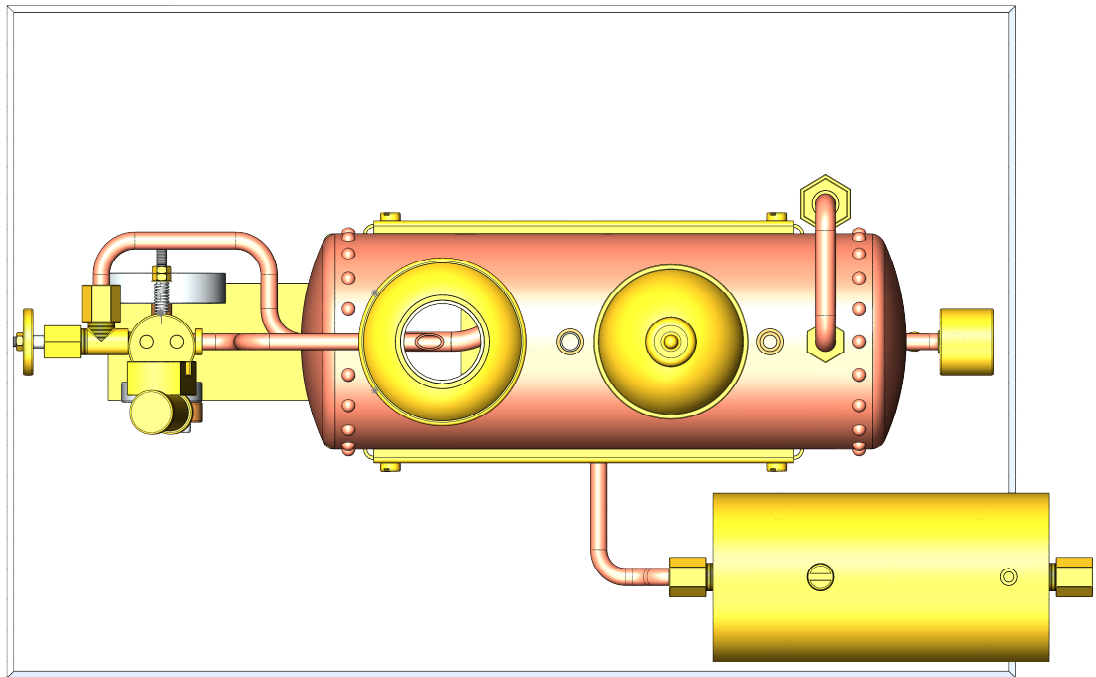
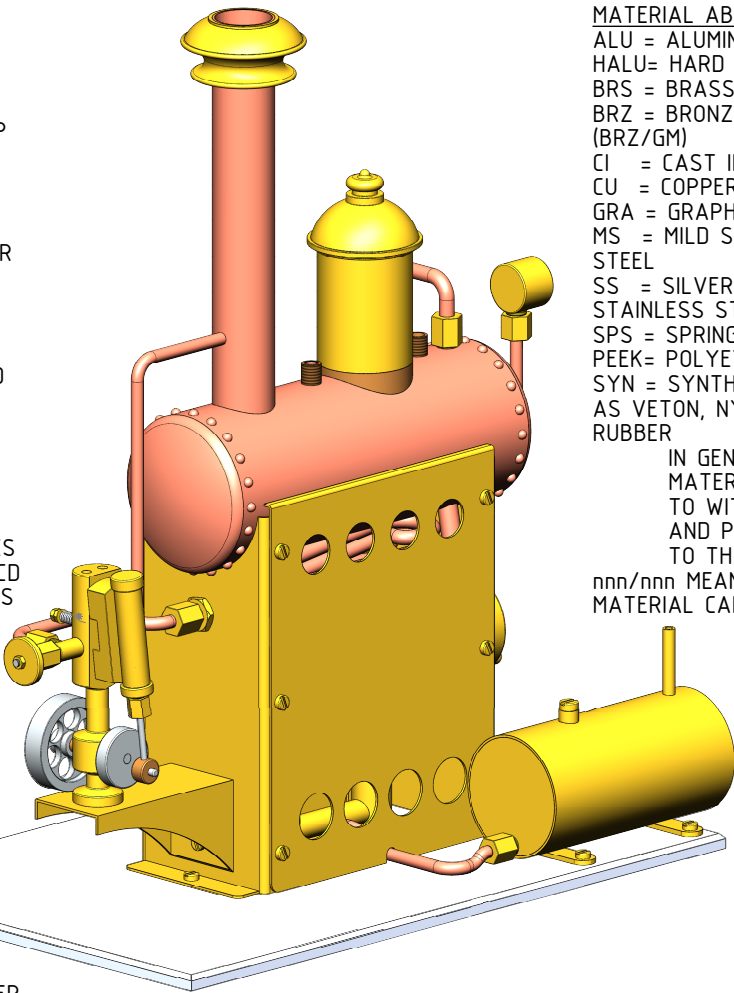


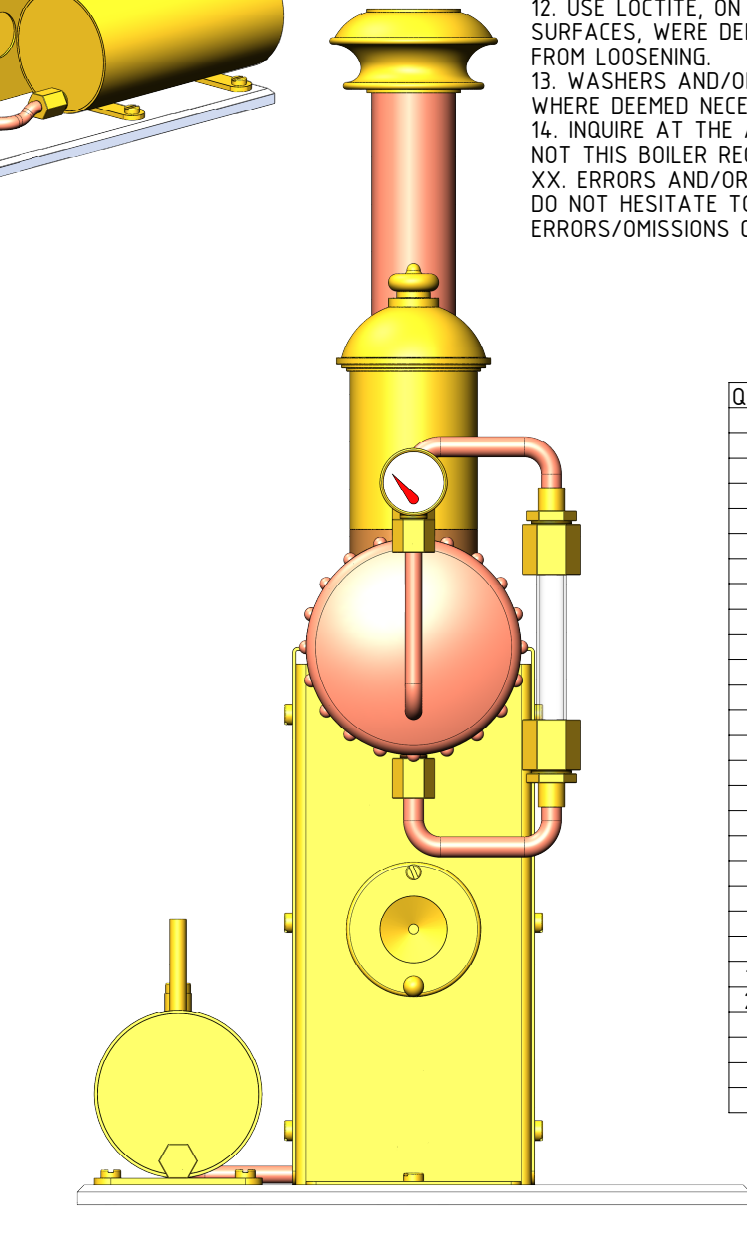
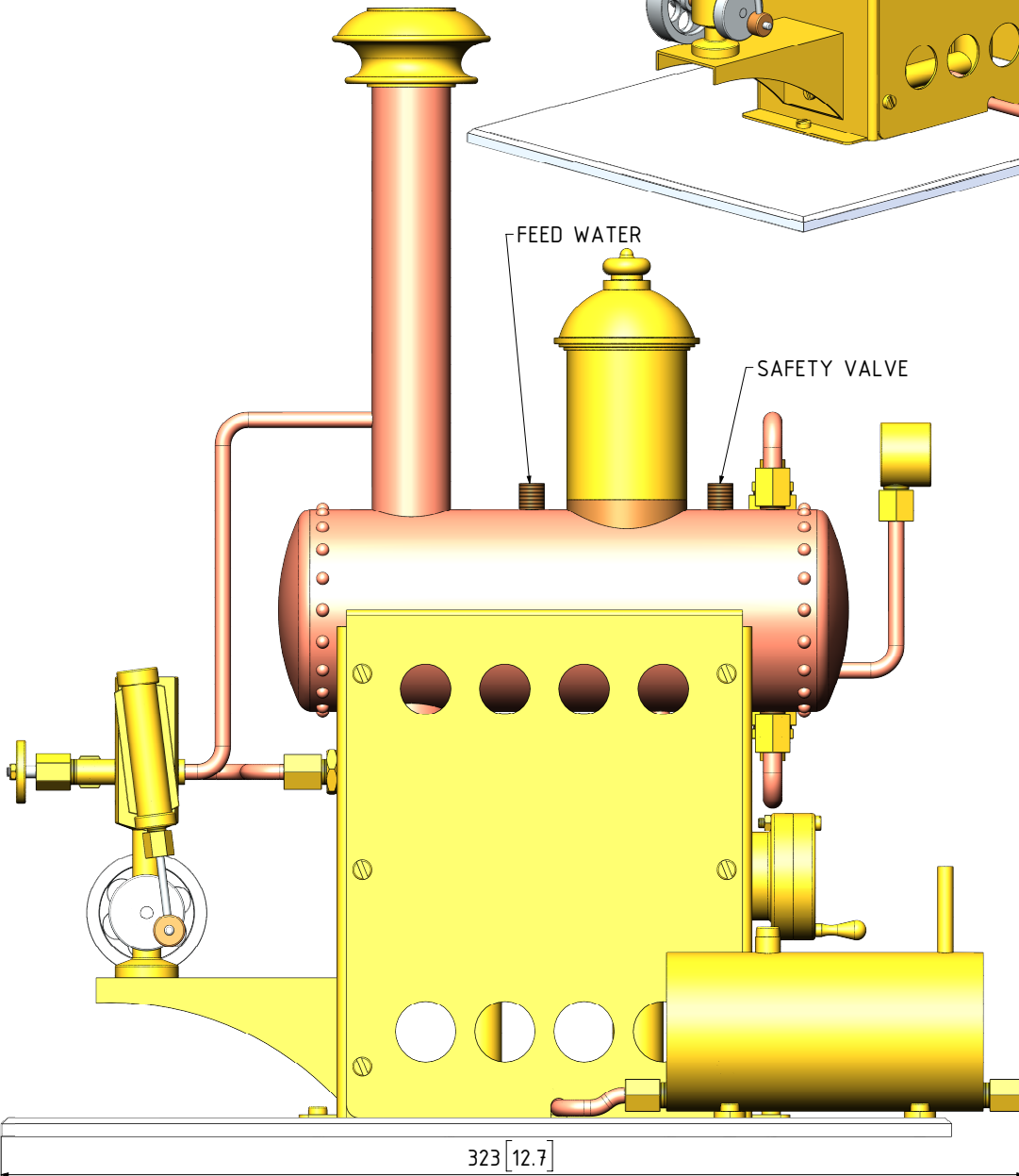
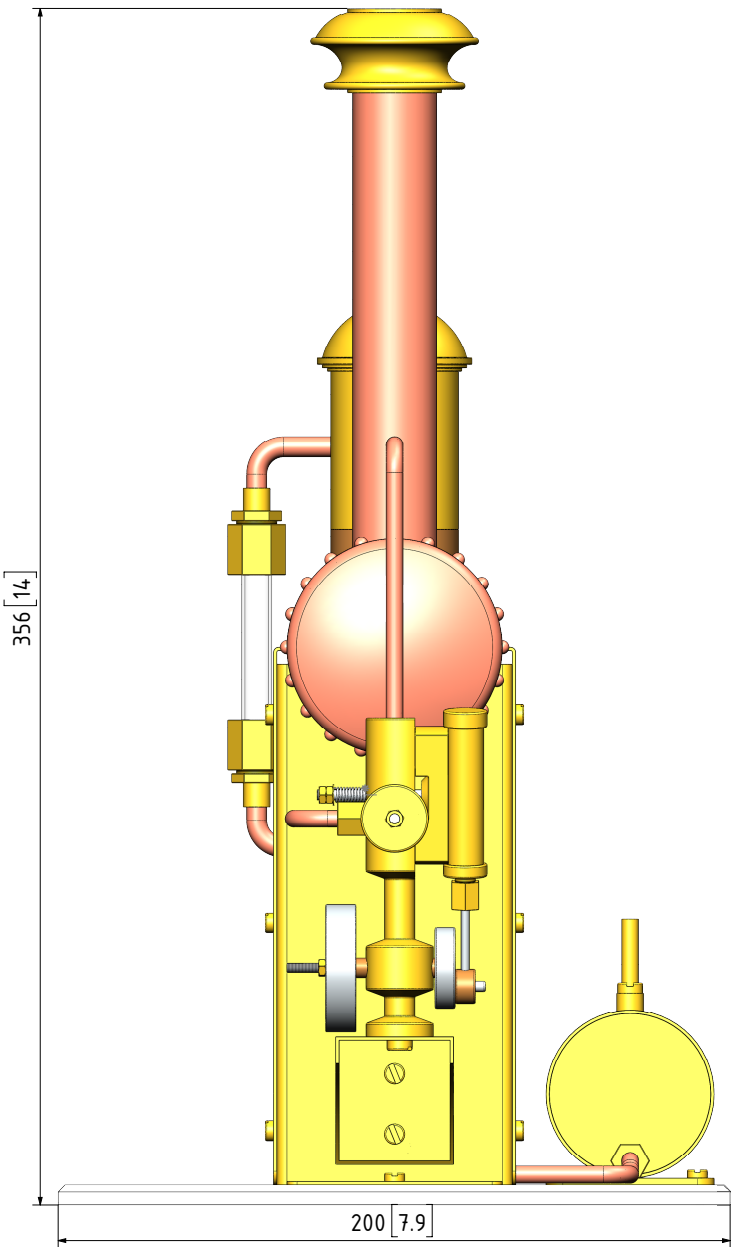


OTHER ABBREVIATIONS
DP = DEEP
DAA= DRILL AFTER
ASSEMBLY
D&TAA= DRILL AND TAP
AFTER ASSEMBLY
CF = CLOSE FIT (SIZE
FOR SIZE)
PF = PRESS FIT
PFAA= PRESS FIT AFTER
ASSEMBLY
PCD = PITCH CIRCLE
DIAMETER
RM = REAM
HEX = HEXACON, 6SIDED
CP = COMPRESSED
KNL = KNURLED
CSK = COUNTERSINK
PL = PLACES
DWL= DOWEL
SPF=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



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

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.



QTY.	PART NUMBER
1	01-36-00-1-01-BASE MOUNTING PLATE
1	01-36-00-1-02-BOILER BASE
1	01-36-00-1-03-FIRE HOLE
1	01-36-00-1-04-SPIRIT BURNER
1	01-36-00-1-05-FUELTANK
1	01-36-00-1-06-BOILER
3	01-36-00-1-07-BOILER NIPPLE
2	01-36-00-1-08-BOILER SYPHON PIPE
1	01-36-00-1-09-SUPERHEATER COIL
1	01-36-00-1-10-WATER LEVEL GAUGE
1	01-36-00-1-11-PRESSURE GAUGE
1	01-36-00-1-12-ENGINE BLOCK
1	01-36-00-1-13-STEAM SUPPLY VALVE
1	01-36-00-1-14-STEAM SUPPLY PIPE
1	01-36-00-1-15-EXHAUST PIPE
1	01-36-00-2-01-CYLINDER
1	01-36-00-2-02-CRANK SHAFT+FLYWHEEL
1	01-36-00-2-03-PISTON+ROD
1	01-36-00-2-04-SPRING
5	01-36-00-M3 NUT
1	01-36-00-M3 WASHER
1	01-36-00-M3x18 PAN HEAD SCREW
14	01-36-00-M4 NUT
20	01-36-00-M4x6 PAN HEAD SCREW
1	01-36-00-M5 NUT
1	01-36-00-M5x12 PAN HEAD SCREW
1	01-36-00-M5x8 PAN HEAD SCREW
2	01-36-00-M8 SPECIAL NUT

NOTES: THIS DESIGN IS BASED ON A SKETCH WHICH I FOUND ON THE INTERNET. THE SKETCH AND ACCOMPANIED ARTICLE WERE BY W.MARSHALL BLACK. DATE AND MAGAZINE ARE UNKNOWN

TITLE
A VERY SIMPLE STATIONARY STEAM PLANT
FOR BEGINNERS

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

PROJECT No 01-36-00
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PROJECTION
DATE JULY 2019
SHEET: 01 OF 04

MODEL SCALE: 1:1
DWG SCALE: 1:1 @A3 OR AS SHOWN
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A3 No: 01-36-00-SHT01

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