



TYPE APPROVAL CERTIFICATE

Certificate No:
TAE000012K
Revision No:
2

This is to certify:

That the Bulkhead/Deck Penetration

with type designation(s)
MCT Brattberg 2000 type; RGP

Issued to
MCT Brattberg AB
Karlskrona, Sweden

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2021-04-15**

for **DNV**

This Certificate is valid until **2025-12-04**.

DNV local station: **Malmö**

Approval Engineer: **Ivar Bull**

Marta Alonso Pontes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

"MCT Brattberg 2000 type: RGP"

RGP 50, RGP 70, RGP 100, RGP 125, RGP 150 and RGP 200 and
RGP 50S, RGP 50L, RGP 2", RGP 3", RGP 4", RGP 5", RGP 6" and RGP 8"

Frames filled with 60 mm thick MCT Brattberg Lycron insert blocks, spare blocks, add blocks with plugs and wraps, handi block with plugs, U-blocks.

The frames are welded to the steel section. Available frames: S=sleeve without flange. SFR=sleeve with round flange. SFRB= sleeve with round flange and pre-drilled holes. SFRBO= sleeve with round flange and pre-drilled holes, openable.

Application/Limitation

Approved for penetration in bulkheads or decks limited to a pressure of 3.2 bar.
The penetration system is generally not to be used for penetrating boundaries of tanks.

When requested to be used in watertight bulkheads on passenger ships and Special Purpose Ships (SPS), the penetration system has to comply with the requirements given in SOLAS Ch. II-1 Reg. 13.2.3 (2009 issue). Penetrations passing through watertight bulkheads are subject for separate examination and approval by actual flag administration."

Each product is to be supplied with its manual for installation and use.

Type Approval documentation

Tests carried out

Pressure tests with water according to class programme DNVGL-CP-0165 dated Oct 2017.

Marking of product

The product is to be marked with name of manufacturer and type designation.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT shall be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE