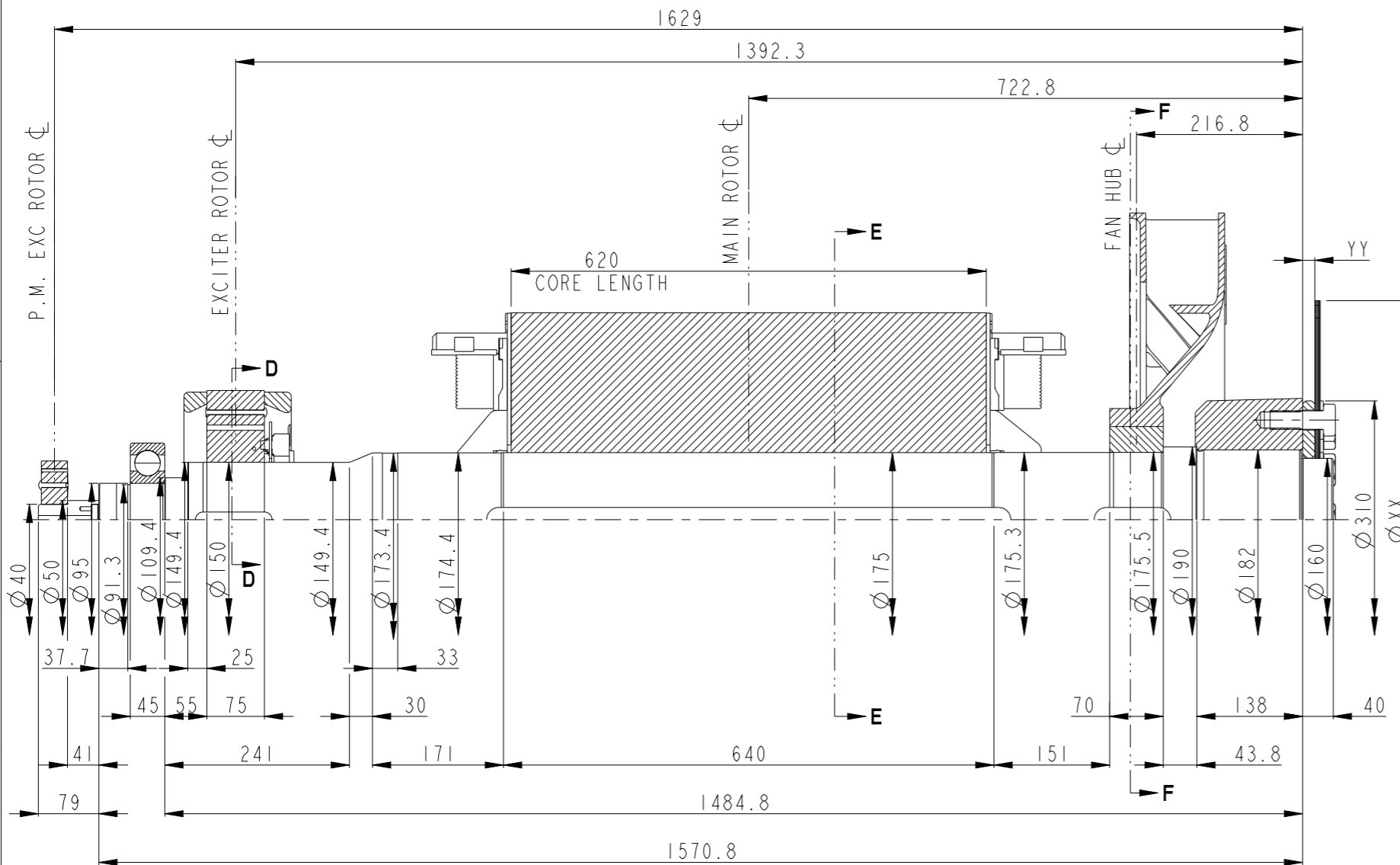
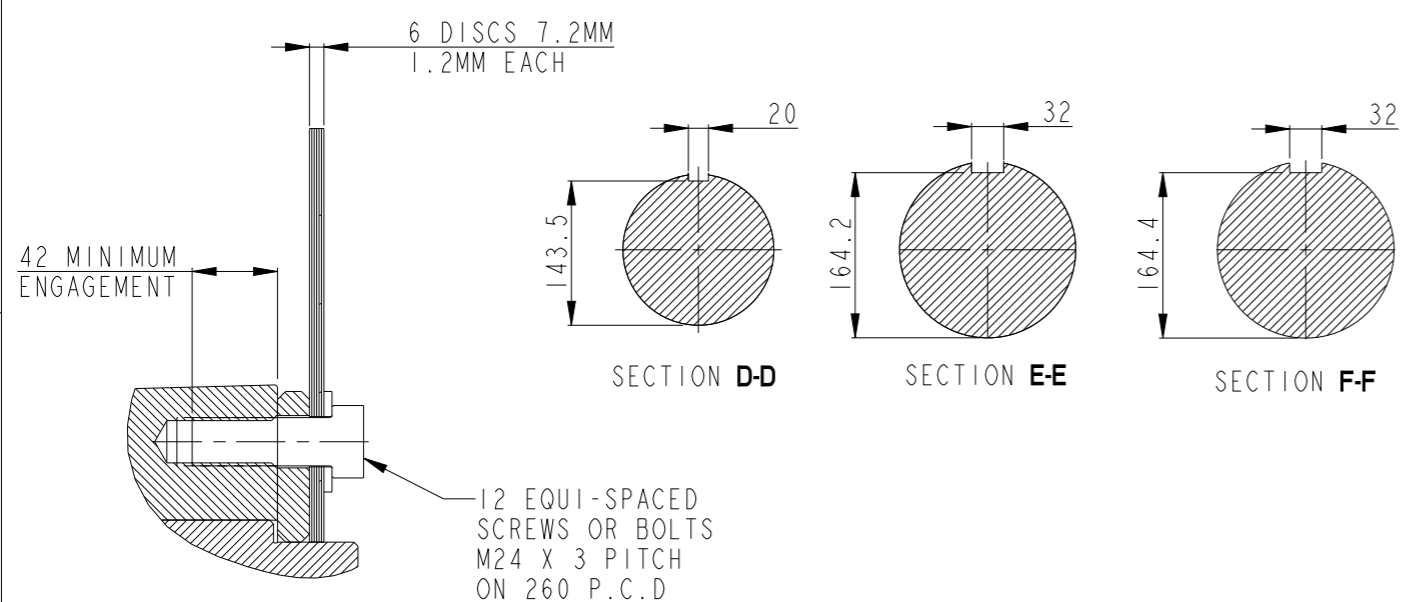


REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-180150	A	1	PRODUCTION RELEASE	KDP	NPDI	I.SAUNDATTI	18SEP18



- NOTES:
- SHAFT STIFFNESS:  
THE STIFFNESS OF THE SHAFT BETWEEN THE MAIN ROTOR CORE  $\phi$  AND THE COUPLING HUB IS  $127.57 \times 10^6$  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  $34.47 \times 10^6$  N/M<sup>2</sup> FOR SPEED RANGE OF 0.95 TO 1.1 NOMINAL SPEED AND  $68.94 \times 10^6$  N/M<sup>2</sup> 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 <sup>2</sup> Kg m <sup>2</sup>
FAN	28.800	1.6520
HUB	46.88	0.7630
SHAFT	277.15	1.0176
MAIN ROTOR	945.359	36.7607
EXCITER ROTOR	46.791	0.7758
P.MAG ROTOR	6.970	0.0190
STUB SHAFT	0.929	0.0003
TOTAL	1352.879	40.9884



CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0.453592
kg m <sup>2</sup>	lb ft <sup>2</sup>	0.04214
kgcm/rad	lbin/rad	1.1521246
N/m <sup>2</sup>	lbf/in <sup>2</sup>	6894.76

COUPLING SAE No.	COUPLING DIMENSIONS		TOTAL MASS OF COUPLING ASSEMBLY (kg)	COUPLING STIFFNESS (kgcm/rad)	COUPLING DISC WR <sup>2</sup> (kg m <sup>2</sup> )
	$\phi$ XX mm	YY mm			
18	572	16	24.5	$1592 \times 10^6$	0.590
21	673	00	23.1	$1468 \times 10^6$	1.135
24	733	00	26.84	$1428 \times 10^6$	1.598

SECTION THRU SHAFT END AND COUPLING SCREWS OR BOLTS

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO -	DWN K.PAWAR		CUMMINS GENERATOR TECHNOLOGIES	
	DO NOT SCALE PRINT	CKD N.DAHIWELKAR		DRAWING, TORSIONAL	
SCALE 1:1		APVD I.SAUNDATTI	SITE CODE	S7E, 4POLE 1B	
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	DATE 18SEP18		PUN	DWG SIZE A2
		FIRST USED ON S7			CAD SHEET 1 of 1