



Powertrain platform engineering

Situation and objective

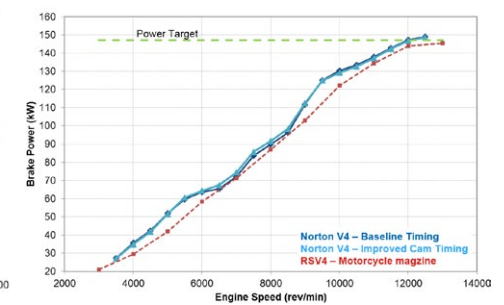
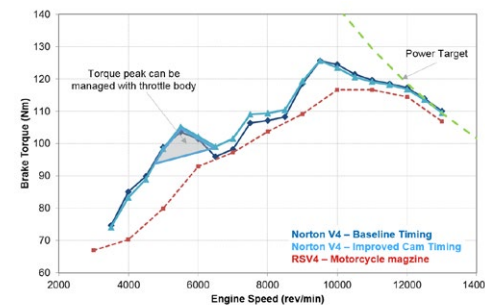
- Ricardo worked with Norton to create a powertrain family.
- By considering the family during concept, opportunities to drive commonality were created:
 - V4 1200cc
 - Parallel twin 650cc
 - Supercharged version of 650cc
- Number of new part numbers were minimised, creating simpler inventory and production line.

Approach

- Ricardo were responsible for concept and definitive design of the engine, specifying the cooling system and fuel system requirements
- Norton were responsible for development and validation

Results and benefits

- Using this approach, we reduced design costs, made efficiency savings and reduced development effort



Power and torque values were checked using Ricardo WAVE performance prediction