DRAWING NO. 123A90-DDL-ST-DD-90027 | REV. 03

A) GENERAL NOTES FOR DECK WELDING DETAILS :

1 – a) ALL WELDS SHALL BE CONTINUOUS.
b) WHERE ACCESS IS POSSIBLE, ALL WELD SHALL BE DOUBLE SIDED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OR APPROVED BY COMPANY REPRESENTATIVE.
c) FULL PENETRATION GROOVE WELD SHALL BE USED UNLESS NOTED OTHERWISE OR APPROVED BY COMPANY REPRESENTATIVE.

2 – ALL T K Y JOINTS SHALL BE WELDED IN ACCORDANCE WITH DETAILS SHOWN ON THE DRAWINGS N° 123A90–DDL–ST–DD–90030 & 90031 WHICH ARE BASED ON API RP 2A AND COMPANY SPECIFICATIONS Norsok M–101 2011.

3 – T K Y JOINTS SPECIFIED FOR WELD PROFILE CONTROL SHALL BE TESTED AS INDICATED ON THE DRAWINGS 123A90–DDL–ST–DD–90030 & 90031.

4 – WELDS SPECIFIED FOR WELD PROFILE CONTROL SHALL RECEIVE MAGNETIC PARTICLE INSPECTION (M.P.I.) FOR SURFACE AND NEAR SURFACE DISCONTINUITIES.

5 – PEENING OTHER THAN TO REMOVE WELD SPLATTER OR SLAG SHALL NOT BE ALLOWED.

6 – REQUIRED WELD PROFILES SHALL BE MAINTAINED EVEN FOR WELDS THAT ARE HIDDEN (i.e. WELDS UNDER OVERLAPPING BRACES OR DIAPHRAGMS.)

7 – WELD PASSES TO BE DEPOSITED IN A BALANCED MANNER TO MINIMIZE DISTORSION. ROOT PASS PLUS SUFFICIENT NUMBER OF SUBSEQUENT PASSES TO BE COMPLETED BEFORE ASSEMBLY IS TURNED.

8 – ALL WELDS TO BE BACK–GOUGED AND/OR GROUND TO BRIGHT METAL AND BACK WELDED WHERE ACCESS PERMITS.

9 – ALL DIAPHRAGMS WILL BE WELDED FROM BOTH SIDES UNLESS NOTED OTHERWISE ON THE DRAWINGS. THIS APPLIES TO BOTH FILLET AND FULL PENETRATION WELDS.

10 – MINIMUM PREHEATING AND INTERPASS TEMPERATURES MUST BE MAINTAINED DURING THE ENTIRE WELDING PROCESS FOR RESTRAINED OR CRITICAL CONNECTIONS, SUCH AS DIAPHRAGM PLATES.

11 – THE FABRICATOR IS TO ADHERE TO THE TYPICAL FRAMING DETAIL UNLESS SHOWN OR NOTED OTHERWISE ON THE DRAWINGS.

12 – a) LONGITUDINAL SEAMS TO BE STAGGERED AS SHOWN ON THE DRAWINGS N° 123A90–DDL–ST–DD–90028 & 90029 AND GENERAL SPECIFICATIONS Norsok M–101 2011. (TYPICAL AT ALL GIRTH WELD).
b) LOCATE LONGITUDINAL SEAM WELDS 90 DEGREES MINIMUN APART WHERE POSSIBLE, WITH 250mm MINIMUN. APART AT ADJACENT CANS.
c) MULTIPLE SECTION CANS ARE THOSE THAT REQUIRE THE SPLICING OF TWO CANS TO MAKE–UP THE COMPLETE CAN LENGTH.
d) AT NODE, LOCATE LONGITUDINAL SEAM WELDS AT LEAST 75mm CLEAR FROM EACH FRAMING MEMBER.

13 – MINIMUM DISTANCE BETWEEN GIRTH WELDS SHALL BE:
– ONE PIPE DIAMETER OR 900mm WHICHEVER IS LESS.

14 – UNLESS OTHERWISE AGREED WITH THE COMPANY, FOR TUBULAR CONNECTIONS, DOUBLE SIDED WELDS SHALL BE REQUIRED WHEN BRACE O.D. EXCEEDS 610mm (24") AND/OR BRACE THICKNESS EXCEEDS 38mm (1.5"), AND/OR BRACE TO CAN ANGLE IS LESS THAN 30°.

B) GENERAL NOTES FOR WELDING :

1 – ALL WELDING PROCEDURES ARE TO COMPLY WITH DNV–OS–C401.

2 – ALL WELDS SHALL BE CONTINUOUS. IN PARTICULAR FOR WELDS OF JOISTS TO PLATING.

3 – ALL WELDS SHALL BE FULLY SEAL WELDED EXCEPT FOR THOSE OTHERWISE INDICATED.

4 – FILLET WELDS ARE INDICATED BY THE LEG SIZE (L), ALWAYS, PROVIDING THAT THE MINIMUN THROAT IS MET.
– MINIMUM LEG SIZE OF FILLET WELDS TO BE L=6mm FOR CYCLICALLY LOADED STRUCTURE, FOR SPECIAL AND FIRST CATEGORY MEMBERS.
– OTHERWISE MINIMUM LEG OF FILLET WELDS TO BE AS FOLLOWS: (SEE FIGURE 2)

	MIN. LEG (L)	MIN. THROAT (a)
t < 12 mm	6 mm	4.0 mm
12 < t < 20 mm	6 mm	4.0 mm
t > 20 mm	8 mm	5.7 mm

– UNLESS NOTED OTHERWISE ON DRAWINGS, OR WITHOUT DETAILED FILLET WELDS FOR SPECIAL & FIRST CALCULATION, DOUBLE SIDE CATEGORY TO BE: (SEE FIGURE 2)
L = 0.7T, WITH T= MIN. (T1, T2)

6 – THE MINIMUM SPECIFIED LEG LENGTH OF FILLET WELD SHALL BE THE DIFFERENCE OF ACTUAL WELD LENGTH AND THE ACTUAL ROOT GAP (SEE FIGURE 1).

7 – MINIMUM GAP BETWEEN BRACING FOOTPRINTS IS 75mm.

8 – MINIMUM GAP BETWEEN WELD TOES IS 75mm.

9 – WHERE ACHIEVED GAP BETWEEN WELD TOES IS BETWEEN 25 AND 50mm, LOCAL GRINDING AND M.P.I. ARE REQUIRED IN ORDER TO AVOID LOCAL UNDER–CUT AND TO GET A SMOOTH WELD PROFILE.

10 – WHEN ACCESS IS LIMITED FABRICATION TO PROVIDE 100mm CLEARANCE FOR WELDING (SEE FIGURE 3).

11 – TEMPORARY RAT HOLES SHALL BE PROVIDED ONLY TO PERFORM THE THROUGH WELD (SEE FIGURE 4) .
THE EDGES OF THE RAT HOLES SHALL BE CHAMFERED AT 45 DEGREES. THE RADIUS OF THE RAT HOLES SHALL BE 20mm. AFTER WELDING AND INSPECTION OF THE THROUGH WELDS, THE TEMPORARY RAT HOLES SHALL BE PROPERLY FILLED WITH WELD.

12 – THE TEMPORARY RAT HOLES SHALL BE PREPARED AND EDGES BEVELLED BEFORE FITTING THE PIECES TOGETHER.

13 – NO PERMANENT RAT HOLES SHALL BE USED.

14 – ALL BEVELS SHALL BE INDIVIDUALLY 20°, 30°, 45° WITH REGARD TO THE UT INSPECTION SURFACE.

C) WELDING INSPECTION CATEGORIES :

INSPECTION CATEGORY	STRUCTURAL CATEGORY
I	DC1 (or SPECIAL)
II	DC2 / DC3 (or PRIMARY)
III	DC4 (or SECONDARY)

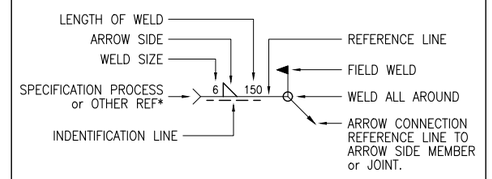
DNV–OS–C401

D) WELDING SYMBOLS :

BASIC WELDING SYMBOLS ISO 2553

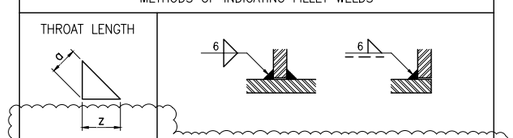
BASIC SYMBOLS			SUPPLEMENTARY SYMBOLS				
FILLET WELD	DOUBLE V	SINGLE V	BACKING WELD	BACKING STRIP	ALL AROUND	FIELD WELD	FLUSH
				M			

STANDARD LOCATION OF ELEMENTS OF A WELDING SYMBOL



* OMIT TAIL WHEN REFERENCE IS NOT USED.

METHODS OF INDICATING FILLET WELDS



– FOR FILLET WELDS, THE WELD SIZE REPRESENTS, WHERE INDICATED, THE FILLET WELD LEG LENGTH (z)
– FOR PARTIAL PENETRATION WELDS, THE WELD SIZE IS INDICATED OMITTING THE LETTER (s)

03

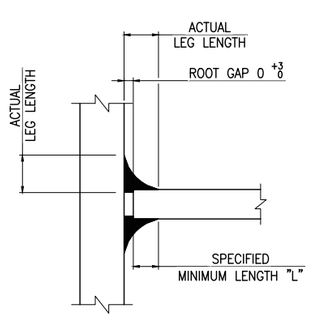


FIGURE 1 :
FILLET WELD WITH ROOT GAP
(SEE WELDING GENERAL NOTE B6)

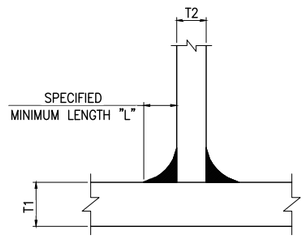


FIGURE 2 :
FILLET WELD WITHOUT ROOT GAP

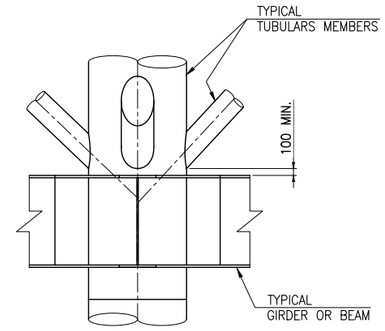


FIGURE 3 :
CLEARANCE FOR LIMITED ACCESS

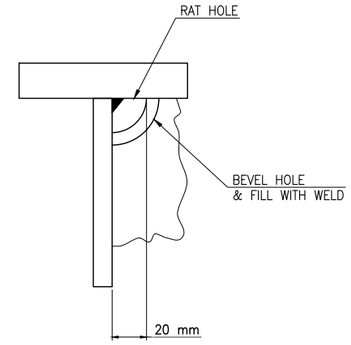


FIGURE 4 :
RAT HOLE

TECON

REV.	DATE	DRN	CHKD	APPD	DESCRIPTION
03	05/11/24	SGR	AB	DLS	ACCEPTED FOR CONSTRUCTION (AFC)
02	17/04/24	SGR	AB	DLS	ACCEPTED FOR CONSTRUCTION (AFC)
01	31/01/24	SGR	AB	DLS	ACCEPTED FOR CONSTRUCTION (AFC)
00	13/10/23	SGR	AB	DLS	ISSUE FOR REVIEW (IFR)

CROSSWIND | ROSETTI MARINO

TITLE :
BASE LOAD POWER HUB (BLPH)
STANDARD DRAWINGS
WELDING GENERAL NOTES

CONTRACT NO./TITLE CW–I–WP4–2023–05/HOLLANDSE KUST NOORD WIND PARK			SCALE NTS
DRAWN S.GRIFFINI	CHECKED A.BALZAROTTI	APPROVED D.LO STERZO	DATE 05/11/24
A1	DRAWING NO. 123A90–DDL–ST–DD–90027	SHEET 001	REV. 03

File Name : 123A90–DDL–ST–DD–90027_03.dwg