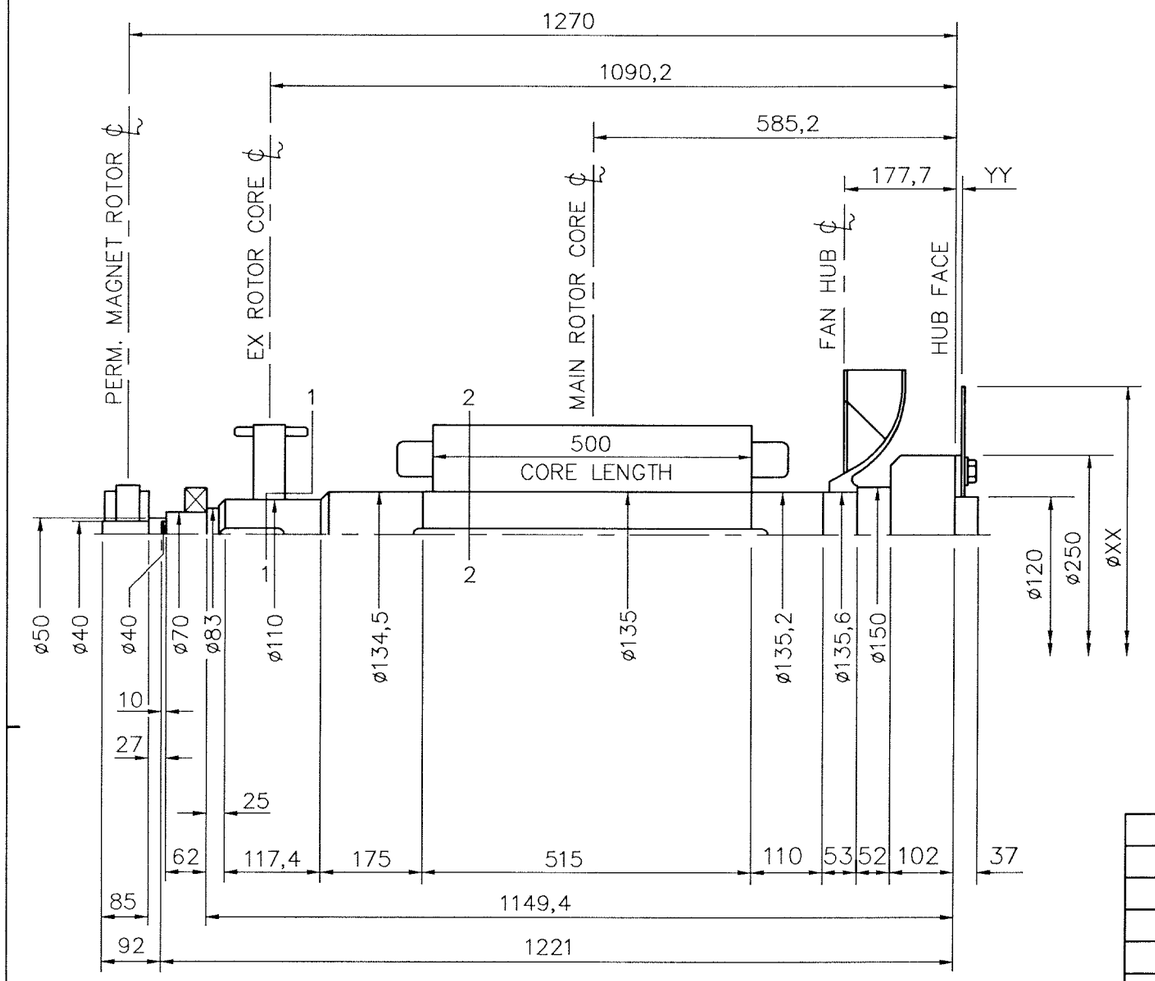
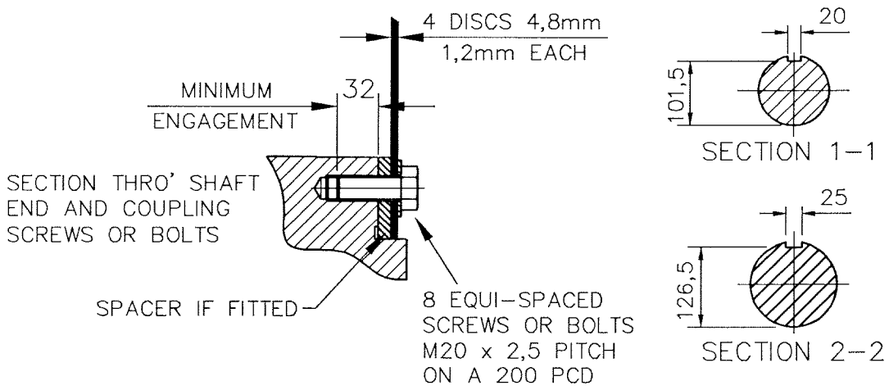
DL15–12559	ISSUE C
FIRST W.O.	

IF IN DOUBT–ASK
DO NOT SCALE





NOTES!

SHAFT STIFFNESS: –
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ℄
AND THE COUPLING HUB FACE ℄ IS 55,82 x 10^6 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 x 10^6N/m^2 FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND
68,94 x 10^6N/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	WR² kgm²	COUPLING SAE No	COUPLING DIMEN's		COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 4–PLATES kgcm/rad	COUPLING DISC WR² kg m²
				XX	YY			
EX.ROTOR	31,290	0,5100						
MAIN ROTOR	411,700	7,5290						
FAN	12,530	0,3930						
SHAFT	129,664	0,2870	ø17,75"	450,9	18,2	14,97	675,0x10⁶	0,152
HUB	23,922	0,2455	14	467	25,4	17,67	632,0x10⁶	0,174
P.M. STUB SHAFT	0,929	0,0003	18	572	16,0	18,06	579,0x10⁶	0,396
P.M. EX. ROTOR	6,970	0,0180	21	673	0,0	17,10	554,0x10⁶	0,756
–	–	–	–	–	–	–	–	–
TOTAL	617,005	8,9828	–	–	–	–	–	–

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
4/3000/1	A	SMC	27.06.00	ORIGINAL ISSUE

CONVERSION FACTORS

TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m²	lb ft²	0,04214
kgcm/rad	lbin/rad	1,1521246
N/m²	lbf/in²	6894,76

CERTIFIED PRINT (ONLY IF SIGNED)		
BY		
DATE		
DRAWN	SMC	27.06.00
CHECKED		30-10-02
APPROVED		30/10/02

HC534 1E – SINGLE BEARING
MOMENTS OF INERTIA AND SHAFT DETAILS

SCALE NTS

FIRST W.O.

UNIT OF MEASUREMENT MILLIMETRES (mm)

NEWAGE INTERNATIONAL Ltd
STAMFORD ENGLAND

DL15–12559 ISSUE C