



Task – T1870483
Steel Mill Approval – Extension
Certificate No. STML-T1743816-4

Attention: Mr. Eugene GOLI-OGLU, NLMK DANSTEEL A/S (WCN779431)

The documents shown in the attached list are reviewed in accordance with the applicable requirement of the following and the facility is considered approved to manufacture products for hull application as outlined in the process/product approval.

1. ABS Rules for Materials and Welding Part 2 (2019)

Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request renewal of approval prior to the five year expiry date.

For any clarifications, contact Ms. Lin Lihong at +86-21-23270994, llin@eagle.org.

Very truly yours,

Wei-Biao (Bill) Shi
Vice President

Electronically Signed by: Satya Meruva

Documents List

| Drawing No. | Rev. No. | Title | Status |
|-----------------------------|----------|---|----------|
| Approval Application Report | 00 | Approval Application Report for NLMK DanSteel A/S | Reviewed |
| Annex B | N/A | Test Protocols | Reviewed |
| Annex C | N/A | Welding Data | Reviewed |
| Annex D | N/A | CTOD Data | Reviewed |

Electronic copies of the documents, appropriately stamped, are available in the ABS My Eagle Portal through Engineering Manager.

Process/Product Approval

| Product | Grade | Thickness | Fine Grain Practice | Casting Practice | Delivery condition |
|---|-----------------------|-----------|---------------------|------------------|--------------------|
| Extension of Approval | | | | | |
| Plate | AH*/DH 36*/40 Z35 | 55 mm | Al+Nb | CC | NR |
| Plate | AH*/DH 36*/40 Z35 | 55 mm | Al+Nb+V | CC | NR |
| Steel Making Practice: BOC Deoxidation Practice: Al+Si Killed Heat treatment Facility: In-house | | | | | |
| Previously Approved Grades | | | | | |
| Plate | AH/DH 32/36 | 30 mm | Al+Nb | CC | NR |
| Plate | A/B/D | 30 mm | Al | CC | NR |
| Approval of these grades is based on prior approval of equivalent grades in the N condition together with production statistics. Steel Making Practice: Slabs sourced from NOVOLIPETSK STEEL (WCN783804) Deoxidation Practice: Slabs sourced from NOVOLIPETSK STEEL (WCN783804) Heat treatment Facility: In-house | | | | | |
| Plate | AH*/DH*/EH 32*/36 Z35 | 150 mm | Al+Nb+V | CC | N |

| | | | | | |
|---|----------------------------------|---------|-----------------------|----|------|
| Plate | AH*/DH 32*/36 | 25 mm | Al+V | CC | AR |
| Plate | AH40 | 12.5 mm | Al+V | CC | AR |
| Plate | AH*/DH*/EH*/FH 32*/36*/40 Z35 | 60 mm | Al+Nb | CC | TMCP |
| Plate | AH*/DH*/EH*/FH 32*/36*/40 Z35 | 60 mm | Al+Nb+V+Ti | CC | TMCP |
| Plate | AH32*/36 | 12.5 mm | Al+V+Ti | CC | AR |
| Plate | AH*/DH*/EH 32*/36 Z35 | 60 mm | Al/(Al+Nb)/(Al+V) | CC | N |
| Plate | E | 60 mm | Al/(Al+Nb) | CC | N |
| Plate | A*/B*/D | 100 mm | Al/(Al+Nb) | CC | N |
| Plate | B | 40 mm | Al | CC | AR |
| Plate | A | 100 mm | Al | CC | AR |
| Steel Making Practice: Slabs sourced from NOVOLIPETSK STEEL (WCN783804) Deoxidation Practice: Slabs sourced from NOVOLIPETSK STEEL (WCN783804) Heat treatment Facility: In-house | | | | | |

* Approval of these grades is based on qualification tests carried out on the higher grade.