

DL15-12569

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  $\phi$  AND THE SHAFT EXTENSION  $\phi$  IS  $38,18 \times 10^6$  kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

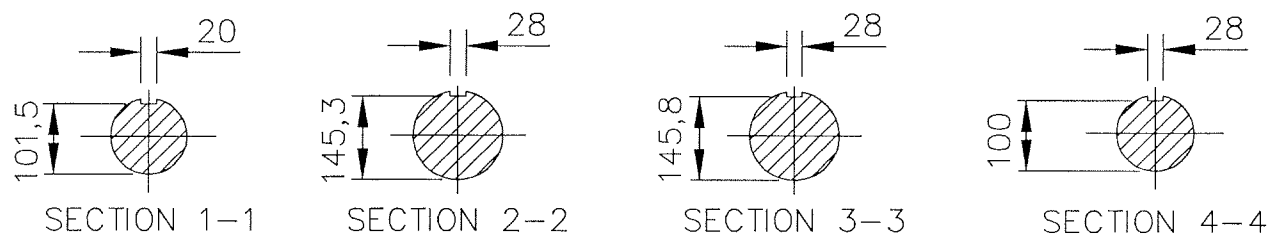
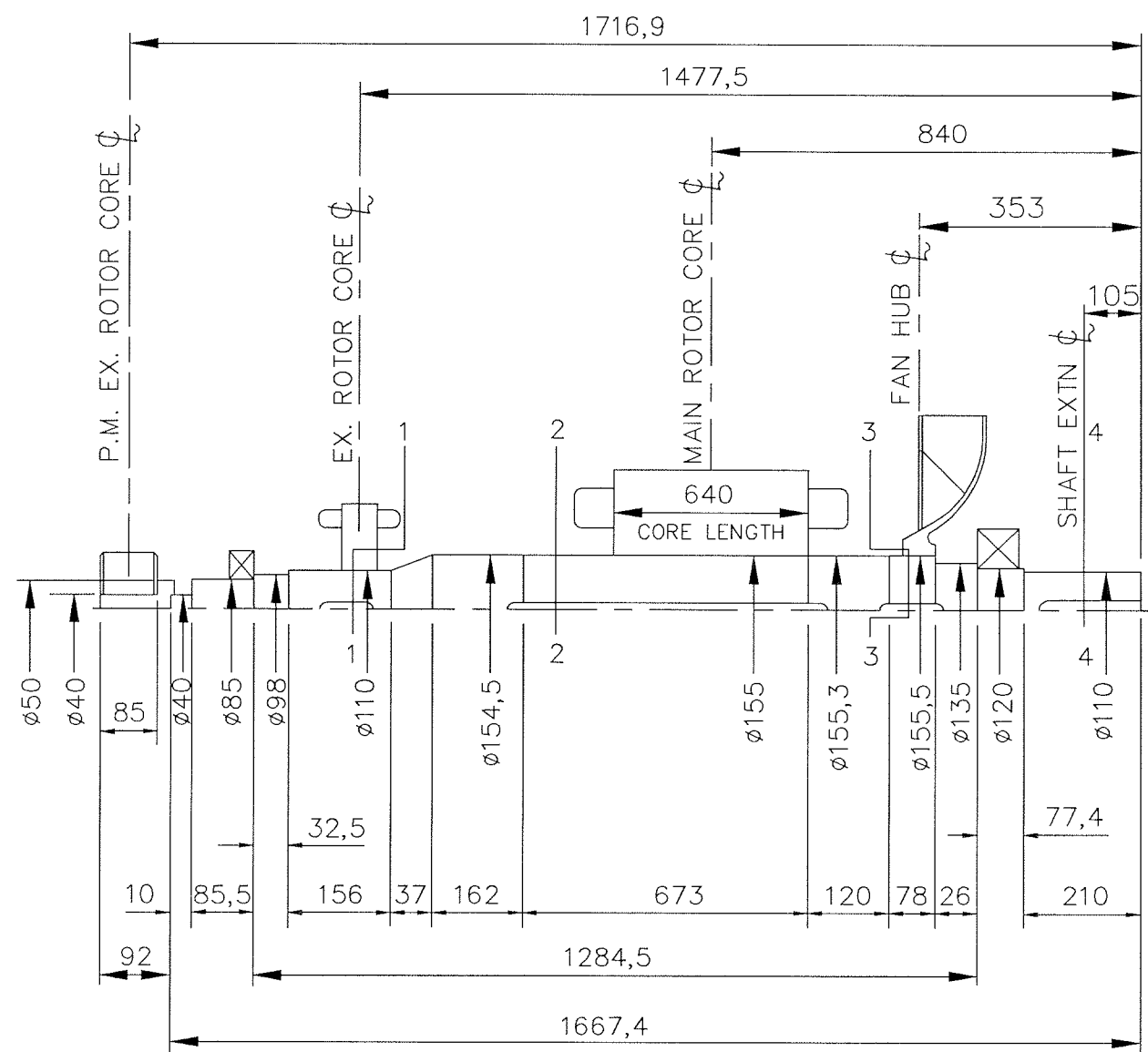
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE).

MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34,47 \times 10^6$  N/m<sup>2</sup> FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND  $68,94 \times 10^6$  N/m<sup>2</sup> 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 <sup>2</sup> kgm <sup>2</sup>
EX. ROTOR	51,600	0,8590
MAIN ROTOR	773,356	23,8964
FAN	16,100	0,6762
SHAFT	198,847	0,5314
P.M. EX. ROTOR	6,970	0,0190
P.M. STUB SHAFT	0,929	0,0003
-	-	-
-	-	-
TOTAL	1047,802	25,9823

<table border="1"> <thead> <tr> <th colspan="3">CONVERSION FACTORS</th> </tr> <tr> <th>TO CONVERT</th> <th>TO</th> <th>DIVIDE BY</th> </tr> </thead> <tbody> <tr> <td>kg</td> <td>lb</td> <td>0,453592</td> </tr> <tr> <td>kg m<sup>2</sup></td> <td>lb ft<sup>2</sup></td> <td>0,04214</td> </tr> <tr> <td>kgcm/rad</td> <td>lbin/rad</td> <td>1,1521246</td> </tr> <tr> <td>N/m<sup>2</sup></td> <td>lbf/in<sup>2</sup></td> <td>6894,76</td> </tr> </tbody> </table>					CONVERSION FACTORS			TO CONVERT	TO	DIVIDE BY	kg	lb	0,453592	kg m <sup>2</sup>	lb ft <sup>2</sup>	0,04214	kgcm/rad	lbin/rad	1,1521246	N/m <sup>2</sup>	lbf/in <sup>2</sup>	6894,76	CERTIFIED PRINT (ONLY IF SIGNED) BY DATE		HC634 2K MOMENTS OF INERTIA AND SHAFT DETAILS		SCALE FIRST W.O.	
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DRAWN S.M.C. 29.06.00 CH'D S.M.C. 17.7.00 APP'D D.J. 17/7/00		NTS SHEET 1:10 UNIT OF MEASUREMENT MILLIMETRES (mm)																										
4/3000/2	A	S.M.C.	30.06.00	ORIGINAL ISSUE	NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND			DL15-12569 ISSUE A																				
MOD'N	ISSUE	DRAWN	DATE	ALTERATION																								