

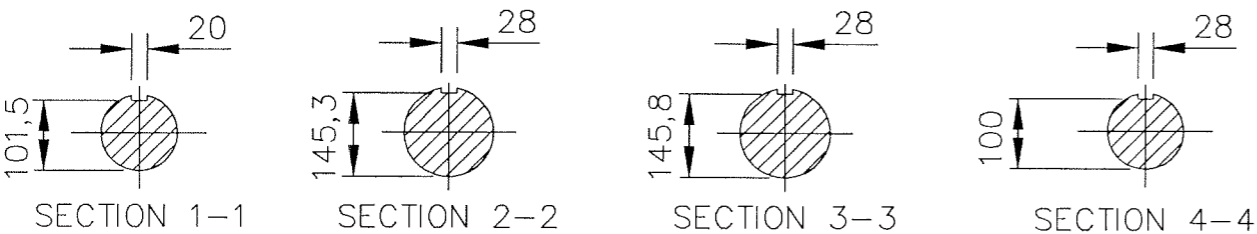
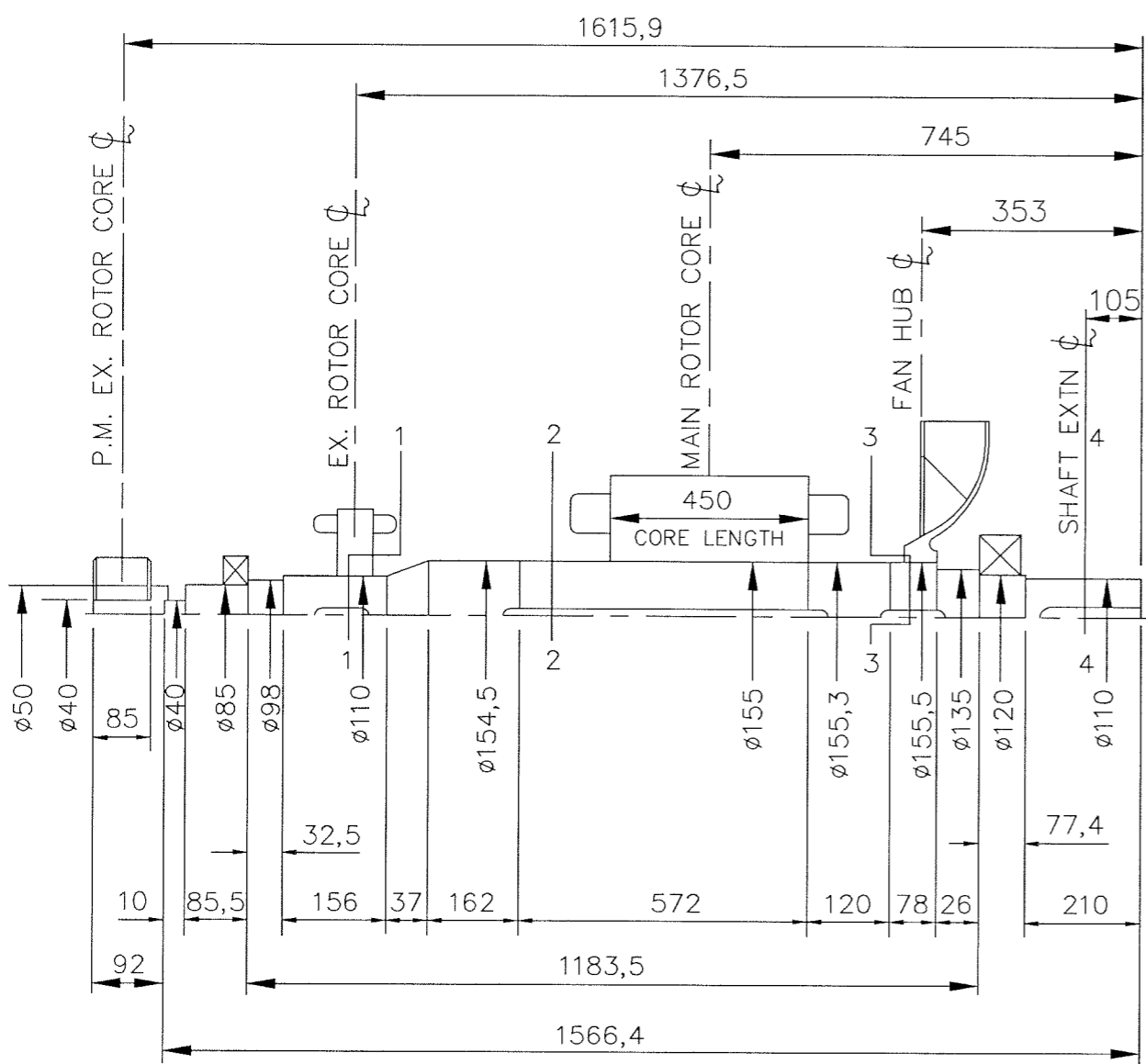
DL15-12567

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 $41,49 \times 10^6$ 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 | 561,892 | 17,4556 |
| 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 | 821,377 | 19,4965 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--|--|--|--|-------|--|--|--|--|--------|--|--|--|--|------------------|--|--|--|--|---|--|--|--|--|------------|--|--|--|--|---------------------|--|--|--|--|----------|--|--|--|--|
| 4/3000/2 | | | | | A | | | | | S.M.C. | | | | | 30.06.00 | | | | | ORIGINAL ISSUE | | | | | | | | | | | | | | | | | | | |
| MOD'N | | | | | ISSUE | | | | | DRAWN | | | | | DATE | | | | | ALTERATION | | | | | | | | | | | | | | | | | | | |
| CONVERSION FACTORS | | | | | | | | | | | | | | | CERTIFIED PRINT | | | | | HC634 2H MOMENTS OF INERTIA AND SHAFT DETAILS NEWAGE INTERNATIONAL LTD STAMFORD ENGLAND | | | | | SCALE | | | | | FIRST W.O. | | | | | | | | | |
| TO CONVERT | | | | | | | | | | | | | | | (ONLY IF SIGNED) | | | | | | | | | | NTS | | | | | UNIT OF MEASUREMENT | | | | | | | | | |
| TO | | | | | | | | | | | | | | | BY | | | | | | | | | | SHEET 1:10 | | | | | MILLIMETRES (mm) | | | | | | | | | |
| kg | | | | | | | | | | | | | | | DATE | | | | | DRAWN | | | | | S.M.C. | | | | | 29.06.00 | | | | | | | | | |
| kg m ² | | | | | | | | | | | | | | | APP'D | | | | | CH'D | | | | | SM | | | | | 17/7/00 | | | | | | | | | |
| kgcm/rad | | | | | | | | | | | | | | | BY | | | | | DATE | | | | | DRAWN | | | | | S.M.C. | | | | | 29.06.00 | | | | |
| N/m ² | | | | | | | | | | | | | | | APP'D | | | | | CH'D | | | | | SM | | | | | 17/7/00 | | | | | | | | | |
| lb | | | | | | | | | | | | | | | DATE | | | | | DRAWN | | | | | S.M.C. | | | | | 29.06.00 | | | | | | | | | |
| lb ft ² | | | | | | | | | | | | | | | APP'D | | | | | CH'D | | | | | SM | | | | | 17/7/00 | | | | | | | | | |
| lbin/rad | | | | | | | | | | | | | | | DATE | | | | | DRAWN | | | | | S.M.C. | | | | | 29.06.00 | | | | | | | | | |
| lbf/in ² | | | | | | | | | | | | | | | APP'D | | | | | CH'D | | | | | SM | | | | | 17/7/00 | | | | | | | | | |

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