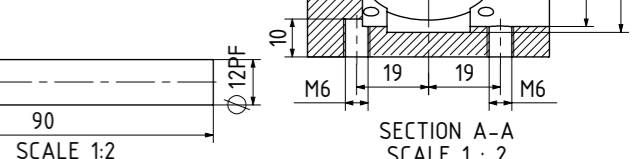
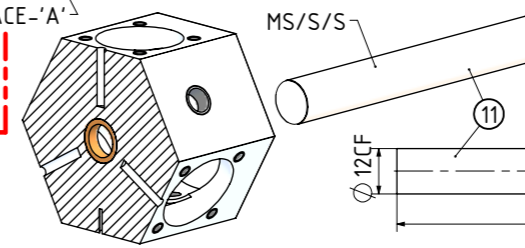
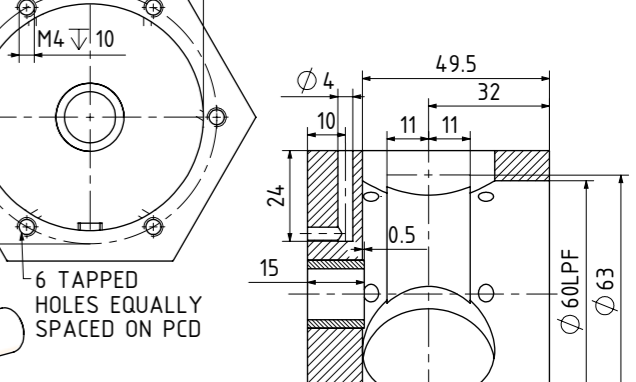
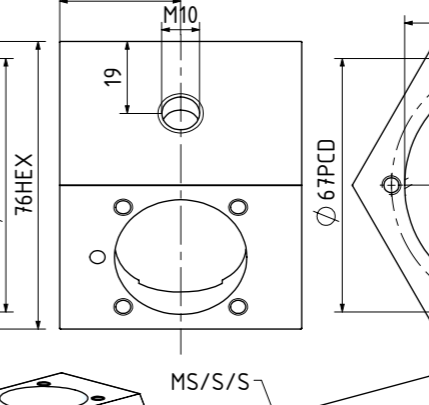
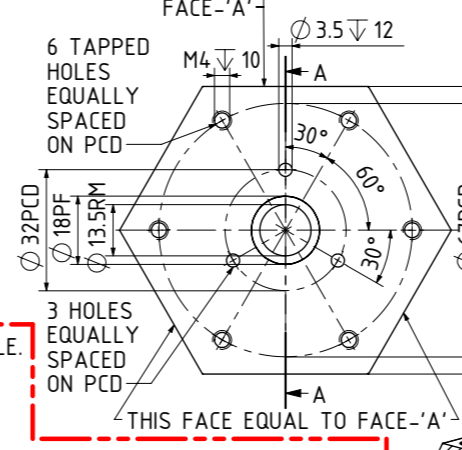
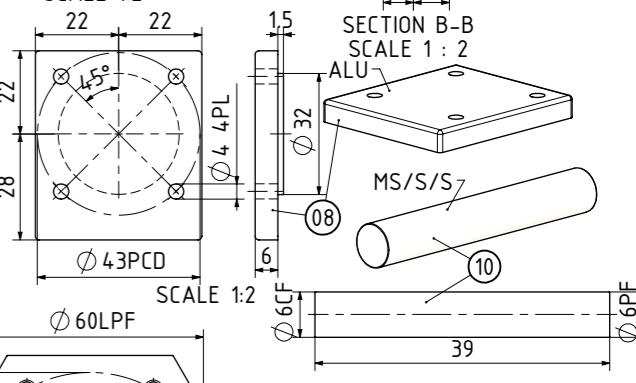
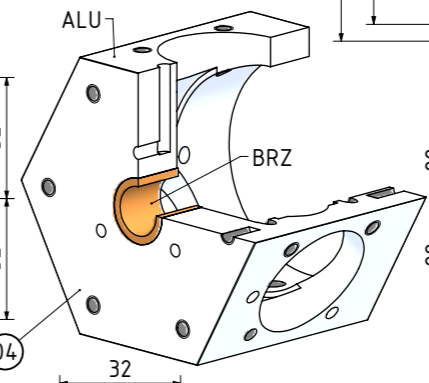
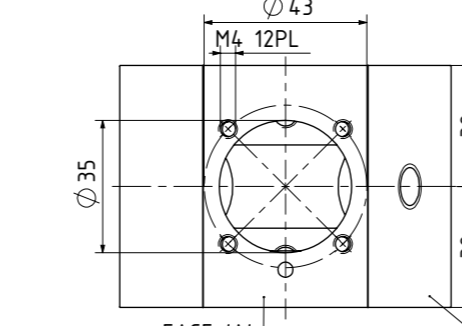
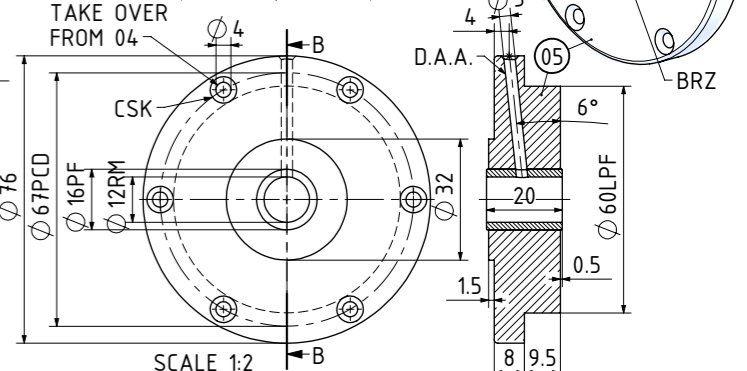
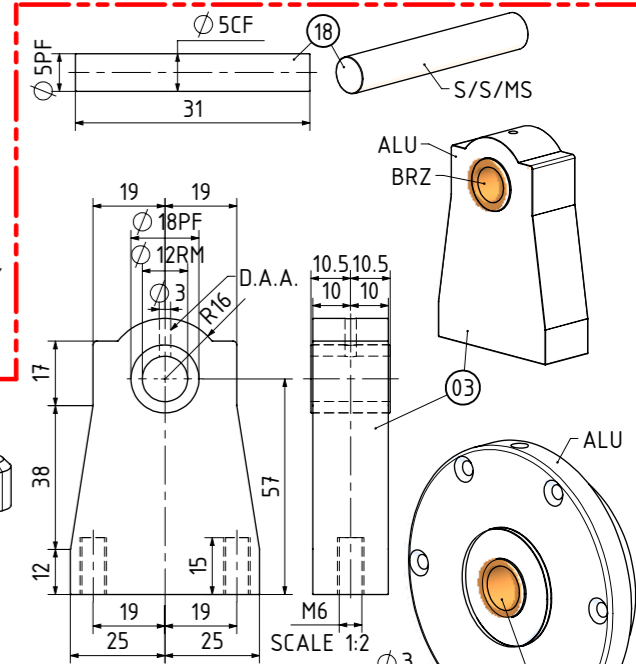
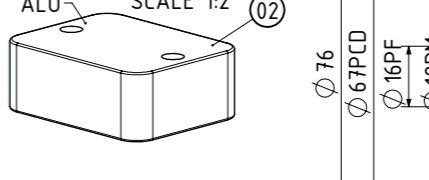
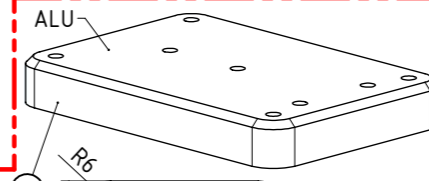
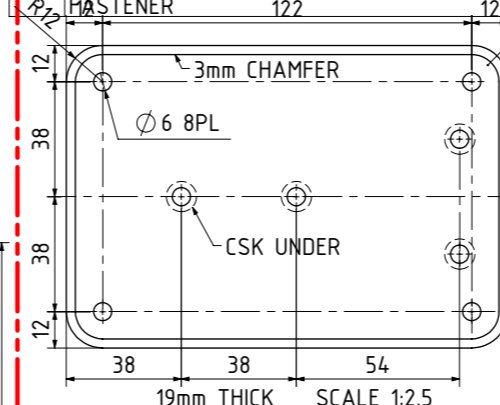


| QTY. | PART NUMBER |
|------|------------------------------------|
| 1 | EVG-P11-01-BASE PLATE |
| 1 | EVG-P11-02-ENGINE STAND |
| 1 | EVG-P11-03-MAIN BEARING STAND |
| 1 | EVG-P11-04-CRANKCASE |
| 1 | EVG-P11-05-CRANKCASE COVER |
| 1 | EVG-P11-06-CRANKCASE VALVE HOUSING |
| 3 | EVG-P11-07-CYLINDER |
| 3 | EVG-P11-08-CYLINDER COVER |
| 1 | EVG-P11-09-PISTON CRANK |
| 1 | EVG-P11-10-PISTON CRANK PIN |
| 1 | EVG-P11-11-PISTON CRANKSHAFT |
| 1 | EVG-P11-12-FLYWHEEL |
| 1 | EVG-P11-13-VALVE CRANK |
| 1 | EVG-P11-14-CON-ROD HUB |
| 1 | EVG-P11-15-CON-ROD BIG END PIN |
| 3 | EVG-P11-16-CON-ROD |
| 2 | EVG-P11-17-PISTON |
| 3 | EVG-P11-18-PISTON PIN |
| 1 | EVG-P11-19-VALVE |
| 1 | EVG-P11-20-VENT SCREW PLUG |
| 12 | EVG-P11-21-CYLINDER TIE ROD |
| 2 | EVG-P11-22-STEAM IN-OUT PIPE |
| 12 | EVG-P11-M4 DOME NUT |
| 6 | EVG-P11-M4x16 C-SINK SCREW |
| 6 | EVG-P11-M4x29 C-SINK SCREW |
| 2 | EVG-P11-M6x30 C-SINK SCREW |
| 2 | EVG-P11-M6x45 C-SINK SCREW |
| 1 | EVG-P11-23-FLYWHEEL CRANKSHAFT |

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

FOR MATERIAL ABBREVIATIONS REFER SHEET 02



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.

NOTES: THE ORIGINAL DRAWINGS AND ARTICLE OF THIS ENGINE WERE BY ELMER VERBURG AND PUBLISHED IN A BOOK AS CHAPTER 11. THE ORIGINAL DRAWINGS WERE POSTED ON: WWW.JOHN-TOM.COM (THIS ENGINE IS 2 TIMES LARGER THAN THE ORIGINAL)

TITLE
3 CYLINDER STEAM ENGINE RADIAL TYPE
(BORE 32mm x STROKE 25mm)

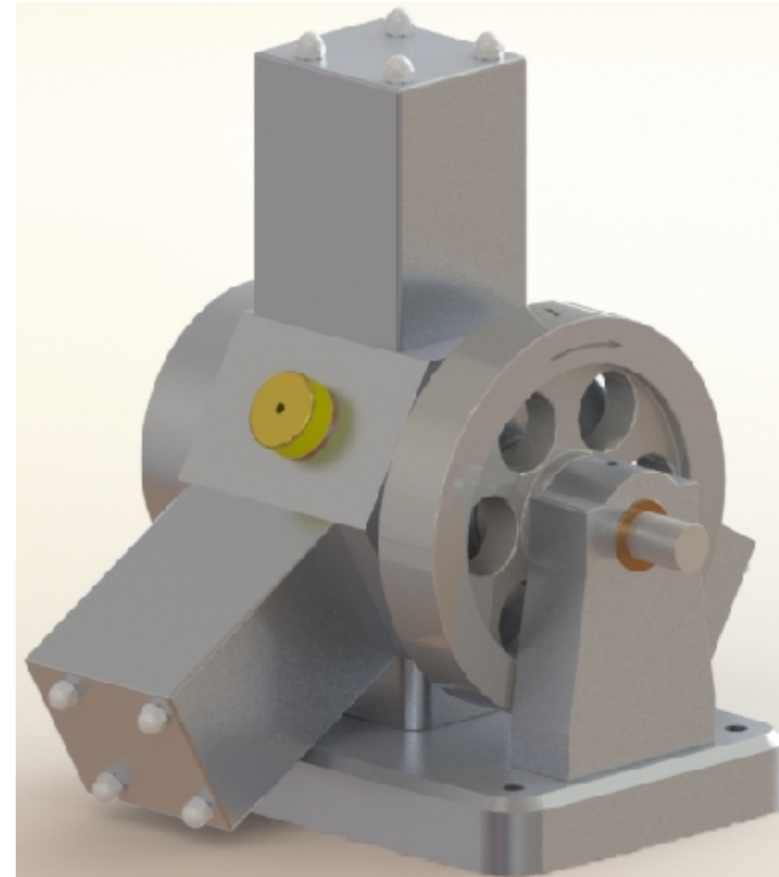
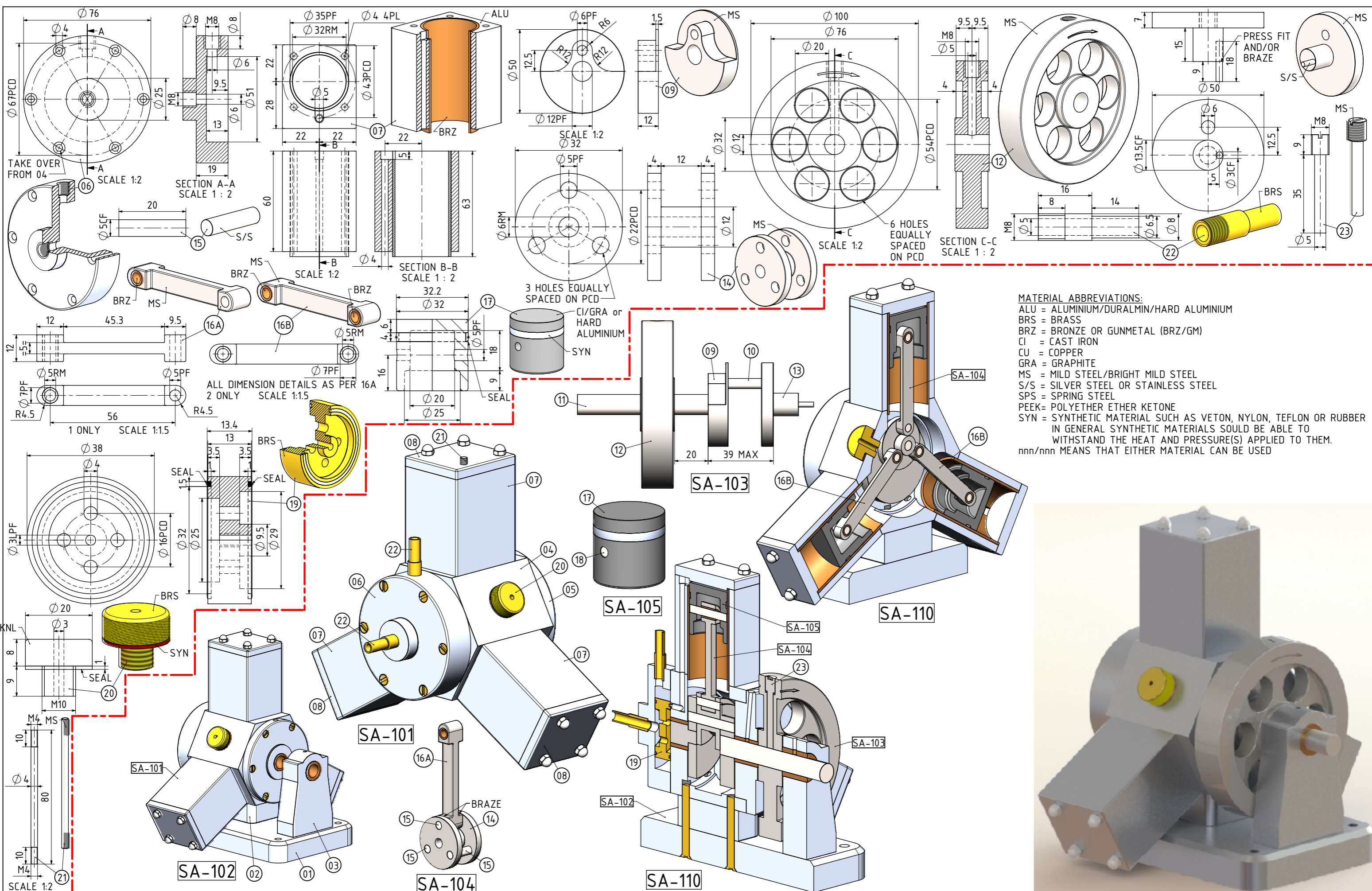
DRAWING CONTENTS
G.A. BOM, ISOMETRIC VIEW, NOTES,
PARTS AND ASSEMBLIES

PROJECT No 10-11-00
 JDW DRAUGHTING SERVICES
 J.A.M. DE WAAL, 12 BRIGHTWELL STREET PAPAURA 2110.
 NEW ZEALAND. PHONE: 0064 09 2988815. MOB: 0211791000
 E-MAIL: dewaal@xtra.co.nz.

PROJECTION

 DATE
JANUARY-2016

MODEL SCALE: 1:1
 DWG SCALE: 1:1 @A3 OR AS SHOWN
 Copyright © J.A.M. DE WAAL PAPAURA NZ
 SHEET: 01 OF 02
A3 No: EVG-P11-01



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|--|--|--|--|---|--|---|--|---|--|
| NOTES: THE ORIGINAL DRAWINGS AND ARTICLE OF THIS ENGINE WERE BY ELMER VERBURG AND PUBLISHED IN A BOOK AS CHAPTER 11. THE ORIGINAL DRAWINGS WERE POSTED ON: WWW.JOHN-TOM.COM (THIS ENGINE IS 2 TIMES LARGER THAN THE ORIGINAL) TITLE 3 CYLINDER STEAM ENGINE RADIAL TYPE (BORE 32mm x STROKE 25mm) | | DRAWING CONTENTS PARTS AND ASSEMBLIES, NOTES | | PROJECT No 10-11-00 JDW DRAUGHTING SERVICES J.A.M. DE WAAL, 12 BRIGHTWELL STREET PAPA KURA 2110. NEW ZEALAND. PHONE: 0064 09 2988815. MOB: 0211791000 E-MAIL: dewaal@xtra.co.nz. | | PROJECTION JDWDS 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 PAPA KURA NZ A3 No: EVG-P11-02 | |
|--|--|--|--|---|--|---|--|---|--|