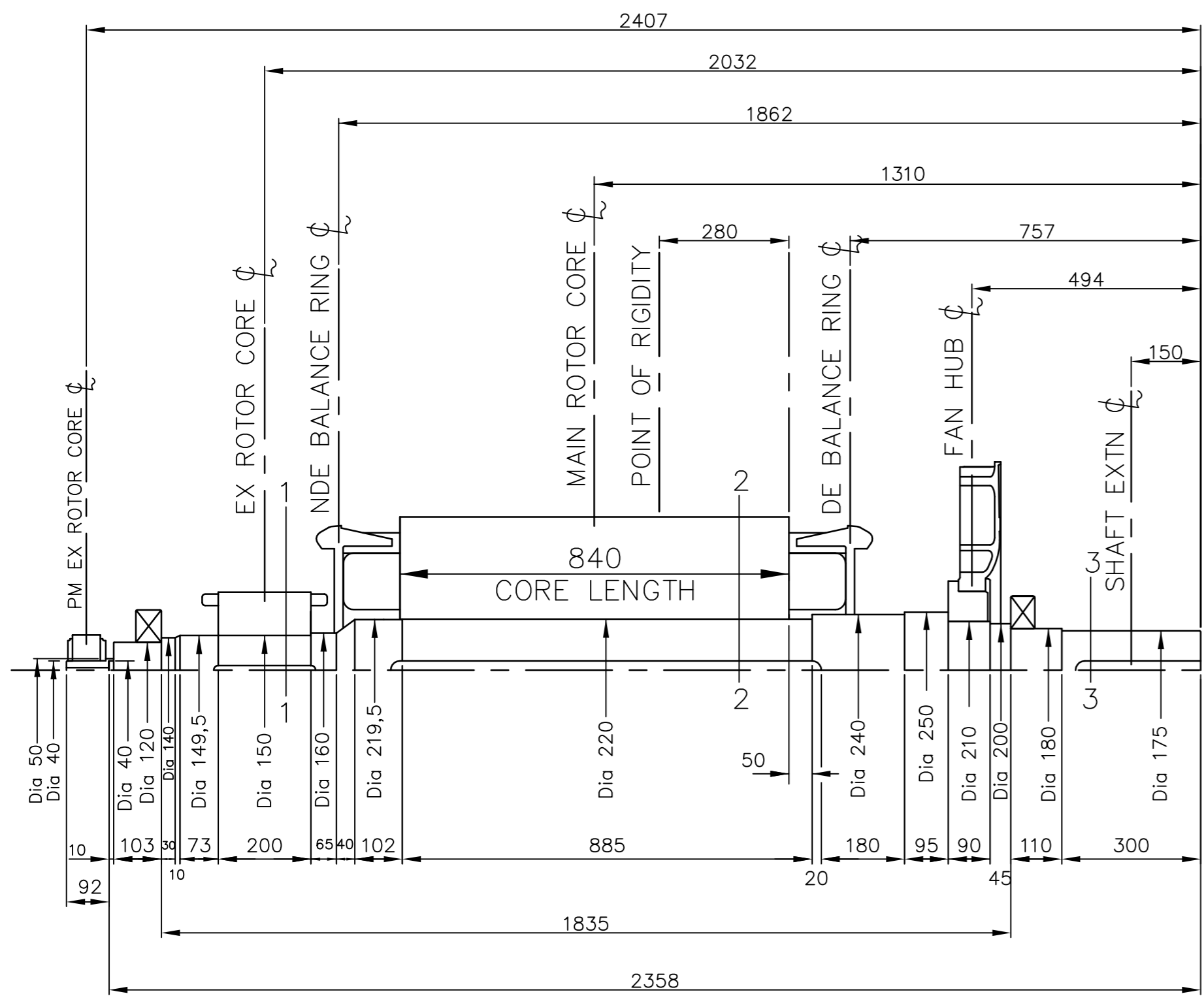


REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-165790	D	1	DRAWING BORDER UPDATED	AS	AS	D.LEE	27OCT16



NOTES !

SHAFT STIFFNESS :-  
 THE STIFFNESS OF THE SHAFT BETWEEN THE POINT OF RIGIDITY AND THE SHAFT EXTENSION  $\phi$  IS  $14.14 \times 10^6 \text{ Nm/rad}$

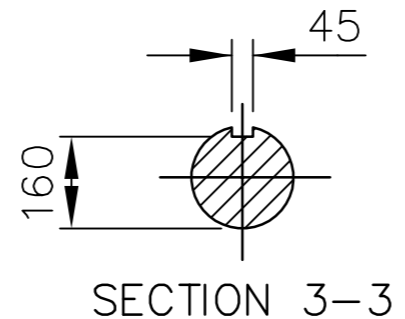
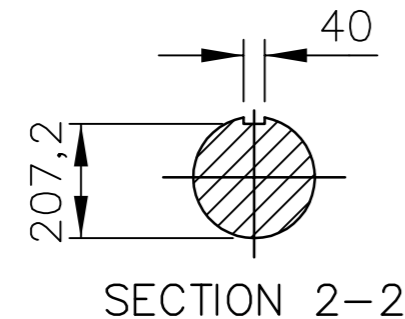
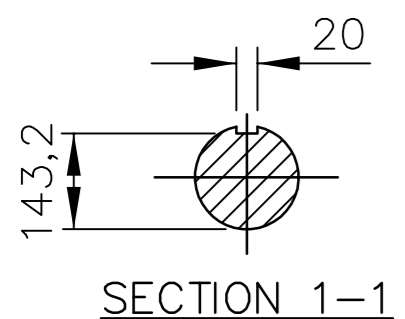
SHAFT MATERIAL:-  
 STEEL - C40E+N TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE)  
 MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS  $34.47 \times 10^6 \text{ N/m}^2$  FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND  $68.94 \times 10^6 \text{ N/m}^2$  FOR RUN THROUGH 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 B.S. 6861 PART 1 GRADE 2,5.

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

COMPONENT	Mass(kg)	Mk <sup>2</sup> (kgm <sup>2</sup> )
SHAFT	582,8	3,272
FAN	31,33	3,0981
FAN HUB	41,64	0,886
DE BALANCE RING	31,28	2,43
MAIN ROTOR	1898,52	111,182
NDE BALANCE RING	31,28	2,43
EXC ROTOR ASSY	124,67	2,235
PMG ROTOR	6,97	0,019
PMG STUB SHAFT	0,93	0,0003
TOTAL	2749,42	125,5524

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0,453592
kg m <sup>2</sup>	lb ft <sup>2</sup>	0,04214
Nm/rad	lbf in/rad	0,1130
N/m <sup>2</sup>	lbf/in <sup>2</sup>	6894,76



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO N/A	DRAWN R.TYE		CUMMINS GENERATOR TECHNOLOGIES	
	DO NOT SCALE PRINT	CHECKED C.MILLS		DRAWING, ENGINEERING	
SCALE NTS		APPROVED A.SAVILL	SITE CODE	MOMENTS OF INERTIA P80 2X	
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.		DATE 16APR04		STA	DWG SIZE A3
		FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON N/A		CAD SHEET 1 of 1