



TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This is to certify that the
Non-Opening Window

Manufacturer

HÜSNA YAPI ve GEMİ MALZEMELERİ
SAN. ve TİC. LTD. ŞTİ.

Address

Fatih Bulvarı No:592 Sultanbeyli -
İSTANBUL / TURKEY

Product Type

Non-opening window

Particulars / Designation

NOW (Non-opening windows weld on type)
NOB (Non-opening windows bolt on type)

Application

It may be used for ships and marine industry
according to ISO-3903 (TYPE F) and Türk Loydu
Rules

Reference Rule

Türk Loydu Rules, Hull Part A Chapter 1- July 2021
Türk Loydu Rules, Naval Ship Technology Hull
Structures and Ship Equipment Part E Chapter 102-
January 2016

Place and Date

İSTANBUL / 10.03.2022

Subject to the conditions referred to in the following pages, this certificate is valid until 02.08.2026

This certificate consists of 2 pages.

Emrah SÖĞÜTÇÜ
New Building Division Manager



This certificate is subject to terms and conditions described below:

-Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.

Product Details

-Material used to be referred to the approved drawing dated 03.09.2021

-Sizes:

NOMINAL SIZE		
w1xh1(mm)	w2xh2(mm)	w3xh3(mm)
600x800	650x850	660x860
800x800	850x850	860x860
1200x1200	1250x1250	1260x1260
2200x1600	2250x1650	2260x1660
3600x2600	3650x2650	3360x2660

Application / Limitation (Approval Conditions):

-Glass pane is built up reinforced, polished and tempered glass. Non opening windows of all series, types, models and nominal sizes shall be manufactured according to the requirements (Dimension, materials etc.) given in ISO 3903, ISO 614 and heated glass panes ISO 3434 International Standards and Türk Loydu Rules. Necessary pressure value for glass pane calculation must be determined by ship designer. Glass panes thickness must be calculated according to ISO 21005 requirements.

-It can be open max. Ø 450 mm. hole in the glasses for CVS (Clear View Screen.)

Documentation

The design and construction drawings (NON OPENING WINDOW WELD ON/ BOLT ON TYPES) approved by Türk Loydu Ref No: PAE-EPAS/010275/21-1411/SA dated 03.09.2021.

Following tests were carried out with satisfactory results.

- Watertightnes test
- Mechanical strength test (Glass pane and Material)
- Visual and dimension inspection.
- Break test (for glass pane)

The main frame shall be marked with the letter for the type.

- Further marking indications are optional (Nominal size, Material class Manufacturer's name, Number of international standard)
- Glass pane shall be marked in accordance with International Standard

S. Mahir TUĞCU

Surveyor

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