Certificate No.: 2212301336341247

TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This is to certify that the

TUG NOZZLES

Manufacturer	MARSİS MAKİNE VE GEMİ SANAYİ ANONİM ŞİRKETİ
Address	İstanbul Deri ve Endüstri Serbest Bl. Aydınlı SB mah. Kodalak Cad. No:12 Tuzla- İSTANBUL
Product Type	MN08TN01, MN08TN02, MN08TN03, MN08TN04, MN08TN05, MN08TN06, MN08TW07, MN08TW08, MN08TW09, MN080TW10, MN080TW11, MN080TW12 (Bronze& Stainless Steel)
Reference Rule	TL Rules, Part A, Chapter 2, Material , 01.01.2021 TL Rules, Part B, Chapter 4, Machinery, 01.01.2021 TL Rules, Part B, Chapter 5, Electric, 01.01.2021 TL Rules, Part E, Chapter 103 - Metallic Materials, Special Materials for Naval Ships, 01.01.2022 TL Rules, Part E, Chapter 105 - Naval Ship Technology, Electrical Installations, 01.01.2022 TL Rules, Part E, Chapter 107 - Naval Ship Technology, Ship Operation Installations and Auxiliary System, 01.01.2022 ISO 6182-1:2021 , 01.08.2021
Place and Date	İSTANBUL / 22.02.2023
Approval Conditions :	Fire Fighting Ships.

Subject to the conditions referred to in the following pages, this certificate is valid until 12.05.2027.

Emrah SÖĞÜTÇÜ

New Building Division Manager

129220

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 revelant international instruments that apply to it.

Product : TUG NOZZLES

Type Designation :

Type	Flow Rate
MN08TN- Narrow; 60^0 Bronze&Stainless Steel	150 – 750 l/dk
MN08TW-Wide,160^0 Bronze&Stainless Steel	200 – 1300 l/dk

Type: MN08TN-NARROW		
Nozale Type	**Guide Plate Thickness (mm)**	**K Factor**
MN08TN01-Bronze	3	110±5
MN08TN02-Bronze	4	130±5
MN08TN03-Bronze	5	165±5
MN08TN04-Bronze	6	185±5
MN08TN05-Bronze	8	255±5
MN0806-Bronze	10	295±5
MN08TN01-SS	3	110±5
MN08TN02-SS	4	130±5
MN08TN03-SS	5	165±5
MN08TN04-SS	6	185±5
MN08TN05-SS	8	255±5
MN08TN06-SS	10	295±5

Type: MN08TN-WIDE		
Nozale Type	**Guide Plate Thickness (mm)**	**K Factor**
MN08TW07-Bronze	3	180±5
MN08TW08-Bronze	4	230±5
MN08TW09-Bronze	5	275±5
MN08TW10-Bronze	6	335±5
MN08TW11-Bronze	8	430±5
MN08TW12-Bronze	10	520±5
MN08TW07-SS	3	180±5
MN08TW08-SS	4	230±5
MN08TW09-SS	5	275±5
MN08TW10-SS	6	335±5
MN08TW11-SS	8	430±5
MN08TW12-SS	10	520±5

Place of test carried out : Marsis Makine Ve Gemi Sanayi Anonim Şirketi

Marking of product : Maker's name or trade mark -Type Designation- Size.

Surveyor Name : Sezer Mahir TUĞCU

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