Short-Period Strong Focusing Undulator Scheme, A.S. KHLEBNIKOV, A.V. SMIRNOV, V.A. BAZYLEV, A.V. TULUPOV, RRC KI; R. TATCHYN, SLAC - A novel short-period hybrid/PM undulator scheme is considered. The magnetic structure does not contain small-scale PM pieces. The periodic magnetic field is generated by surface profiles machined into the steel yokes. The structure can provide 2.7 kGauss magnetic field amplitude and averaged gradients 150 - 500 T/m for 1/2 gap/period ratio and 4.5 mm vertical gap. Dipole and quadrupole field components are tunable. 3D magnetostatic field computations and data of measurements obtained for 9mm-period mock-up structure are discussed.