



TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This is to certify that the
Inward (Left) Right Opening Window

Manufacturer	HÜSNA YAPI ve GEMİ MALZEMELERİ SAN. ve TİC. LTD. ŞTİ.
Address	Fatih Bulvarı No:592 Sultanbeyli - İSTANBUL / TURKEY
Product Type	Opening window
Particulars / Designation	I(L)RW (Inward (left) right opening windows weld on type) I(L)RB (Inward (left) right 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			GLASS THICKNESS t (mm)	MIN. NO OF FASTENERS
w1xh1(mm)	w2xh2(mm)	w3xh3(mm)		
400x600	450x650	460x660	Acc.to ISO 21005	4
600x800	650x850	660x860	Acc.to ISO 21005	6
1000x700	1050x750	1060x760	Acc.to ISO 21005	8
1100x800	1150x850	1160x860	Acc.to ISO 21005	8
2000x1000	2050x1050	2060x1060	Acc.to ISO 21005	10

Application / Limitation (Approval Conditions) :

- Glass pane is built up reinforced, polished and tempered glass. Side scuttle 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 of 2000x1000mm glass pane calculation must be determined by ship designer. Glass pane thickness must be calculated according to ISO 21005 requirements.

Documentation

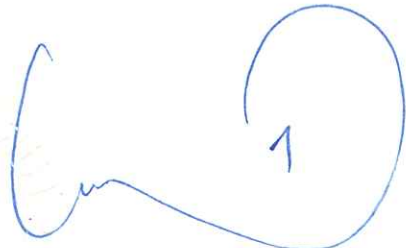
The design and construction drawings (INWARD (LEFT) RIGHT OPENING WINDOW) approved by Türk Loydu Ref No: PAE-EPAS/010275/21-1411/SA dated 03.09.2021.

Following tests were carried out with satisfactory results.

- Watertightness 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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