

DL15-12576

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 $41,76 \times 10^6$ kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-

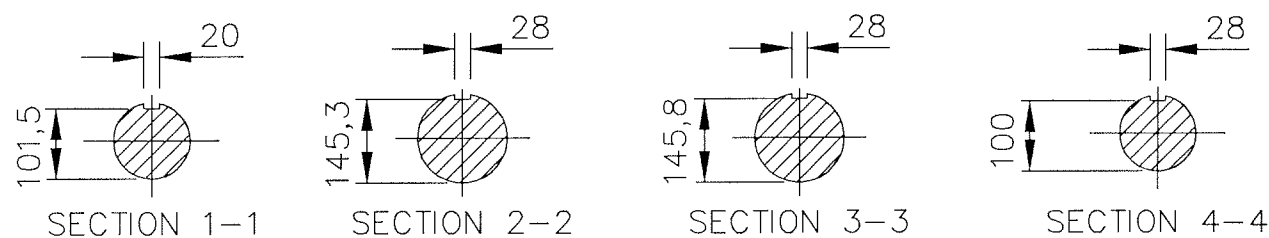
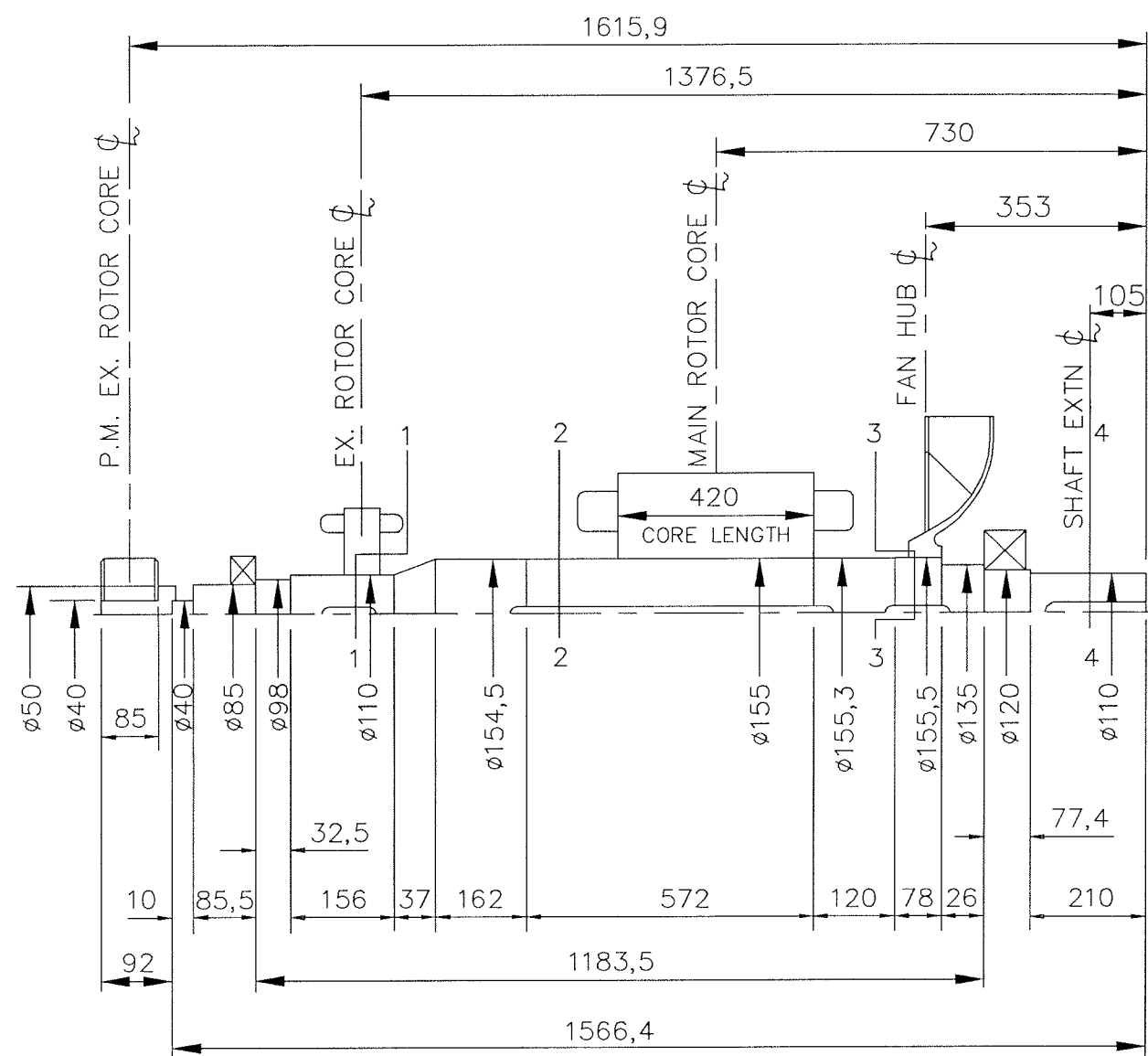
STEEL - 080M40 TO BS970 PART 1 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE).

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	580,000	20,285
FAN	16,100	0,6762
SHAFT	185,125	0,4902
P.M. EX. ROTOR	6,970	0,0190
P.M. STUB SHAFT	0,929	0,0003
-	-	-
-	-	-
TOTAL	840,724	22,3297

<table border="1"> <thead> <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 m²</td> <td>lb ft²</td> <td>0,04214</td> </tr> <tr> <td>kgcm/rad</td> <td>lbin/rad</td> <td>1,1521246</td> </tr> <tr> <td>N/m²</td> <td>lbf/in²</td> <td>6894,76</td> </tr> </tbody> </table>					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. 13.07.00 CH'D S.M.C. 17.7.00 APP'D S.M.C. 17/7/00			HC636 2J MOMENTS OF INERTIA AND SHAFT DETAILS		SCALE FIRST W.O. NTS SHEET 1:10 UNIT OF MEASUREMENT MILLIMETRES (mm)	
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4/3000/2 A S.M.C. 13.07.00 ORIGINAL ISSUE MOD'N ISSUE DRAWN DATE ALTERATION					NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND			DL15-12576 ISSUE A																		