

动态方程: $F = mg + m\ddot{x}$

非线性影响: 力的单向性, 间隙依赖性, 磁饱和和边缘磁通, 漏磁

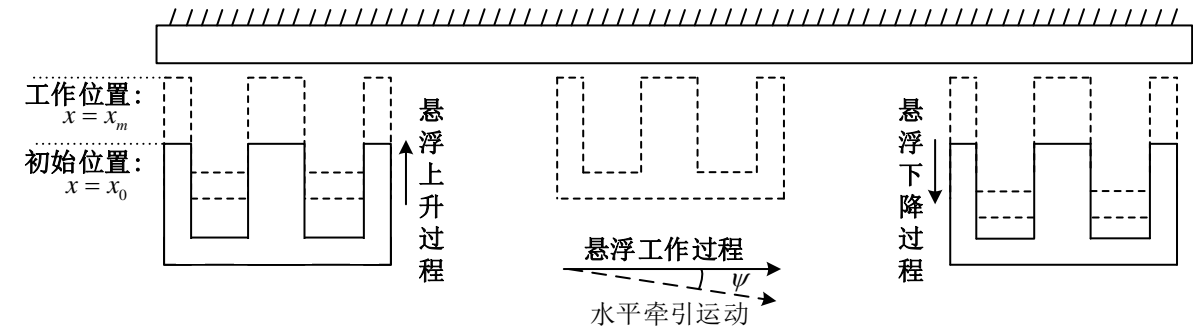
水平牵引力扰动

$F = mg + m\ddot{x} + (m\ddot{x}_h + c\dot{x}_h + kx_h)\sin\psi$

力的单向性, 间隙依赖性, 磁饱和和边缘磁通, 漏磁, 磁滞, 涡流

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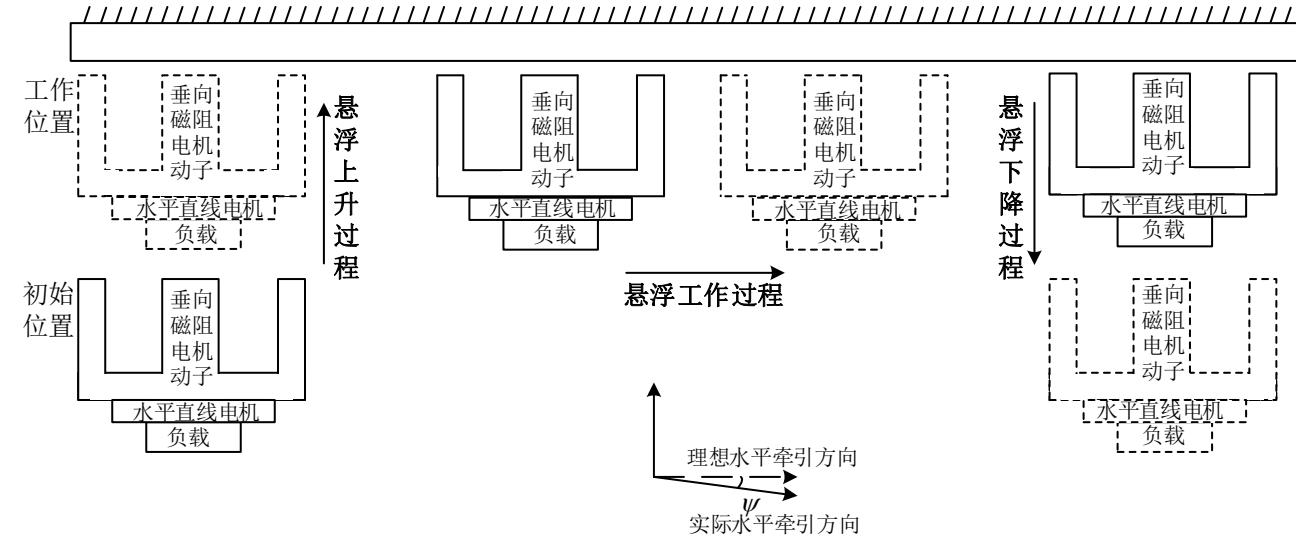
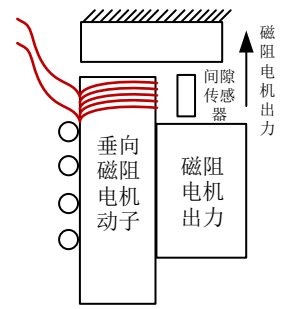
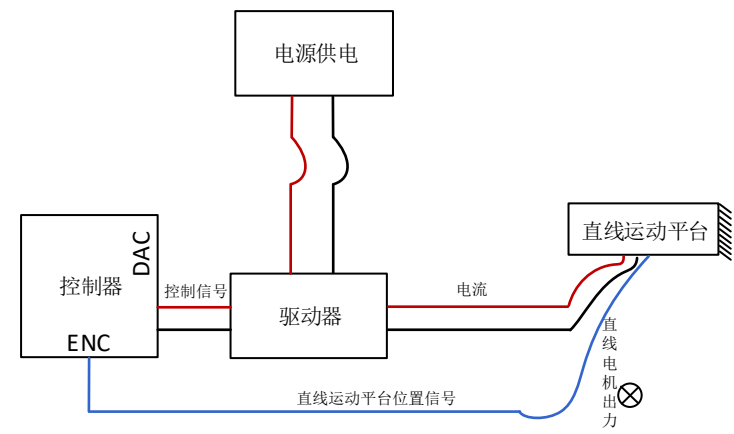
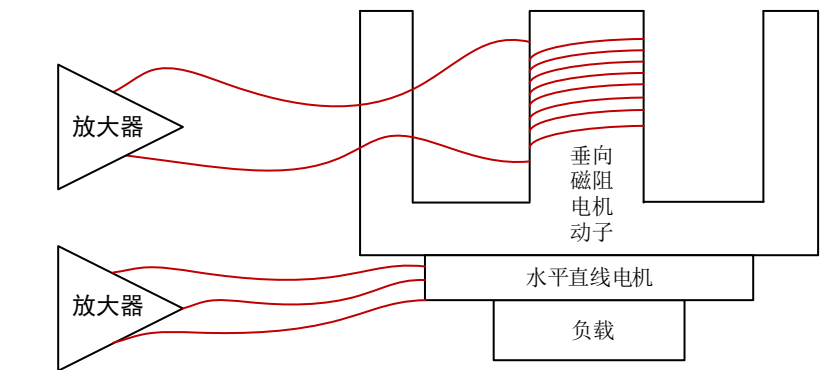
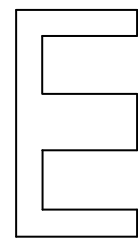
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非正交力扰动

间隙测量不匹配扰动

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