

Figure 1S. Chemical composition analysis of phosphorous coating crystals by Energy Dispersive X-ray Spectroscopy.

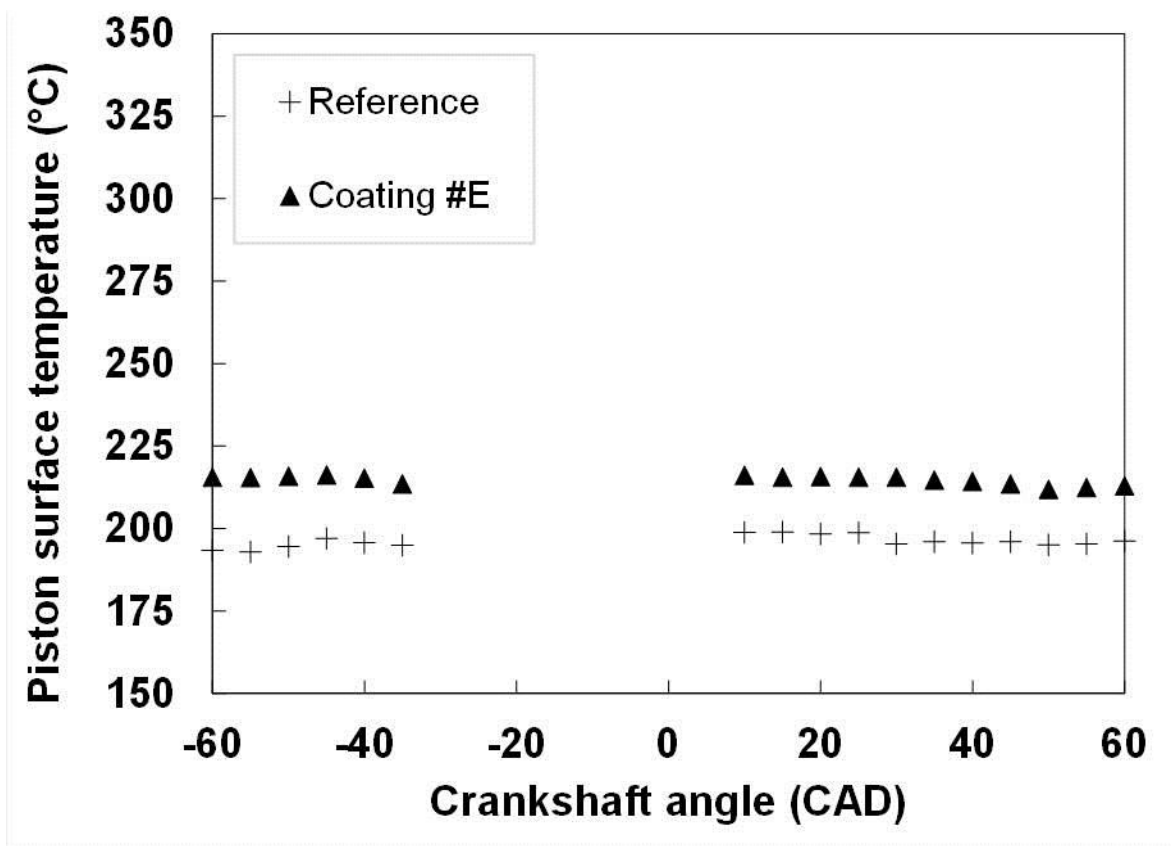


Figure 2S. Piston surface temperatures at 2000 rpm, 4 bar IMEP ($\lambda = 1.21$) at the end of exhaust stroke (from -60 to 0 CAD) and beginning of intake stroke (from 0 to 60 CAD).