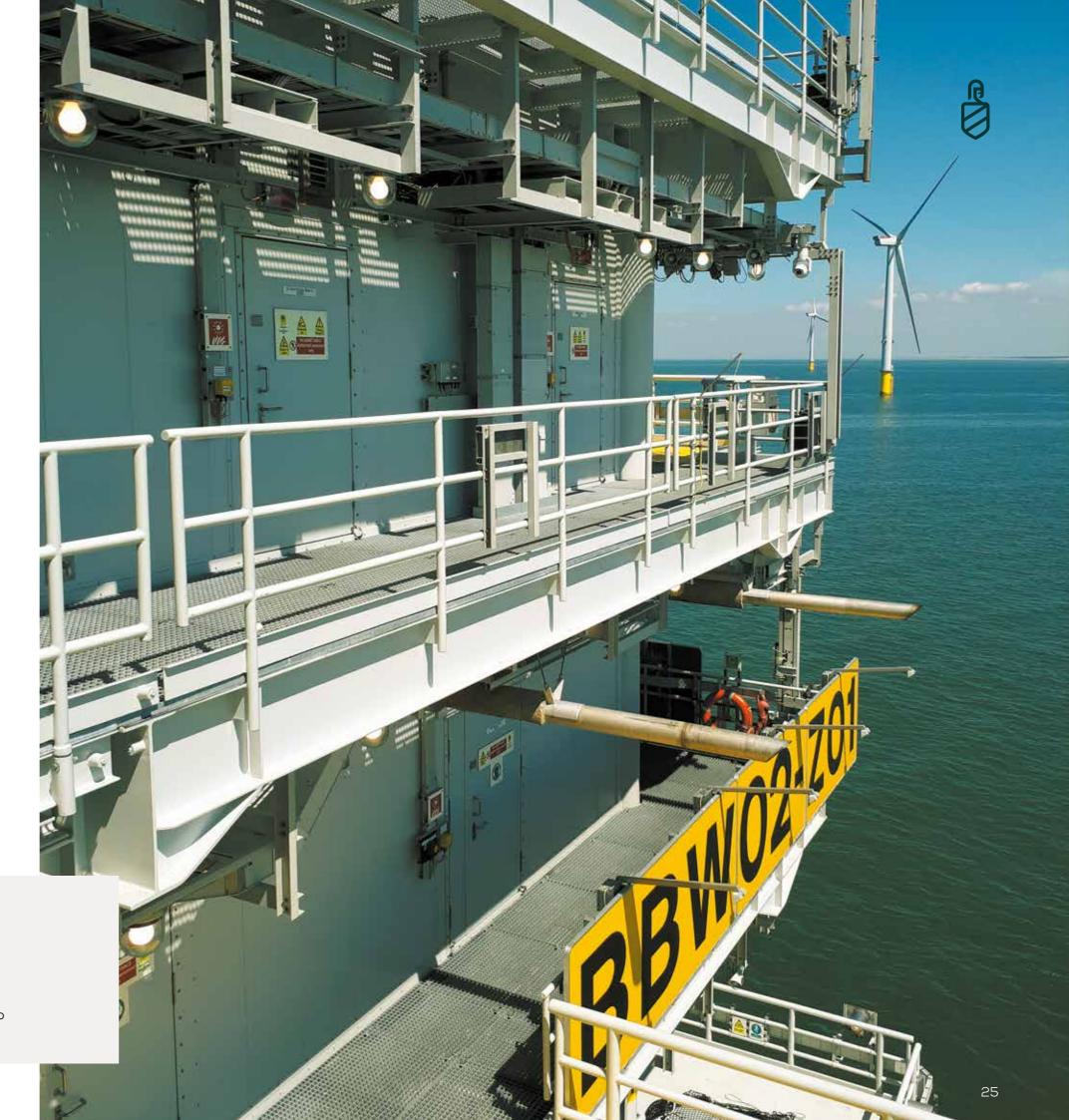
## **HORNSEA**

#### Large HVDC converter in shallow water.

The Hornsea Wind Farm is located in the North Sea off the east coast of England. The development has been split into a number of subzones, first of which began supply of power in 2019. The Hornsea Wind farm provides 850,000 households with energy.

Our lightweight G21 FirePanels allowed the client to keep the total weight of the offshore substations within the limits. This made it possible for the platforms to be produced cost effectively and installed easily in shallow water. The overall installation time for the project was rather short. As all InterDam panels could be installed by bolting only, the overall production schedule was met.

- → G21 external walls 4,200 m²
- → G21 internal walls 2,500 m²
- → Deck insulation 6,000 m²
- → IDM double sealed external doors 45 no
- → IDM internal doors 60 no







## **TYRA**

#### Denmark's largest offshore gas field.

Tyra is the largest gas field in Denmark, contributing approximately 90% of the total natural gas production of the country. Tyra field has two production complexes connected by pipelines. They include oil and gas processing plants that process gas from Tyra field, but also from many other fields (Halfdan, Valdemar, Roar, Svend, Harald, Lulita, Gorm and Dan)

This is one of the very few oil & gas projects executed in the North Sea in 2021. We are proud to be part of the supply chain for this project. To make it blast and fire proof, we combined Generation II welded walls with Generation IV bolted sandwich walls. This has assured that, all walls and doors have fit for purpose designs to save weight and costs.

- → Fire resistant A60 and H60 fire rated external G21 sandwich panels
- → 1.0 bar H120 Generation II blast and fire wall
- → H60, A60, A0 fire rated internal G21 sandwich panels
- → H60 and A60 hinged and pneumatic ext. sliding doors
- → Internal A60 A0 doors and A60 fire rated windows



## TCO

#### Tengiz future growth project.

Tengiz field is an oilfield located in northwestern Kazakhstan. The integrated Future Growth Project-Wellhead Pressure Management Project (FGP-WPMP) is designed to further increase total daily production from the Tengiz reservoir and maximize the ultimate recovery of resources.

The FGP will use state-of-the-art technology, successfully developed by Fluor.

- → 21,000 m² blast resistant cladding and roof panels for blast buildings
- → 11,500 m² fire rated sandwich panels
- → 125 no. blast and fire rated doors
- → Hydraulically operated extreme large fire fighting garage doors
- → 20 no. blast and fire rated windows
- → 950 m² blast screens
- → 9 no. minor buildings
- → 4 no. HVAC stacks







## **CATS TERMINAL**

#### Onshore gas reception and processing.

The Central Area Transmission System (known as CATS) is a natural gas transportation and processing system that transports gas through 404 kilometers of pipeline from the Central North Sea to a reception and processing terminal at Teesside in the North East of England. In 2018, CATS delivered over five billion cubic meters of gas to UK markets (14% of the UK gas production and 7% of its demand).

Our G21 Fire and Blast panels were an integral part of the modular design philosophy for this terminal. It resulted in minimized installation time compared to alternatives such as welded construction or concrete buildings. The light weight of the total structure saved costs and on site construction time. From start to finish, all units were assembled within three months.

- → El120 fire and 131 mbar blast rated wall panels
- → El120 fire and 131 mbar roof panels
- → El120 fire and 131 mbar doors
- → El120 fire and 131 mbar windows

## **ROYAL DUTCH NAVY**

#### Air defense and command frigates.

The four 'De Zeven Provinciën' class ships are highly advanced air defense and command frigates in service with the Royal Navy of the Netherlands. Ship survivability requires these ships to be divided into rocket proof compartments. The doors have to meet the same impact resistance. Together with TNO (Dutch organization for applied scientific research) we designed, tested and certified fit-for-this-purpose rocket proof doors.

Other criteria like water tightness, fire resistance and shock proof also had to be met. For the very specific demands in the Naval Defense industry we offer our NADAM range of fit-for-purpose certified door and hatch solutions. Tailored to application these doors and hatches are blast-resistant up to 10 bar and water tight up to 0.7 bar with large clear opening sizes.

- → Nadam 3
- → Nadam 4 MkII
- → HPB High performance blast doors







## HSL-ZUID TUNNEL TRAJECTORY

#### High speed railway tunnels.

The Dutch High Speed railway (HSL) trajectory comprises multiple tunnels:

- → Tunnel Groene Hart
- → Tunnel Dordtse Kil
- → Tunnel Rotterdam Noord
- → Tunnel Mookhoek
- → Tunnel Oude Maas
- → Tunnel Galderen

The total length of the "Tunnel Groene Hart" for example, including access ramps, is approximately 8.6 km. The bored tunnel consists of one tube with an inner diameter of 13.3 meter and is 7.2 kilometers long. For safety reasons three emergency shafts are implemented in the alignment and a central wall separates the two train tracks.

We were selected to supply the doors including yearly preventive maintenance in order to maximize proper functioning. Those doors need to provide safe escape routes for the design life of the tunnel. They have to withstand over a million 'blast' loads as they face pressure waves during the passing of high speed trains.

- → RWS curve (high temperature)Sliding and hinged doors
- → Design, supply, installation and maintenance of the total package
- $\rightarrow$  Monitoring sensors for optimal safety control







# A very rich history.

Whenever two leading companies merge, a very rich history of innovation and trendsetting product development is coming to the surface. Knowing that Van Dam and InterDam were always leaders in the field of fire and blast protection, albeit both with their own specialties, you can be confident that the new InterDam will strive to remain the defining shield in the field.

Facts and figures.

110 + years of since experience 4,560 75 ††††††††††

Welded fire/blast walls 400,000 m<sup>2</sup>

Fire/blast doors 48,000 pcs

Current certified test reports total 131

Fire and blast sandwich panels

1,600,000 m<sup>2</sup>





## George and the Dragon.

InterDam is on a quest for the ultimate fire and blast protection. And perhaps the origin of our quest is anchored in the legendary saga of George and the Dragon. A brave knight who saved the daughter and rule of a medieval king by heroically killing a fire breathing dragon. As you may know, we have our common roots in Ridderkerk. And on the coat of arms of that town you can find, you guessed it: Sir George fighting the savage dragon.



At InterDam we comply to all certification demands with the widest range of certified products and fit-for-purpose solutions in the industry. leading the field of passive fire and blast protection.

#### Europe HQ

InterDam B.V.
Klompenmakerstraat 12
P.O. Box 299
2984 BB Ridderkerk
The Netherlands
T: +31 (0) 180 470030

www.interdam.com



