



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00002DF**  
Revision No:  
**2**

This is to certify:

That

**Dalishen Aluminum Co., Ltd.**  
**No.8, West of Shenchang Road, Development Zone, Danyang,**  
**China**

is an approved manufacturer of  
**Wrought Aluminium and Aluminium Alloys**

in accordance with  
**DNV rules for classification – Ships**

and the following particulars:

|                                 |  |
|---------------------------------|--|
| <b>Application area</b>         | <b>Wrought Aluminium Alloys</b>          |
| <b>Products</b>                 | <b>Plates</b>                            |
| <b>Manufacturing method</b>     | <b>Cold rolled,</b><br><b>Hot rolled</b> |
| <b>Max. thickness</b>           | <b>See page 2</b>                        |
| <b>Heat treatment condition</b> | <b>See page 2</b>                        |

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.  
Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2022-05-03**

This Certificate is valid until **2025-01-29**.

DNV local station: **Nanjing**

Approval Engineer: **Stefan Röhr**

for **DNV**

\_\_\_\_\_  
**Thorsten Lohmann**  
**Head of Section**

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.



Form code: AM 311

Revision: 2021-03

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## Particulars of the approval

### Wrought aluminium alloys

| Grade <sup>1)</sup> | Product                | Manufacturing method | Max. section / wall thickness [mm] | Heat treatment condition |
|---------------------|------------------------|----------------------|------------------------------------|--------------------------|
| NV 5052             | Plate                  | Cold rolled          | $3.0 \leq t \leq 6.0$              | H32                      |
|                     |                        | Cold rolled          | $3.0 \leq t \leq 5.0$              | O                        |
|                     |                        | Hot rolled           | $5.0 \leq t \leq 50.0$             |                          |
| NV 5083             | Plate                  | Cold rolled          | $3.0 \leq t \leq 6.0$              | H321                     |
|                     |                        |                      | $12,5 \leq t \leq 50.0$            |                          |
|                     |                        | Hot rolled           | $6.0 \leq t \leq 12.5$             |                          |
|                     |                        | Hot rolled           | $6.0 \leq t \leq 50.0$             | H112                     |
|                     |                        | Cold rolled          | $3.0 \leq t \leq 5.0$              | H111, O                  |
|                     |                        |                      | Hot rolled                         |                          |
| Cold rolled         | $3.0 \leq t \leq 50.0$ | H116                 |                                    |                          |
| NV 5754             | Plate                  | Cold rolled          | $3.0 \leq t \leq 6.0$              | H32                      |
|                     |                        | Cold rolled          | $3.0 \leq t \leq 5.0$              | O, H111                  |
|                     |                        | Hot rolled           | $5.0 \leq t \leq 50.0$             |                          |
| NV 5086             | Plate                  | Cold rolled          | $3.0 \leq t \leq 50.0$             | H116                     |
|                     |                        | Hot rolled           | $6.0 \leq t \leq 50.0$             | H112                     |
| NV 5454             | Plate                  | Cold rolled          | $3.0 \leq t \leq 50.0$             | H32                      |
|                     |                        |                      | $3.0 \leq t \leq 6.0$              | O                        |
|                     |                        | Hot rolled           | $6.0 \leq t \leq 50.0$             |                          |

Remarks:

- <sup>1)</sup> Incl. equivalent grades in acc. to other standards