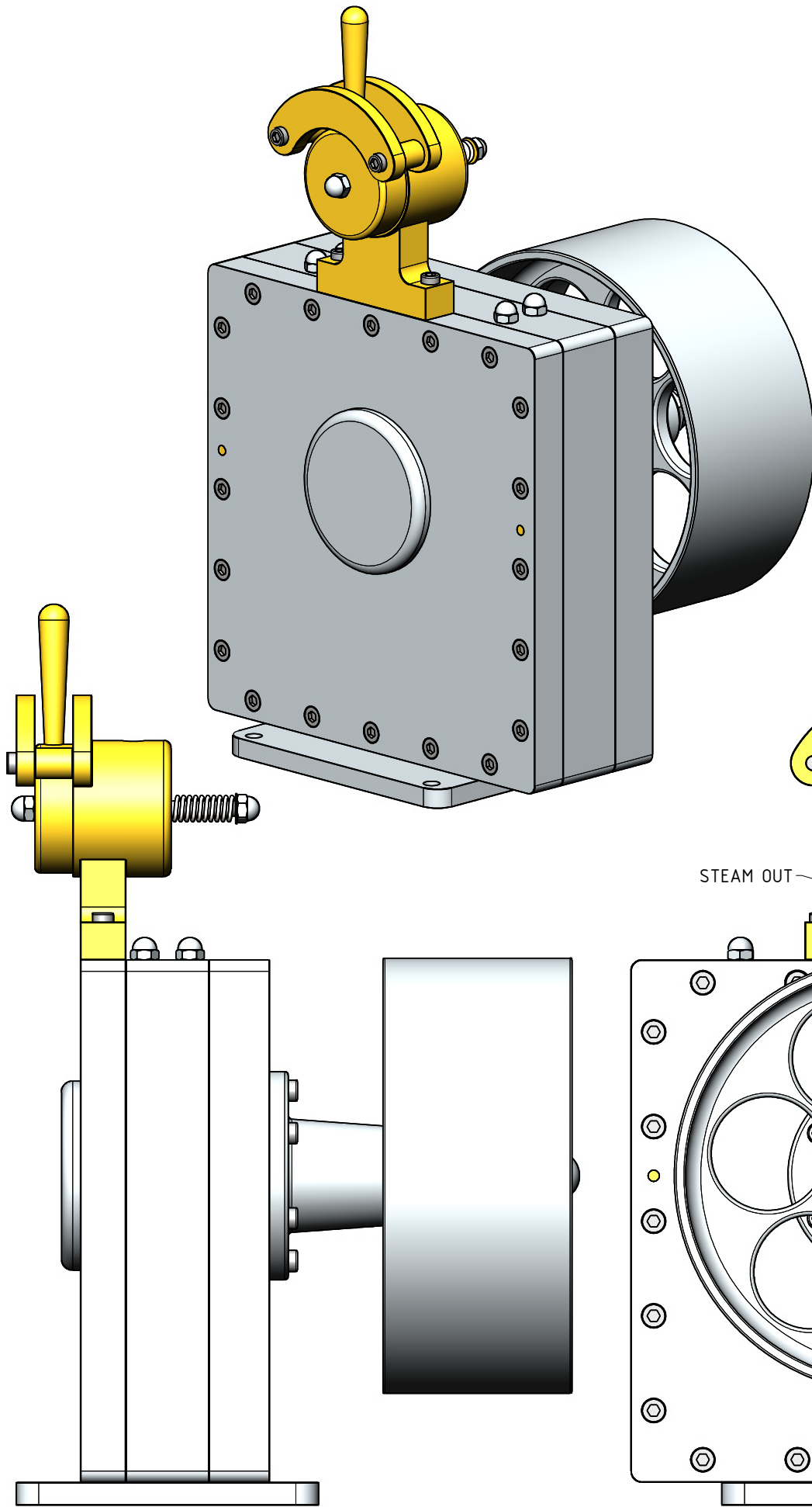
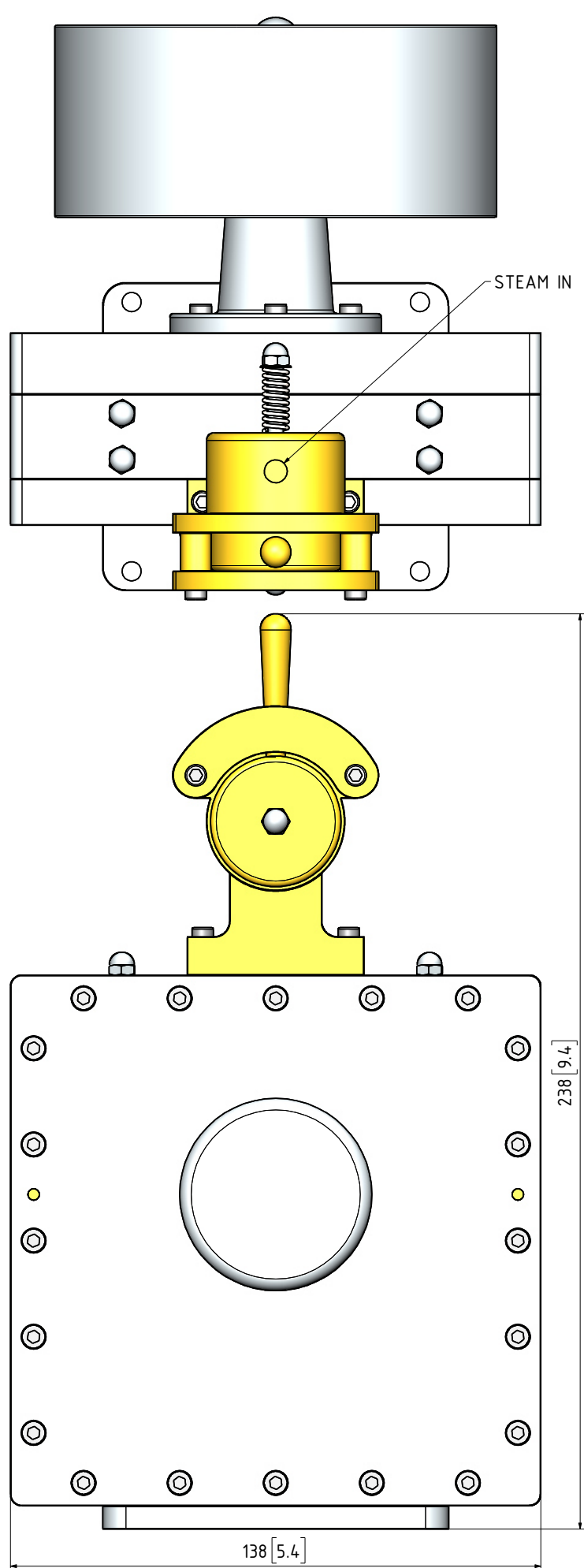




NOTES:

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. ALL CONNECTIONS/JOINTS WHICH HAVE STEAM PRESSURE APPLIED TO IT SHALL BE SILVER/HARD SOLDERED.
6. COMPRESSION SPRINGS ARE DRAWN IN COMPRESSED STATE (CP), UNCOMPRESSED STATE IS APPROX 40% TO 60% LONGER THEN COMPRESSED STATE.
7. 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.
8. 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.
9. THE ORDER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED AND THE MODEL IS ASSEMBLED IS ENTIRELY LEFT TO THE BUILDER/MODEL MAKER.
10. A COLOUR SCHEME FOR THIS PROJECT IS ENTIRELY LEFT UP TO THE MODEL MAKER.
11. THE MANNER IN WHICH THE PARTS/COMPONENTS ARE MANUFACTURED IS ENTIRELY LEFT UP TO THE BUILDER.
12. USE LOCTITE, ON SCREW OR PRESS FIT CONNECTIONS OR SURFACES, WERE DEEMED NECESSARY TO PREVENT PARTS FROM LOOSENING.
13. WASHERS AND/OR SPRING WASHERS SHALL BE USED WHERE DEEMED NECESSARY.
14. INQUIRE AT THE APPROPRIATE AUTHORITIES WHETHER OR NOT THIS BOILER REQUIRE A PRESSURE TEST CERTIFICATE.
- XX. ERRORS AND/OR OMISSIONS MAY OCCUR IN THE DRAWINGS, DO NOT HESITATE TO CONTACT ME SO THAT THE ERRORS/OMISSIONS CAN BE RECTIFIED.

MATERIAL ABBREVIATIONS:

ALU = ALUMINIUM
HALU= HARD ALUMINIUM
BRS = BRASS
BRZ = BRONZE OR
GUNMETAL (BRZ/GM)
CI = CAST IRON
CU = COPPER
GRA = GRAPHITE
MS = MILD STEEL/BRIGHT
MILD STEEL
SS = 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 SOULD
BE ABLE TO
WITHSTAND THE
HEAT AND
PRESSURE(S)
APPLIED TO THEM.

nnn/nnn MEANS THAT
EITHER MATERIAL CAN BE
USED

OTHER ABBREVIATIONS

AS = AS SHOWN
DP = DEEP
DAA= DRILL AFTER ASSEMBLY
D&TAA= DRILL AND TAP AFTER
ASSEMBLY
CF = CLOSE FIT (SIZE FOR SIZE)
PF = PRESS FIT
PFAA= PRESS FIT AFTER
ASSEMBLY
PCD = PITCH CIRCLE DIAMETER
RM = REAM
HEX = HEXACON, 6SIDED
CP = COMPRESSED
KNL = KNURLED
CSK = COUNTERSINK
PL = PLACES
DWL= DOWEL
SPF= SPOTFACE
(T)HESOP=(TAPPED)HOLES
EQUALLY SPACED ON PCD
(T)HESOC=(TAPPED)HOLES
EQUALLY SPACED ON
CIRCUMFERENCE
OD = OUTSIDE DIAMETER
ID = INSIDE DIAMETER
[SA-xxx] = SUB ASSEMBLY-xxx

QTY.	PART NUMBER
1	09E-51-00-1-01-OUTER CYLINDER FRAME
1	09E-51-00-1-02-REVERSING VALVE BODY
2	09E-51-00-2-01-BALL BEARINGS
1	09E-51-00-2-02-MOVING CYLINDER
1	09E-51-00-2-03-CRANK SHAFT+FLYWHEEL
1	09E-51-00-2-04-INNER PISTON
1	09E-51-00-2-05-REVERSING VALVE
6	09E-51-00-M4 DOME NUT
1	09E-51-00-M4 WASHER
12	09E-51-00-M4x18 A-K C-SINK SCREW
10	09E-51-00-M4x20 A-K CYL HEAD SCREW
40	09E-51-00-M4x24 A-K C-SINK SCREW
1	09E-51-00-M8 DOME NUT

NOTES: THE ORIGINAL DRAWINGS WERE GIVEN TO ME. THE ORIGINAL DRAWINGS WERE BY STEWART HART. FROM "POTTY ENGINEERING". THE DRAWINGS WERE DATED JULY 2012. DRAWING TITLE WAS "POTTY DAKE ENGINE".

TITLE
A MODEL OF A STEAM ENGINE TO THE
"DAKE" DESIGN.

DRAWING CONTENTS
GENERAL ARRANGRMENT, NOTES,
ISOMETRIC VIEW, BILL OF MATERIALS

PROJECT No 09E-51-00
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PROJECTION
DATE NOVEMBER 2020
SHEET: 01 OF 03

MODEL SCALE: 1:1
DWG SCALE: 1:1 @A3 OR AS SHOWN
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A3 No: 09E-51-00-SHT01

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