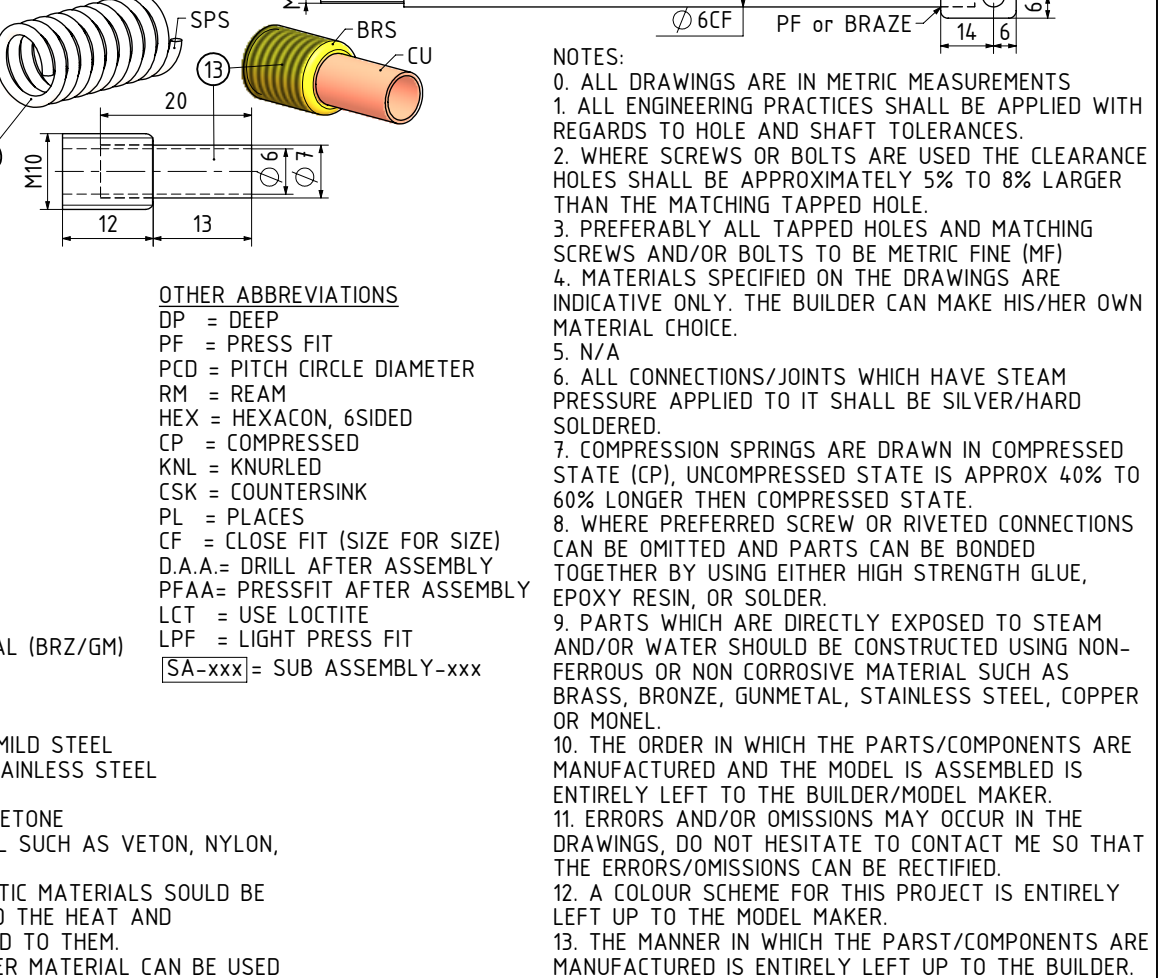
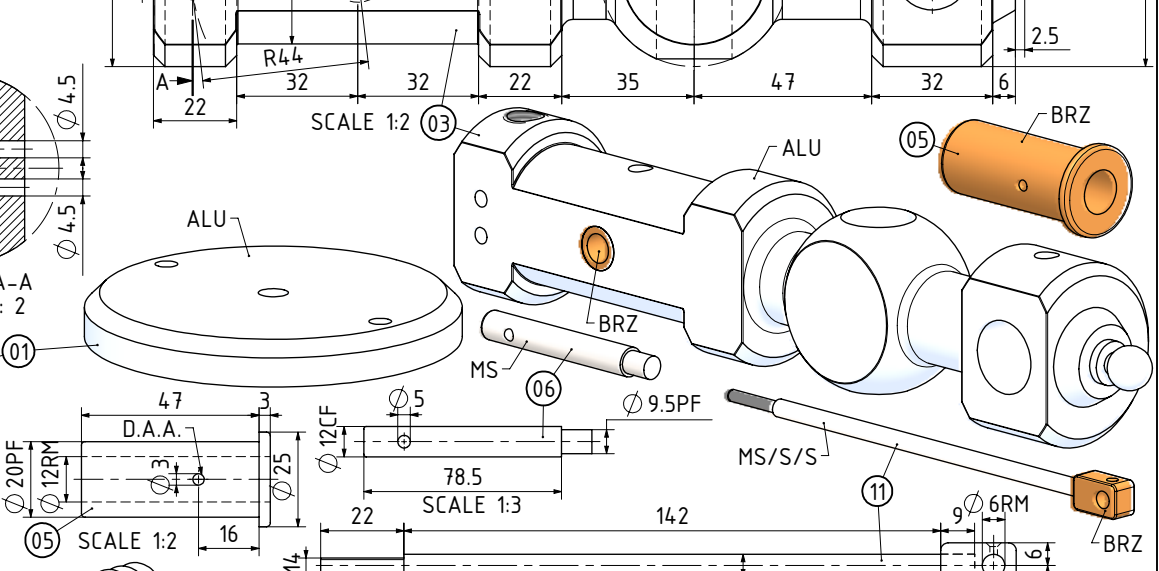
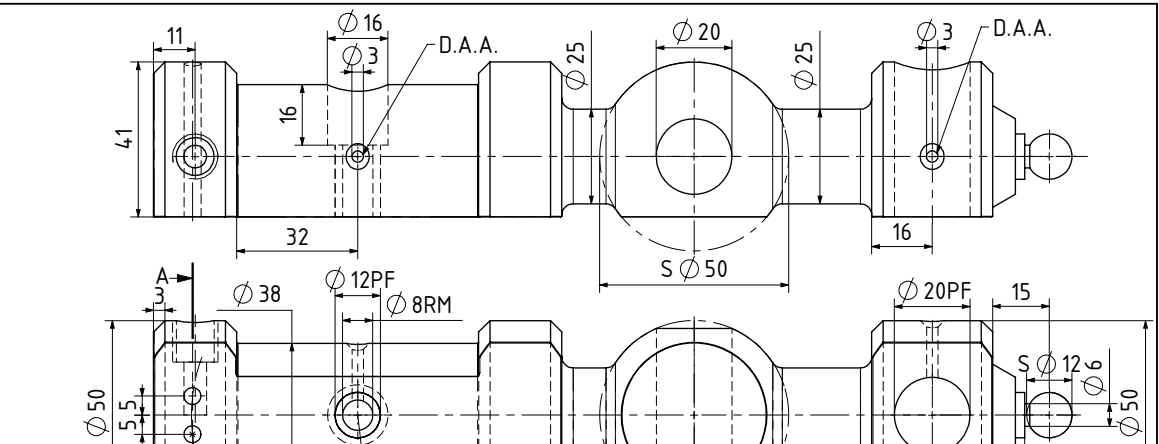
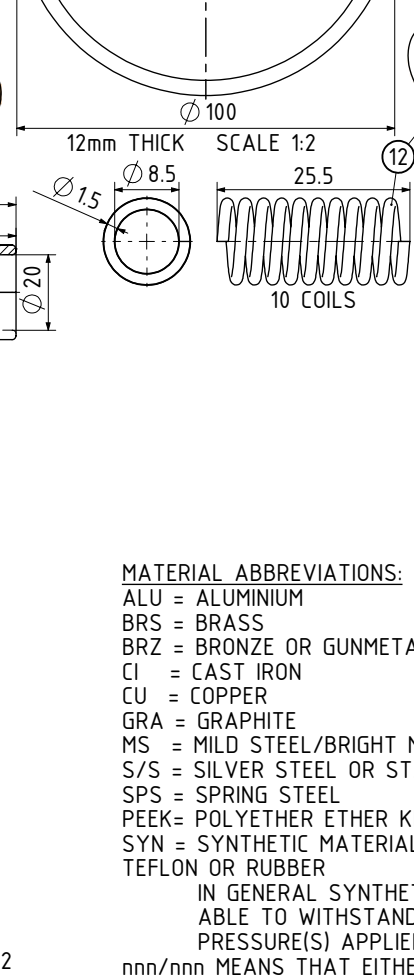
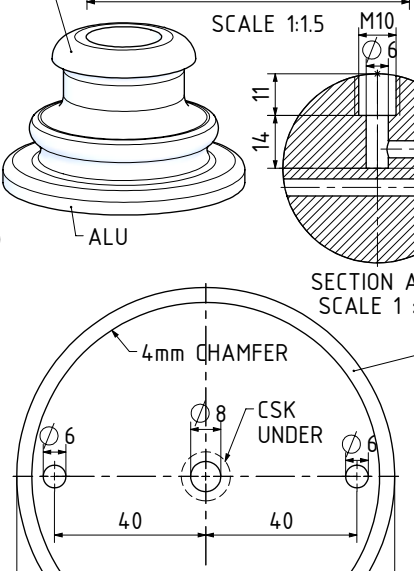
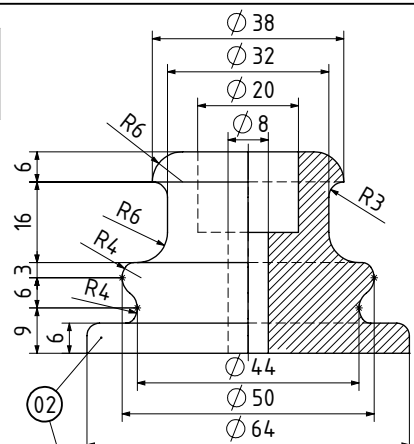
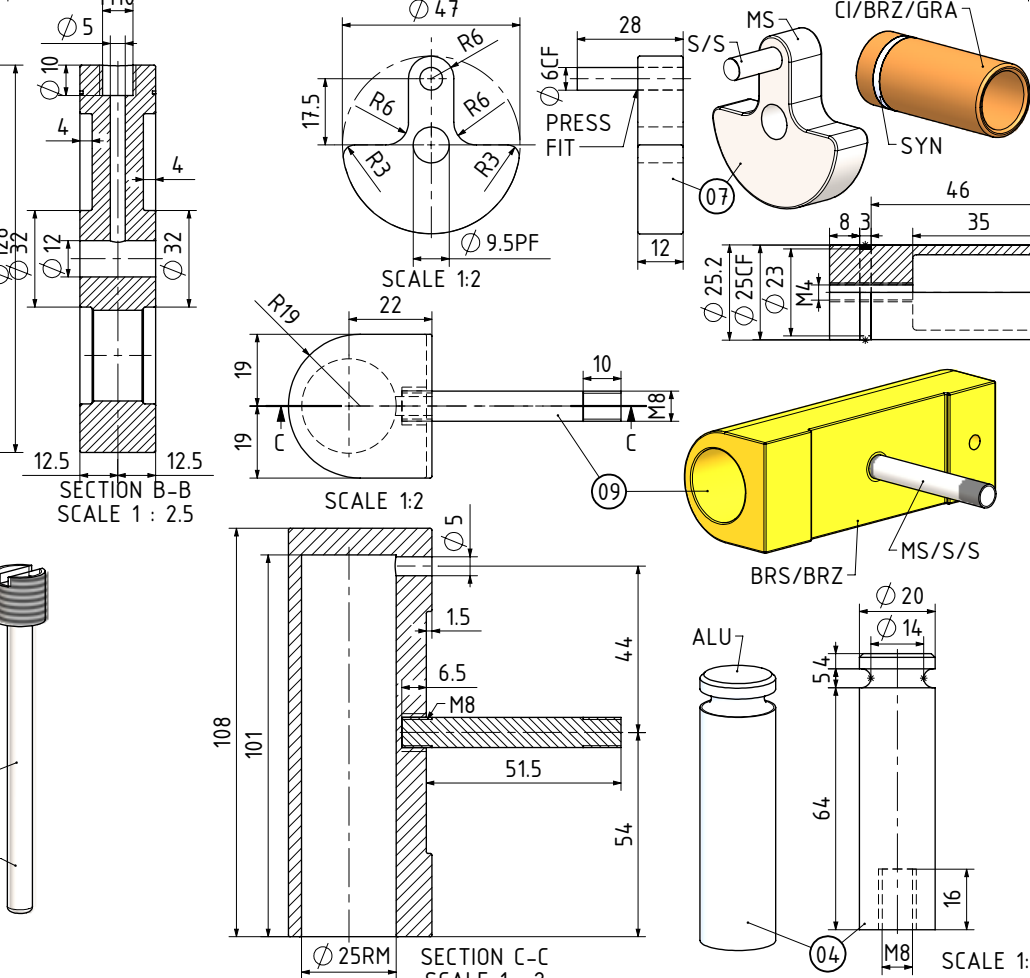
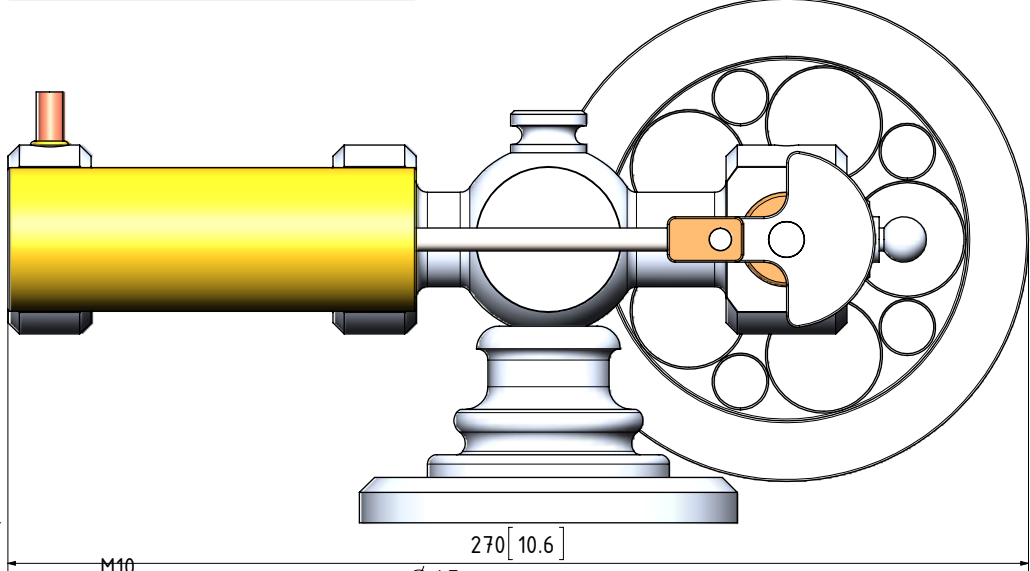
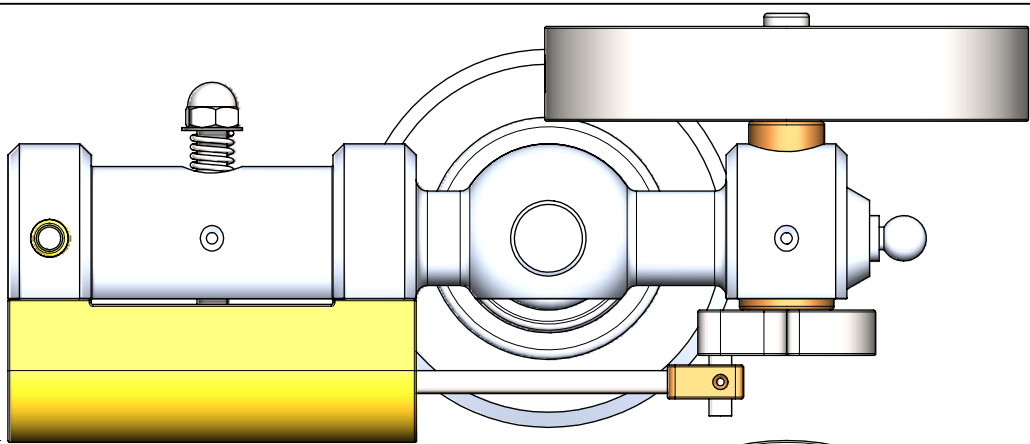
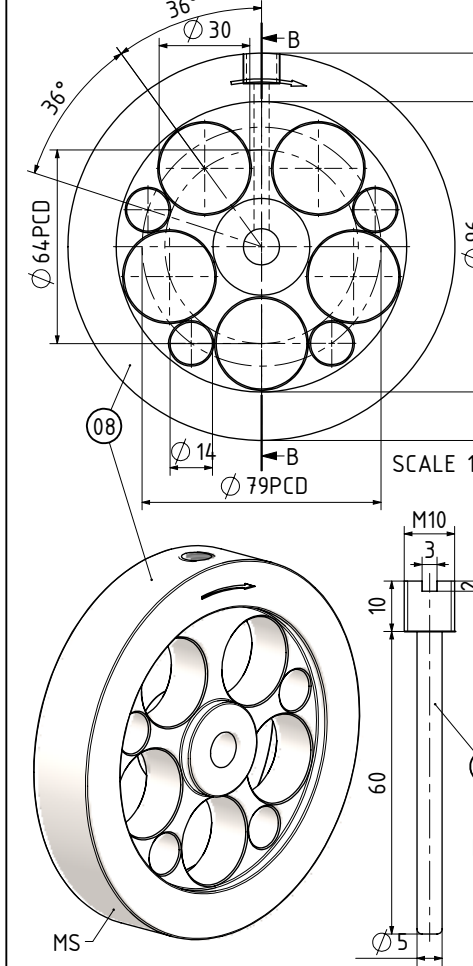
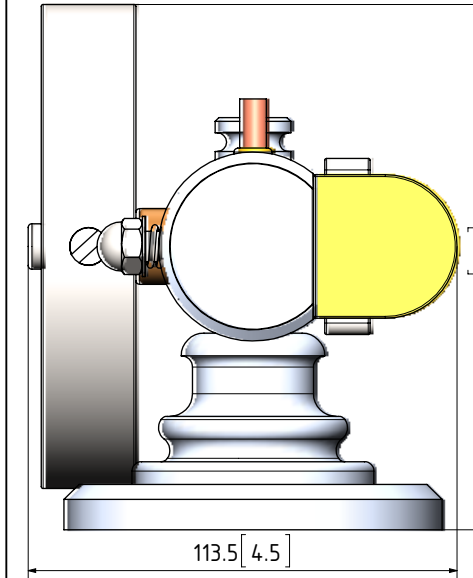


QTY.	PART NUMBER
1	EVG-P18-01-BASE PLATE
1	EVG-P18-02-BASE COLUMN
1	EVG-P18-03-ENGINE BODY
1	EVG-P18-04-CENTER POST
1	EVG-P18-05-CRANKSHAFT BEARING
1	EVG-P18-06-CRANKSHAFT
1	EVG-P18-07-CRANK
1	EVG-P18-08-FLYWHEEL
1	EVG-P18-09-CYLINDER
1	EVG-P18-10-PISTON
1	EVG-P18-11-CON-ROD
1	EVG-P18-12-PIVOT SPRING
1	EVG-P18-13-STEAM INLET CONNECTOR
1	EVG-P18-14-FLYWHEEL LOCKING PIN
1	EVG-P18-M8 DOME NUT
1	EVG-P18-M8 WASHER
1	EVG-P18-M8x50 A-K C-SINK SCREW



NOTES:

0. ALL DRAWINGS ARE IN METRIC MEASUREMENTS
1. ALL ENGINEERING PRACTICES SHALL BE APPLIED WITH REGARDS TO HOLE AND SHAFT TOLERANCES.
2. WHERE SCREWS OR BOLTS ARE USED THE CLEARANCE HOLES SHALL BE APPROXIMATELY 5% TO 8% LARGER THAN THE MATCHING TAPPED HOLE.
3. PREFERABLY ALL TAPPED HOLES AND MATCHING SCREWS AND/OR BOLTS TO BE METRIC FINE (MF)
4. MATERIALS SPECIFIED ON THE DRAWINGS ARE INDICATIVE ONLY. THE BUILDER CAN MAKE HIS/HER OWN MATERIAL CHOICE.
5. N/A
6. ALL CONNECTIONS/JOINTS WHICH HAVE STEAM PRESSURE APPLIED TO IT SHALL BE SILVER/HARD SOLDERED.
7. COMPRESSION SPRINGS ARE DRAWN IN COMPRESSED STATE (CP), UNCOMPRESSED STATE IS APPROX 40% TO 60% LONGER THEN COMPRESSED STATE.
8. WHERE PREFERRED SCREW OR RIVETED CONNECTIONS CAN BE OMITTED AND PARTS CAN BE BONDED TOGETHER BY USING EITHER HIGH STRENGTH GLUE, EPOXY RESIN, OR SOLDER.
9. PARTS WHICH ARE DIRECTLY EXPOSED TO STEAM AND/OR WATER SHOULD BE CONSTRUCTED USING NON-FERROUS OR NON CORROSIVE MATERIAL SUCH AS BRASS, BRONZE, GUNMETAL, STAINLESS STEEL, COPPER OR MONEL.
10. THE ORDER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED AND THE MODEL IS ASSEMBLED IS ENTIRELY LEFT TO THE BUILDER/MODEL MAKER.
11. ERRORS AND/OR OMISSIONS MAY OCCUR IN THE DRAWINGS, DO NOT HESITATE TO CONTACT ME SO THAT THE ERRORS/OMISSIONS CAN BE RECTIFIED.
12. A COLOUR SCHEME FOR THIS PROJECT IS ENTIRELY LEFT UP TO THE MODEL MAKER.
13. THE MANNER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED IS ENTIRELY LEFT UP TO THE BUILDER.

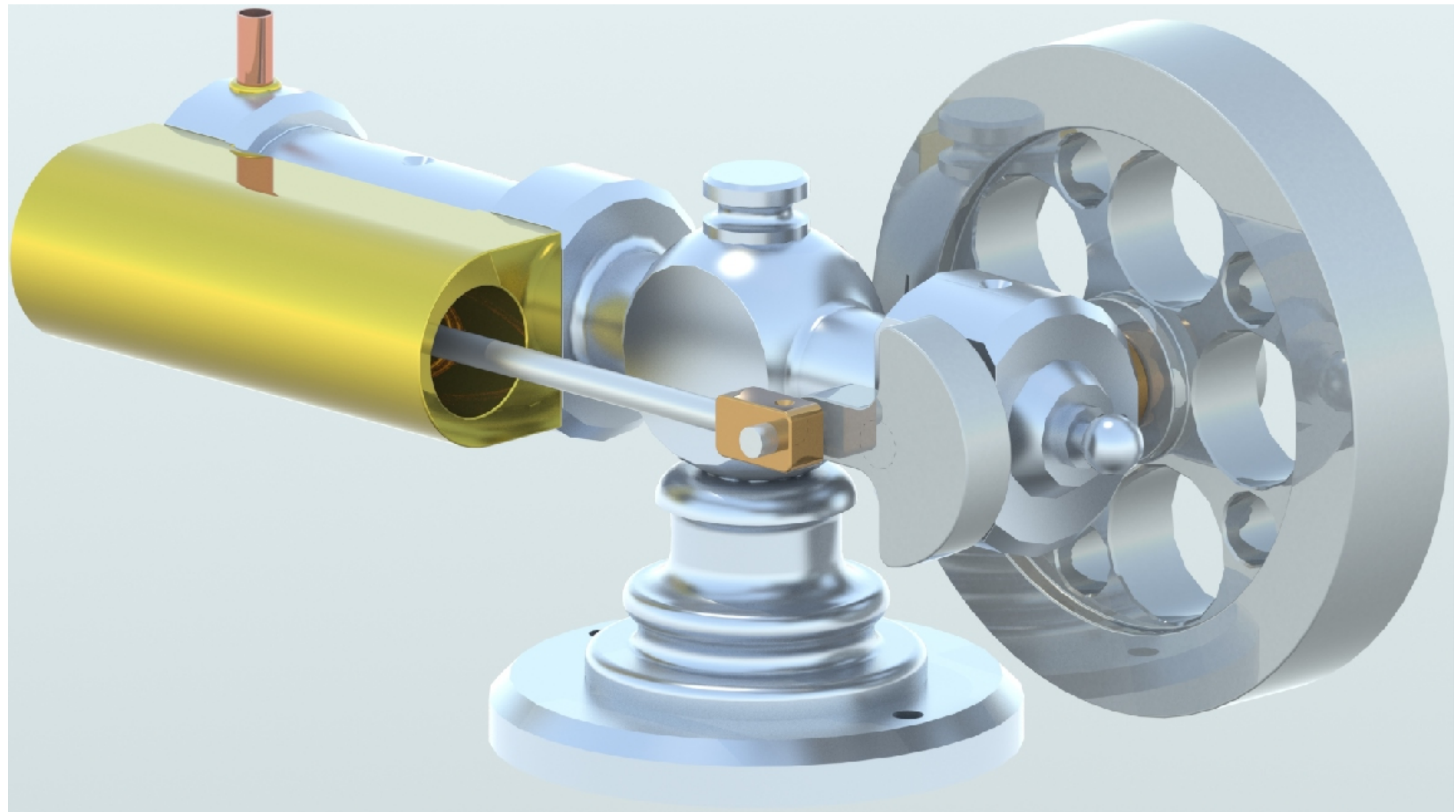
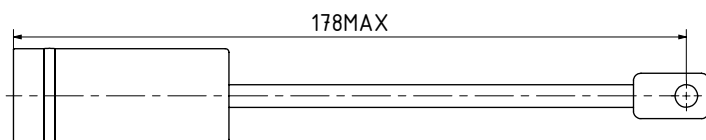
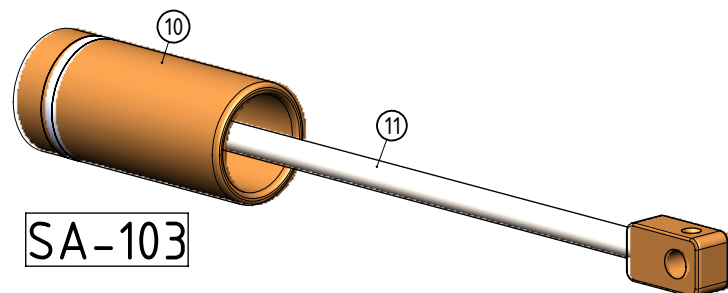
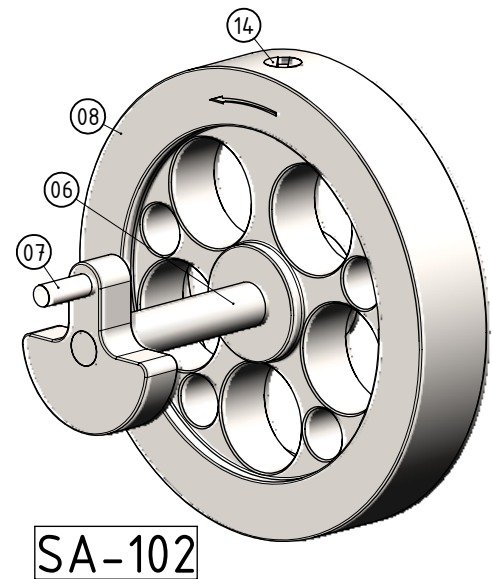
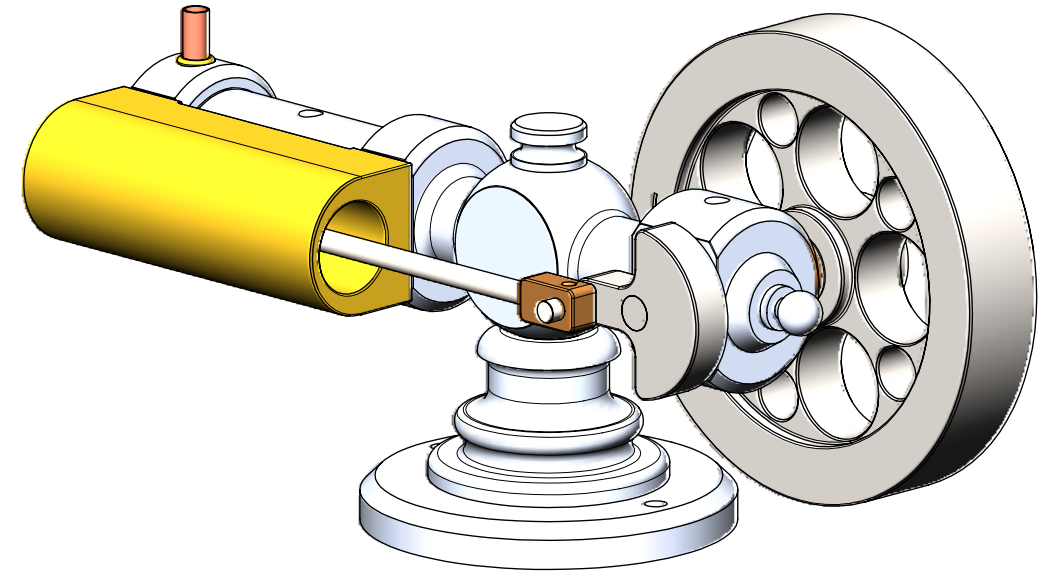
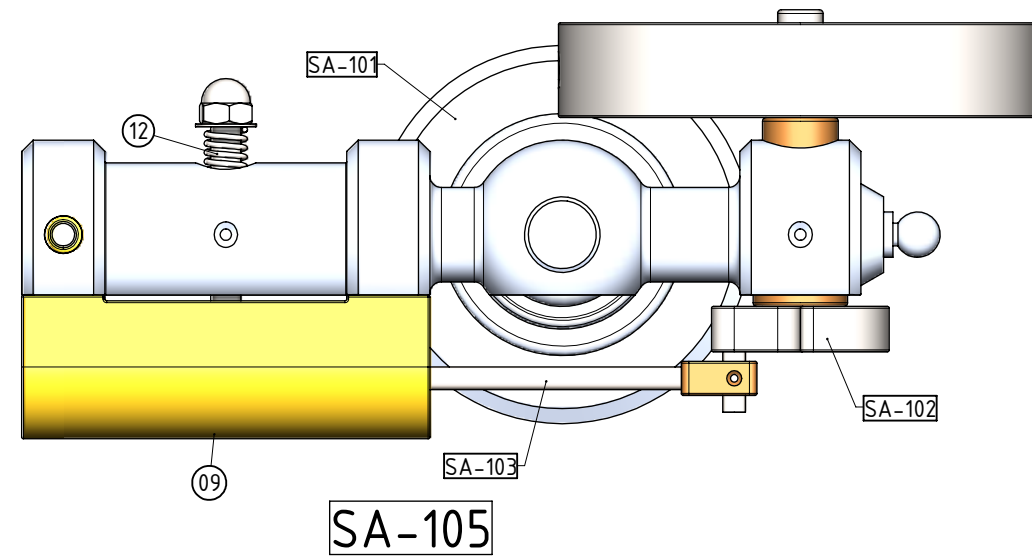
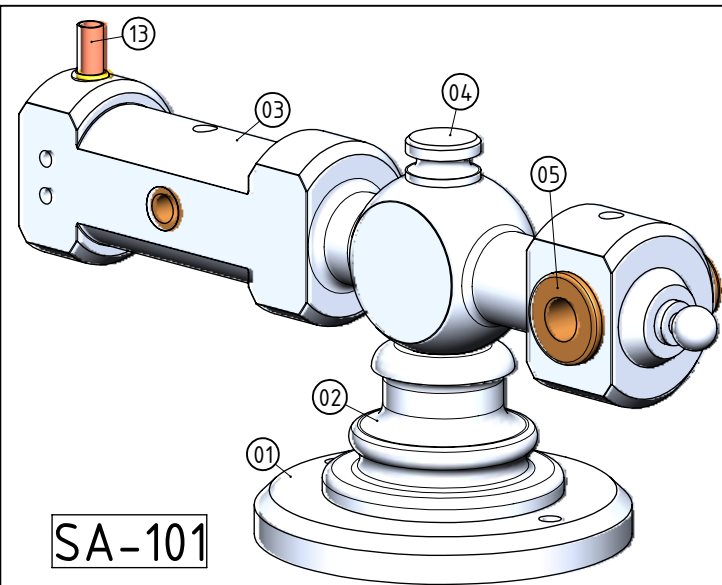
OTHER ABBREVIATIONS

DP = DEEP
PF = PRESS FIT
PCD = PITCH CIRCLE DIAMETER
RM = REAM
HEX = HEXACON, 6SIDED
CP = COMPRESSED
KNL = KNURLED
CSK = COUNTERSINK
PL = PLACES
CF = CLOSE FIT (SIZE FOR SIZE)
D.A.A.= DRILL AFTER ASSEMBLY
PFAA= PRESSFIT AFTER ASSEMBLY
LCT = USE LOCTITE
LPF = LIGHT PRESS FIT
[SA-xxx]= SUB ASSEMBLY-xxx

MATERIAL ABBREVIATIONS:

ALU = ALUMINIUM
BRS = BRASS
BRZ = BRONZE OR GUNMETAL (BRZ/GM)
CI = CAST IRON
CU = COPPER
GRA = GRAPHITE
MS = MILD STEEL/BRIGHT MILD STEEL
S/S = SILVER STEEL OR STAINLESS STEEL
SPS = SPRING STEEL
PEEK= POLYETHER ETHER KETONE
SYN = SYNTHETIC MATERIAL SUCH AS VETON, NYLON, TEFLON OR RUBBER
IN GENERAL SYNTHETIC MATERIALS SHOULD BE ABLE TO WITHSTAND THE HEAT AND PRESSURE(S) APPLIED TO THEM.
nnn/nnn MEANS THAT EITHER MATERIAL CAN BE USED

NOTES: THE ORIGINAL DRAWINGS AND ARTICLE OF THIS ENGINE WERE BY ELMER VERBURG AND PUBLISHED IN A BOOK AS CHAPTER 18. THE ORIGINAL DRAWINGS WERE POSTED ON: WWW.JOHN-TOM.COM (THIS ENGINE IS 2 TIMES LARGER THAN THE ORIGINAL)											
TITLE			DRAWING CONTENTS			PROJECT No 10-18-00		PROJECTION		MODEL SCALE: 1:1	
1 CYL. HORZ. OSCILLATING STEAM ENGINE CALLED "FANCY 2"			GENERAL ARRANGEMENT, BOM, NOTES, PARTS AND ASSEMBLIES			JDW DRAUGHTING SERVICES		 JDWDS		DWG SCALE: 1:1 @A3 OR AS SHOWN	
						DATE		JANUARY-2016		Copyright © J.A.M. DE WAAL PAPAURA NZ	
						SHEET: 01 OF 02		A3 No: EVG-P18-01			
J.A.M. DE WAAL, 12 BRIGHTWELL STREET PAPAURA 2110. NEW ZEALAND. PHONE: 0064 09 2988815. MOB: 0211791000 E-MAIL: dewaal@xtra.co.nz.											



NOTES: THE ORIGINAL DRAWINGS AND ARTICLE OF THIS ENGINE WERE BY ELMER VERBURG AND PUBLISHED IN A BOOK AS CHAPTER 18. THE ORIGINAL DRAWINGS WERE POSTED ON: WWW.JOHN-TOM.COM (THIS ENGINE IS 2 TIMES LARGER THAN THE ORIGINAL)

TITLE
1 CYL. HORZ. OSCILLATING STEAM ENGINE
CALLED "FANCY 2"

DRAWING CONTENTS
PARTS AND ASSEMBLIES, ISOMETRIC
VIEW, RENDERED PICTURE

PROJECT No 10-18-00
JDW DRAUGHTING SERVICES
J.A.M. DE WAAL, 12 BRIGHTWELL STREET PAKAPURA 2110.
NEW ZEALAND. PHONE: 0064 09 2988815. MOB: 0211791000
E-MAIL: dewaal@xtra.co.nz.

PROJECTION
DATE JANUARY-2016
SHEET: 02 OF 02

MODEL SCALE: 1:1
DWG SCALE: 1:1 @A3 OR AS SHOWN
Copyright © J.A.M. DE WAAL PAKAPURA NZ
A3 No: EVG-P18-02