

REL NO	REV	NO	REVISION	DWN	CKD	APVD	DATE
ECO-183270	C	1	DRAWING BORDER UPDATED	AS	TC	M.RAGHUNATHAN	30JAN19

D

C

B

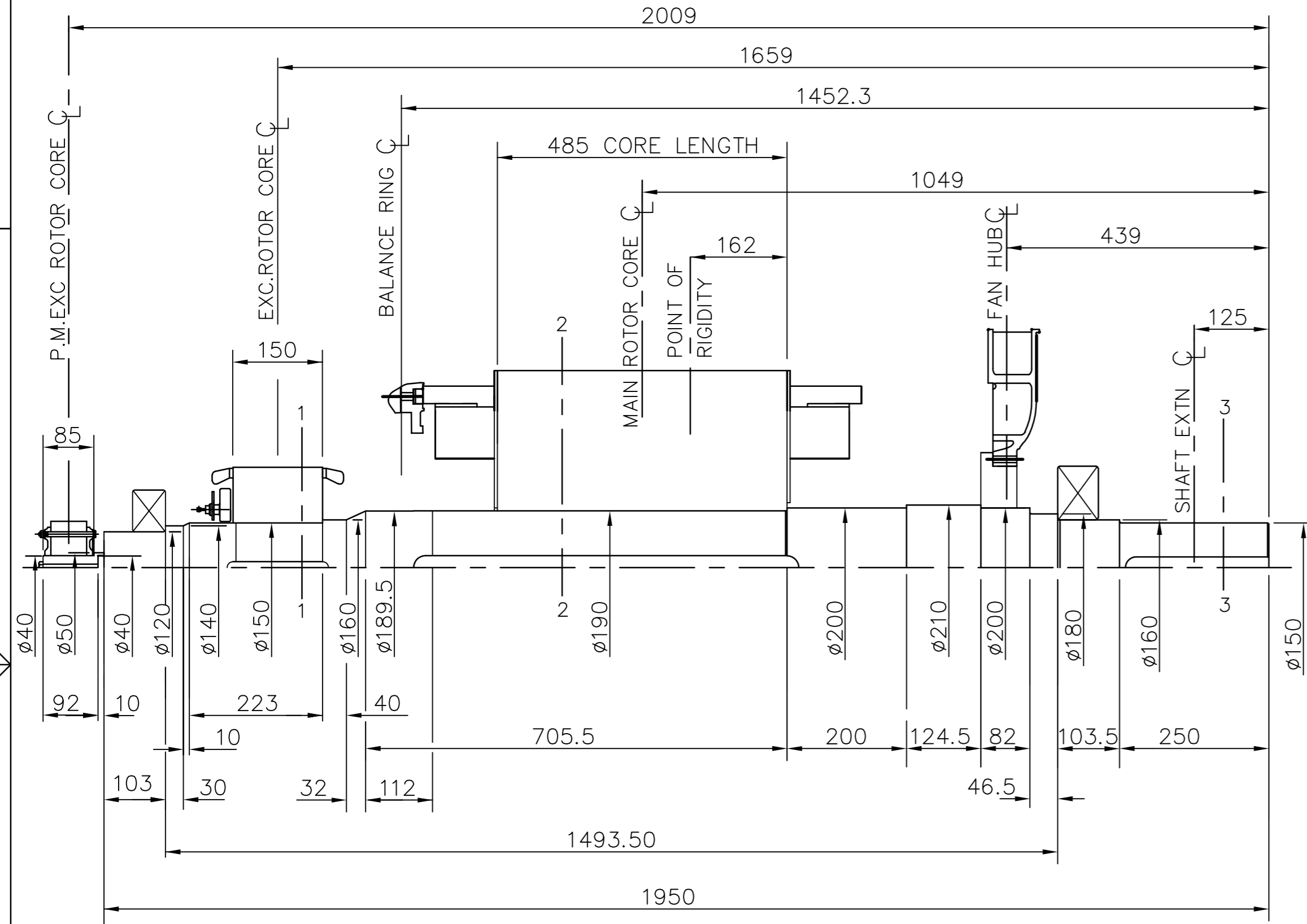
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NOTES !

SHAFT STIFFNESS :-
 THE STIFFNESS OF THE SHAFT BETWEEN THE POINT OF RIGIDITY AND THE SHAFT EXTENSION ζ IS 9.81MNm/Rad

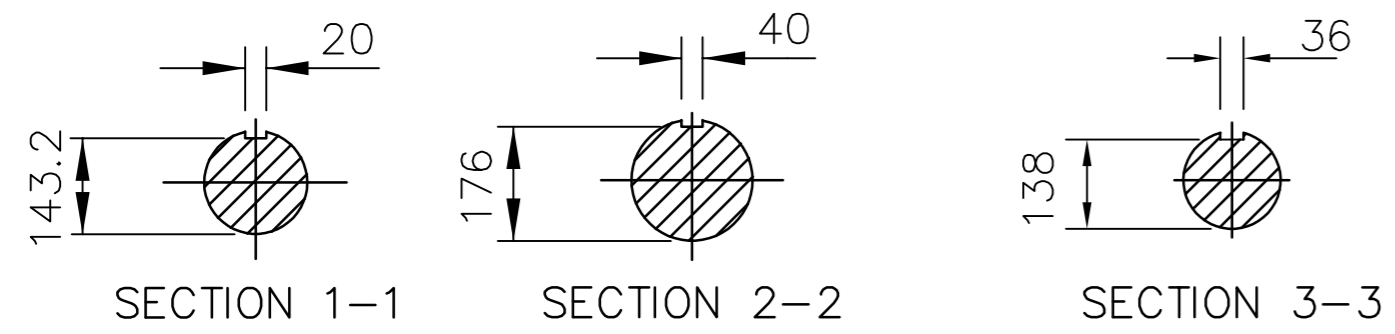
SHAFT MATERIAL:-
 STEEL - C40E+N TO BSEN 10083-2 2006 (APPROVED BY MARINE AUTHORITIES WHEN APPROPRIATE)
 MAXIMUM RECOMMENDED VIBRATORY STRESS LEVEL IN THE SHAFT IS $34.47 \times 10^6 \text{ N/m}^2$ FOR SPEED RANGE OF 0.95 TO 1.1 X NOMINAL SPEED AND $68.94 \times 10^6 \text{ N/m}^2$ FOR RUN THROUGH CONDITIONS, 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 BS ISO 1940 PARTS 1 AND 2. BALANCE GRADE 2.5

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

COMPONENT	Mass Kg	mk ² kgm ²
SHAFT	375.3	1.5746
FAN	23.17	2.1497
FAN HUB	28.8	0.6088
BALANCE RING DE		
MAIN ROTOR	1141.47	67.1355
BALANCE RING NDE	24.45	1.8722
EX. ROTOR	85.55	1.391
P.M. ROTOR	6.97	0.019
P.M.STUB SHAFT	0.93	0.0003
TOTAL	1686.64	74.7511

CONVERSION FACTORS		
TO CONVERT	TO	DIVIDE BY
kg	lb	0.453592
kg m ²	lb ft ²	0.04214
Nm/rad	lbf in/rad	0.1130
N/m ²	lbf/in ²	6894.76



UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS	SIM TO N/A	DRAWN A.SHAWYER		CUMMINS GENERATOR TECHNOLOGIES		
	DO NOT SCALE PRINT	CHECKED A.SAVILL		DRAWING,ENGINEERING		
SCALE N/A		APPROVED M.HYATT	SITE CODE	MOMENTS OF INERTIA P80R - 2 BEARING		
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 01APR14		STA	DWG SIZE A3	L18-10559
		FOR INTERPRETATION OF DIMENSIONING AND TOLERANCING, SEE ASME Y14.5-2009	FIRST USED ON N/A			