# Base Load Power Hub (BLPH)

## SPARE PART INDEX REGISTER (COMMISIONING, OPERATION) H2 STORAGE VESSEL

Document Number: 1723001756-COM-LIS-00018

Document Class: 3

ROSETTI MARINO

| | |
|---|---|
| 1 | NO COMMENTS - APPROVED - WORK MAY PROCEED |
| 2 | MINOR COMMENTS - REVISE AND RESUBMIT - WORK MAY PROCEED |
| 3 | MAJOR COMMENTS – REJECTED – DO NOT PROCEED |
| 4 | APPROVAL NOT REQUIRED |

*NOTE: Approval doesn't relieve the supplier from mandatory compliance with contractual documents and specifications. Comments made do not imply acceptance of any cost or delivery impact.*

| Sign | Date |
|---|---|
| | 20-06-2024 |

| Rev. | Date | Description | Prepared | Reviewed | Approved |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| 1 | 14/06/2024 | Issue for Information (IFI) | M. Toniolo | D. Passerini | D. Passerini |
| 0 | 03/05/2024 | Issue for Information (IFI) | M. Toniolo | D. Passerini | D. Passerini |

BREMBANA&ROLLE

**Revision / Change Log**

| Rev. | Description |
|---|---|
| 0 | Issue for Information (IFI) |
| 1 | Issue for Information (IFI) |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

**HOLD LIST**

| No. | Description |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |

| | |
|---|---|
| CLIENT: | **ROSETTI MARINO** |
| PURCHASE ORDER No.: | **1723001756 123A90A** |
| END USER: | **CROSSWIND** |
| ENGINEERING | **ROSETTI MARINO** |
| PROJECT: | **BLPH PLATFORM** |
| SITE: | **HOLLANDSE KUST NOORD SITE V** |
| ITEM: | **V-25001 A÷F** |
| EQUIPMENT TYPE: | **HORIZONTAL EQUIPMENT** |
| SERVICE: | **H2 STORAGE VESSEL** |
| MANUFACTURER | **BREMBANA & ROLLE S.p.A.** |
| JOB NOMBER: | **23096** |
| SERIAL NUMBER | **23096-01-SNA÷SNF** |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| 1 | Issued for APPROVAL | 14/06/2024 | M. TONIOLO | D.PASSERINI | D.PASSERINI |
| 0 | Issued for APPROVAL | 03/05/2024 | M. TONIOLO | D.PASSERINI | D.PASSERINI |
| **REV.** | **DESCRIPTION** | **DATE** | **ORIGINATOR** [Project Eng.] | **CHECK** [Project Tech.Mng.] | **APPROVAL** [Engineering Mgr.] |

| | |
|---|---|
| CLIENT: | **ROSETTI MARINO** |
| PURCHASE ORDER No.: | **1723001756 123A90A** |
| END USER: | **CROSSWIND** |
| ENGINEERING | **ROSETTI MARINO** |
| PROJECT: | **BLPH PLATFORM** |
| SITE: | **HOLLANDSE KUST NOORD SITE V** |
| ITEM: | **V-25001 A÷F** |
| EQUIPMENT TYPE: | **HORIZONTAL EQUIPMENT** |
| SERVICE: | **H2 STORAGE VESSEL** |
| MANUFACTURER | **BREMBANA & ROLLE S.p.A.** |
| JOB NOMBER: | **23096** |
| SERIAL NUMBER | **23096-01-SNA÷SNF** |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| 1 | Issued for APPROVAL | 14/06/2024 | M. TONIOLO | D.PASSERINI | D.PASSERINI |
| 0 | Issued for APPROVAL | 03/05/2024 | M. TONIOLO | D.PASSERINI | D.PASSERINI |
| **REV.** | **DESCRIPTION** | **DATE** | **ORIGINATOR** [Project Eng.] | **CHECK** [Project Tech.Mng.] | **APPROVAL** [Engineering Mgr.] |

ROSETTI MARINO

# SPARE PARTS LIST

CROSSWIND

| | | | | | |
|---|---|---|---|---|---|
| Document Title | **Commissioning and 2 years spare parts list** | | | | |
| The document relates to | **HOLLANDSE KUST NOORD WIND PARK Project - Base Load Power Hub (BLPH)** | | | | Contract: **CW-I-WP4-2023-05** |
| Project ID | **123A90** | Doc. n° **123A90-XXX-XX-XX-0000** | Rev. **Issued for review** | Rev. Date **02-May-24** | Status **IFR** / Class **2** |

The equipment consists of the following units/components

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Tag no. | V2S001 A/F | | | | | |
| 2 | Tag description | H2 Storage Vessel | | | | | |
| 3 | Manufacturer model/type no. | | | | | | |
| 4 | Manufacturer serial no. | 23096-01-SNA/F | | | | | |
| 5 | No. of units | 6 | | | | | |
| 6 | Quantity of parts FITTED / INSTALLED per unit/component | 144 | 6 | 144 | 6 | 6 | 6 |

Supplier: BREMBANA & ROLLE S.p.A.

Address: Via Villino, 1 - 24030 Valbrembo (BG) - Italy

PO Number: 1723001756 123A90A

PO description: H2 Storage Vessels

Supplier telephone no: +39-35-4510682

E-mail: nroncalli@brembanarolle.com; friganello@brembanarolle.com

Contact name: Mrs. Nadia Roncalli / Floriana Riganello

Contact mobile no:

WEBSITE www.brembanarolle.com

General Information:

| MATERIALS DATA | | | | | | | | | | | | | | | | | | | | Commissioning spares | 2 Years spares | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item Number | Total number of identical spares installed | Description of recommended spare parts | Parts/drawing ref. | | | Material | Certificate Type (if applicable) | Certificate Reference (if applicable) | Shelf life (years) | Weight (net) | Weight (gross) | Volume | HS Code | ECCN Code | % US Content | Country of origin | Supplier part no. | Manufacturer part no. | Manufacturername | Quantity ordered | Quantity ordered | Remarks |
| | | | Project Datasheet no. | Project Detail dwg. no. | Item ref. | | | | | | | | | | | | | | | | | |
| 7 | | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 1 | 144 | STUD BOLTS 1-1/2"-8UN B1.1 Lg. 260 mm + 2 NUTS (M1) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 10 | SA 193 Gr.B7 + SA 194 Gr.2H | 3.1 | EN-10204: 2004 | >5 | 3.5 | 3.5 | n.a. | 7318 | 1548 | | Italy | 10 | n.a. | PRESSBOLT S.R.L. | 15 | 15 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 2 | 6 | SW GASKET 24" 300# c/w S.S. INNER/ C.S.OUTER RING (M1) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 11 | 316 S.S. + EPOXY COATED C.S. | 2.2 | EN-10204: 2004 | >3 | 4 | 4 | n.a. | 8484 | 1000 | | Italy | 11 | n.a. | ABO S.R.L. | 18 | 18 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 3 | 144 | STUD BOLTS 1-1/2"-8UN B1.1 Lg. 260 mm + 2 NUTS (M2) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 14 | SA 193 Gr.B7 + SA 194 Gr.2H | 3.1 | EN-10204: 2004 | >5 | 3.5 | 3.5 | n.a. | 7318 | 1548 | | Italy | 14 | n.a. | PRESSBOLT S.R.L. | 15 | 15 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 4 | 6 | SW GASKET 24" 300# c/w S.S. INNER/ C.S.OUTER RING (M2) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 15 | 316 S.S. + EPOXY COATED C.S. | 2.2 | EN-10204: 2004 | >3 | 4 | 4 | n.a. | 8484 | 1000 | | Italy | 15 | n.a. | ABO S.R.L. | 18 | 18 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 5 | 24 | STUD BOLTS 5/8" UNC-B1.1 Lg 85 + 2 NUTS (3N) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 48 | SA 193 Gr.B7 + SA 194 Gr.2H | 3.1 | EN-10204: 2004 | >5 | 0.25 | 0.25 | n.a. | 7318 | 1548 | | Italy | 48 | n.a. | PRESSBOLT S.R.L. | 12 | 12 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 6 | 6 | SW GASKET 1" 300# c/w S.S. INNER/ C.S.OUTER RING (3N) | 12390-DDL-MAC-DS-50027 | 1723001756-MAC-DD-00024 | 49 | 316 S.S. + EPOXY COATED C.S. | 2.2 | EN-10204: 2004 | >3 | 0.08 | 0.08 | n.a. | 8484 | 1000 | | Italy | 49 | n.a. | ABO S.R.L. | 18 | 18 | BREMBANA & ROLLE GENERAL ASSEMBLY DWG: 1723001756-MAC-DD-00024 |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | | | | | | | | | | |
| 37 | | | | | | | | | | | | | | | | | | | | | | |
| 38 | | | | | | | | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | | | | | | | | |
| 41 | | | | | | | | | | | | | | | | | | | | | | |
| 42 | | | | | | | | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | | | | | | | | |
| 44 | | | | | | | | | | | | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | | | |