

DL15-12568

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 THE SHAFT EXTENSION ϕ IS $39,94 \times 10^6$ kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

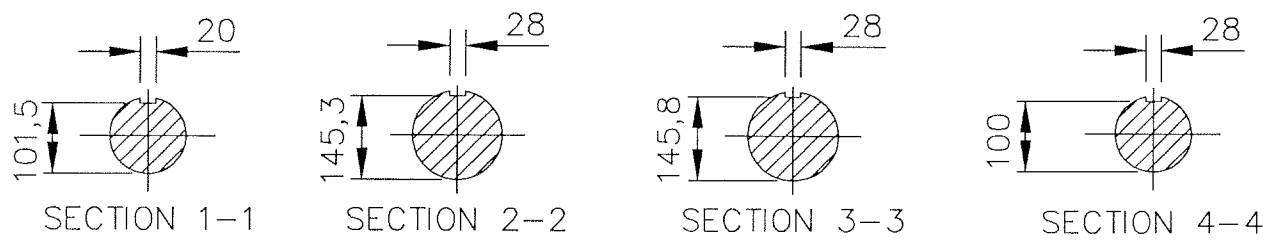
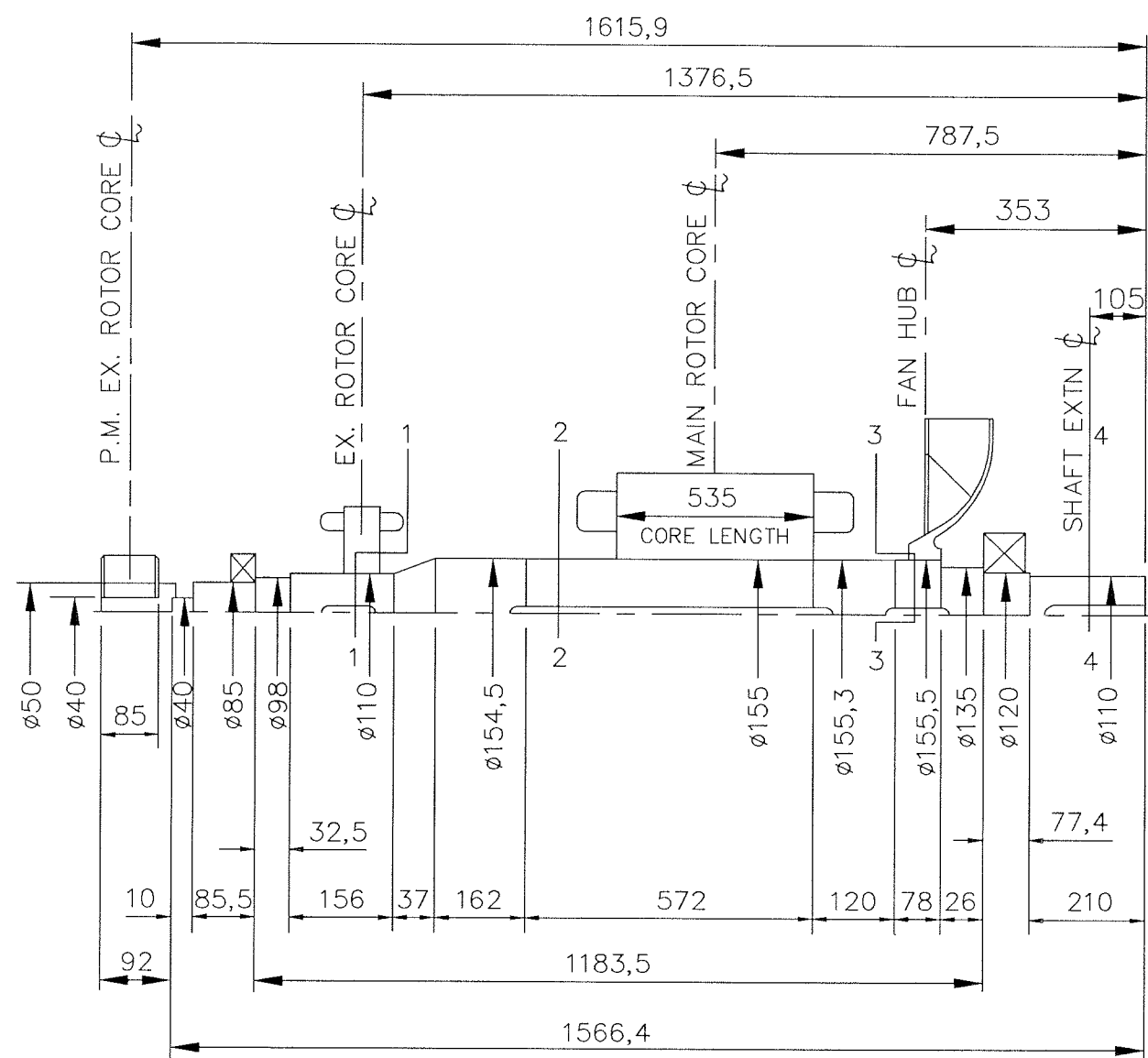
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE).

MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS $34,47 \times 10^6$ N/m² FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND $68,94 \times 10^6$ N/m² 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	51,600	0,8590
MAIN ROTOR	656,995	20,3405
FAN	16,100	0,6762
SHAFT	183,886	0,4864
P.M. EX. ROTOR	6,970	0,0190
P.M. STUB SHAFT	0,929	0,0003
-	-	-
-	-	-
TOTAL	916,480	22,3814

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	S.M.C.	29.06.00
CH'D	S.M.C.	17.7.00
APP'D	[Signature]	

HC634 2J
MOMENTS OF INERTIA
AND SHAFT DETAILS

NEWAGE INTERNATIONAL LTD
STAMFORD ENGLAND

SCALE	FIRST W.O.
NTS	
SHEET 1:10	UNIT OF MEASUREMENT MILLIMETRES (mm)
DL15-12568	ISSUE A

4/3000/2	A	S.M.C.	30.06.00	ORIGINAL ISSUE
MOD'N	ISSUE	DRAWN	DATE	ALTERATION