

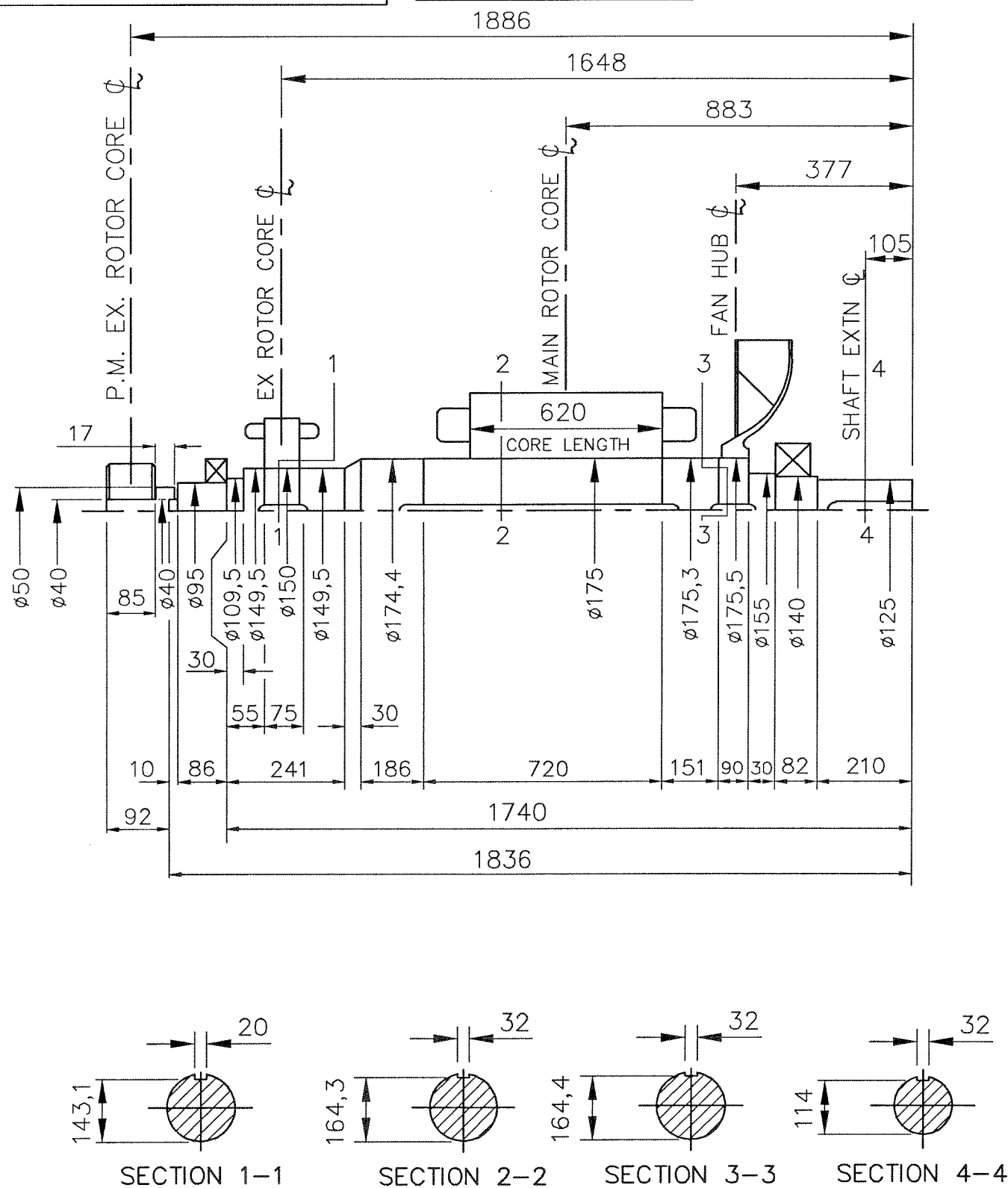
DL15-12968

ISSUE
A

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 SHAFT EXTENSION ϕ IS $61,015 \times 10^6 \text{ kgcm/radian}$ (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
EX.ROTOR	46,791	0,7758
MAIN ROTOR	1109,860	49,1190
FAN	28,800	1,6520
SHAFT	292,175	1,0119
P.MAG.ROTOR	6,970	0,0190
STUB SHAFT	0,929	0,0003
-	-	-
TOTAL	1485,525	52,5780

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	P7D 6-POLE 2 BEARING MOMENTS OF INERTIA AND SHAFT DETAILS	SCALE FIRST W.O.	UNIT OF MEASUREMENT MILLIMETRES (mm)
DRAWN AV 22:04:04 CHECK [Signature] 22-04-04 APPR'D [Signature] 22/4/4		NTS (SHEET 1:10)	
4/7225/03 A AV 22:04:04 ORIGINAL ISSUE	NEWAGE INTERNATIONAL Ltd. STAMFORD, ENGLAND.	DL15-12968	ISSUE A
MOD'N ISSUE DRAWN DATE ALTERATION			