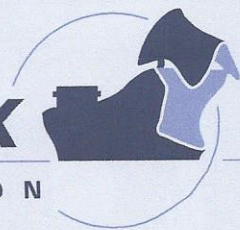


**SCHOENROCK**

ACCESS IN MOTION



# Access in motion

- *Watertight Bulkhead Doors*
- *Ventilation Duct Closing Systems*
- *Hydraulic Marine Systems For Special Applications*
- *Shell Doors*
- *Watertight Building Doors*







# **SCHOENROCK** with History

- ***Our Business Philosophy***

To design and manufacture mechanical, hydraulic, or electric equipment and systems for the marine industry as well as protection for all building types in flood risk areas.

- ***Our Output***

More than 6000 doors in various sizes and executions.

- ***Our References***

You can find our doors on board of tankers, drilling platforms, ro-ro and cruise vessels, naval ships and mega yachts. And recently mounted at buildings as well.

## **SCHOENROCK**

Access in motion



# Hydraulic Systems

Beginning of the fifties, an engineer by the name of Johann Schoenrock started his own steel construction shop in Hamburg, Joh. Schoenrock oHG. Soon after the foundation of the company he began to build hydraulic operating devices for engine room skylights, as well as spindle davits to lower lifeboats, all designed for the maritime industry and fabricated in his own workshop.

A key milestone in our history is the beginning of production of watertight doors for buildings in 2011.

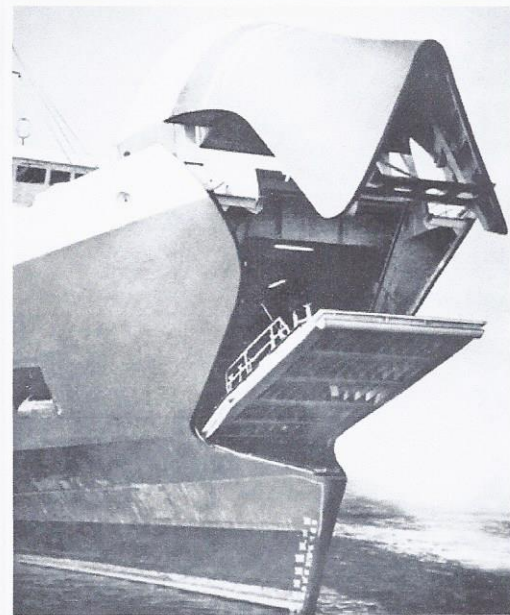
We always strive to let our customers enjoy latest state-of-the-art technology as well as provide the best possible service. The company is totally fit to offer and supply tailor-made solutions.

With the view to be successful in doing this, the company maintains well equipped production facilities in order to safeguard a good quality, and we take pride in having highly skilled and motivated staff at your disposal, for whom "round-the-clock" service still means what it means.



Dr. Volker Behrens  
Managing Director

*We don't need to be the biggest,  
we want to be the best!*



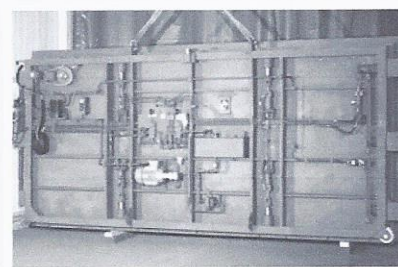
Bow ramp of a RoPax vessel shows the root of the SCHOENROCK logo



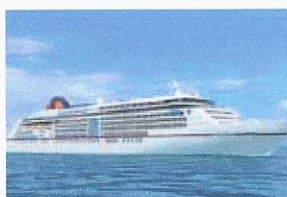
Landing vessel with hydraulic driven bow ramp



Stem ramp at a RoPax vessel



Hydraulic driven bulkhead garage door



***Ships from our reference list – equipped with SCHOENROCK components***

# ***KNOCKING ON is Knocking on the Right One***

*With respect to our standard hydraulically operated watertight sliding door, SCHOENROCK Hydraulik Marine Systems offers the following main advantages to you:*

## *Electric Watertight Sliding Door SHIPTIGHT (E)*



**SHIPTIGHT**  
by SCHOENROCK

### *Technical Data*

- Variable door sizes acc. to customers demand
- Available for 0 - 15 m wc
- Pre-mounted, tested compact unit
- Variable sill versions
- No need for additional re-inforcement
- Shortest possible installation time

### *Advantages*

We've made a host of further enhancements to our proven Electric Watertight Sliding Door. All the following features on the SHIPTIGHT model are new:

- Using a Y-section seal makes for optimal equalisation of mounting tolerance when welding in place
- Increased door frame stiffness
- Guide unit is made of rust-proof stainless steel and brass
- Less force needed to close the door
- Easier installation, as new model requires no electrical motor and spindle to be assembled at the bulkhead
- Sealing surface is rust-proofed
- Electrical drive system with low noise emission for comfortable operation
- New designed emergency generator for operation with low mechanical forces



# OUR DOOR

- The lowest possible weight
- Tailormade installation sizes
- Maximum water resistance up to 60m
- Various sill solutions
- Flexible operation concepts such as: Electric drive, electro-hydraulic drive, manual drive
- Easy installation and serviceability
- Easy accessibility of all components for service

## Hydraulic Watertight Sliding Door SHIPTIGHT (H)



**SHIPTIGHT**  
by SCHOENROCK

### Technical Data

- Variable door sizes acc. to customers demand
- Available for 0 - 15 m wc
- Pre-mounted, tested compact unit
- Variable sill versions
- No need for additional re-inforcement
- Shortest possible installation time

### Advantages

We've made a host of further enhancements to our proven Hydraulic Watertight Sliding Door. All the following features on the SHIPTIGHT (H) model are new:

- Using a Y-section seal makes for optimal equalisation of mounting tolerance when welding in place
- Increased door frame stiffness
- Guide unit is made of rust-proof stainless steel and brass
- Less force needed to close the door
- Easier installation, as new model requires no cylinder or guide rail fastening to bulkhead
- Sealing surface is rust-proofed
- Power Pack with air cooled electrical motor



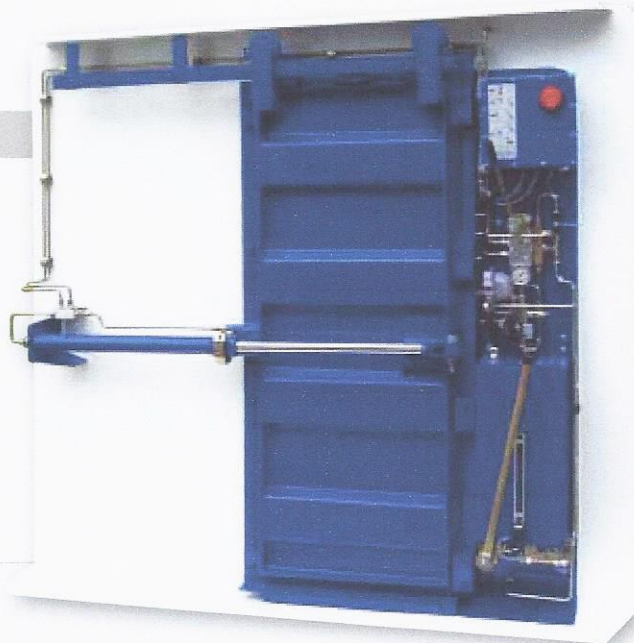


## ***KNOCKING ON OUR DOOR*** *is Knocking on the Right One*

### *Hydraulic Watertight Sliding Door (high pressure)*

#### *Product details:*

- Variable sizes according to customer demand
- Available for 1 - 60m wc
- Pre-mounted, tested compact unit
- Variable sill versions
- No need for additional re-inforcement
- Short installation time



**SHELLTIGHT**  
by SCHOENROCK

### *Hydraulic Watertight Shell Door*

#### *Product details:*

- Tailormade design of shell doors
- Applicable to nearly all type of ships
- Pre-mounted, tested compact unit
- Shortest possible installation time
- Hydraulic operated drive



## Watertight Navy Door

**SHOCKTIGHT**  
by SCHOENROCK

### Product details:

- Shock tested acc. German Navy specification BV230 (fulfilling test limits acc. Stanag 4141 and MIL-S-901D (Navy))
- Vibration tested acc. German Navy specification BV240
- Gastight sealing concept
- Compact, space saving design due to innovative drive concept
- Variable sizes acc. to customer demand
- Low maintenance requirements
- Pre-mounted unit for shortest installation time
- No need for additional re-inforcement
- Optional available with transport ramp system

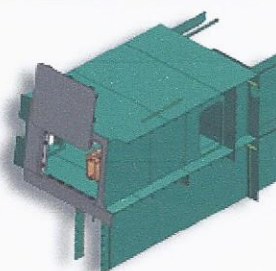
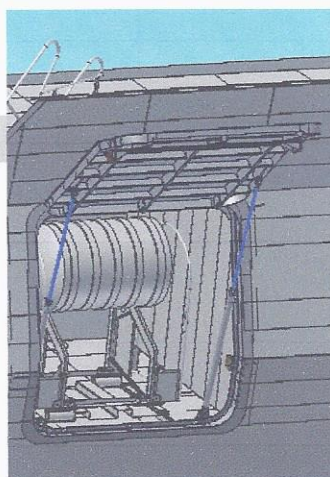


## Hydraulic Watertight Shell Door


**HULLTIGHT**  
by SCHOENROCK

### Product details:

- Coverage of niches in the hull and superstructures to maintain stealth capability and/or
- Providing ship access for people or supply goods
- Shock tested acc. German Navy specification BV230 (fulfilling test limits acc. Stanag 4141 and MILS-901D (Navy))
- Gastight sealing concept
- Compact, space saving design due to innovative drive concept
- Variable sizes acc. to customer demand
- Low maintenance requirements
- Available in watertight and non watertight design
- Pre-mounted unit for shortest installation time







***New from SCHOENROCK:  
FLOODTIGHT Sliding Doors***



# FLOODTIGHT Sliding Doors

*With our FLOODTIGHT watertight building door, we offer perfect flood protection for all building types in flood risk areas.*



## Technical data

- Simple manual actuation with crank handle (option: electric drive)
- Various sizes available, depending on customer wishes
- Available for a water pressure of 0 - 10 m water column
- Leak rate practically 0 l per minute and meter of seal
- Available in double-wing design
- Supplied as a preassembled, test unit

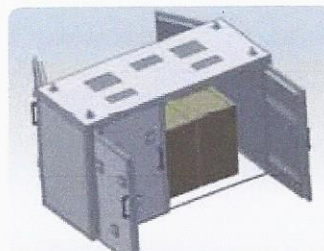
## Advantages

- Easy operation
- Integration into new buildings
- Retrofitting in existing buildings
- Integration into digital building management systems
- Visual adaptation to the building architecture possible

## Special Applications

With FLOODTIGHT Sliding Doors SCHOENROCK has successfully transferred its shipbuilding know-how to technology for buildings. This results in many additional application options, for e.g.:

- Development, construction and installation of protective racks
- Implementation of watertightness solutions requiring the highest standards
- Development, construction and installation of off-shore components



**FLOODTIGHT**  
by SCHOENROCK



## Ventilation Duct Closing Systems



### Ventilation Duct Closing Systems

Our ventilation duct covers are designed to shut down the ventilation system in case of fire. Each cover consists of a flap, which can open 30° or 45° upwards, and a frame. Opening and closing is done by means of a hydraulic cylinder. The system is operated and controlled by means of operating stations, which are usually located on the weather deck. Each operating station consists of an oil tank, a hand pump, a manual valve, a pressure limitation valve, a manometer and an electric-position indicator.

#### Product details:

- Hydraulic operated ventilation damper systems for cargo spaces
- Variable sizes acc. to customer demand
- Optional hand or automatic operated
- Optional with ventilation jalousies acc. DIN 83410
- Shortest possible installation time
- Powered by hand hydraulic or hydraulic powerpack
- Available with automatic closing from bridge panel with indication "open" / "closed"
- Available with automatic closing via interface to other systems with feedback signals "open" / "closed"

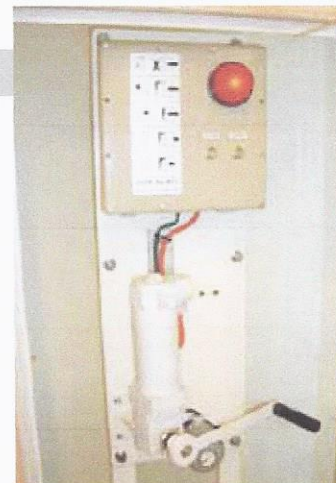
### Related equipment

#### Fleximod

Fleximod is the modular operation panel for our electrical watertight sliding doors. It contains the junction box, hand generator and necessary acoustic devices.

The placement of the module takes place flexible close to the door in niches behind designer wall elements or equal coverage.

Dimensions are tailor made acc. to available space. An optional position of hand generator with angle installation can be delivered.



#### Laser Safety Strip

In order to avoid accidents when closing the doors, a laser beam can be installed in the door opening. This option can be installed on existing door systems, on new hydraulic doors and new electric doors.



## ***Custom-designed for your milling work***



Our CNC manufacturing center guarantees lowest tolerances and highest quality

### ***Our Universal Portal Machining Centre***

#### ***We can do your milling for you***

Our ultra-modern AXA Universal Portal Machining Centre is fitted with a 2-axis swivel head. This allows your workpieces to be machined vertically and horizontally – from all four sides and even at an angle. Quickly and accurately.

The special arrangement of the swivel head means that the entire Z-path is available in both the vertical and horizontal spindle position.

We can use your control files – or program the work according to your specifications or drawings.

#### ***Or you can do it yourself using our centre***

On request, we can also make our new Machining Centre available for use by customer's staff. Careful instruction is included.

You can decide yourself when, for how long and with how many staff you want to use the Centre. On request, you can operate a three-shift system and work on Sundays and public holidays.

#### ***Service inclusive***

Our Machining Centre is designed to handle even the heaviest pieces – with our indoor crane we can transport packages with a unit weight of up to 5 t max.

Workpieces can be delivered quickly and easily by truck right into our engineering hall, protected against weather influences.

Seaworthy packing, shipping, customs clearance? Let us take care of that too! On request, our Machining Centre is there for you round the clock.



#### ***Technical data:***

**Maximum component size in mm**  
L: 5000 x B: 2500 x H: 650

**Maximum component weight**  
ca. 10000 kg

**Maximum worktable load**  
ca. 1000 kg/m<sup>2</sup>

**Positioning accuracy on 1000 mm**  
per axis in mm: + – 0.018

**Repeating accuracy**  
per axis in mm: + – 0.0075

**Number of available tools: 22**



### *By our own: Production "Made in Germany"*

The SCHOENROCK Group has well equipped production facilities of its own, as such safeguarding our own high quality standards. We "do" our own hydraulics and power packs and are able to carry out pressure tests as required in our own workshop near Hamburg/Germany.

### *Spare Parts and Service*

The SCHOENROCK Group is able to provide adequate spare parts, conversion, repair and maintenance services worldwide.

### *Research, Development, IT*

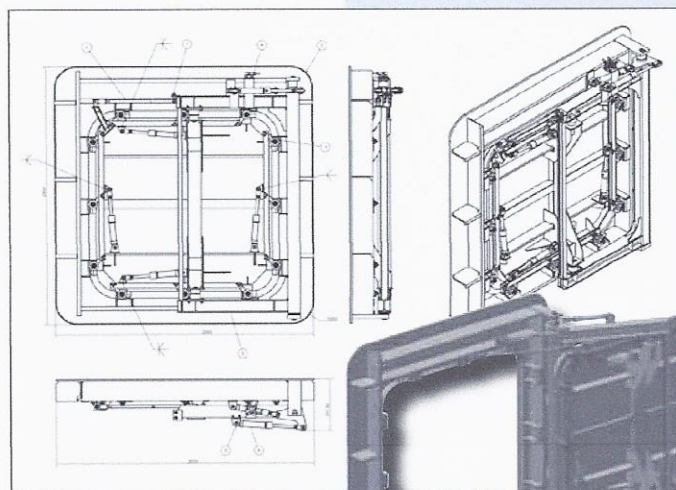
With a view to "stay on top" SCHOENROCK is working in close contact with technical universities as well as with classification societies. After all, most hydraulic or electric doors and stern ramps may look alike, the same for side shell doors. However sometimes, major differences exist in the non-visible parts and we have found it very rewarding to cooperate on technical developments on such creative and innovative levels, that have enabled us to come up with some rather unique solutions.

Our company can also render design services, from "conceptual to fabrication drawings", FE-analysis and calculations. Designs can be executed in either 2 or 3D. Our hard- as well as software are "latest state-of-the-art".

Assembling  
facility for  
power packs



Production line  
for steel made  
door frames  
and blades



From design to the finished product  
from one hand

### *Certification*

SCHOENROCK has a quality management system (DIN EN ISO 9001 : 2000), valid until 2014, and is classified by all classification societies.





# All over the World: The **SCHOENROCK** Network

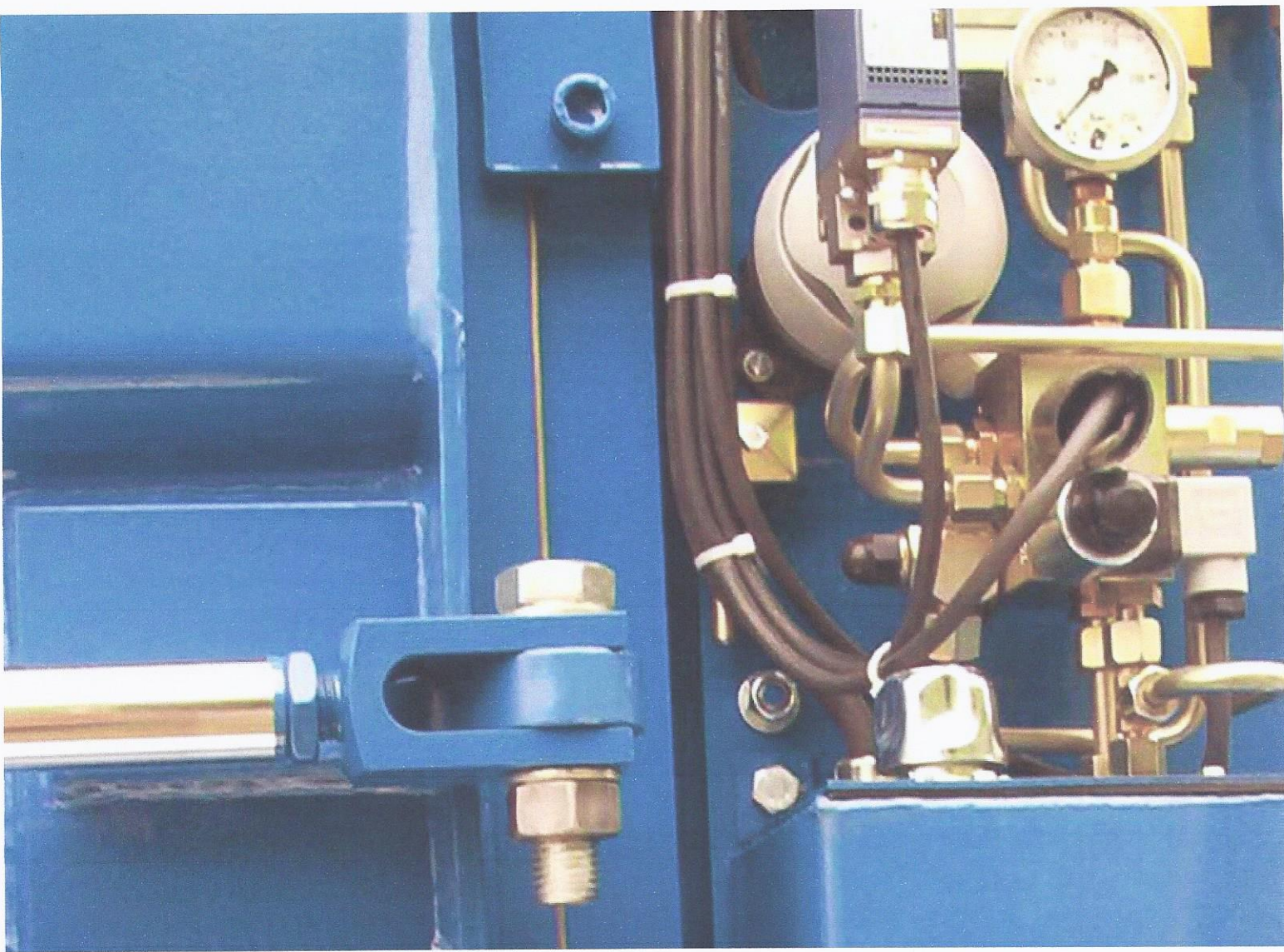
Worldwide  
Agents Network

- 
- Germany
  - Finland
  - Netherlands
  - Great Britain
  - France
  - Spain
  - Portugal
  - Italy
  - Greek
  - Turkey
  - Russia
  - Canada
  - Brazil
  - Dubai / Middle East
  - India
  - Singapore
  - Korea
  - China

**SCHOENROCK**

ACCESS IN MOTION





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