

Fire and blast rated doors

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Experts in fire and blast rated doors

The main purpose of a fire and blast rated door is to provide the highest level of safety to personnel and equipment.

Van Dam supplies medium and heavy duty fire rated blast doors, which meet all requirements as outlined in the SOLAS 74, IMO FTP code and NORSOK. All doors have a type approval from Lloyds Register, ABS, US Coast Guard (USCG), GOST and DNV.

Application

There are various specifically designed doors for the oil & gas market, the wind energy market and the infra & defense market.

Van Dam doors

The types of doors we supply are; single & double hinged doors, sliding doors, oversized doors, pneumatically & electrically operated doors and, single leaf naval doors

Van Dam doors are designed to the highest standards and longevity (30+ years). All doors are customizable to project or customer requirements. We are flexible in adjusting specific details of the door.

Door features:

- Fire rating: A0, A60, H60, H120 and J30
- Blast Rated up to 2 bar overpressure
- Fully designed according to NORSOK requirements
- Mild Steel finished with an offshore paint system
- Stainless steel 316L, glass blasted or painted
- Gas-tight
- Weathertight
- Sound reduction up to 52 dB
- Thermal insulated doors
- Oversized doors
- Welded or bolted installation
- Manually, Electrically & Pneumatically Operated

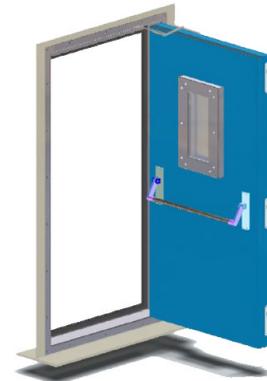


The doors

Single hinged

Our single hinged doors can be applied in the offshore and onshore oil and gas market, the LNG market and the offshore wind energy market, in varying fire ratings.

We supply heavy and medium duty, single hinged doors. A standard door can withstand a blast pressure up to 0.1 bar, without the need for extra stiffening. Advanced engineering allows the door to be able to withstand 2 bar blast pressure.



Double hinged

Our double hinged doors are also applicable in the offshore and onshore oil and gas market, the LNG market and the offshore wind energy market, in varying fire ratings.

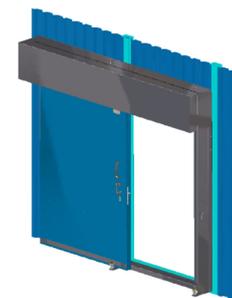
All standard double hinged doors are heavy duty and can withstand a blast pressure up to 0.1 bar without the need for extra stiffening and can be engineered to withstand 2 bar blast pressure.



Sliding

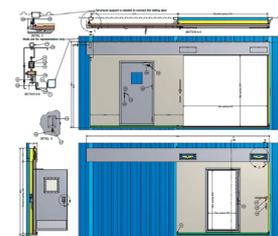
Sliding doors can be applied in the offshore and onshore oil and gas market, the LNG market and the offshore wind energy market.

All standard double hinged doors are heavy duty and can withstand a blast pressure up to 0.1 Bar without the need for extra stiffening.



Oversized

Van Dam can provide oversized doors, which exceed the size of the actual tested and certified doors. We make use of the most sophisticated software to simulate a fire or blast situation for these oversized doors by way of in-house simulation programs, which make it possible to calculate the effects of a fire and blast on oversized doors.



Pneumatically operated

In order to meet the demanding NORSOK regulations (with respect to opening forces), the doors can be equipped with a pneumatic system. Van Dam can supply a full Stainless Steel 316L pneumatic system including all components located inside the control box. No additional electrical items are required for the pneumatic door drive to operate.



Electrically operated

One of Van Dam's solutions to meet NORSOK requirements, or special requirements from client when opening force, is the challenge to beat. The electrical operated sliding door system is designed to electrically open and close sliding doors in extreme environmental offshore and onshore conditions.

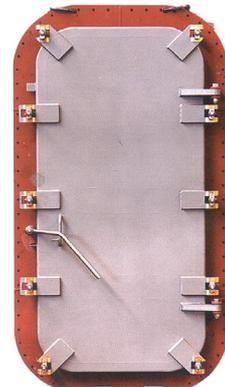


Single leaf naval

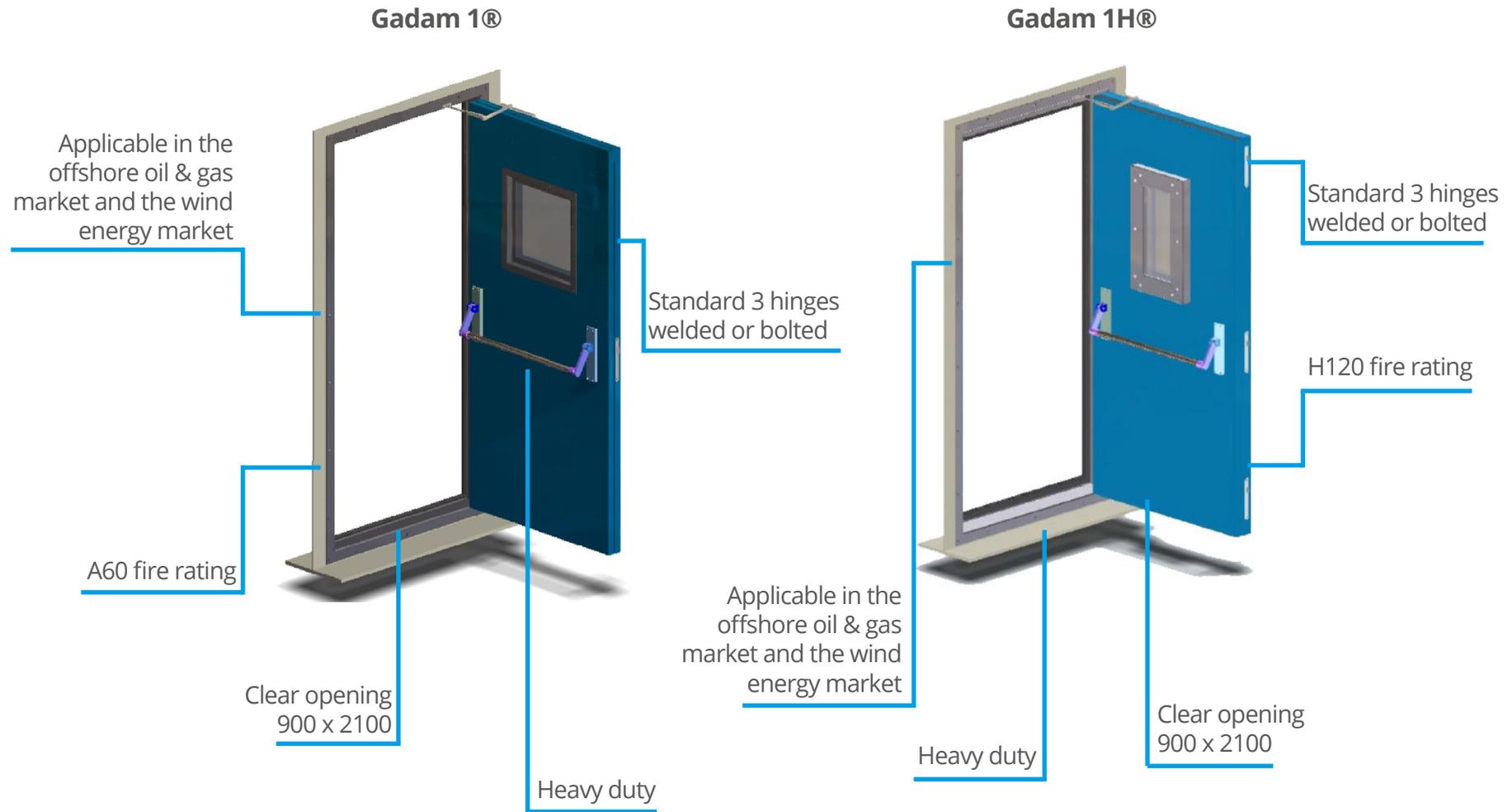
Single leaf, naval doors are designed to meet the specific requirements of the defense market.

The naval doors have a light weight, single leaf, hinged membrane made out of heavy carbon steel. These doors have a higher rating for blast resistance (up to 10 Bar) and are also resistance to shocks.

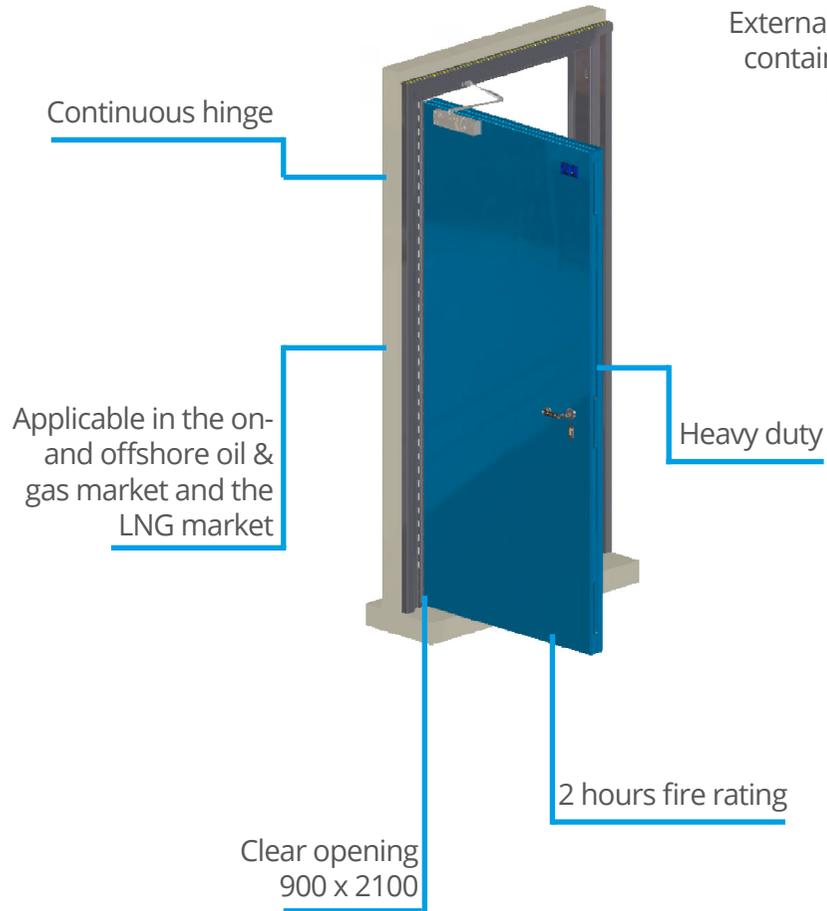
All our naval doors can be customized according to your project requirements.



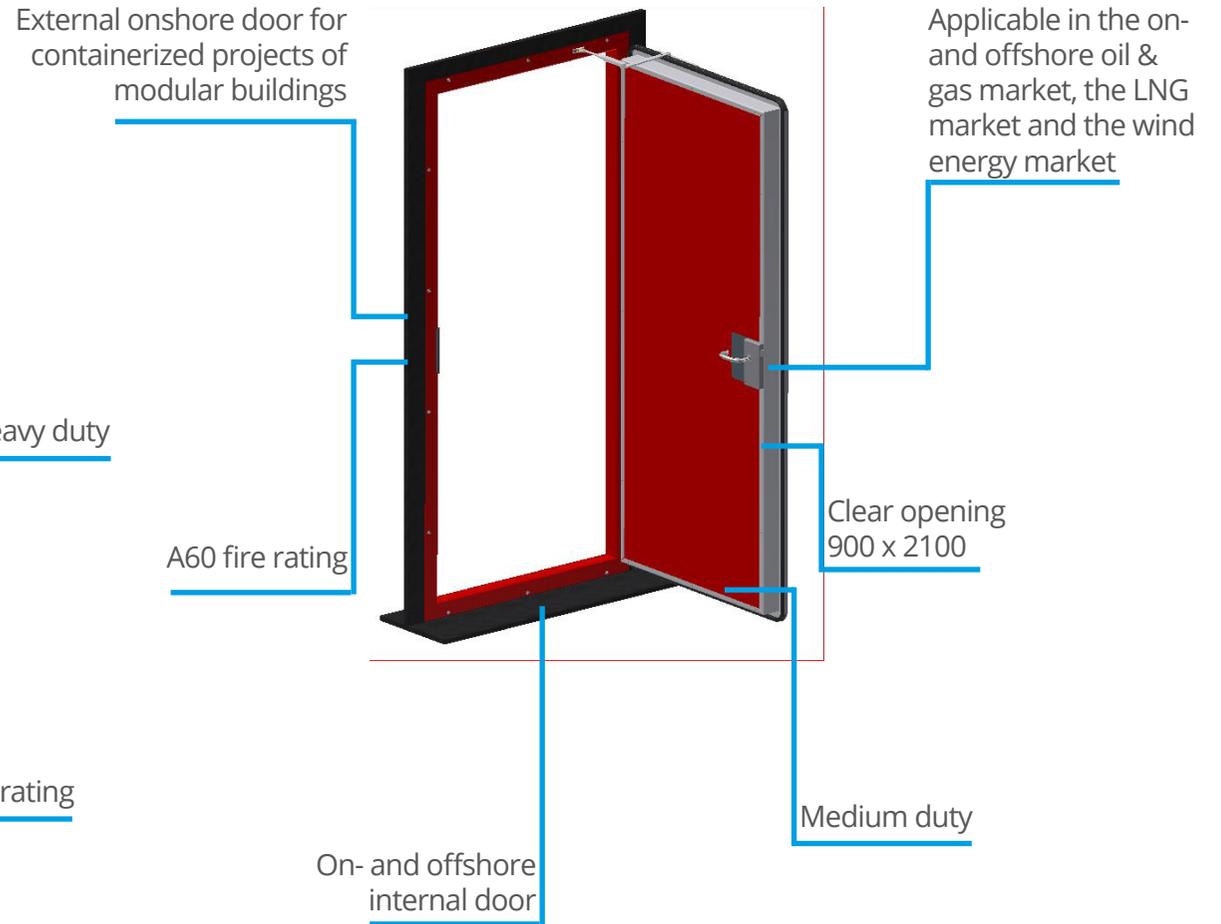
Single hinged doors



Gadam 11®



Medam 1®

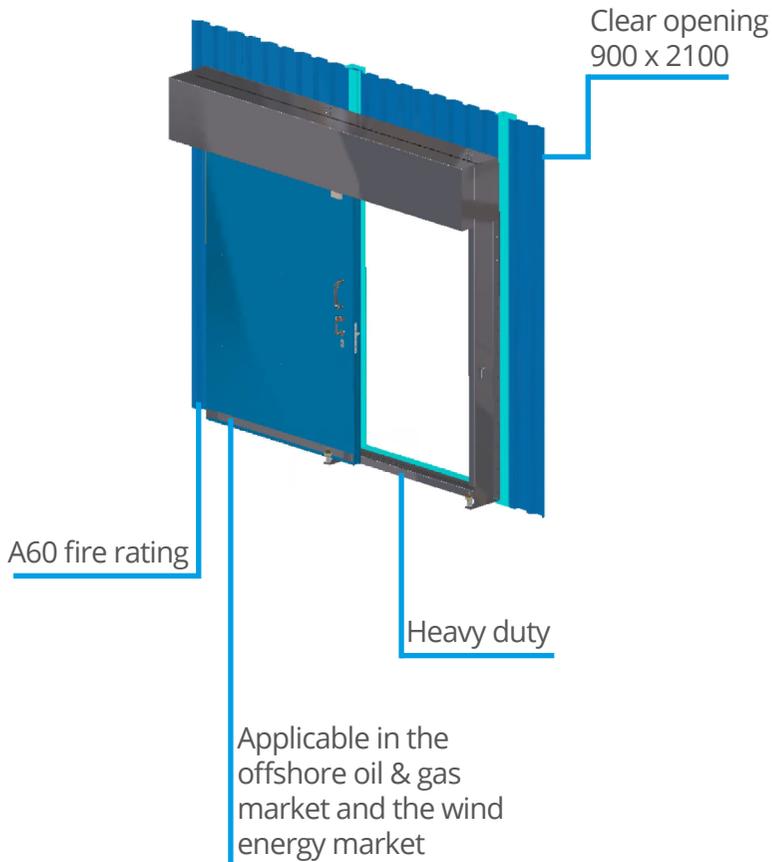


Double hinged doors

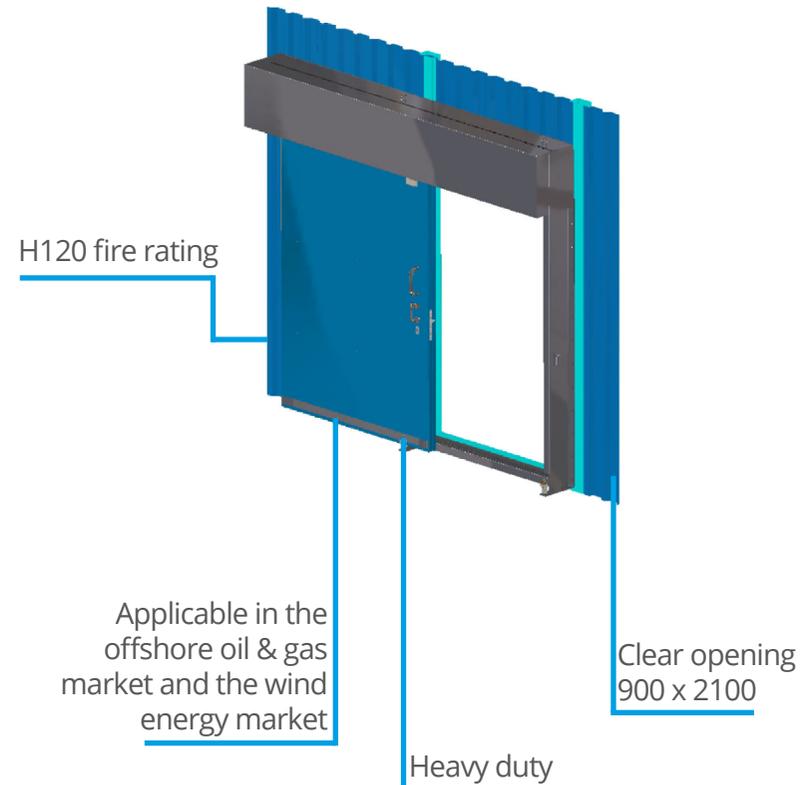


Sliding doors

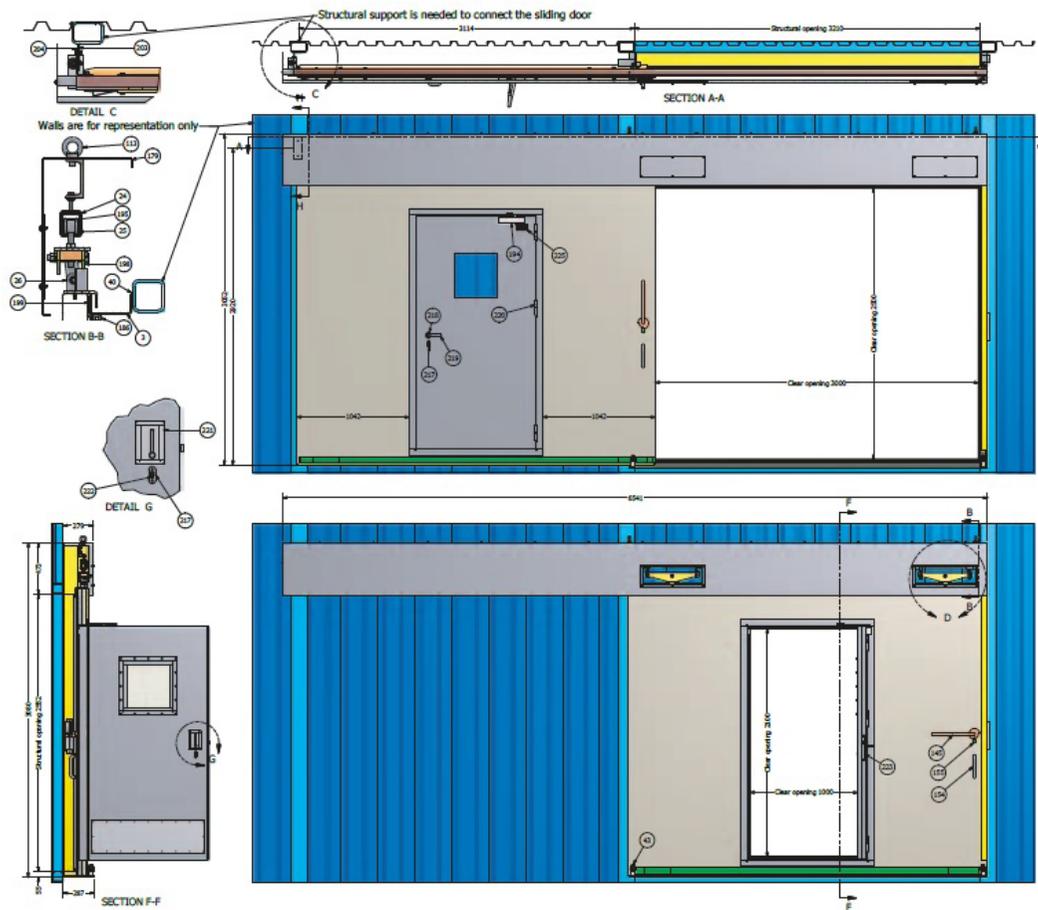
Gadam 3®



Gadam 3H®



Oversized doors



Through sophisticated software simulations, the individual door as well as the fire resistance of the whole door system is tested, in addition to its blast resistance and overall integrity. It calculates the behaviour of every single part of the door and predicts very accurately what will happen in case of a fire or blast.

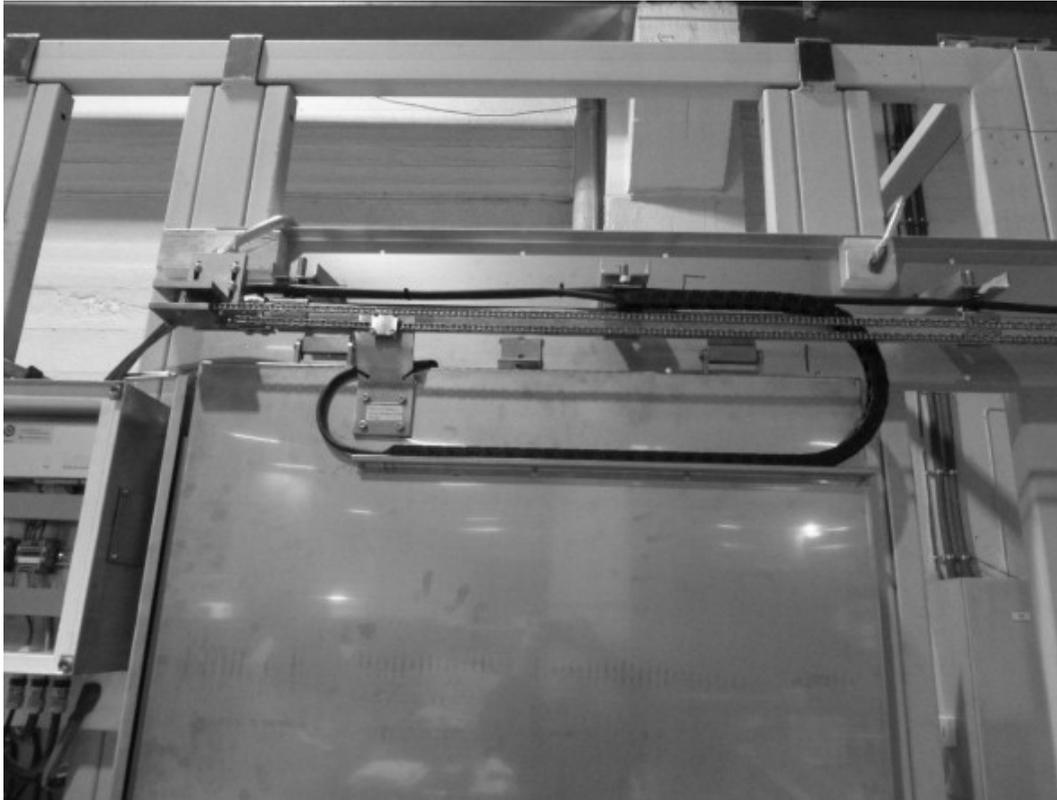
After the test, a project approval can be issued by the notified bodies such as Lloyds Register, DNV, ABS, USCG, etc.

Pneumatically operated doors



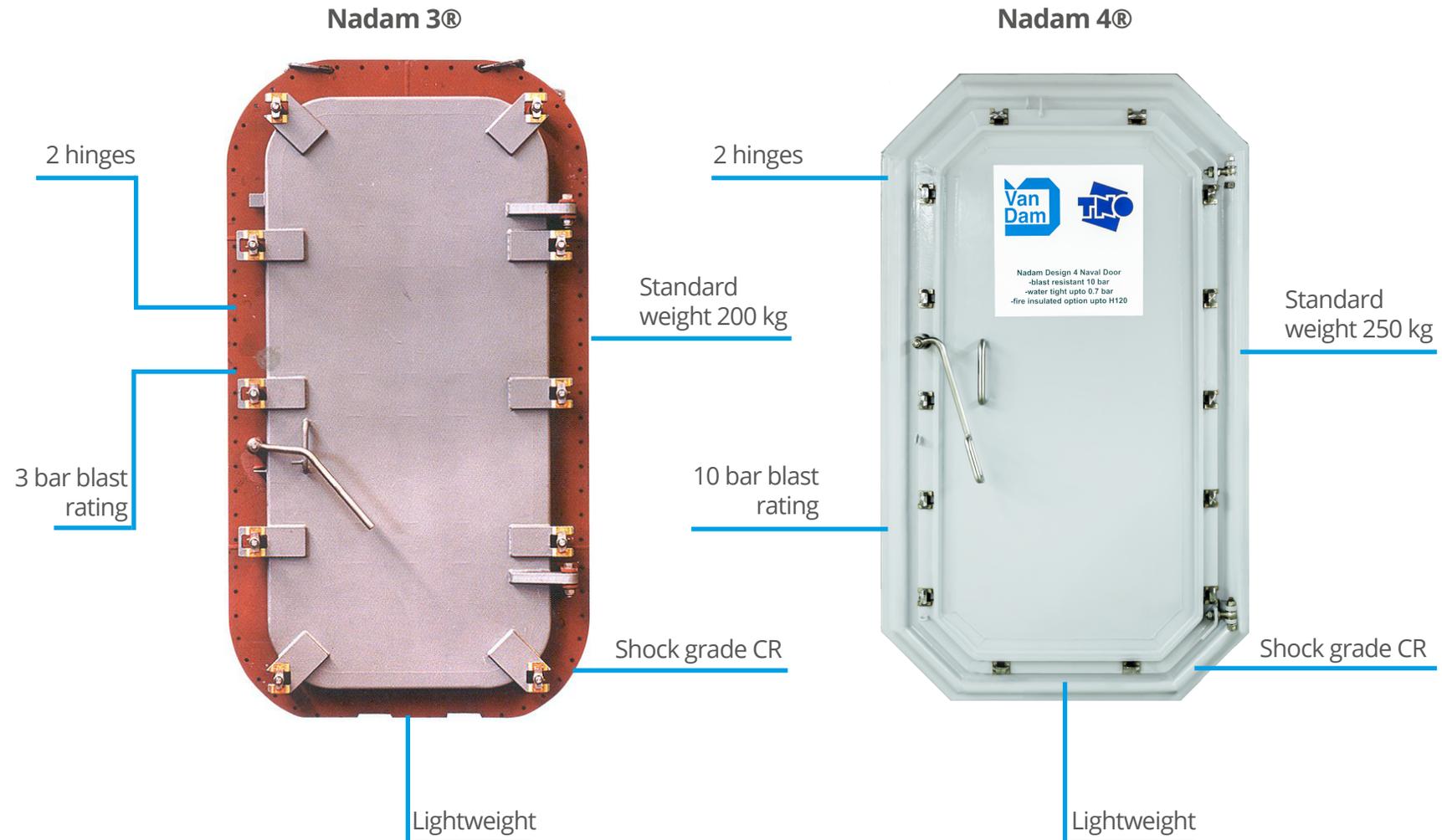
The drive system of a pneumatically operated door is equipped with a patented fire safety valve in order to prevent the door from opening during a fire. Air bottles (20 liters) are installed and used to operate the door in case of an emergency and if there is no air supply the air bottles will have sufficient air to make at least four opening/closing cycles of the door. Should more opening/closing cycles be required, additional air bottles can be installed to meet the requirements. On both sides of the door, a push/pull override valve is located which can vent the system (air will be released), which makes it possible to operate the doors manually.

Electrically operated doors



The system of an electrically operated door is located in a weathertight control box and is equipped with a back-up battery to operate the door (10) times in case of a power failure so as to provide safety in all situations. The door can be operated by using the push buttons and/or the door handles.

Single leaf naval doors



What Van Dam needs to meet your requirements

Van Dam has made sustainable research and development a core element in its activities. Through innovation and high-end engineering, we can provide the best quality in fire and blast rated doors.

In order to create the best match between project and products, we need to know several key points such as:

- Project specification
- Bill of Material (BoM)
- Blast load + duration
- Type of certification
- Acoustic requirements

Van Dam is strongly committed to expanding its offer far beyond the standard products. We aim to continuously develop exciting new solutions and services to help our customers improve performance in numerous market segments.

How it started

Van Dam's long history dates all the way back to 1906, when we started as a metal sheet company supplying the local ship building industry with airbreathers and various engineered metal specialties.

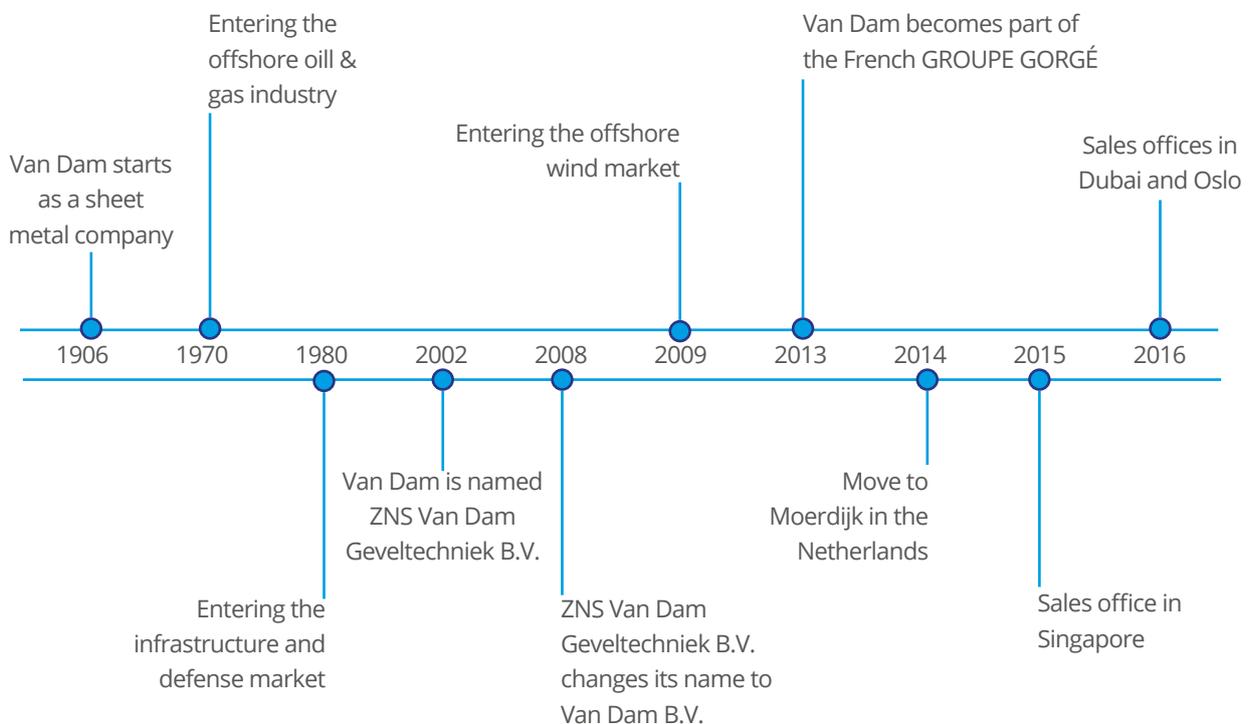
With the development of the offshore oil & gas industry in the 1970's, van Dam has developed into being a market leader in fire and blast rated products and solutions.

Our goal is to provide our customers worldwide with superior fire and blast protective products based on innovative and creative solutions and technologies, ultimately delivering sustainable growth and profit in a safe environment.

Our track record and diverse projects in the oil and gas market, the wind market and infra & defense market has made a solid statement in the industry.

We believe that innovation is a key factor in being able to comply with the highest standards and regulations and also with customers' needs and requirements.

In business for over 100 years, let our long experience be your added value!



About van Dam

We design and manufacture fire and blast protective products and solutions to protect personnel and critical equipment. Van Dam B.V. is a market leader in this niche market and our innovative character enables us to stay ahead of the competition by investing in its technologies and anticipating on constant changing safety regulations.

Our organization

We wish to supply a variety of products to the global market from our central organization in the Netherlands with a staff that is highly knowledgeable in fire and explosion proof products and associated products, whereby production activities will take place worldwide. Distributors all over the world are responsible for overseeing and selling a diversity of products on a global basis.

All activities take place from the head office in Moerdijk, the Netherlands, which manages the global production sites and sales network. But also Van Dam ventured into the works setting up Branch offices worldwide. Van Dam B.V. is a genuine project organization, whereby all departments contribute towards the successful completion of a project.

The organization has more than 100 years of experience in projects for international customers who maintain the highest of standards, such as IMO Solas, NORSOK, USCG and many other specifications.

Our organization is fully geared up, and qualified, to face and match the challenges of your complex Design & Build projects.

The Group

Van Dam B.V. is part of the GROUPE GORGÉ (listed on the Euronext Paris Stock exchange), a leading independent engineering group.

The Group's activities are focused on the fast growing technological niche market in the nuclear, defense and aerospace industry.

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