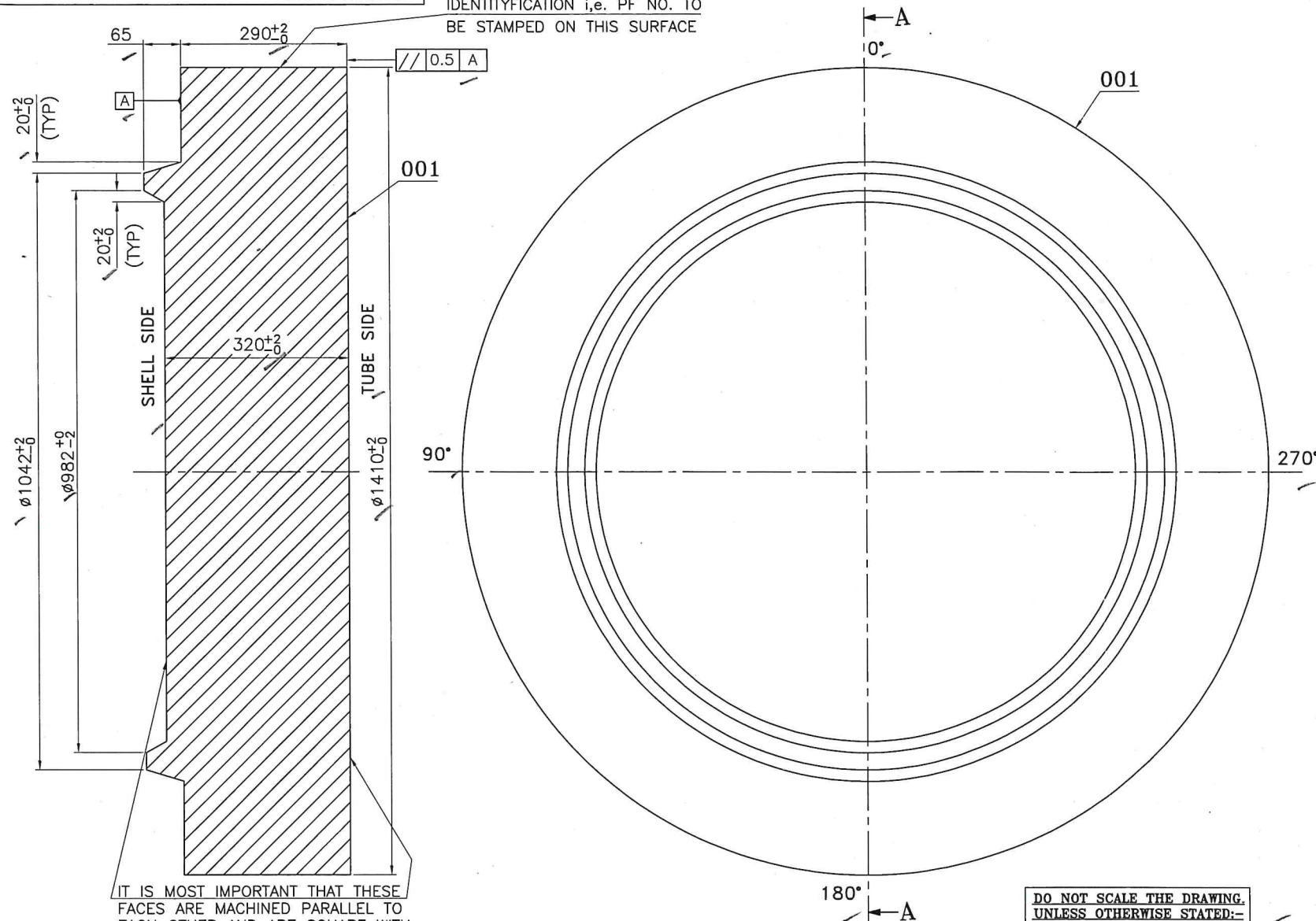


3-16053-40882

DRAWING NO.

IDENTIFICATION i.e. PF NO. TO
BE STAMPED ON THIS SURFACE

NOTE-A

MOCKUP BLOCK REQUIRED FOR PROCESS QUALIFICATION AND PROCESS CONTROL SHALL BE OF SAME HEAT TREATMENT CONDITION AND MATERIAL OF TUBE SHEET FORGING. FOR QUANTITY AND SIZE FOR DIFFERENT MOCKUP BLOCKS REFER ENQUIRY/PO.

न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड Nuclear Power Corporation of India Limited		
☒ अनुमोदित / APPROVED		
☐ टिप्पणी के अनुसार अनुमोदित / APPROVED AS NOTED		
☐ संशोधन को आगे बढ़ाएं / सेक / PROCEED WITH/HOLD FABRICATION		
☐ अंतिम ट्रांसपैरेन्सी एवं प्रिंट्स भेजें / SEND FINAL TRANSPARENCIES & PRINTS		
☐ संशोधन करें एवं अनुमोदन के लिए पुनः प्रस्तुत करें REVISE & RESUBMIT FOR APPROVAL		
जाँचकर्ता / CHECKED BY	समीक्षकर्ता / REVIEWED BY	अनुमोदनकर्ता / APPROVED BY
प्रखर 15/11/19	वि.प्र.माधविकर 15/11/19	15/11/19
किए जानेवाले कार्य का अनुमोदन आपूर्तिकर्ता संशोधन को विनिर्देशनों के अनुसार आपूर्ति करने के उत्तरदायित्व से मुक्त नहीं करता है। This approval of the work to be done does not relieve the supplier of the responsibility of supply according to specifications.		

IT IS MOST IMPORTANT THAT THESE
FACES ARE MACHINED PARALLEL TO
EACH OTHER AND ARE SQUARE WITH
TUBE SHEET OD.

SECTION : A-A

TECHNICAL REQUIREMENTS (TR):-

- SUPPLY CONDITION : HEAT TREATED AND PROOF MACHINED ALL OVER.
- ALL TECHNICAL AND TESTING REQUIREMENTS SHALL BE AS PER NPCIL APPROVED SPECIFICATION No. BHEL/NPCIL/30599/CS-FORGINGS/CDE-19-3411.
- NO REPAIRS/WELDING SHALL BE PERMITTED WITHOUT PRIOR APPROVAL OF NPCIL.
- TEST COUPON FOR TESTING SHALL BE FORMED AS PER SPECIFICATION NO.-BHEL/NPCIL/30599/CS-FORGINGS/CDE-19-3411.
- IDENTIFICATION TO BE STAMPED AT LOCATION SHOWN WITH FOLLOWING INFORMATION:
a). PURCHASE FORGING NUMBER.
b). HEAT NUMBER
c). BHEL PO NUMBER
d). MATERIAL DESIGNATION.
- MATERIAL OF CONSTRUCTION : SA 350 LF2 CLASS-1.
- TEMPORARY OIL BASED RUST PREVENTIVE TO BE APPLIED AFTER MACHINING THE TUBE SHEET ON ALL SURFACES.
- THE TUBE SHEET SHALL BE FORGED IN SUCH A WAY THAT FACE CORRESPONDING TO TUBE SIDE (CLADDING SIDE) SHALL CORRESPOND TO THE BOTTOM OF INGOT.
- ALL DIMENSIONS INDICATED ARE IN mm.
- UNLESS OTHERWISE MENTIONED THE TOLERANCE ON LINEAR AND ANGULAR DIMENSIONS SHALL BE IN ACCORDANCE TO IS:2102.
- THE SURFACE FINISH OF FORGINGS SHALL BE 3.2 OR BETTER.

TOLERANCE ON LINEAR DIMENSIONS (IS:2102)			
DIMENSIONS	TOL	DIMENSIONS	TOL
UP TO 6	±0.1	315 - 1000	±0.8
6 - 30	±0.2	1000 - 2000	±1.2
30 - 120	±0.3	2000 - 4000	±2.0
120 - 315	±0.5	4000 - 8000	±3.0

TOLERANCE ON LINEAR DIMENSIONS		TOLERANCE	
SPECIFIED DIMENSIONS			
XX	± 0 . 40		
XX.X	± 0 . 40		
XX.XX	± 0 . 25		

TOLERANCE ON ANGULAR DIMS : 0°-0.5°

DO NOT SCALE THE DRAWING.
UNLESS OTHERWISE STATED:-ALL DIMENSIONS ARE IN mm.
MACHINE ALL OVER.SURFACE FINISH TO BE $\sqrt{3.2}$ OR BETTER.
REMOVE ALL BURRS.REMOVE ALL EXTERNAL SHARP CORNERS
AND EDGES BY CHAMFERING TO $\frac{0.15}{45^\circ}$.ROUND ALL INTERNAL CORNERS AND
EDGES TO R $\frac{0.15}{45^\circ}$.TOLERANCES ON RADII AND CHAMFERS
(IS : 2102)

REDII AND CHAMFERS	0.5-3	3-6	6-30
TOLERANCES	±0.2	±0.5	±1.0

ADDITIONAL INFORMATION

DRG. LIST : 4-16503-40359

STATUS OF DRAWING

W/O. NO. : 18085/86-W-04801

DISTRIBUTION OF PRINTS

CDE - 1 HCM - 4 FWM - 4

REV.	DATE	ALTERED	विवरण	संख्या
02	03/05/19	CHECKED	नागेन्द्र सिंह	नगेन्द्र सिंह
		APPROVED	ए.के.माहौर	ए.के.माहौर

ZONE DRAWING REVISED TO INCORPORATE
NPCIL COMMENTS DTD. 10/04/2019.

REV.	DATE	ALTERED	विवरण	संख्या
01	20/03/19	CHECKED	नागेन्द्र सिंह	नगेन्द्र सिंह
		APPROVED	ए.के.माहौर	ए.के.माहौर

ZONE DRAWING REVISED BASED ON NPCIL
COMMENTS DTD. 15/03/2019.
TOLERANCE TABLE ADDED.
NOTE-A ADDED.

01	01410	001	TUBE SHEET	B.O.	3763.0
VAR00	QTY.-Nos	REMARKS	VAR. NO.	ITEM NO.	DESCRIPTION
58	64	65	75	76	77
59	60	61	62	63	64
65	66	67	68	69	70
71	72	73	74	75	76
77	78	79	80	81	82
83	84	85	86	87	88
89	90	91	92	93	94
95	96	97	98	99	100

NUCLEAR POWER CORPORATION OF INDIA LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)	
PROJECT : GORAKHPUR HARIYANA ANU VIDHYUT PARIYOJANA 1&2 (700 MWe).	
NPCIL PURCHASE ORDER NO. : CMM/FTP/10-33-1-1149/e-PO/30599, DATED 25.01.2019	
NPCIL DRAWING NO : GHVP-1&2/33411/2019/DD REV.00	

EQUIPMENT NAME : SHUT DOWN COOLER

TAG NO. : (3341-HX-1,2,3,4)

वर्क/ ड्रॉ. DRN.	नाम/ NAME	हस्ता./SIGN	दिनांक/DATE	वे.रि. की संख्या NO. OF VAR.
जाँचा CKD.	विजय कुमार कुशवाहा	विजय कुमार	08/03/2019	
अनुमोदित APPD.	नागेन्द्र सिंह	नागेन्द्र सिंह	08/03/2019	
	ए.के.माहौर	ए.के.माहौर	08/03/2019	

विभाग DEPT.	उत्प. टोल. नाप की त्रुटि UNTOL. DIMS. GR.	अनुपात SCALE	भार (कि.ग्रा.) WEIGHT (K.G.)	उत्प. ड्राइंग का संदर्भ REF. TO ASSY. DRG.	मद. क्र. ITEM NO.	मद. संख्या NO. OF ITEM
कोड 411	AA0203208	1:10	3763.0	3-16503-40883	001	

शीर्षक/ TITLE

TUBE SHEET FORGING

ड्राइंग क्र./DRAWING NO.

3-16503-40882

पृष्ठ क्र./SHT. NO. 01

पृष्ठों की संख्या/NO. OF SHT. 01