

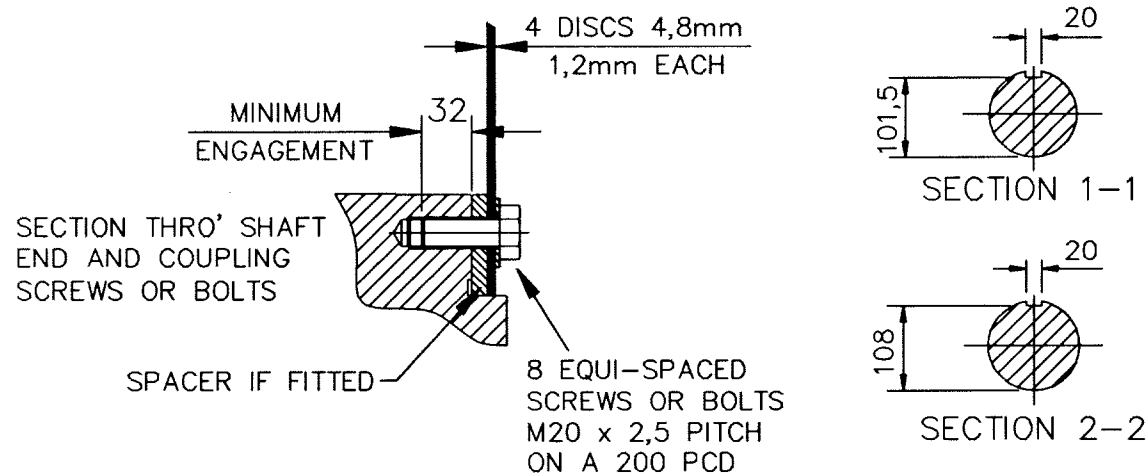
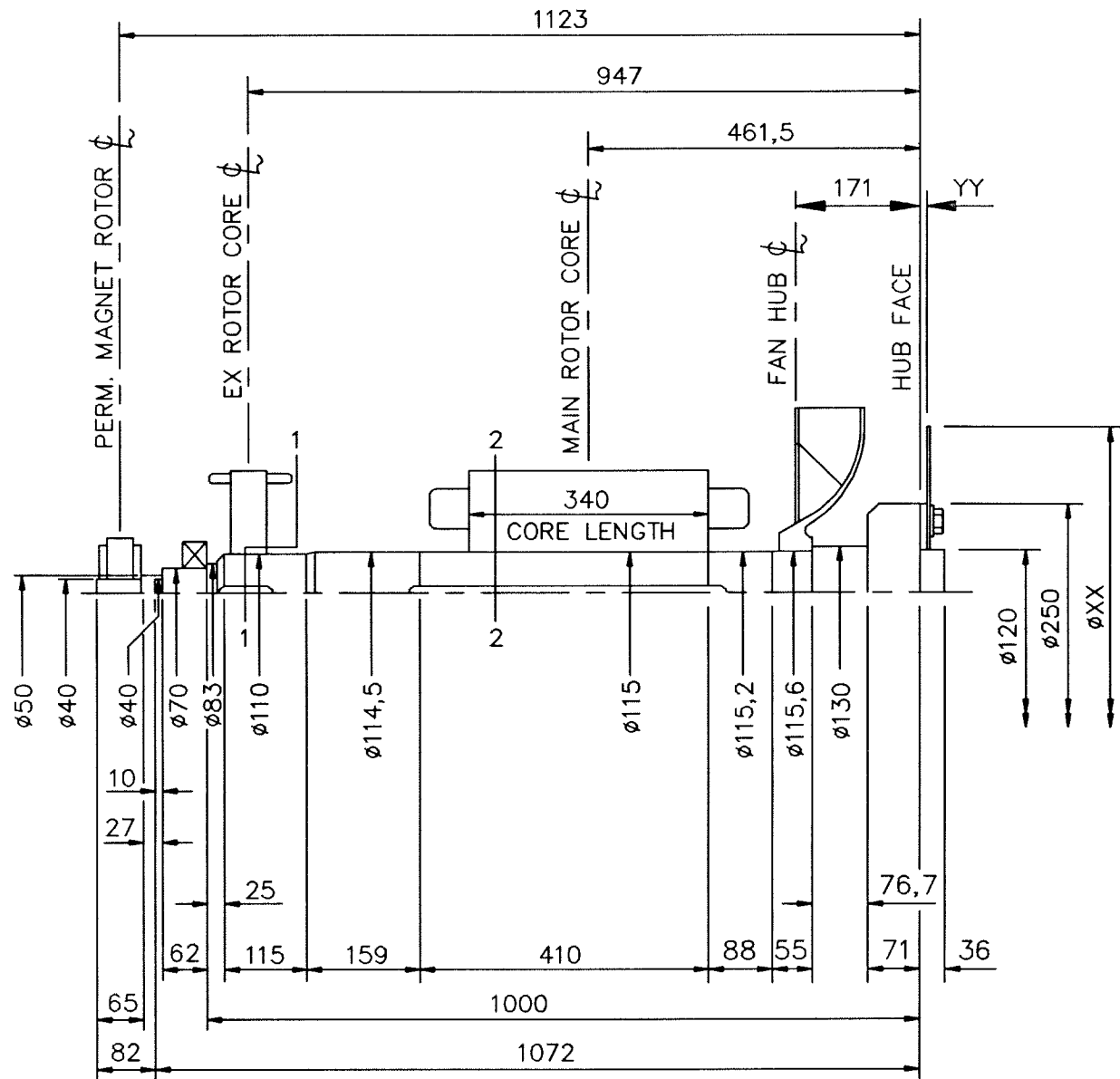
DL15-12486

ISSUE
C

IF IN DOUBT-ASK

DO NOT SCALE

FIRST W.O.



NOTES!

SHAFT STIFFNESS: -

THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB FACE IS $38,20 \times 10^6 \text{ kgcm/radian}$ (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	COUPLING DIMEN's		COUPLING ASSEMBLY WEIGHT	COUPLING STIFFNESS 4-PLATES	COUPLING DISC WR ²
EX. ROTOR	31,290	0,5100	SAE No	XX	YY	kg	kgcm/rad	kg m ²
MAIN ROTOR	208,880	2,969						
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	360,993	4,0771	-	-	-	-	-	-

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

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
4/3242/4	C	SMC	13.02.02	COUPLING DETAIL MODIFIED
4/3000/2	B	SMC	30.06.00	MAIN ROTOR & TOTAL WEIGHT MODIFIED
4/3000/1	A	SMC	26.06.00	ORIGINAL ISSUE

CERTIFIED PRINT (ONLY IF SIGNED) BY DATE	HC434 1D - SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	SCALE NTS	FIRST W.O.
DRAWN SMC 26.06.00 CHECKED SMC 13.2.02 APPROVED	NEWAGE INTERNATIONAL Ltd STAMFORD ENGLAND	UNIT OF MEASUREMENT MILLIMETRES (mm)	ISSUE DL15-12486 C