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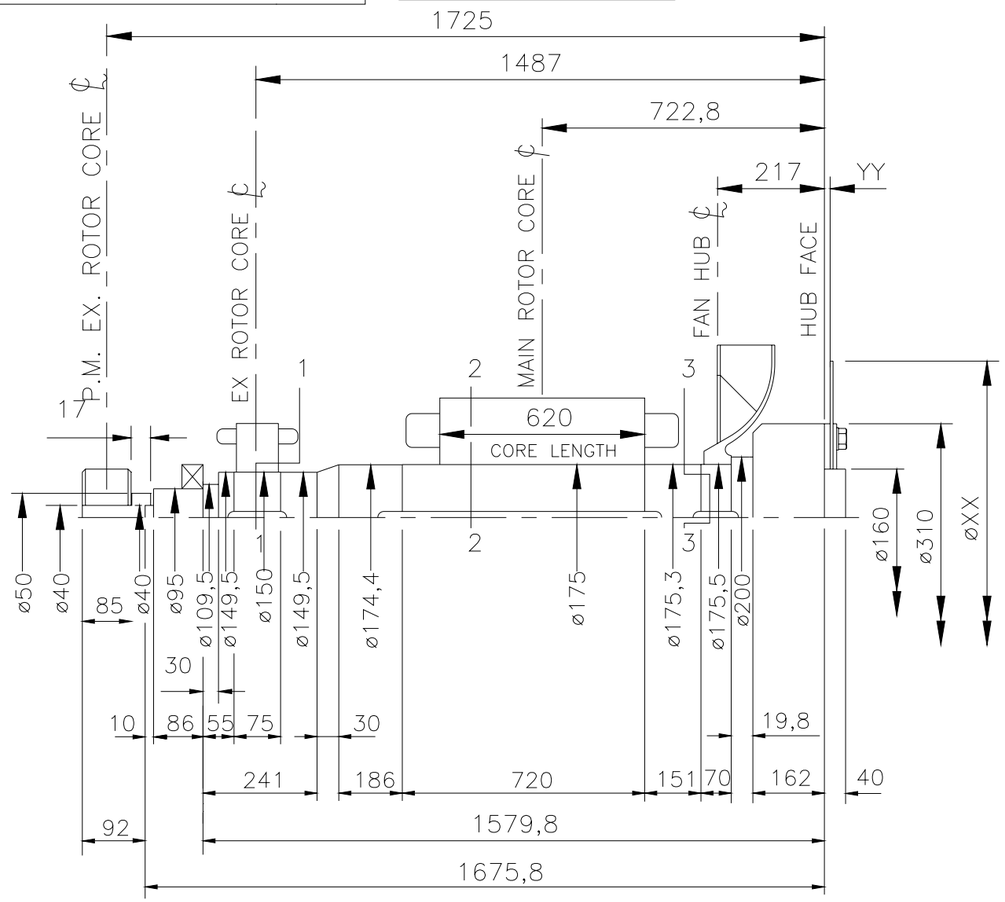
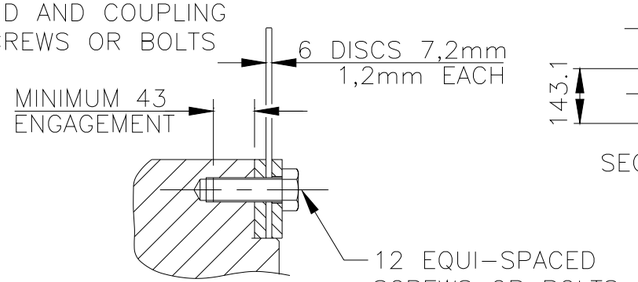
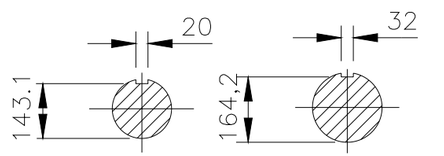
IF IN DOUBT–ASK
DO NOT SCALE

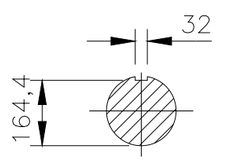


SECTION THRO' SHAFT END AND COUPLING SCREWS OR BOLTS





SECTION 1–1 SECTION 2–2



SECTION 3–3

NOTES!
SHAFT STIFFNESS:–
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ℄ AND THE COUPLING HUB FACE IS 130,38 x 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 x 10^6 N/m² FOR A SPEED RANGE OF 0,95 TO 1,1 x NOMINAL SPEED, AND
68,94 x 10^6 N/m² FOR RUN THROUGH CONDITIONS, FOR INDUSTRIAL MACHINES.
FOR MARINE AUTHORITIES, THEIR APPROPRIATE RULES WILL APPLY.
CUMMINS GENERATOR TECHNOLOGIES LTD. SHOULD BE NOTIFIED OF ANY ROTORS NOT COMPLYING WITH THESE RULES.
CUMMINS GENERATOR TECHNOLOGIES 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	WR² kgm²
EX.ROTOR	46,791	0,7758
MAIN ROTOR	945,359	36,7607
FAN	28,800	1,6520
SHAFT	301,114	1,1282
HUB	53,533	0,8846
P.MAG.ROTOR	6,970	0,0190
STUB SHAFT	0,929	0,0003
–	–	–
TOTAL	1383,496	41,2206

COUPLING SAE No	COUPLING DIMEN's XX	COUPLING DIMEN's YY	COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 6–PLATES kgcm/rad	COUPLING DISC WR² kg m²
18	572	16	24,5	1592x10^6	0,590
21	673	00	23,1	1468x10^6	1,135
24	733	00	26,84	1428x10^6	1,598

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m²	lb ft²	0,04214
kgcm/rad	lbin/rad	1,1521246
N/m²	lbf/in²	6894,76

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
5–0448–02	C	TW	30.04.10	CHANGE OF COMPANY NAME AND CORRECTION TO DOUBLE ISSUE.
4–6904–01	B	DW	22.09.03	EX ROTOR MTG ø110, MOD WEIGHT AND INERTIA AND SHAFT, E/ROTOR & TOTAL
4/6745/9	A	SMC	08.07.03	ORIGINAL ISSUE

CERTIFIED PRINT (ONLY IF SIGNED)
BY
DATE

DRAWN	SMC	08.07.03
CHECK	AJB	30.04.10
APPR'D	JKB	30.04.10

P7D SINGLE BEARING MOMENTS OF INERTIA AND SHAFT DETAILS

CUMMINS GENERATOR TECHNOLOGIES LTD.

SCALE NTS (SHEET 1:10)

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UNIT OF MEASUREMENT MILLIMETRES (mm)

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