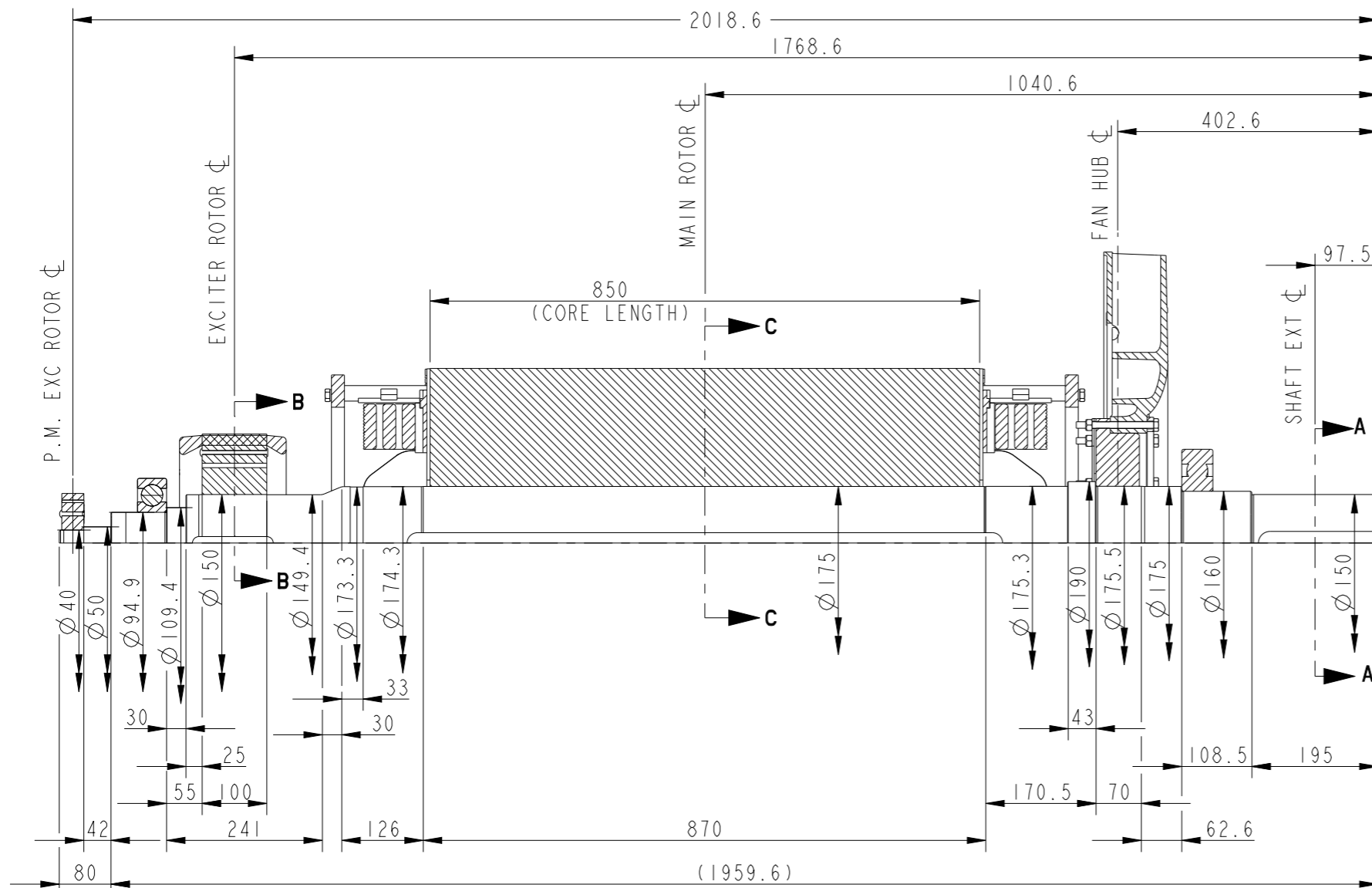


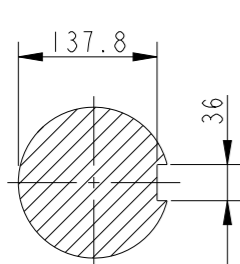
REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-181246	A	1	PRODUCTION RELEASE	KSK	NPD	I.SAUNDATTI	02NOV18

- NOTES:
- SHAFT STIFFNESS:
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE ϕ AND THE COUPLING HUB IS 69.73×10^6 kgcm/radian (STIFFENING EFFECT OF MAIN ROTOR CORE IS NOT INCLUDED IN THIS FIGURE)
 - SHAFT PROPERTIES:
MINIMUM YIELD : 260MPa
MINIMUM ULTIMATE TENSILE STRENGTH : 530MPa
SHAFT MATERIAL IS 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 ISO 1940 GRADE 2.5 AND BS 6861 PART 1 GRADE 2.5
 - FOR UNBALANCED MAGNETIC PULL (U.M.P.) FORCES PLEASE CONTACT CUMMINS GENERATOR TECHNOLOGIES LTD

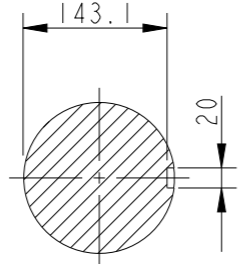


COMPONENT	WT (Kg)	WR ² Kg m ²
EXCITER ROTOR	62.258	0.9988
MAIN ROTOR	1291.940	49.7541
FAN	37.27	4.049
FAN HUB	39.22	0.779
SHAFT	328.083	1.1643
P.MAG ROTOR	6.970	0.0190
STUB SHAFT	0.929	0.0003
TOTAL	1766.67	56.7645

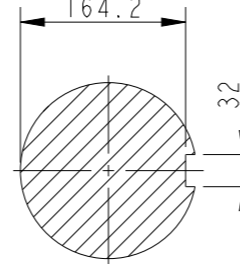
CONVERSION FACTORS		
TO CONVERT	TO	DEVIDE BY
Kg	lb	0.453592
Kg m ²	lb ft ²	0.04214
Kgcm/rad	lb in/rad	1.1521246
N/M ²	ibf/in ²	6894.76



SECTION A-A



SECTION B-B



SECTION C-C

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO -	DWN K. KAWADE		CUMMINS GENERATOR TECHNOLOGIES	
	DO NOT SCALE PRINT	CKD N. DAHIWELKAR		DRAWING, TORSIONAL	
SCALE 1:5		APVD I. SAUNDATTI	SITE CODE	S7J, 4 POLE, 2-BRG	
		DATE 02NOV18		DWG SIZE A2 A060C513	
THIS DOCUMENT (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE DISCLOSED TO OTHERS IN HARD COPY OR ELECTRONIC FORM, REPRODUCED BY ANY MEANS, OR USED FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC.		FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON S7	PUN	CAD SHEET 1 of 1