



NO.	CUSTOMER COMMENTS	MHI ANSWERS
B-1	Aplica el comentario A anterior	B-1 Please refer to drawing No. C97-2282 Rev.1
B-2	Favor escribir al titulo en espanol.	B-2 Noted.

COSTOMER LETTER NO.	712-660-1113
DATE	JUN. 20, '84

MHI DWG.NO.	42025-1011	REV.NO.	
TITLE	Bearing Cooling Water Pump Specification		

# PUMP DATA SHEET

MFG. NO. **CT-38888**

1	CUSTOMER	MITSUBISHI HEAVY INDUSTRIES, LTD.		DESIGN SECTION	YONAGO WORKS		
2	USER			DATE	MAR. 19, 1984	REV.	BY
3	LOCATION	COLOMBIA		CHIEF OF SECT.	G. Kishore		
4	PLANT NAME	CORELCA TERMO GUAJIRA UNIT 2		CHKD. BY	S. Tanaka		
5	ORDER No	EA025-07543		MADE BY	H. Doack		
6	ITEM NO.	42400	NAME OF UNIT	BEARING COOLING WATER PUMP		NO. REQ'D	2 UNITS
OPERATING CONDITIONS							
7	LIQUID	WATER		CAPACITY	900 m <sup>3</sup> /min. Hr		
8	CORR. EROS. DUE TO			DISCH. PRESS	miq. kgf/cm <sup>2</sup>		
9	PUMPING TEMP.	40 °C		SUC. PRESS	miq. kgf/cm <sup>2</sup>		
10	S. G. AT P. T.	1.0		DIFF. PRESS	miq. kgf/cm <sup>2</sup>		
11	VTS. AT P. T.	C.P.		TOTAL HEAD	50 miq.		
12	VAPOR PRESS.	kgf/cm <sup>2</sup> Abs.		NPSH AVAILABLE	22.5 miq.		
13	OPERATING COND.	CONTINUOUS		Hr/Day	INSTALLATION	INDOOR	OUTDOOR
SPECIFICATIONS							
14	AWAMURA SIZE & MODEL	350 x 250 DF-S		PUMP SPEED	1760 RPM		
15	TYPE	CENTRIFUGAL, DOUBLE SUCTION		NPSH REQUIRED	5.8 m (WATER)		
16	CASE MOUNT.	BRACKET, CENTER-LINE, (FOOT) VERT.		DES. EFF. BHP	80 / 152.8 % / KW		
17	SPLIT	VERTICAL (HORIZONTAL)		MIN. CONTINUOUS FLOW	1.5 m <sup>3</sup> /min. Hr		
18	NO. OF STAGE	1		BRG. RADIAL	NO. 6314		
19	IMPELLER TYPE	CLOSE SEMI-OPEN OPEN		THRUST	NO. 6314		
20	DRIVER	MOTOR TURBINE ENGINE		LUBRICATION	GREASE OIL		
21	TYPE OF DRIVE	DIRECT GEAR V-BELT		COOLING WATER	°C		
22	COUPLING	FLEXIBLE GEAR SPACER		SERVICE	BRG. STUFF. BOX COOLER		
23	BASE PLATE	COMMON SEPARATED SOLE		MAIN PIPE SIZE & RATING	TOTAL l/min. -unit		
24	VERT. PUMP LENGTH	FROM SOLE TO SUCTION END — m		EX. FLUSHING	°C		
25	ROTATION (VIEWED FROM DRIVEN END)	CW CCW		LIQUID	l/min. -unit		
26	NOZZLE	SIZE	RATING	FACING	POSITION	SIZE & RATING	l/min. -unit
27	SUCTION	350 mm	ANSI 125 Lb	FF	SIDE	QUENCHING	°C
28	DISCHARGE	250 mm	ANSI 125 Lb	FF	SIDE	LIQUID	l/min. -unit
29	SHAFT SEAL	PACKING & LANTERN RING		MECHA SEAL	SIZE & RATING	l/min. -unit	
30	ARRANGEMENT	10 RINGS		(SELF) EX	ASSEMBLY DRAWING	0TY-30194	
31	SIZE & MTL	□ 14.3 mm V*134 (ASBESTOS)		SECTIONAL DRAWING	0TY3-00137		
32	MFR.	NIPPON VALQUA INDUSTRIES, LTD.		PERFORMANCE CURVE	FCH3-01065		
MATERIALS				ACCESSORIES		SPARE PARTS	
33	CASING COVER	FC25		FUNNEL & VALVE, FOUNDATION BOLTS			
34	IMPELLER	BC2		(BASE PLATE) (COUPLING & COVER)			
35	CASE WEAR RING	BC6		(AIR VALVE) (DRAIN VALVE)			
36	THROTTLE BUSH	BC6		(GREASE CUP) OIL GAUGE, OILER			
37	SHAFT	SUS420J2		(GLAND FLUSHING PIPING)			
38	SHAFT SLEEVE	SUS403		(DRAIN PIPING)			
39				FLUSHING COOLER			
40	GASKET	V*1500 (ASBESTOS)		(PRESS. VAC. COMP. GAUGE & COCK)			
41	BASE PLATE	SS41		COMPANION FLANGE (SPECIAL TOOL)			
MOTOR				OTHERS			
42	MFR.	MITSUBISHI		TYPE	SF-RHN 315M		
43	RATED OUTPUT	160 KW		4 POLES	SUPPLIED BY	SHOP TESTS:	PERFORMANCE YES
44	460 VOLTS	3 PHASE		60 Hz	(PURCHASER)	HYDRO	9 kgf/cm <sup>2</sup>
45	STANDARD:	(JIS) API (ISO) JPI (ANSI)		PUMP MFR.	OTHERS		
46	REMARKS:						
47		PAINTING: MUNSELL					
48		WEIGHTS: (APPROX) PUMP & BASE 1500 kg					
49		MOTOR 1150 kg					

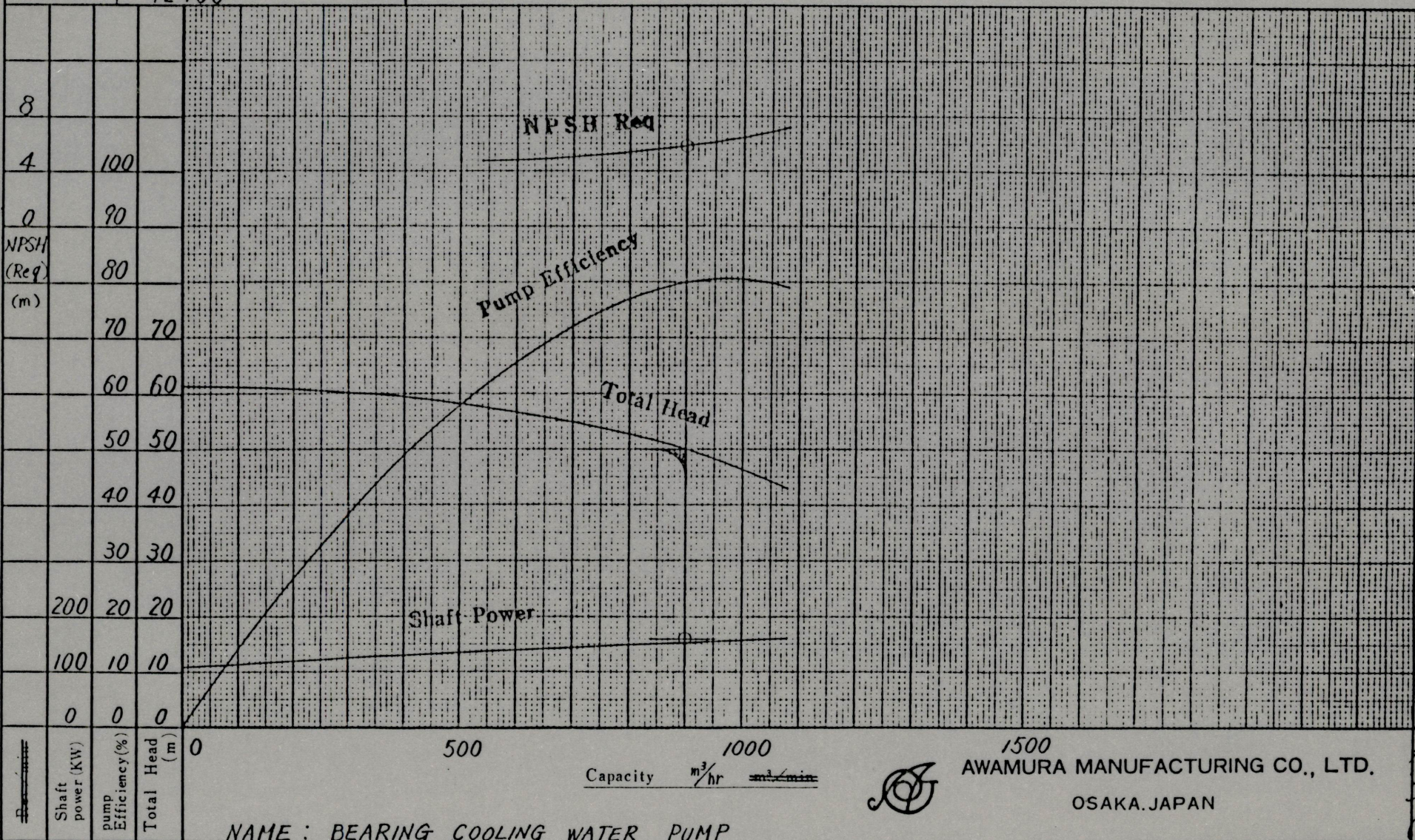
CUSTOMER	MITSUBISHI HEAVY INDUSTRIES, LTD.
USER	
LOCATION	COLOMBIA
PLANT NAME	CORELCA TERMO GUAJIRA UNIT 2
ORDER NO	EA025-07543
ITEM NO.	42400

# CHARACTERISTIC CURVE FOR

350 x 250 DF-S  
DOUBLE SUCTION CENTRIFUGAL PUMP (FOR ~~ESTIMATE~~ DESIGN)

DWG. NO.	FCH3-01065
DATE	MAR. 19. 1984
MFG. NO.	CY-38888
ESTIMATE NO.	E -

TOTAL HEAD 50 m CAPACITY 900 ~~m<sup>3</sup>/min~~ <sup>m<sup>3</sup>/hr</sup> SPEED 1760 r.p.m POWER 160 KW



NAME : BEARING COOLING WATER PUMP



1500  
AWAMURA MANUFACTURING CO., LTD.  
OSAKA, JAPAN

*Handwritten signatures and initials*

07543 42025-1011 3/2