

DL15-12485

ISSUE B

IF IN DOUBT-ASK

FIRST W.O.

DO NOT SCALE

NOTES!

SHAFT STIFFNESS:-

THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB FACE ϕ IS $41,98 \times 10^6 \text{ kgcm/radian}$ (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

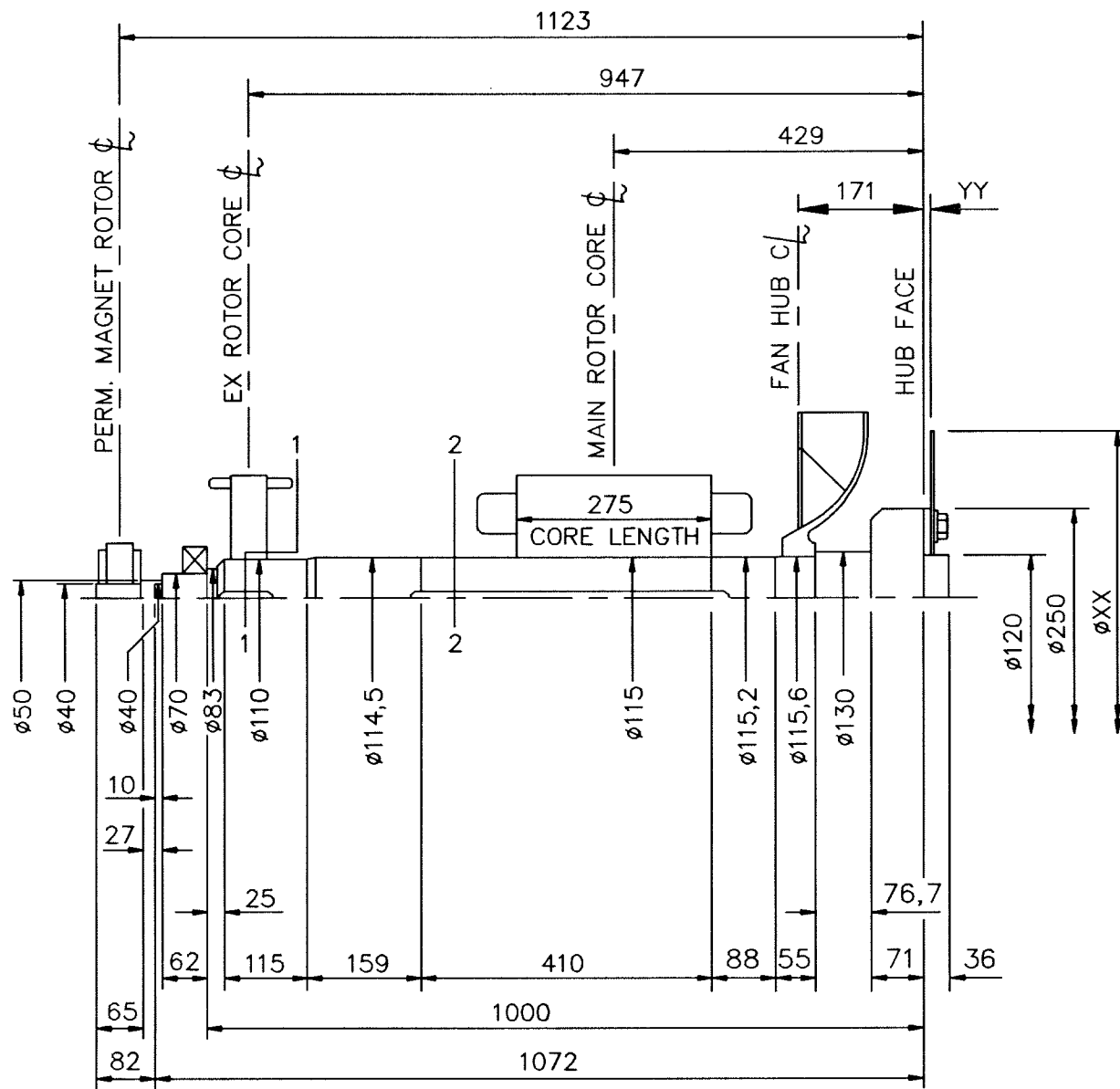
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE).

MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS $34,47 \times 10^6 \text{ N/m}^2$ FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND $68,94 \times 10^6 \text{ N/m}^2$ FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES. FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.

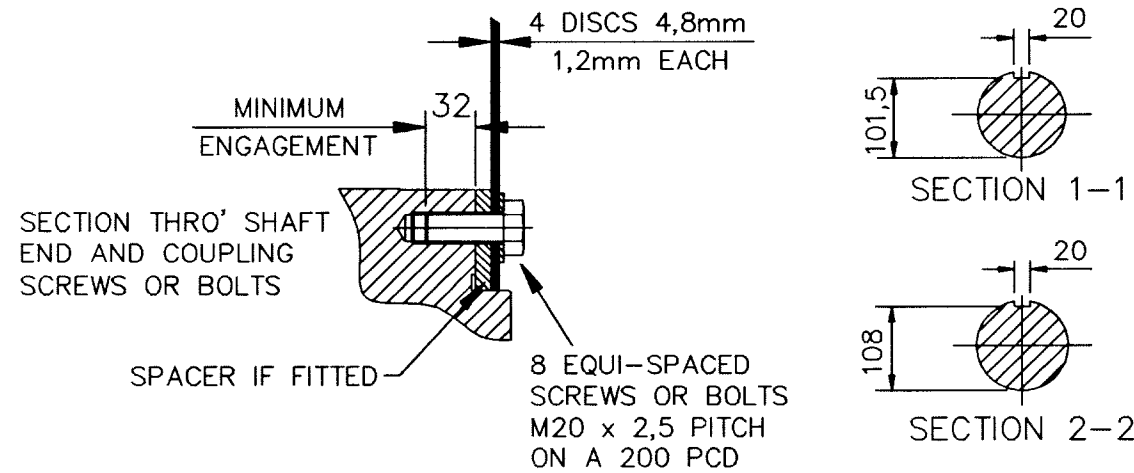
NEWAGE INTERNATIONAL LTD. SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH THESE RULES.

NEWAGE INTERNATIONAL LTD. BALANCE ROTORS TO COMPLY WITH INTERNATIONAL STD. I.S.O. 1940 GRADE 2,5 AND B.S. 6861 PART 1 GRADE 2,5.

FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES REFER TO GENERATOR MANUAL.



COMPONENT	Wt kg	WR ² kgm ²	COUPLING SAE No	COUPLING DIMEN's		COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 4-PLATES kgcm/rad	COUPLING DISC WR ² kg m ²
				XX	YY			
EX. ROTOR	31,290	0,5100	11,5	352	23,8	12,08	$755,8 \times 10^6$	0,055
MAIN ROTOR	172,090	2,4450						
FAN	9,910	0,2630						
SHAFT	87,191	0,1450	11,5	352	23,8	12,08	$755,8 \times 10^6$	0,055
HUB	18,507	0,1779	$\phi 17,75"$	450,9	2,5	9,11	$662,4 \times 10^6$	0,150
P.M. STUB SHAFT	0,955	0,0002	14	467	9,5	11,66	$622,8 \times 10^6$	0,172
P.M. EX. ROTOR	4,260	0,0120	18	572	0,0	12,07	$570,0 \times 10^6$	0,386
-	-	-	-	-	-	-	-	-
TOTAL	324,203	3,5531	-	-	-	-	-	-



CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m ²	lb ft ²	0,04214
kgcm/rad	lbin/rad	1,1521246
N/m ²	lbf/in ²	6894,76

CERTIFIED PRINT (ONLY IF SIGNED)	HC434 1C - SINGLE BEARING	SCALE	FIRST W.O.
BY	MOMENTS OF INERTIA AND SHAFT DETAILS	NTS	
DATE			UNIT OF MEASUREMENT MILLIMETRES (mm)
DRAWN SMC 22.06.00	NEWAGE INTERNATIONAL Ltd		ISSUE
CHECKED SMC 13.2.02	STAMFORD ENGLAND	DL15-12485	B
APPROVED SMC 20/2/02			

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
4/3242/4	B	SMC	13.02.02	COUPLING DETAIL MODIFIED
4/3000/1	A	SMC	22.06.00	ORIGINAL ISSUE