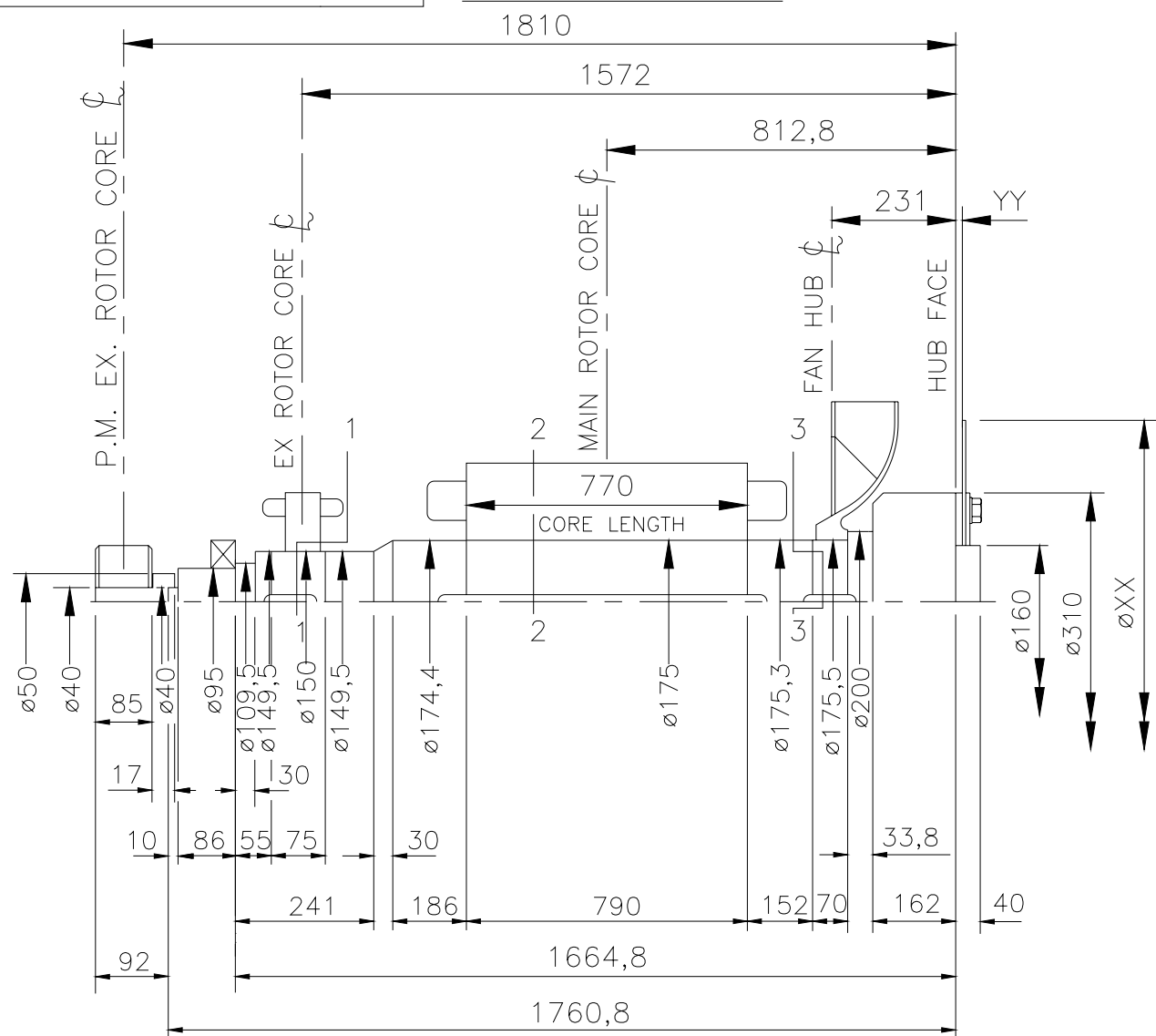


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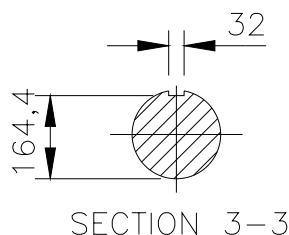
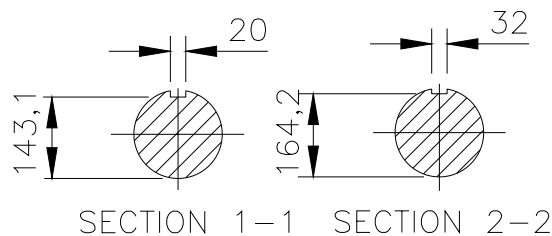
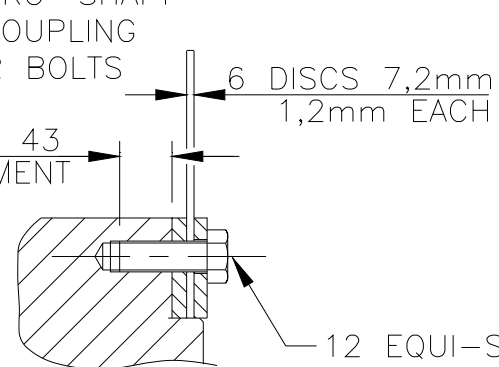
IF IN DOUBT-ASK
DO NOT SCALE

FIRST W.O.



SECTION THRO' SHAFT
END AND COUPLING
SCREWS OR BOLTS

MINIMUM 43
ENGAGEMENT



APPROVED DOCUMENT

NOTES:
SHAFT STIFFNESS:-
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ
AND THE COUPLING HUB FACE IS $113,53 \times 10^6$ kgcm/radian
(STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)

SHAFT MATERIAL:-
STEEL - C40E TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES
WHEN APPROPRIATE)
MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS 34.47×10^6 N/m² FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND 68.94×10^6 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 BS ISO 1940 PARTS 1
AND 2. BALANCE GRADE 2.5

FOR UNBALANCED MAGNETIC PULL (U.M.P.) REFER TO THE FACTORY.

COMPONENT	Wt kg	WR ² kgm ²	COUPLING SAE No	COUPLING DIMEN's XX YY	COUPLING ASSEMBLY WEIGHT kg	COUPLING STIFFNESS 6-PLATES kgcm/rad	COUPLING DISC WR ² kg m ²
EX.ROTOR	46,791	0,7758					
MAIN ROTOR	1153,789	44,8113					
FAN	28,800	1,6520					
SHAFT	318,125	1,1979	18	572 16	24,5	1592×10^6	0,590
HUB	53,533	0,8846	21	673 00	23,1	1468×10^6	1,135
P.MAG.ROTOR	6,970	0,0190	24	733 00	26,84	1428×10^6	1,598
STUB SHAFT	0,929	0,0003					
-	-	-					
TOTAL	1608,937	49,3409					

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

MOD'N	ISSUE	DRAWN	DATE	ALTERATION
5-0448-01	B	AJB	02.02.10	CHANGES TO STEEL SPECIFICATION; STANDARDS REFERENCES. CHANGE OF COMPANY NAME.
4/6745/9	A	SMC	08.07.03	ORIGINAL ISSUE

CERTIFIED PRINT (ONLY IF SIGNED)		
BY		
DATE		
DRAWN	SMC	08.07.03
CHECK	AJB	02.02.10
APPR'D	JKB	02.02.10

P7F SINGLE BEARING
MOMENTS OF INERTIA
AND SHAFT DETAILS

CUMMINS GENERATOR
TECHNOLOGIES LTD.

SCALE
NTS
(SHEET 1:10)

FIRST W.O.

UNIT OF MEASUREMENT
MILLIMETRES (mm)

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