

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Toothed Coupling**

with type designation(s)

GO-A/AR/ARR, GO-AM/AMM/AMR, GO-FA/FAR,FAM, GO-MA, GO-AV, GO-ASC/ASC.D, GO-AH.MN, GO-AH.CL

Issued to

MAINA ORGANI DI TRASMISSIONE S.P.A**Asti AT, Italy**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships/High Speed and Light Craft**Application :****The approval is given for main propulsion and auxiliary duty.****Nominal torque See Tab. 01 in catalogue 270C rev. 2009**This Certificate is valid until **2018-12-31**.Issued at **Høvik** on **2014-10-14**for **DNV GL**DNV GL local station: **Milan**Approval Engineer: **Tore Rønning**.....
Oddvar Deinboll**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.

If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, then the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million.

In this provision the "Society" shall mean DNV GL AS as well as all its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

Certificate No: **M-12564**
File No: **714.70**
Job Id: **262.1-008966-2**

Product description

Tooth couplings MAINA GO-A series

Application/Limitation

The approval is given for main propulsion and auxiliary duty with ratings as given in Tab. 01 on page 01 in catalogue 270C rev.2009

Maximum misalignment: See Tab. 01. in 270C rev. 2009

Drive Nominal Torque is rated torque from table 01 divided with actual service application factor (service factor) from catalogue no.270C rev. 2009 e.g. for marine drive : 2.5 with diesel engine as driver.

Type Approval documentation

Catalogue no.270C rev. 2009 and drawings mentioned in covering letters dated 89-11-10, 98-04-02 and 02-01-23.

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment

For retention of the Type Approval, a DNV surveyor shall perform a survey every second year and before the expiry date of this certificate to verify that the conditions of the type approval are complied with.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the

Type Approval Certificate was issued. The main scope of the Periodical Assessment will normally include:

- Verification of the Type Approval applicant's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the Type Approval documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

When a Type Approved product is manufactured at other companies, the Type Approval applicant takes the sole responsibility for the conformity of the product to the applicable requirements.