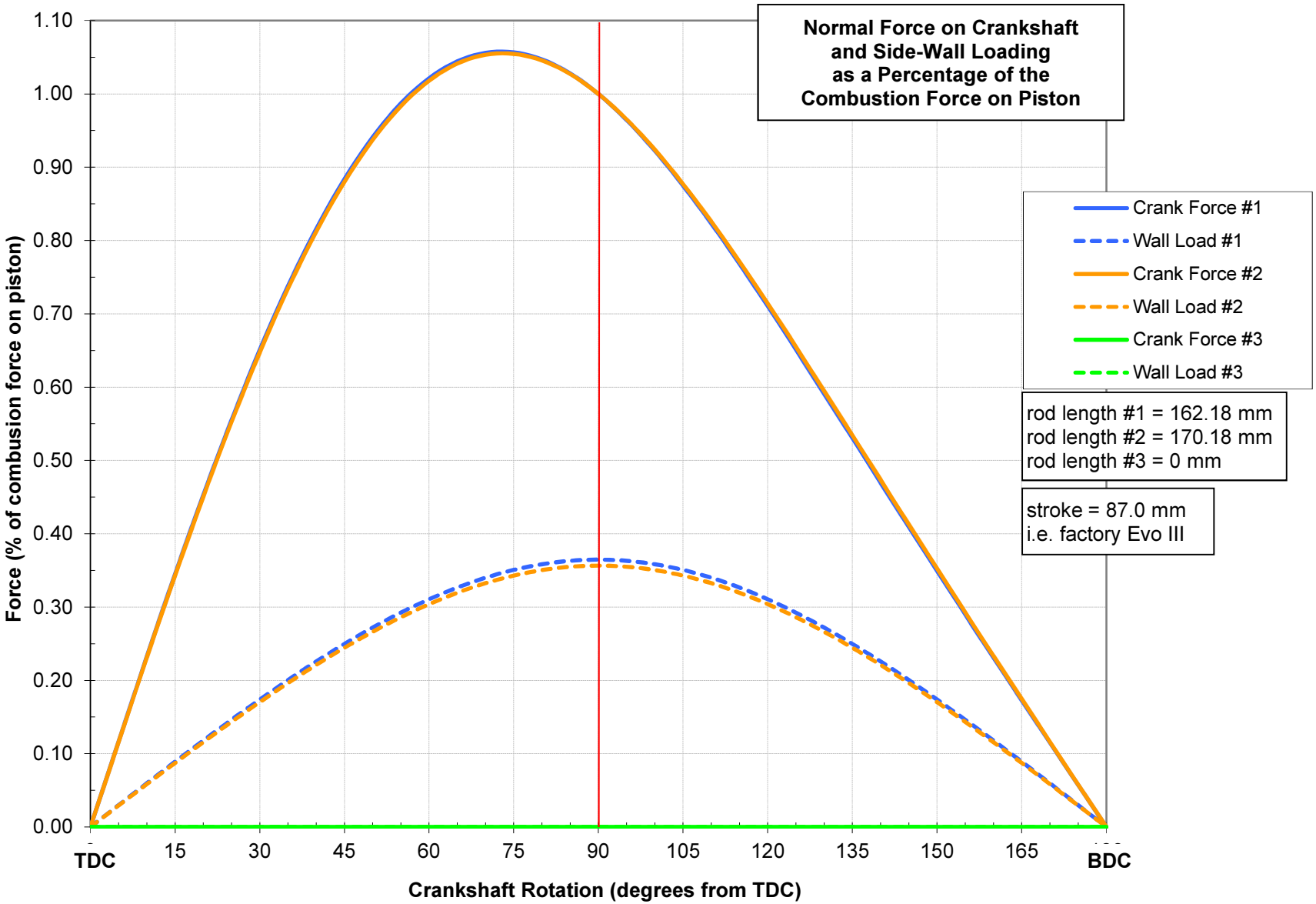
Normal Force on Crankshaft
and Side-Wall Loading
as a Percentage of the
Combustion Force on Piston
Crank Force #1
Wall Load #1
Crank Force #2
Wall Load #2
Crank Force #3
Wall Load #3
rod length #1 = 162.18 mm
rod length #2 = 170.18 mm
rod length #3 = 0 mm
stroke = 87.0 mm
i.e. factory Evo III
Force (% of combusion force on piston)
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
TDC
15
30
45
60
75
90
105
120
135
150
165
BDC
Crankshaft Rotation (degrees from TDC)