Within the PCMM system, the powder formulation components (Active Pharmaceutical Ingredient (API) and excipients) are gravimetrically fed into a vertical, in-line mixer at fixed mass ratios, proportionate to the formulation composition. The homogeneous blends leaving the mixer are then continuously fed into a rotary tablet press and compressed into tablet cores. The tablet cores are vacuum conveyed into a semi-continuous film coating system, where a color film coat is applied to the surface of the tablet core. The film coated tablet are then packaged into drums for subsequent packaging into bottle or blister configurations via a separate operations.