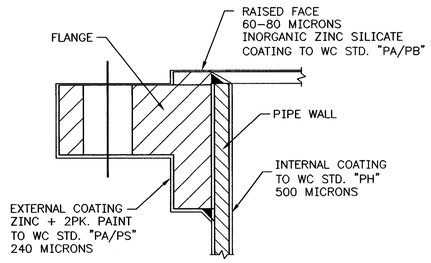
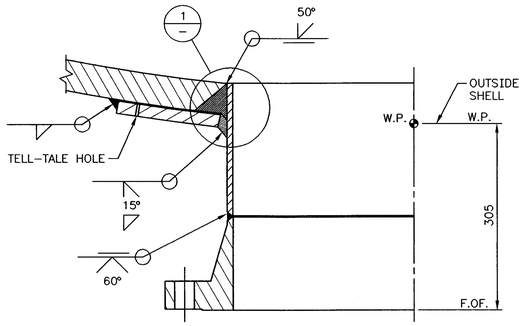


SURGE VESSEL FLANGE FACE PAINTING

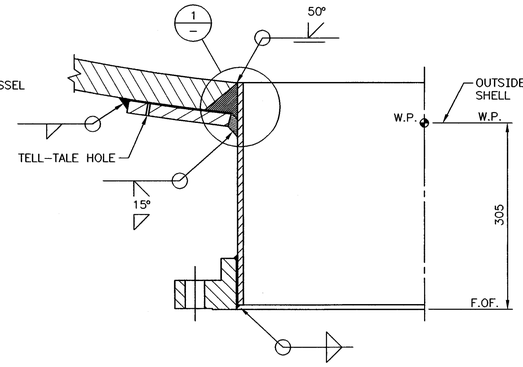
SCALE N.T.S.

NOTE: –INTERNAL OF BLANKING PLATES 500 MICRONS TO PH.
–EXTERNAL OF BLANKING PLATES 240 MICRONS TO PS.
–DO NOT PAINT STAINLESS STEEL BLANKING PLATES.



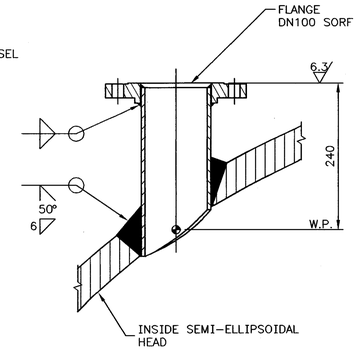
NOZZLES N1 AND M1

WELD NECK FLANGE
SCALE 1:5



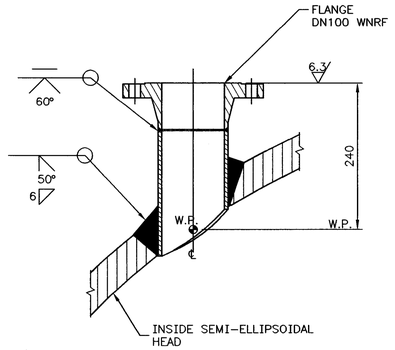
NOZZLES N1 AND M1

SLIP ON FLANGE
SCALE 1:5



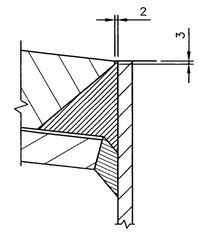
NOZZLES N2; N3; N4

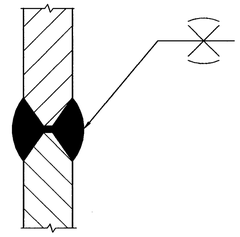
SLIP ON FLANGE
SCALE 1:5



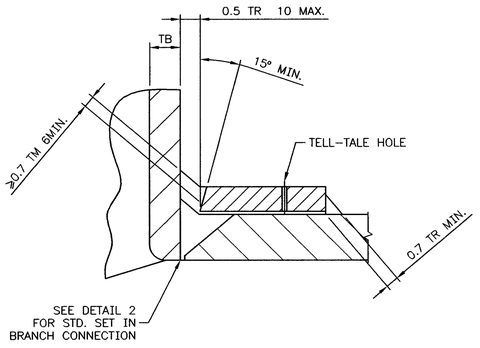
NOZZLES N2; N3; N4

WELD NECK FLANGE
SCALE 1:5

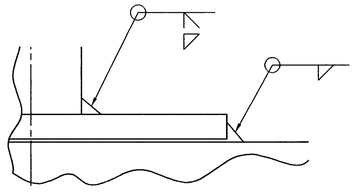




1



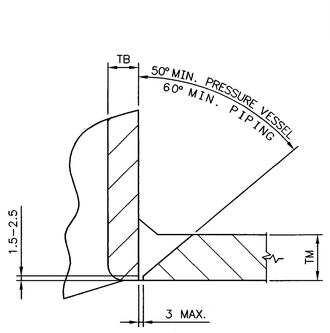
WELD PREPARATION DETAILS
SET IN BRANCH WITH REINFORCING PLATE



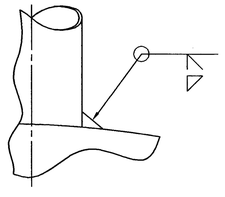
SYMBOLS OF WELD
SHOWN ON DRAWING

LEGEND:
TM – NOMINAL WALL THICKNESS OF MAIN PIPE
TB – NOMINAL WALL THICKNESS OF BRANCH
TR – REINFORCING PLATE THICKNESS
T – 15 – 38mm
H – MAY VARY FROM T TO T

2

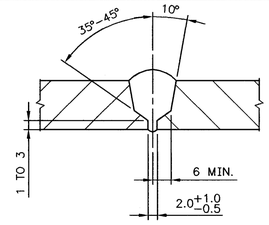


WELD PREPARATION DETAILS
SET IN BRANCH CONNECTION

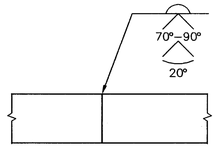


SYMBOLS OF WELD
SHOWN ON DRAWING

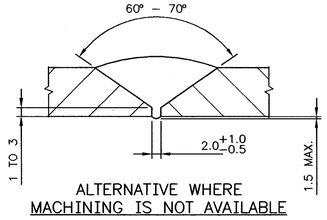
3



BUTTWELD – WELD PREPARATION FOR A WALL THICKNESS GREATER THAN 20mm CIRCUMFERENTIAL JOINTS WHERE ONE SIDE IS INACCESSABLE FOR WELDING. (MAY BE WELDED BOTH SIDES WHERE ACCESSIBLE)



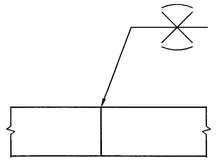
SYMBOLS OF WELD
SHOWN ON DRAWING



ALTERNATIVE WHERE
MACHINING IS NOT AVAILABLE

4

APPLICABLE TO LONGITUDINAL
AND CIRCUMFERENTIAL WELDS



SYMBOLS OF WELD
SHOWN ON DRAWING

DETAIL 1 / –

SCALE 1:2

CIRCUMFERENTIAL AND LONGITUDINAL WELD SEAM

GENERAL NOTES:

1. FLANGES TO AS4331 MADE FROM PLATE.

   DEVIATION FROM FLATNESS OF FLANGE FACE SHALL NOT EXCEED:
   250NB AND SMALLER – ±0.1mm
   300NB AND LARGER – ±0.3mm

2. SURFACE FINISH SHALL BE IN ACCORDANCE WITH REQUIREMENTS BELOW:
   THE GASKET CONTACT SURFACE SHALL BE FORMED BY CONCENTRIC OR CONTINUOUS SPIRAL GROOVE GENERATED BY A 1.5mm RADIUS ROUND–NOSED TOOL WITH A FEED RATE OR SPACING OF 0.8mm PER REVOLUTION.
   THE ROUGHNESS SHALL BE Ra 6.3 MICRONS.

3. THE FINISH OF CONTACT FACES OF FLANGES SHALL BE JUDGED BY VISUAL COMPARISON WITH AS2382 AND AS2536, NOT BY INSTRUMENTS HAVING STYLUS TRACES AND ELECTRONIC AMPLIFICATION.

4. MAXIMUM FILLET SIZE 15mm.

5. ALL WELDING TO BE DONE TO AN APPROVED WELD PROCEDURE AND THE RELEVANT AUSTRALIAN STANDARDS AS1548 AND WATER CORPORATION WS1

6. FILLET SIZE TO BE NOMINATED ON SYMBOL AS REQUIRED BY DESIGNER (VESSEL).

7. WELD PREP DIMENSION TO BE MAINTAINED AFTER MACHINING FACE OF FLANGE.

8. REFER TO SECTION 7 OF DS35–01 FOR VESSEL MANUFACTURING REQUIREMENTS.

9. TELL–TALE HOLES TO BE SILICONE PLUGGED PRIOR TO PAINTING.

10. REINFORCING PADS SHALL BE SUBJECT TO A SOAPY WATER AND PNEUMATIC TEST AT 100kPa.

100 50 0 100 200 300 mm (1:5 AT A1)

ISSUE	DATE	GRID	REVISION	DRN	REC	APPD

DESIGN SURVEY | VERTICAL DATUM NONE | DES CALC N/A | NORTH POINT
COORDINATE SYS NONE | DES CHD N/A
ASCON SURVEY | DES REF 61–22538 | DRN M. DUKOWICZ | Q.C. CHD P. MIRCO

INFRASTRUCTURE DESIGN BRANCH

RECOMMENDED 21/11/2011
MECHANICAL ENGINEER, EMS
APPROVED 20.11.11
PRINCIPAL ENGINEER, EMS

WATER CORPORATION

MECHANICAL STANDARD DRAWING
MECHANICAL DESIGN STANDARD
DS35–01 – SURGE VESSELS
WELD DETAILS

FILE | PLAN JZ39–91–19–1 CAD | ISSUE A
PROJECT

ORIGINAL SHEET SIZE A1

MF 25 NOV 2011

566
810

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