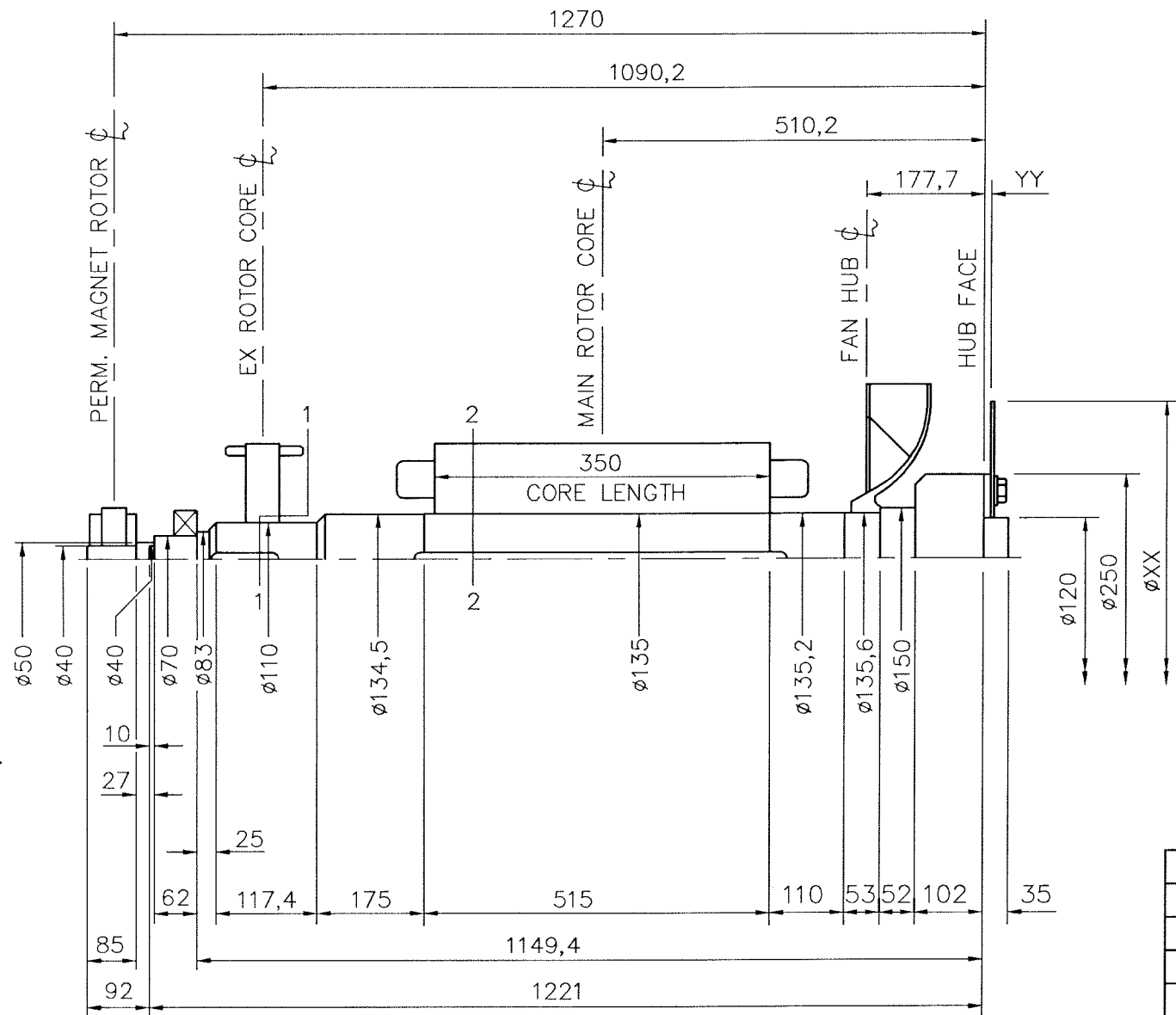


DL15-12557 **ISSUE C**

**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 $66,46 \times 10^6 \text{ kgcm/radian}$ (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						
MAIN ROTOR	296,820	5,4390						
FAN	12,530	0,3930						
SHAFT	129,664	0,2870	$\phi 17,75''$	450,9	18,2	14,97	$675,0 \times 10^6$	0,152
HUB	23,922	0,2455	14	467	25,4	17,67	$632,0 \times 10^6$	0,174
P.M. STUB SHAFT	0,929	0,0003	18	572	16,0	18,06	$579,0 \times 10^6$	0,396
P.M. EX. ROTOR	6,970	0,0180	21	673	0,0	17,10	$554,0 \times 10^6$	0,756
-	-	-	-	-	-	-	-	-
TOTAL	502,125	6,8928	-	-	-	-	-	-

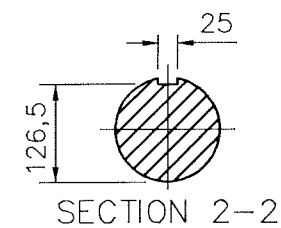
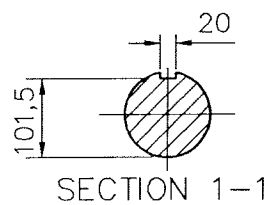
4 DISCS 4,8mm
1,2mm EACH

MINIMUM ENGAGEMENT

SECTION THRO' SHAFT END AND COUPLING SCREWS OR BOLTS

SPACER IF FITTED

8 EQUI-SPACED SCREWS OR BOLTS M20 x 2,5 PITCH ON A 200 PCD



MOD'N	ISSUE	DRAWN	DATE	ALTERATION
4/3956/1	C	AV	29.10.02	COUPLING SAE21 ADDED SAE 11,5 DELETED
4/3242/4	B	SMC	13.02.02	COUPLING DETAIL MODIFIED
4/3000/2	A	SMC	28.06.00	ORIGINAL ISSUE

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)

BY

DATE

DRAWN SMC 28.06.00

CHECKED 30-10-02

APPROVED 30/10/02

HC534 1C - SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS

SCALE

NTS

FIRST W.O.

UNIT OF MEASUREMENT MILLIMETRES (mm)

NEWAGE INTERNATIONAL Ltd
STAMFORD ENGLAND

DL15-12557

ISSUE

C