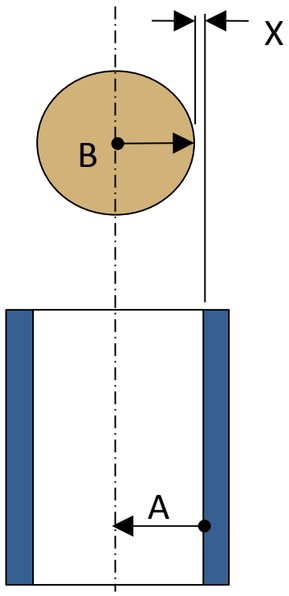
Design Requirement
ball must not be too tight in barrel (LSL)
ball must not be too lose in barrel (USL)

Failure Mode if Requirement is not met
difficult/impossible to load musket (<LSL)
ball does not exit barrel with lethal velocity (>USL)

X	X LSL	X USL	X RANGE
	+0.100	+0.300	0.200

Target X	**+0.200**	**±0.100**

	±	component	from	to	nominal	tolerance	contrib	remarks
A	+	BARREL	edge	centre	9.200	±0.030	30%	
B	-	BALL	centre	edge	9.000	±0.070	70%	
C	+						0%	
D	+						0%	
E	+						0%	
F	+						0%	
G	+						0%	
H	+						0%	
I	+						0%	
J	+						0%	
K	+						0%	
L	+						0%	
M	+						0%	
N	+						0%	
O	+						0%	
P	+						0%	
Q	+						0%	
R	+						0%	
S	+						0%	
				Actual X	**+0.200**	**±0.100**	100%	



X MIN	X MAX	X RANGE	tol used
+0.100	+0.300	0.200	100%
<LSL	>LSL<USL	>USL	
0%	100%	0%	100%
0.00%	99.99%	0.00%	

Major Uncertainties/Assumptions
None

Conclusions
Analysis is accepted

Recommendations
Make Go/No Go gauges for both barrel and ball

