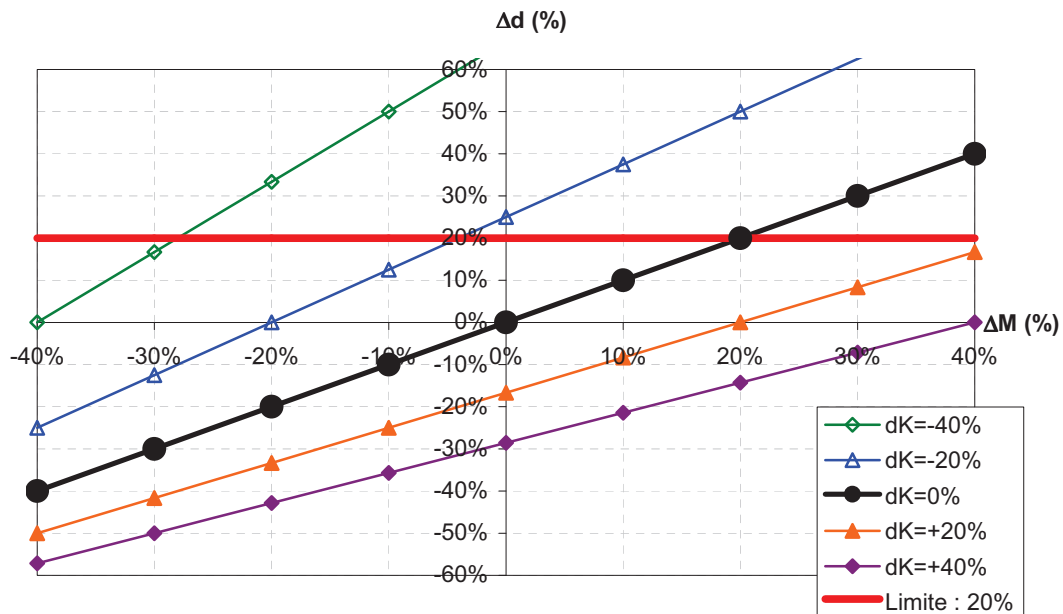
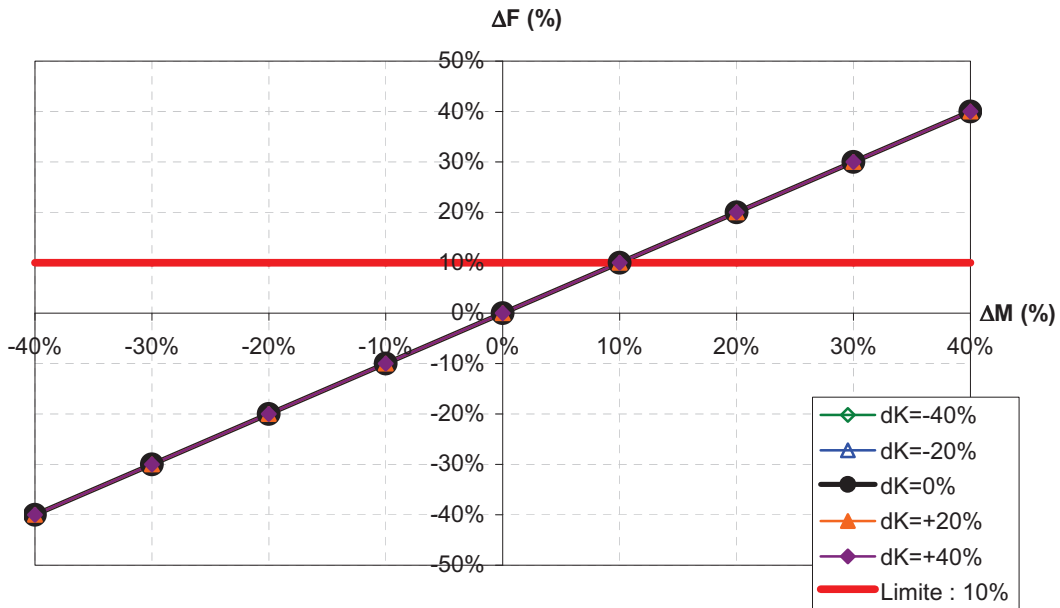


T = 0,1 s

Classe de sol : A

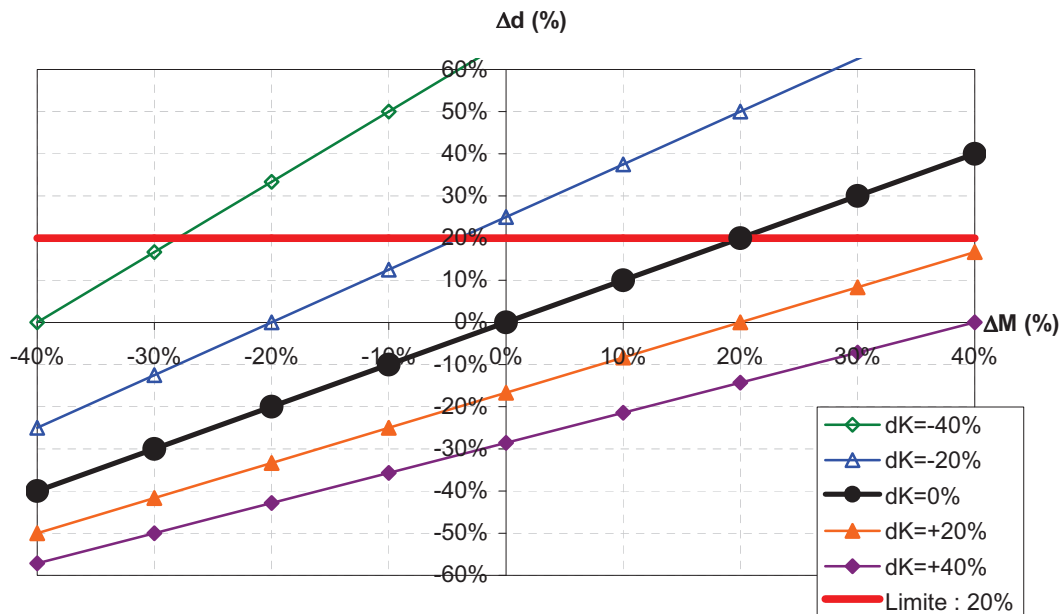
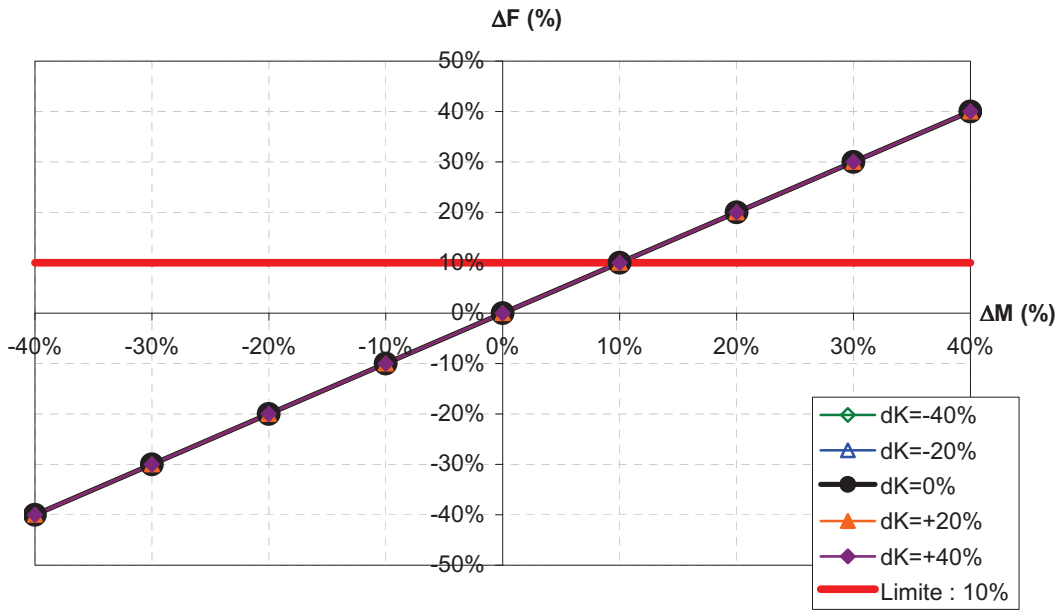
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,1 s

Classe de sol : B

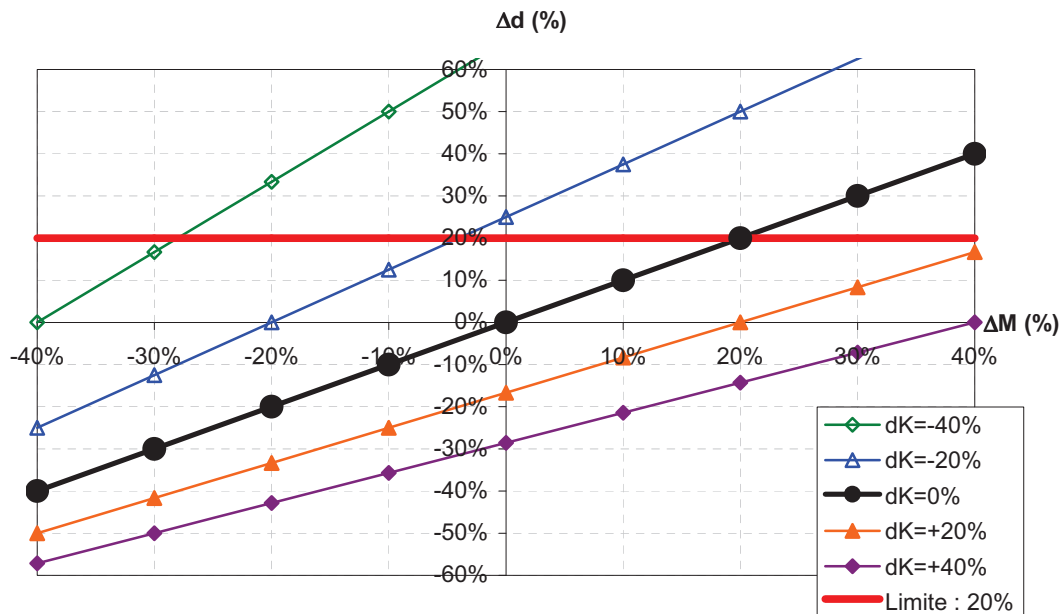
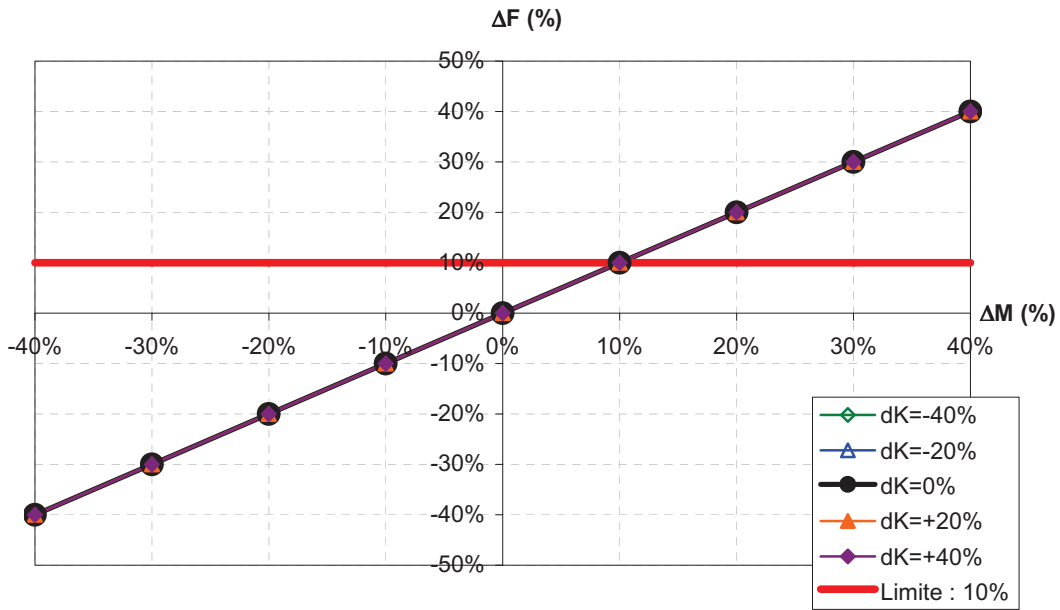
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,1 s

Classe de sol : C

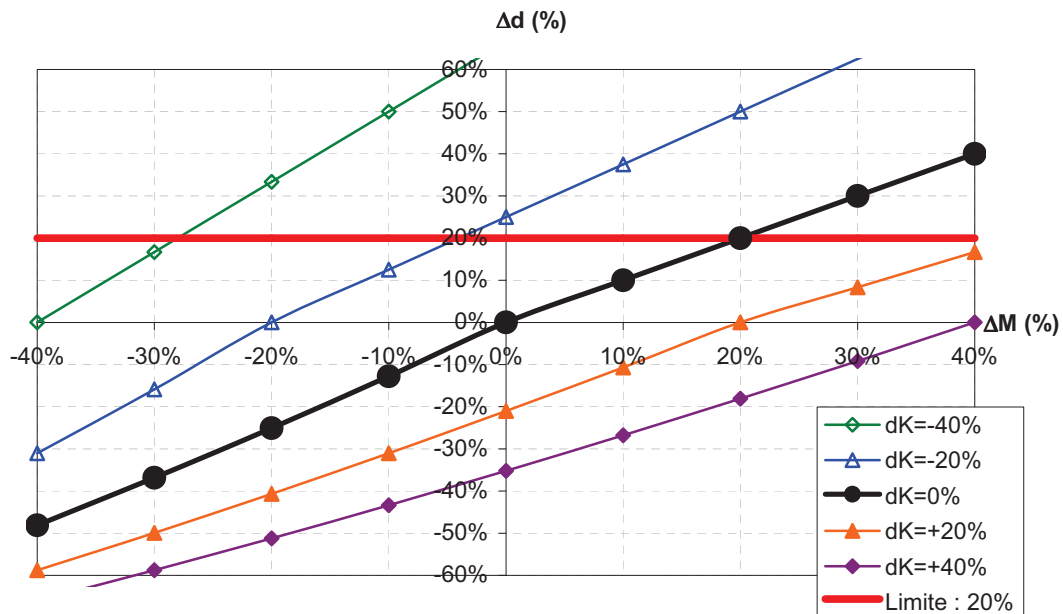
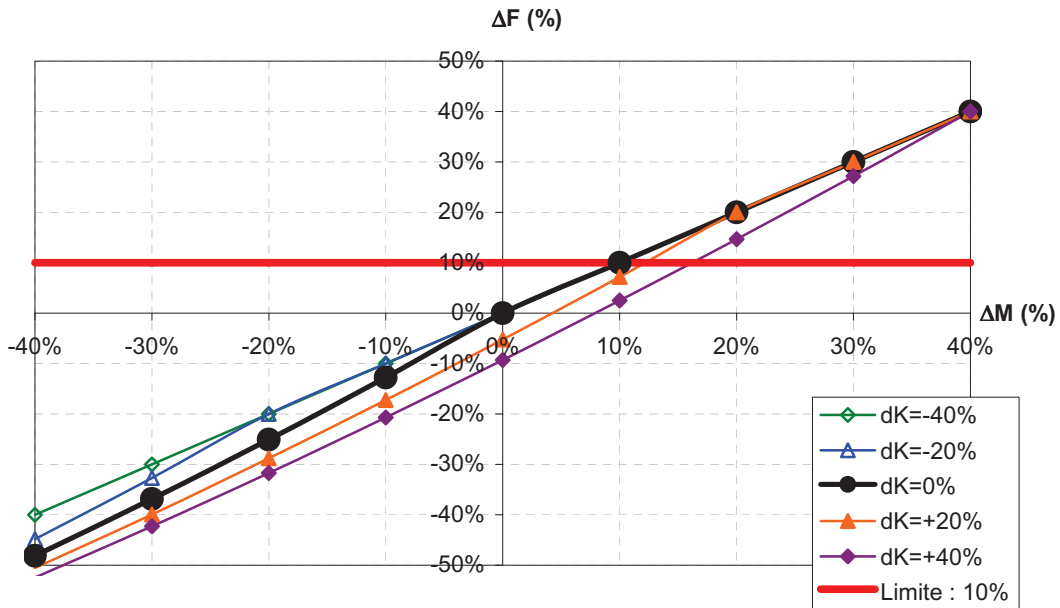
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,1 s

Classe de sol : D

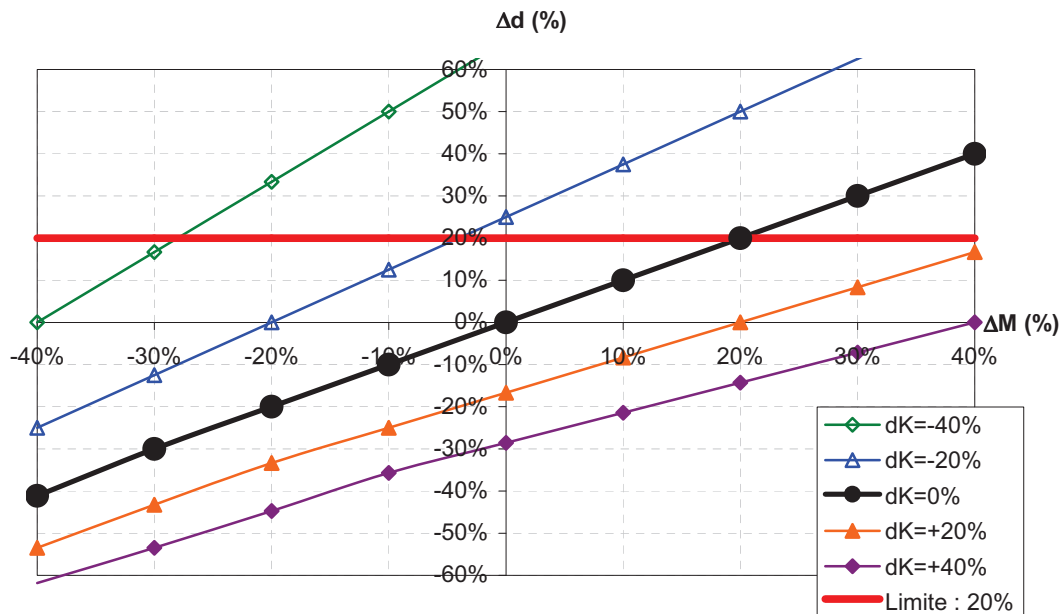
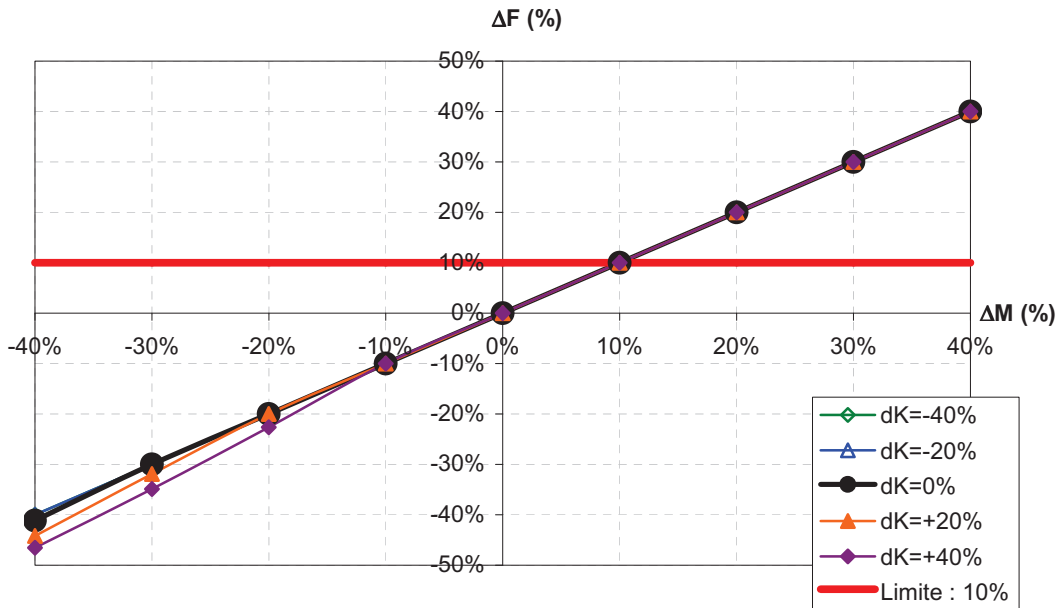
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -45\%$ $\Delta d = -31\%$	$\Delta F = -33\%$ $\Delta d = -16\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -48\%$ $\Delta d = -48\%$	$\Delta F = -37\%$ $\Delta d = -37\%$	$\Delta F = -25\%$ $\Delta d = -25\%$	$\Delta F = -13\%$ $\Delta d = -13\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -51\%$ $\Delta d = -59\%$	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -29\%$ $\Delta d = -41\%$	$\Delta F = -17\%$ $\Delta d = -31\%$	$\Delta F = -5\%$ $\Delta d = -21\%$	$\Delta F = 7\%$ $\Delta d = -11\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -52\%$ $\Delta d = -66\%$	$\Delta F = -42\%$ $\Delta d = -59\%$	$\Delta F = -32\%$ $\Delta d = -51\%$	$\Delta F = -21\%$ $\Delta d = -43\%$	$\Delta F = -9\%$ $\Delta d = -35\%$	$\Delta F = 3\%$ $\Delta d = -27\%$	$\Delta F = 15\%$ $\Delta d = -18\%$	$\Delta F = 27\%$ $\Delta d = -9\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,1 s

Classe de sol : E

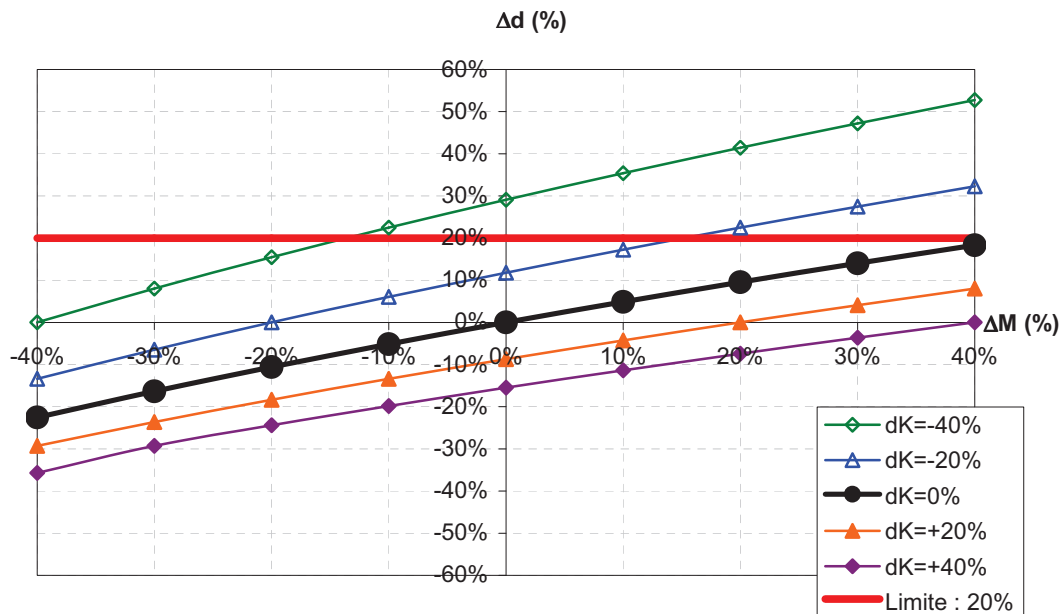
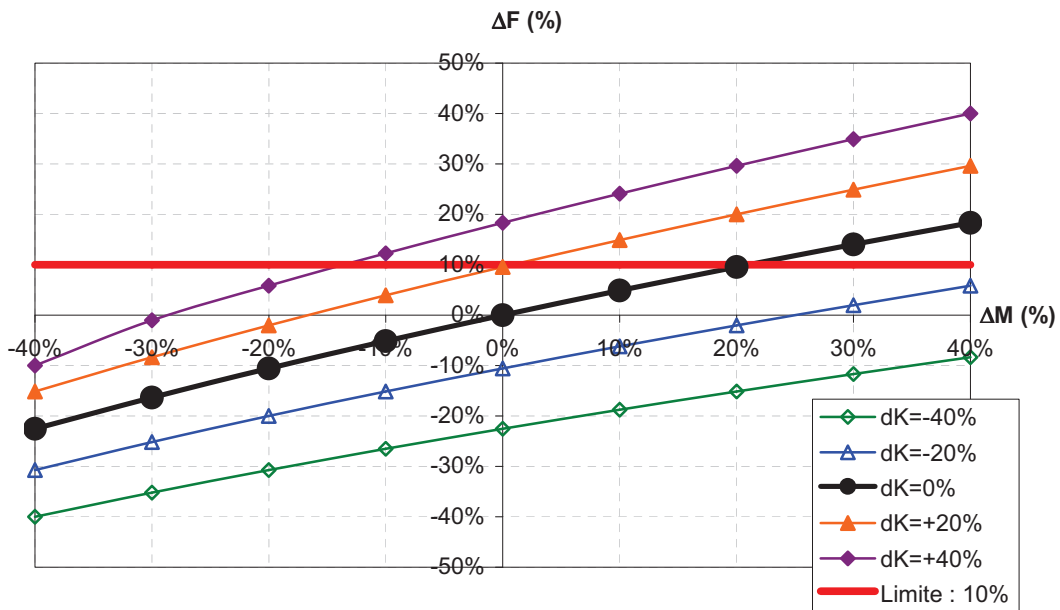
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -41\%$ $\Delta d = -41\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -44\%$ $\Delta d = -53\%$	$\Delta F = -32\%$ $\Delta d = -43\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -47\%$ $\Delta d = -62\%$	$\Delta F = -35\%$ $\Delta d = -53\%$	$\Delta F = -23\%$ $\Delta d = -45\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,3 s

Classe de sol : A

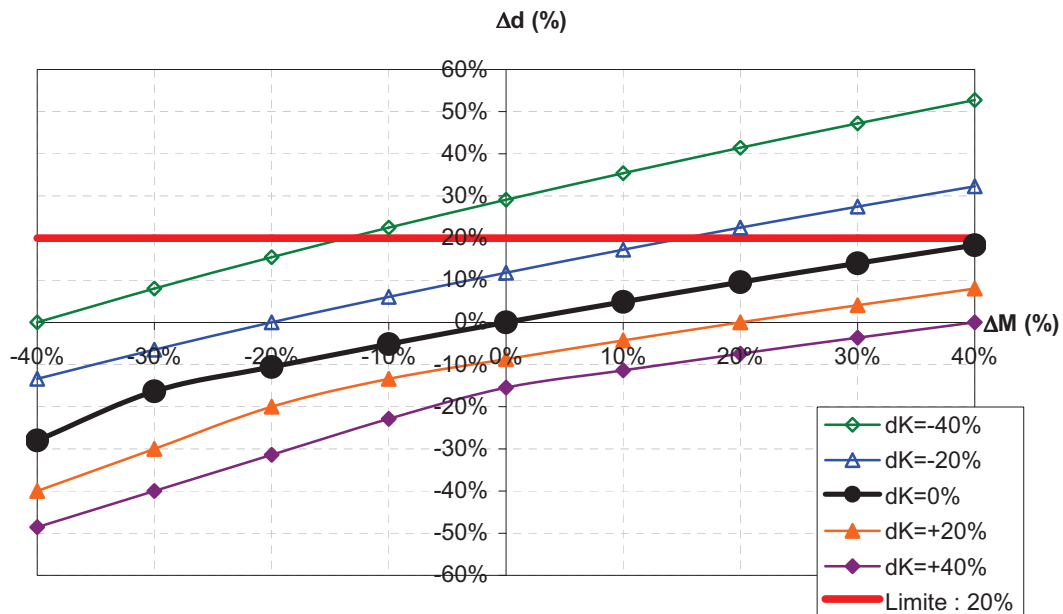
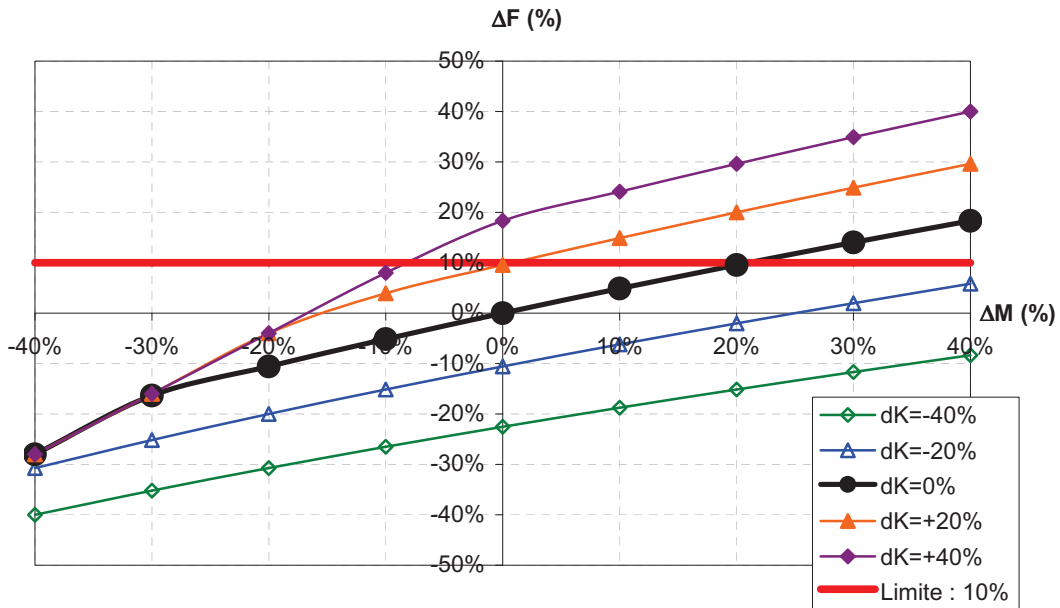
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,3 s

Classe de sol : B

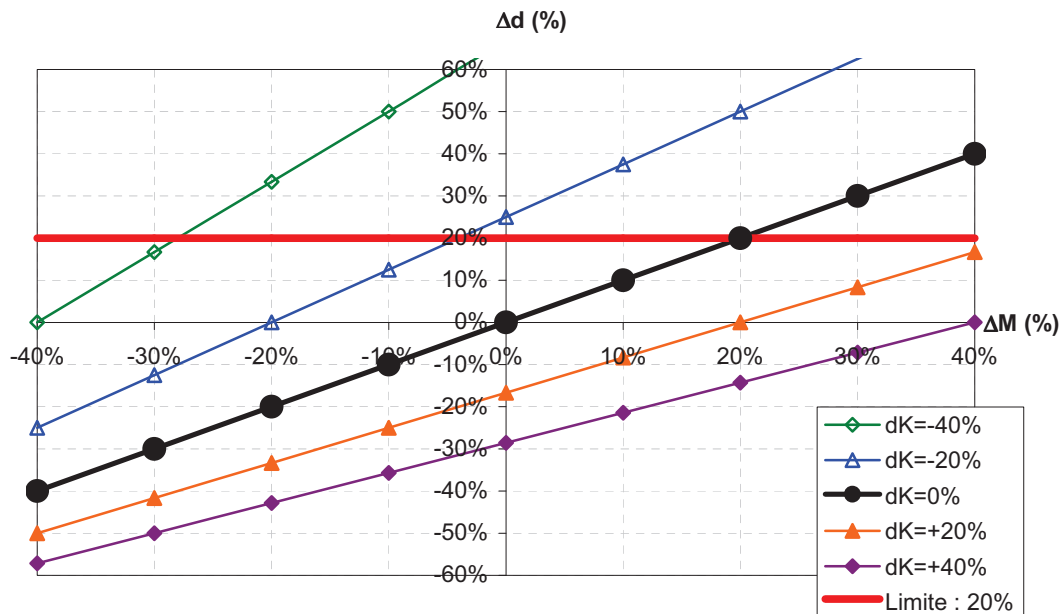
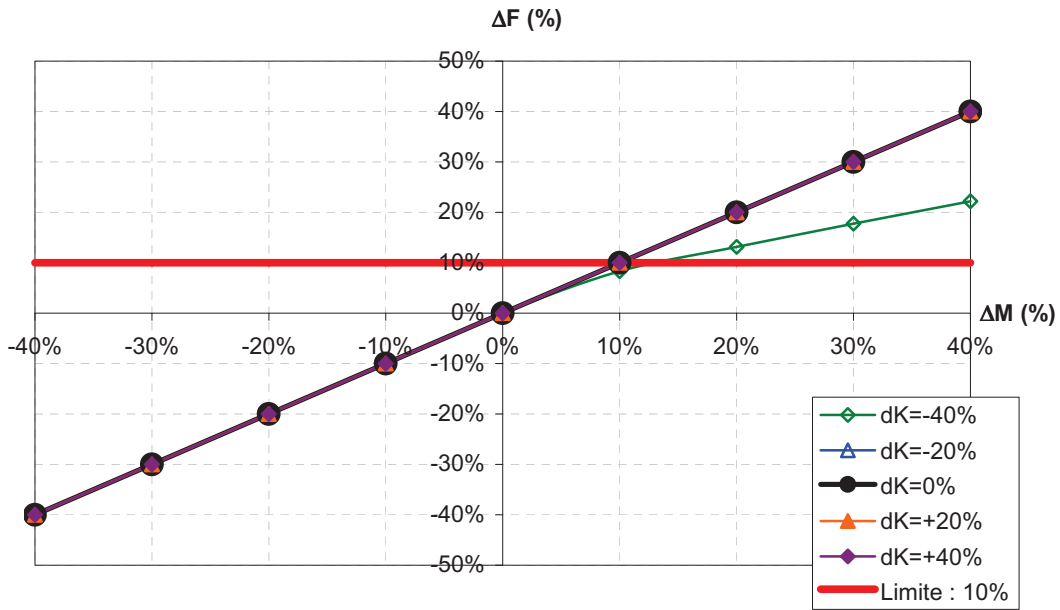
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -28\%$ $\Delta d = -28\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -28\%$ $\Delta d = -40\%$	$\Delta F = -16\%$ $\Delta d = -30\%$	$\Delta F = -4\%$ $\Delta d = -20\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -28\%$ $\Delta d = -49\%$	$\Delta F = -16\%$ $\Delta d = -40\%$	$\Delta F = -4\%$ $\Delta d = -31\%$	$\Delta F = 8\%$ $\Delta d = -23\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,3 s

Classe de sol : C

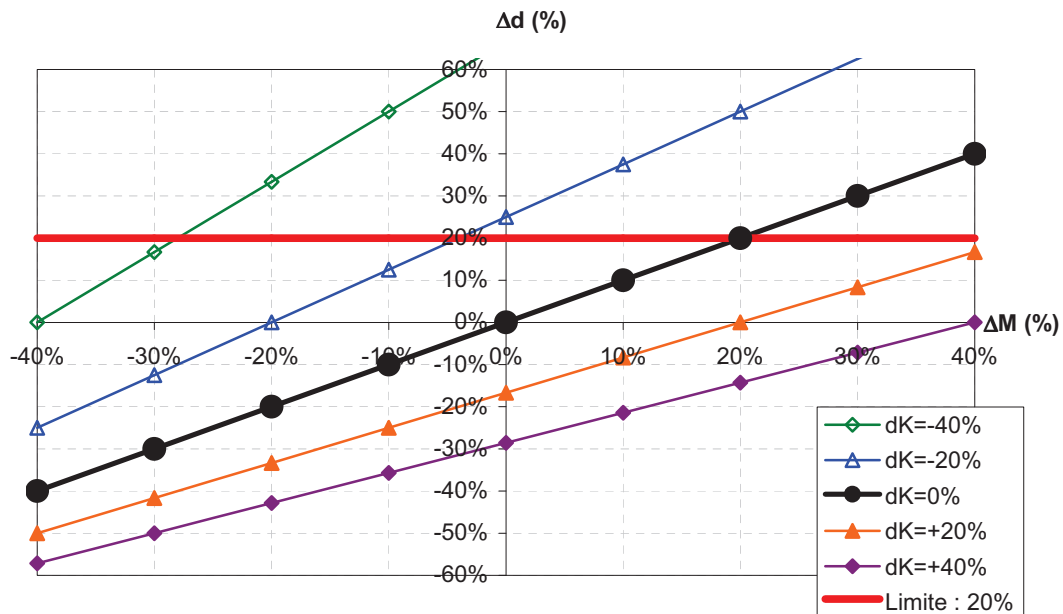
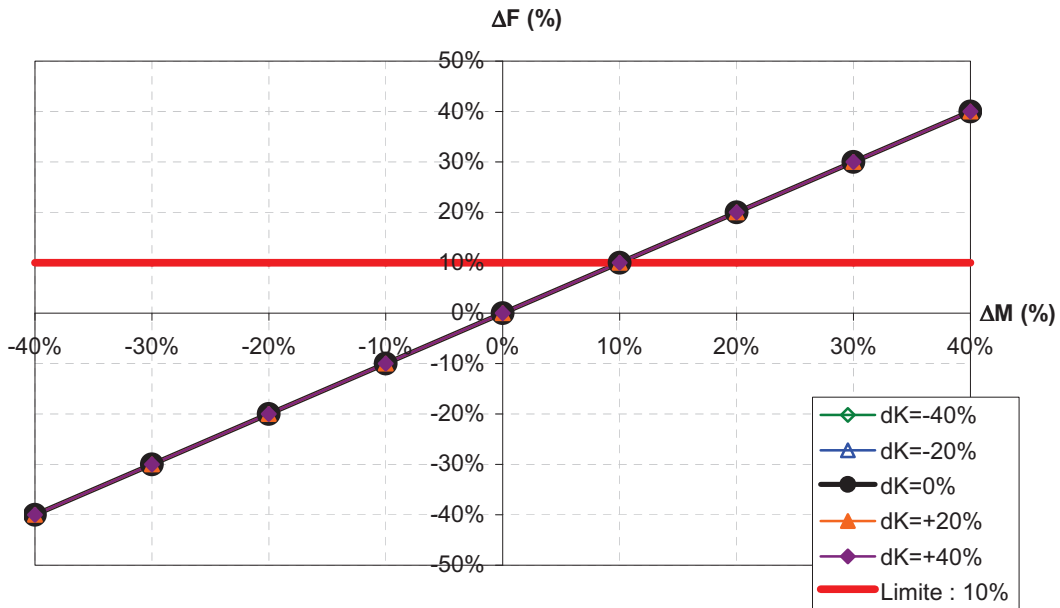
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 8\%$ $\Delta d = 81\%$	$\Delta F = 13\%$ $\Delta d = 89\%$	$\Delta F = 18\%$ $\Delta d = 96\%$	$\Delta F = 22\%$ $\Delta d = 104\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,3 s

Classe de sol : D

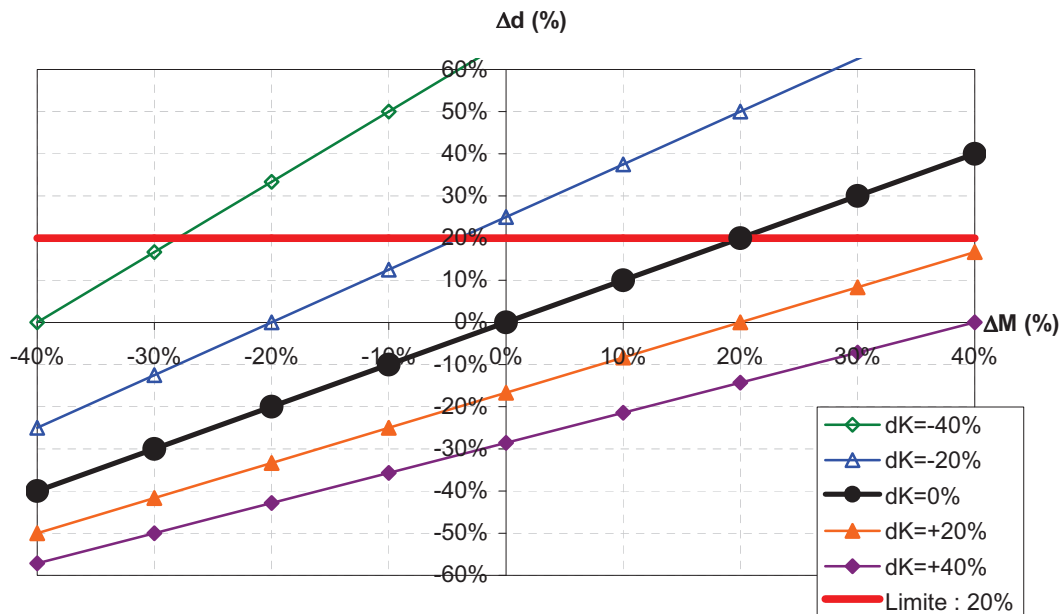
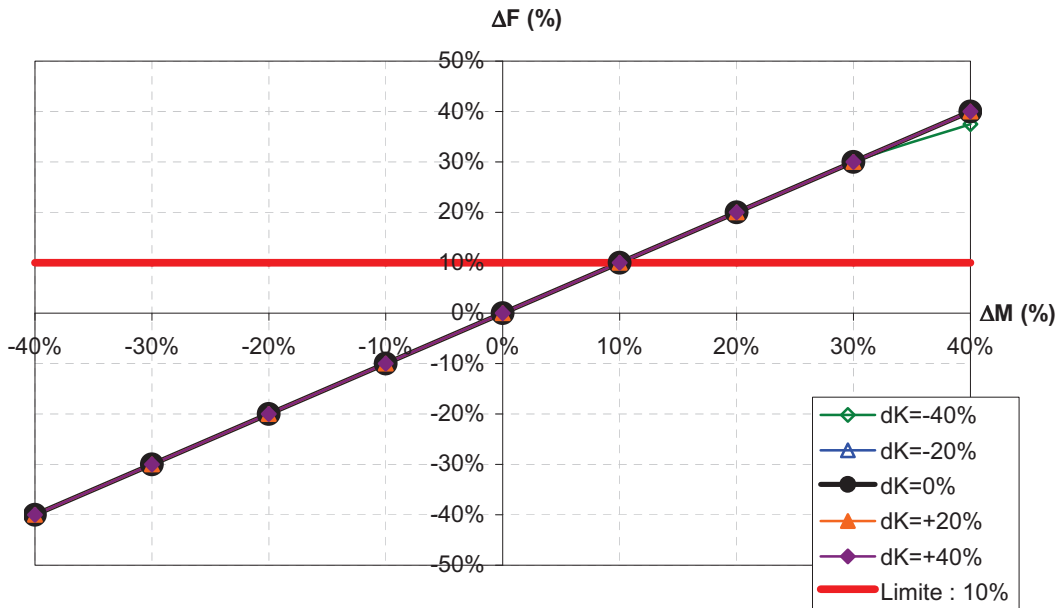
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 40\%$ $\Delta d = 133\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,3 s

Classe de sol : E

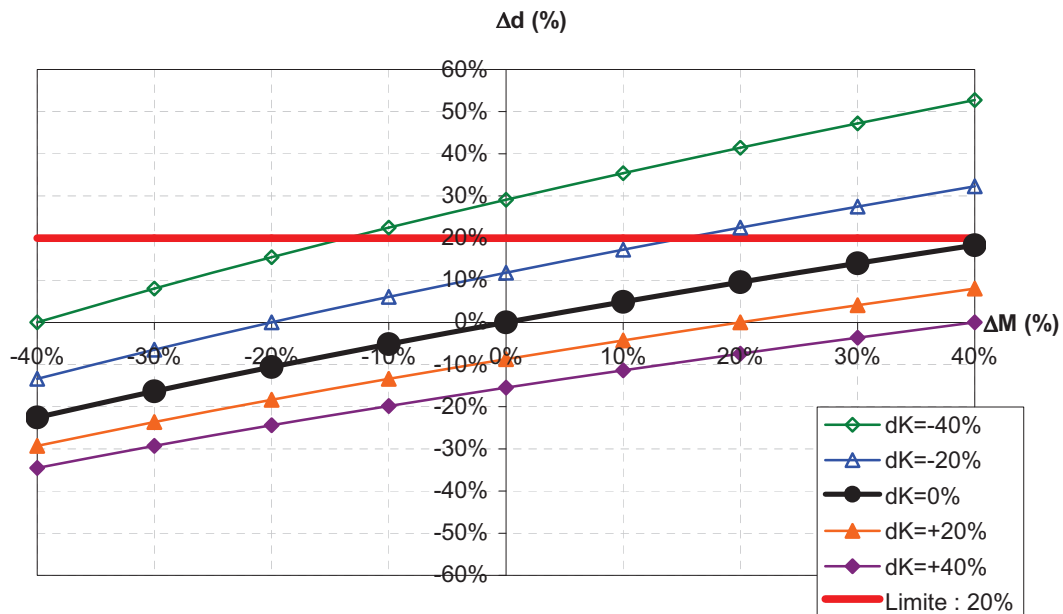
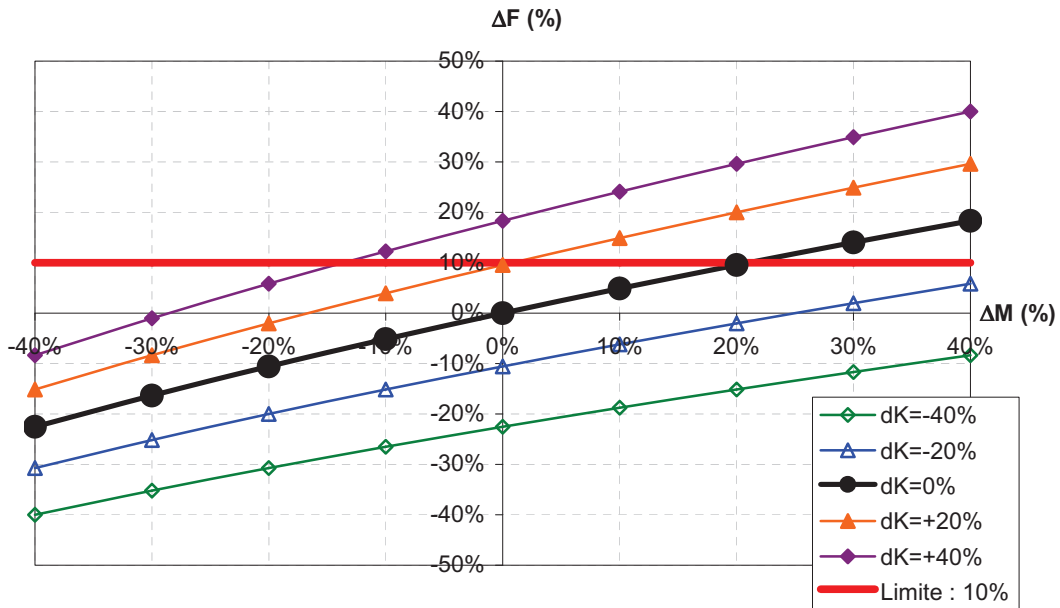
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -30\%$ $\Delta d = 17\%$	$\Delta F = -20\%$ $\Delta d = 33\%$	$\Delta F = -10\%$ $\Delta d = 50\%$	$\Delta F = 0\%$ $\Delta d = 67\%$	$\Delta F = 10\%$ $\Delta d = 83\%$	$\Delta F = 20\%$ $\Delta d = 100\%$	$\Delta F = 30\%$ $\Delta d = 117\%$	$\Delta F = 37\%$ $\Delta d = 129\%$
-20%	$\Delta F = -40\%$ $\Delta d = -25\%$	$\Delta F = -30\%$ $\Delta d = -13\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -10\%$ $\Delta d = 13\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 10\%$ $\Delta d = 38\%$	$\Delta F = 20\%$ $\Delta d = 50\%$	$\Delta F = 30\%$ $\Delta d = 63\%$	$\Delta F = 40\%$ $\Delta d = 75\%$
0%	$\Delta F = -40\%$ $\Delta d = -40\%$	$\Delta F = -30\%$ $\Delta d = -30\%$	$\Delta F = -20\%$ $\Delta d = -20\%$	$\Delta F = -10\%$ $\Delta d = -10\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 20\%$ $\Delta d = 20\%$	$\Delta F = 30\%$ $\Delta d = 30\%$	$\Delta F = 40\%$ $\Delta d = 40\%$
20%	$\Delta F = -40\%$ $\Delta d = -50\%$	$\Delta F = -30\%$ $\Delta d = -42\%$	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -10\%$ $\Delta d = -25\%$	$\Delta F = 0\%$ $\Delta d = -17\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 30\%$ $\Delta d = 8\%$	$\Delta F = 40\%$ $\Delta d = 17\%$
40%	$\Delta F = -40\%$ $\Delta d = -57\%$	$\Delta F = -30\%$ $\Delta d = -50\%$	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -10\%$ $\Delta d = -36\%$	$\Delta F = 0\%$ $\Delta d = -29\%$	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 20\%$ $\Delta d = -14\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,8 s

Classe de sol : A

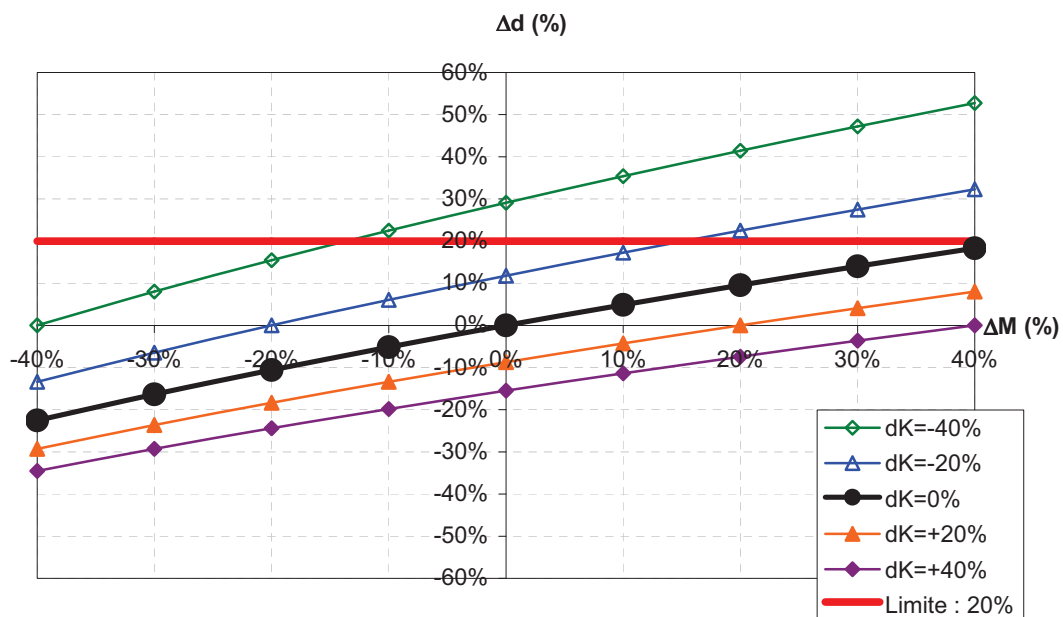
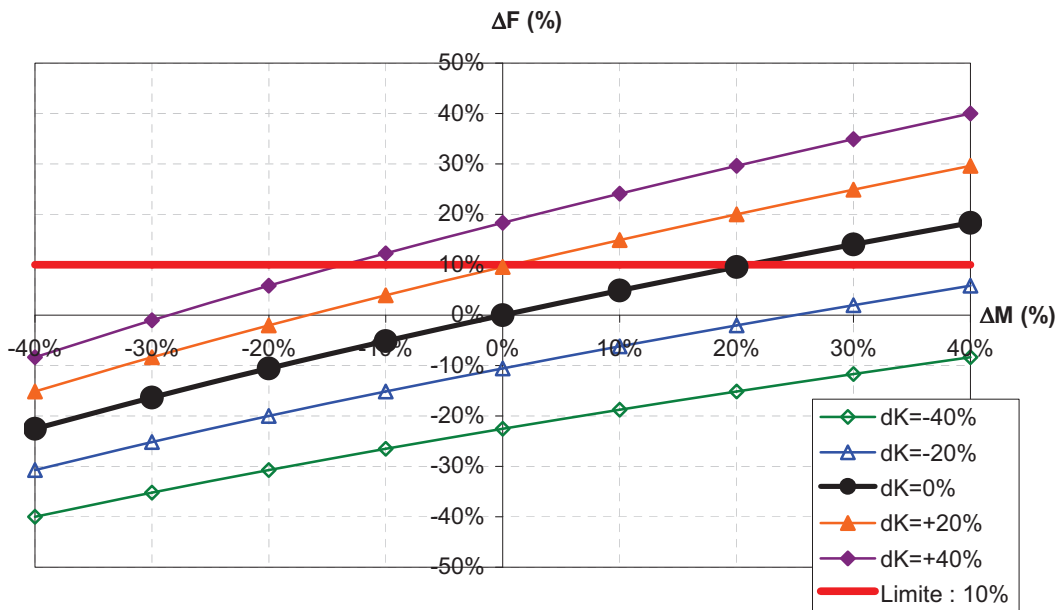
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,8 s

Classe de sol : B

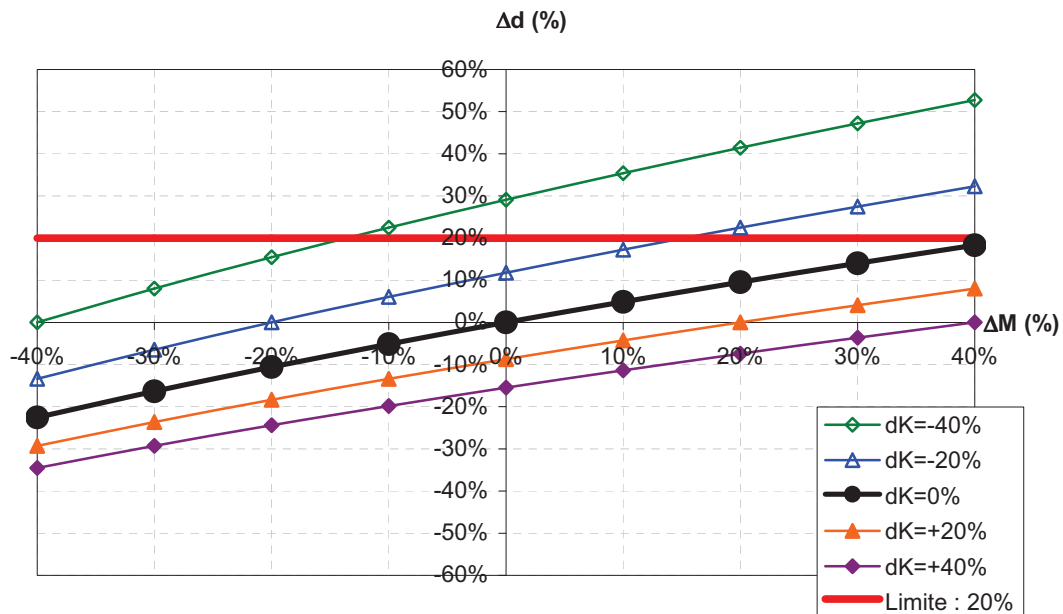
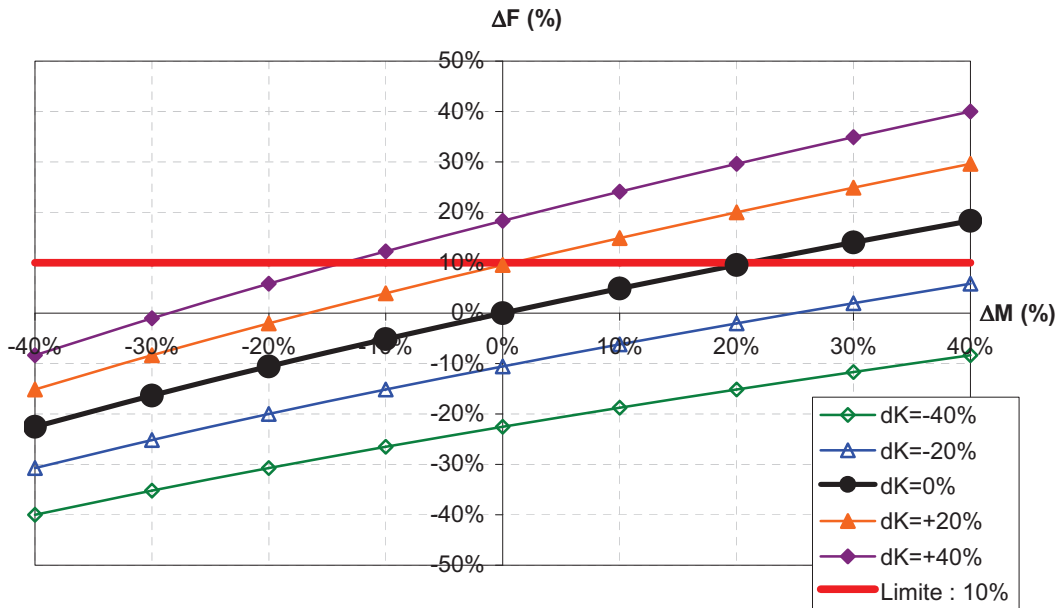
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,8 s

Classe de sol : C

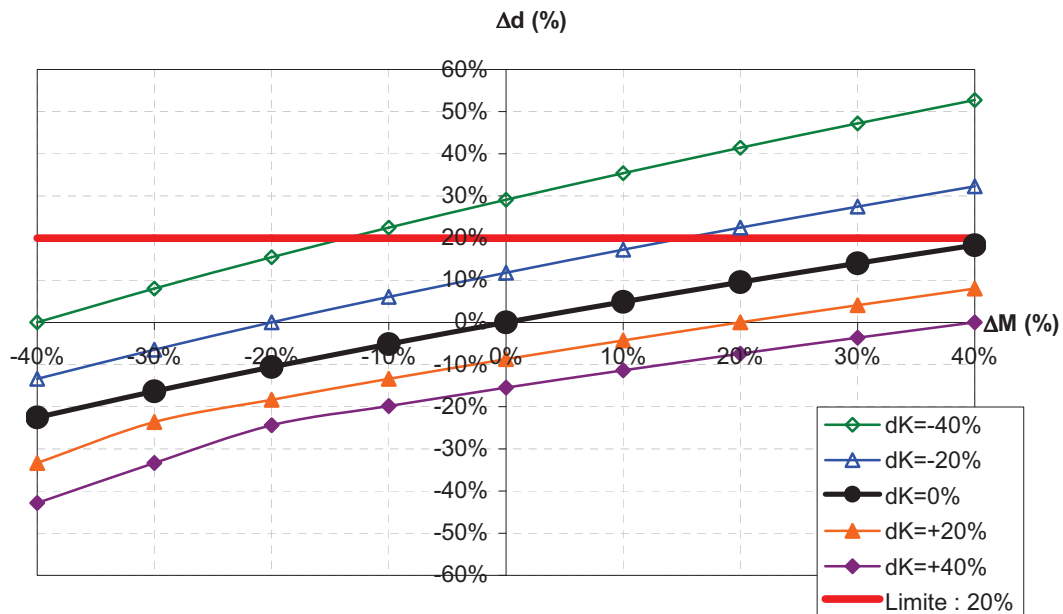
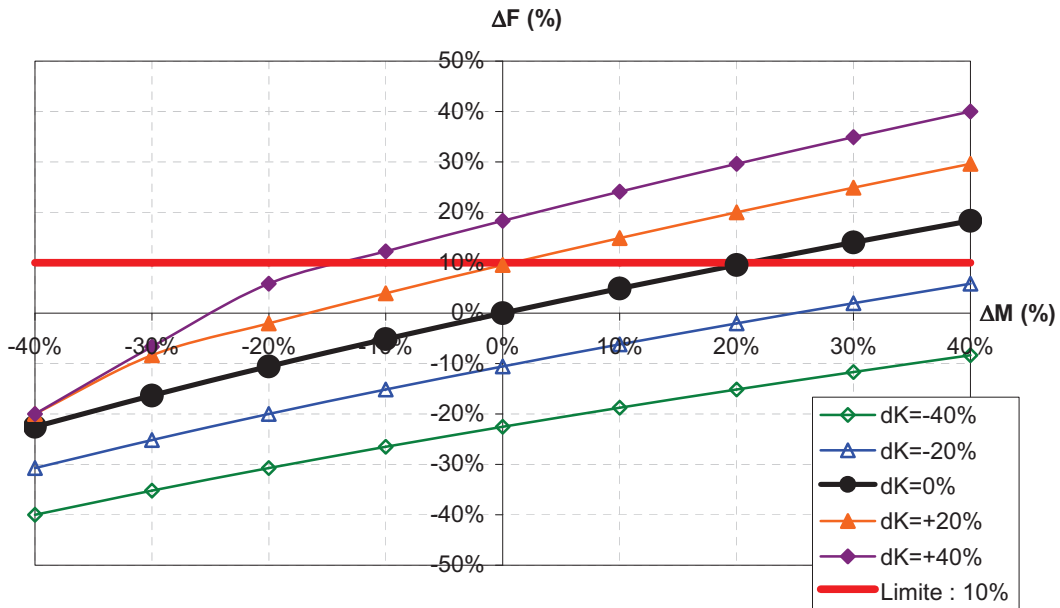
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,8 s

Classe de sol : D

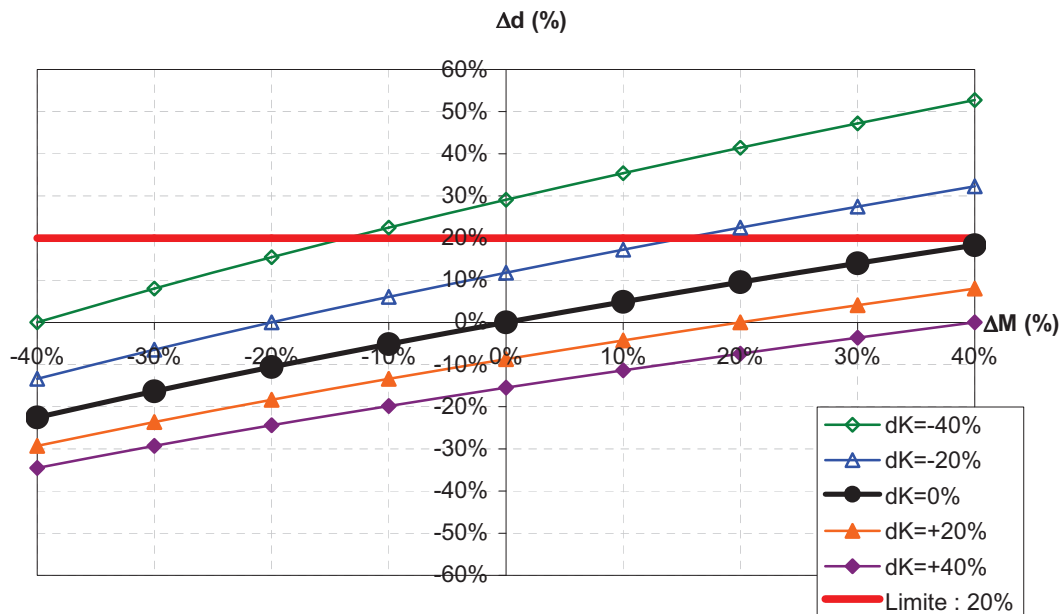
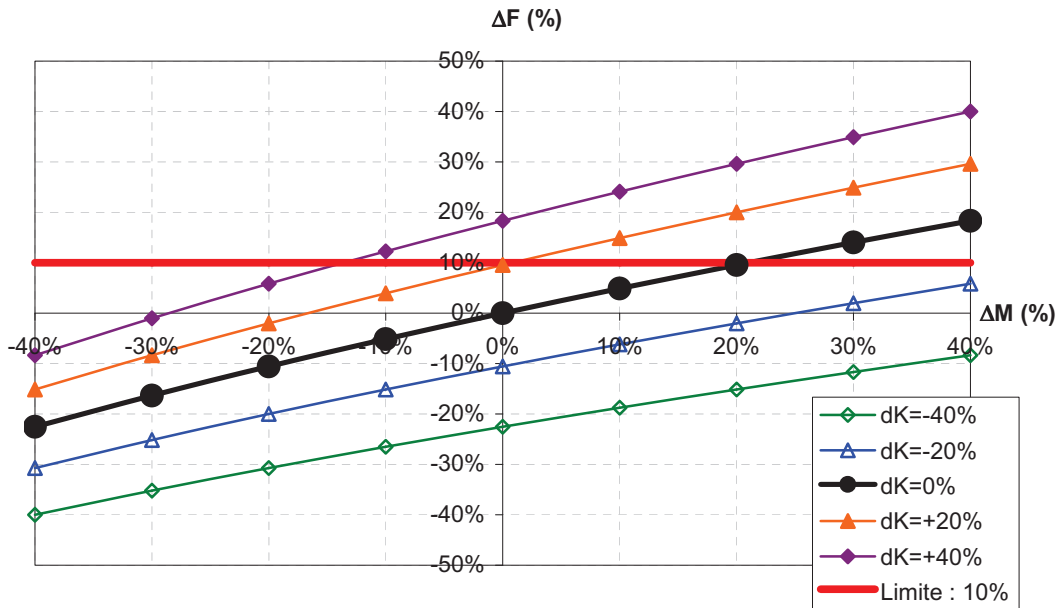
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -20\%$ $\Delta d = -33\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -20\%$ $\Delta d = -43\%$	$\Delta F = -7\%$ $\Delta d = -33\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 0,8 s

Classe de sol : E

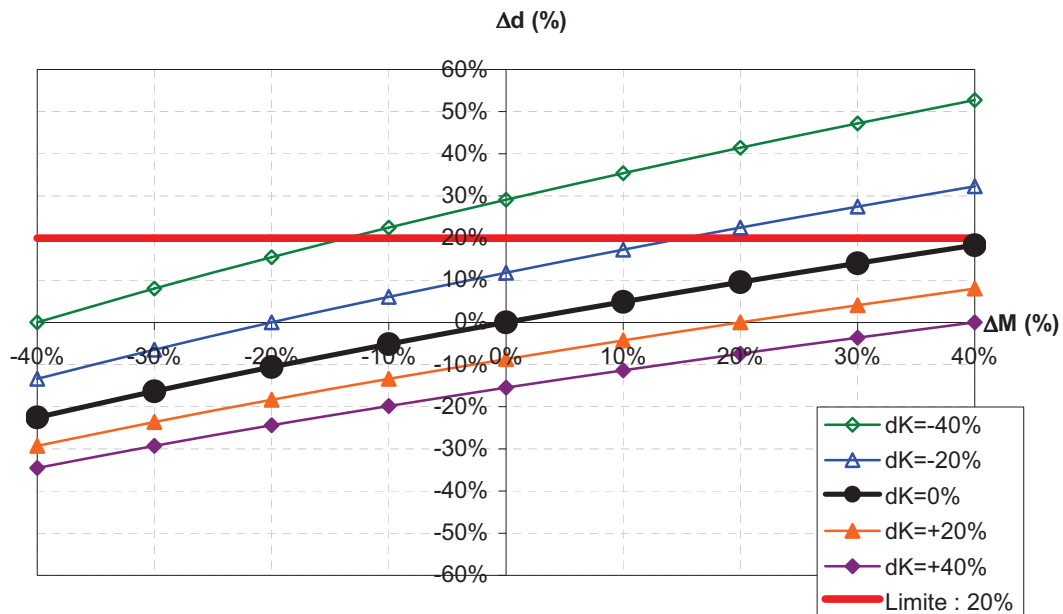
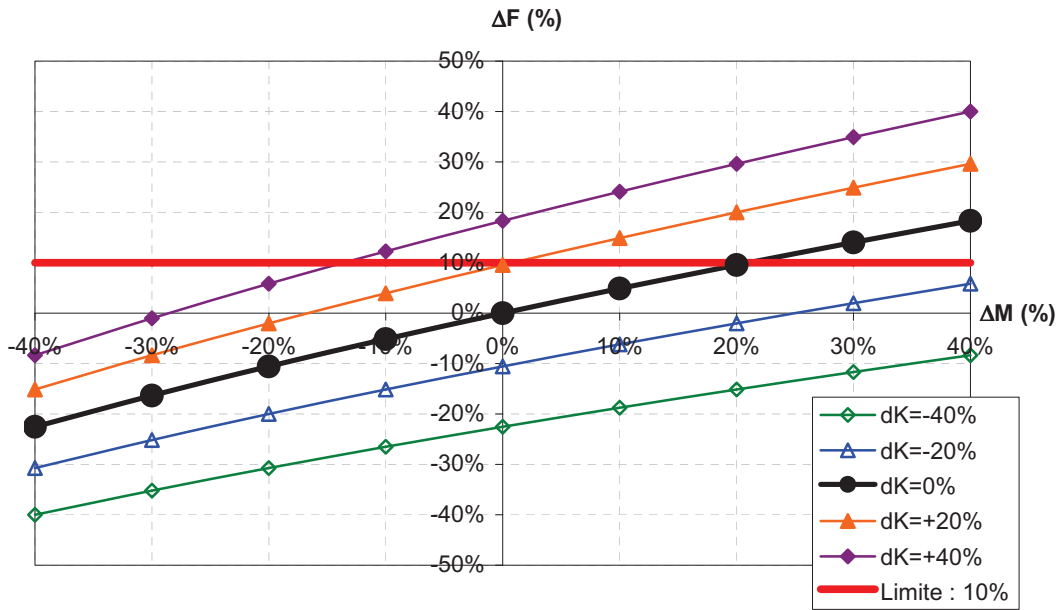
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,1 s

Classe de sol : A

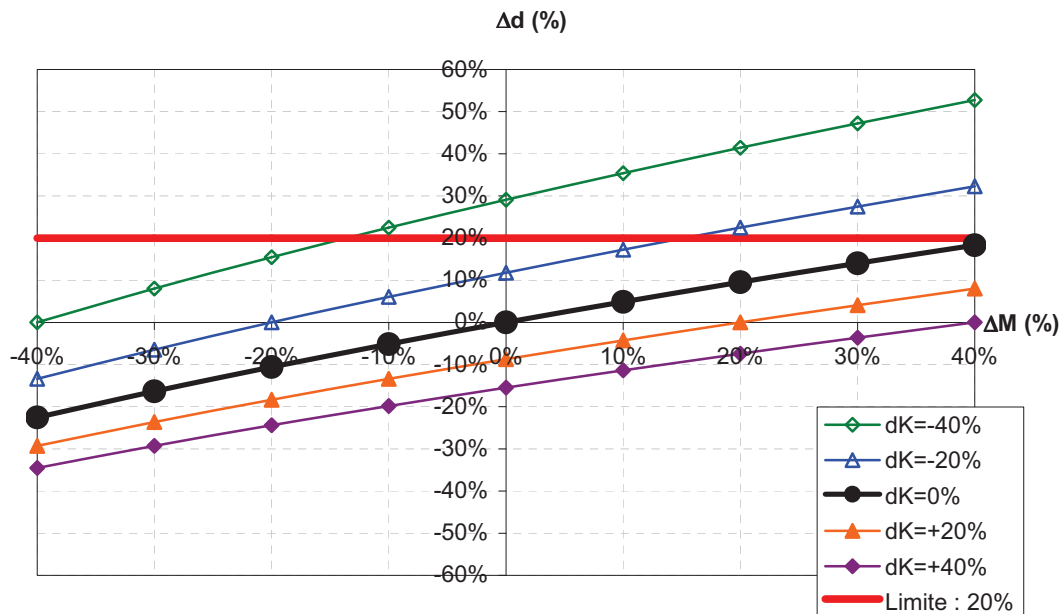
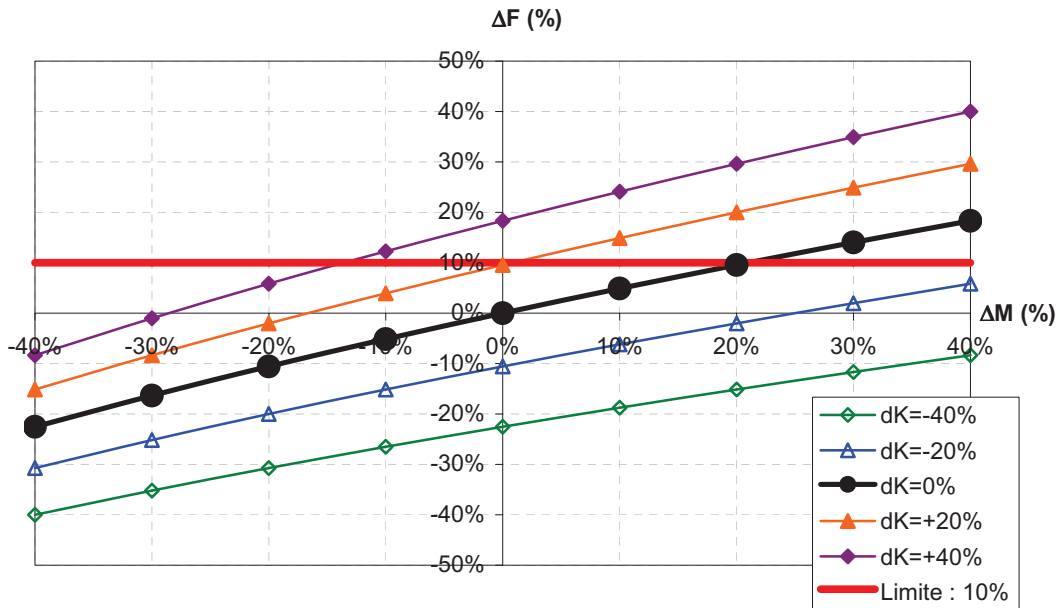
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,1 s

Classe de sol : B

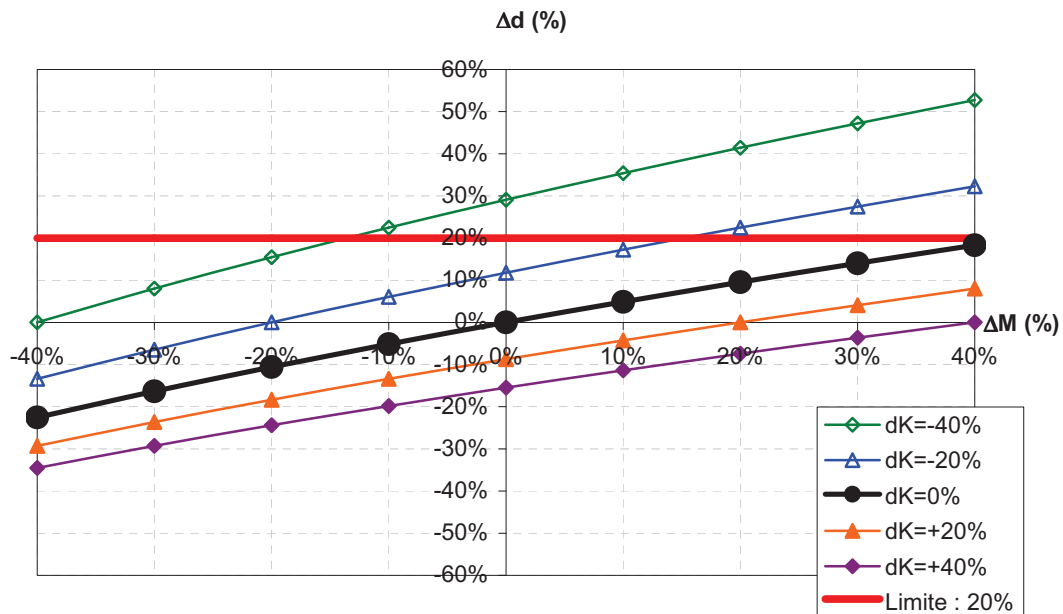
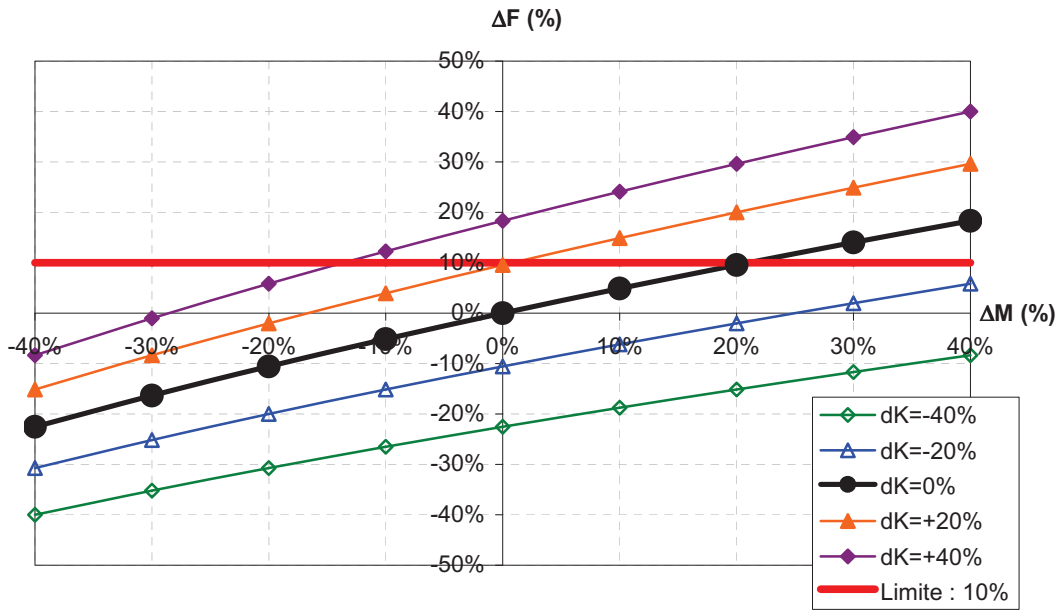
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,1 s

Classe de sol : C

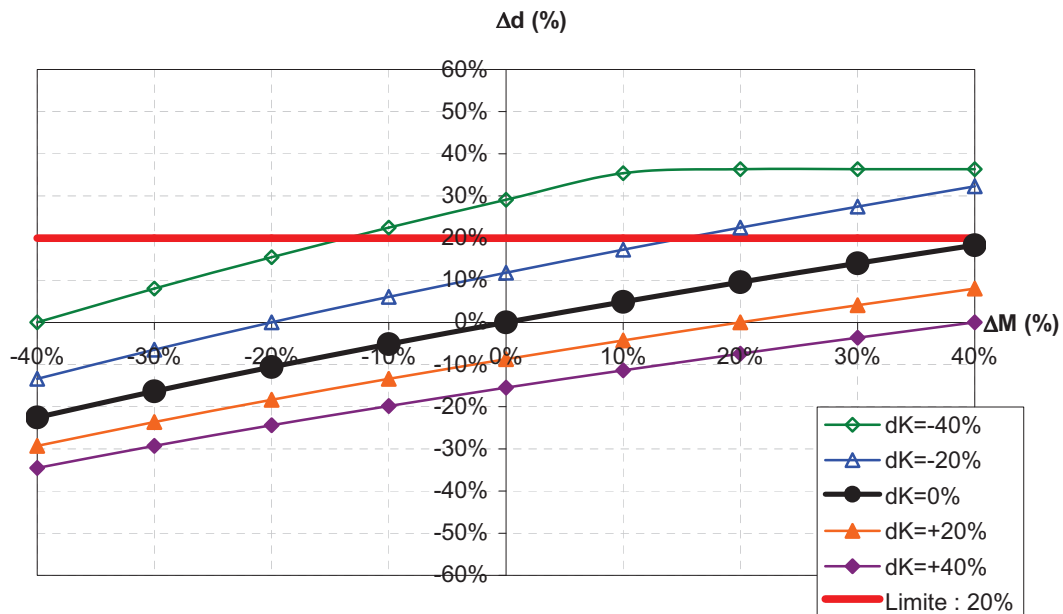
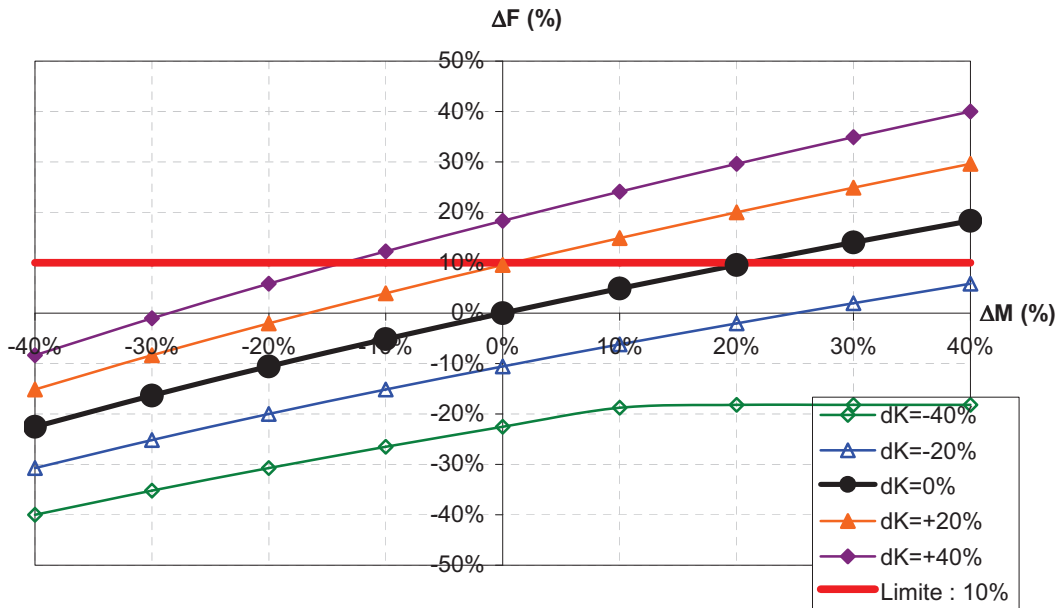
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,1 s

Classe de sol : D

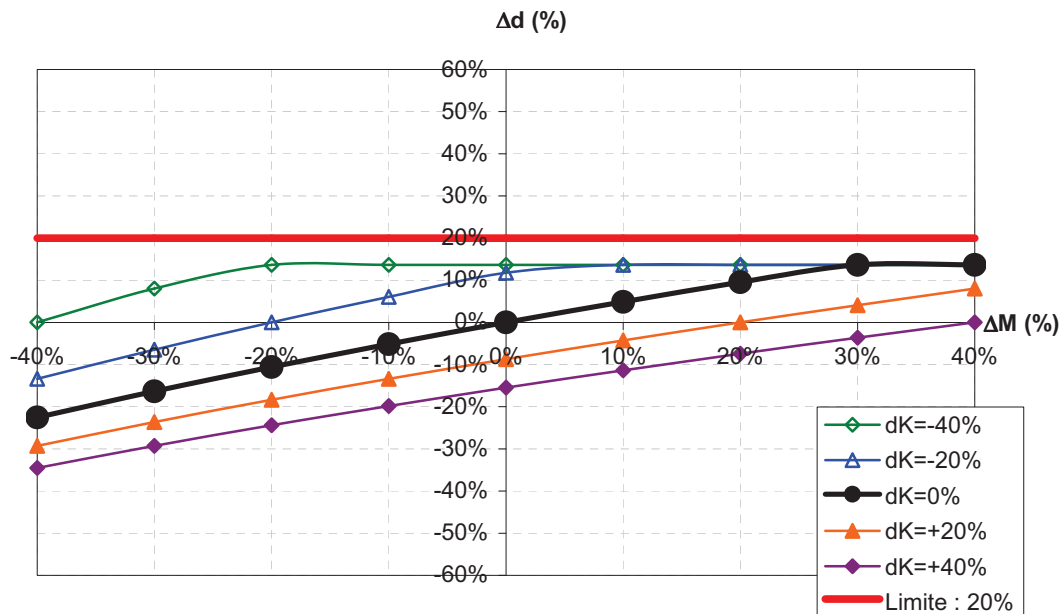
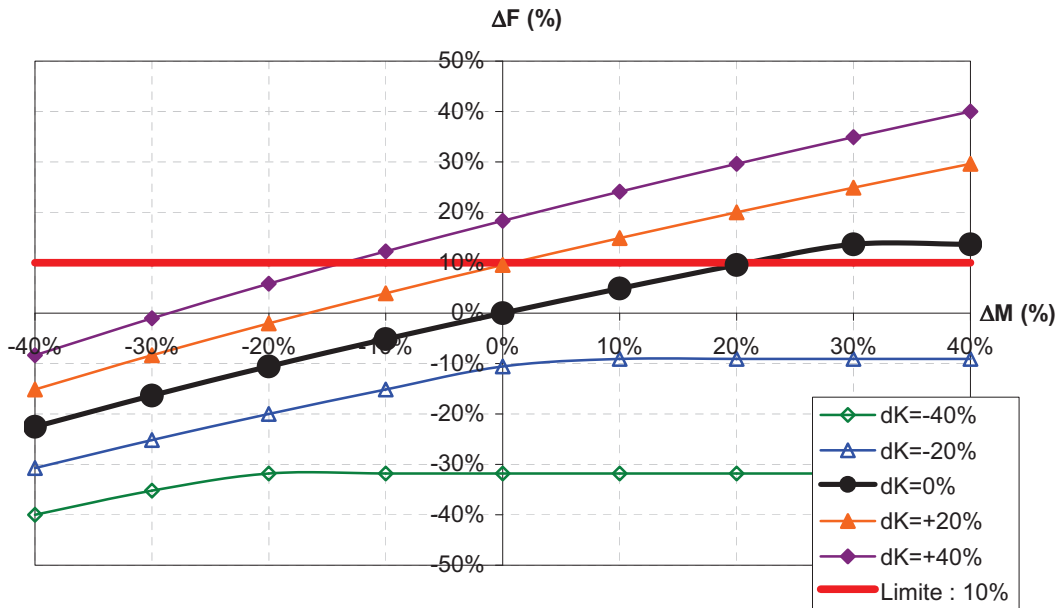
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -18\%$ $\Delta d = 36\%$	$\Delta F = -18\%$ $\Delta d = 36\%$	$\Delta F = -18\%$ $\Delta d = 36\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,1 s

Classe de sol : E

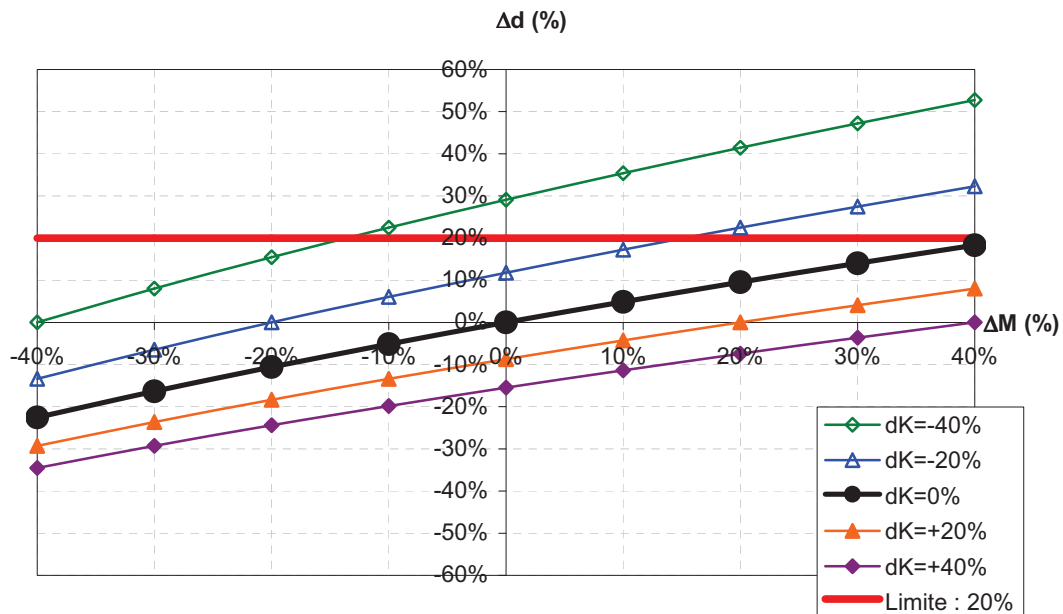
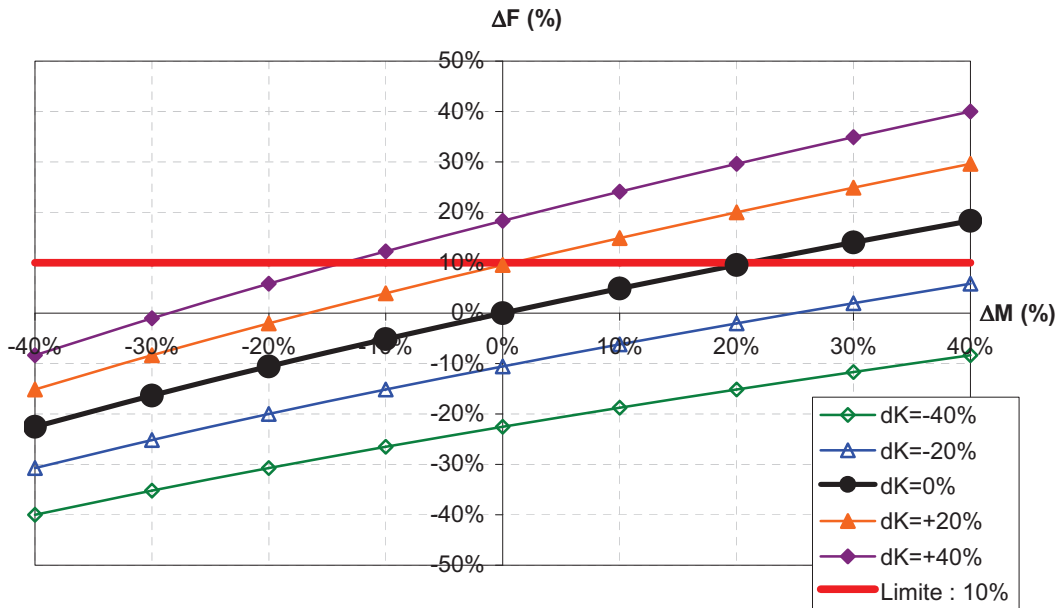
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$	$\Delta F = -32\%$ $\Delta d = 14\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -9\%$ $\Delta d = 14\%$	$\Delta F = -9\%$ $\Delta d = 14\%$	$\Delta F = -9\%$ $\Delta d = 14\%$	$\Delta F = -9\%$ $\Delta d = 14\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 14\%$ $\Delta d = 14\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,4 s

Classe de sol : A

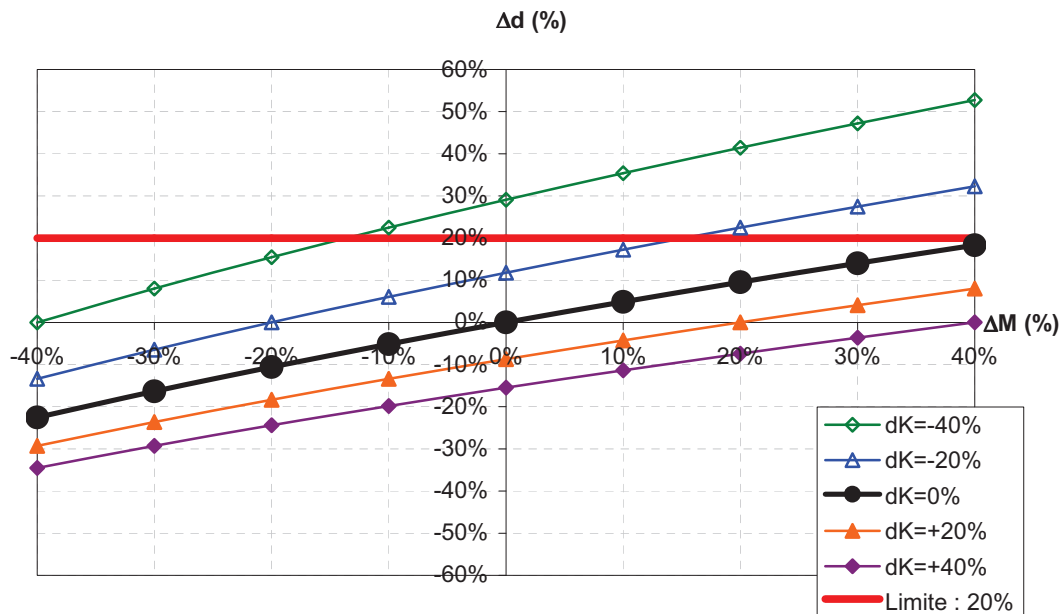
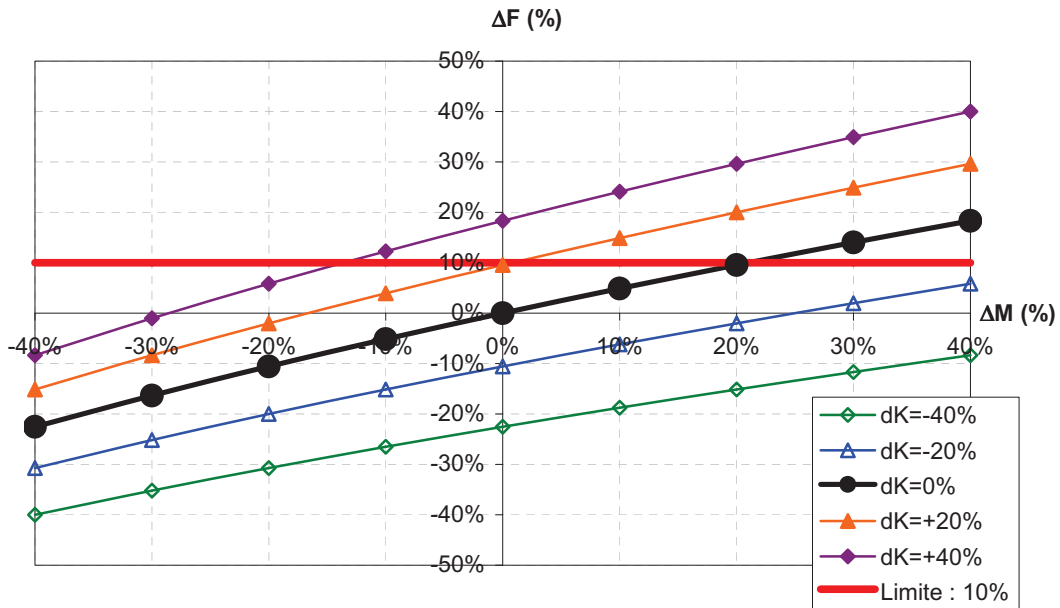
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,4 s

Classe de sol : B

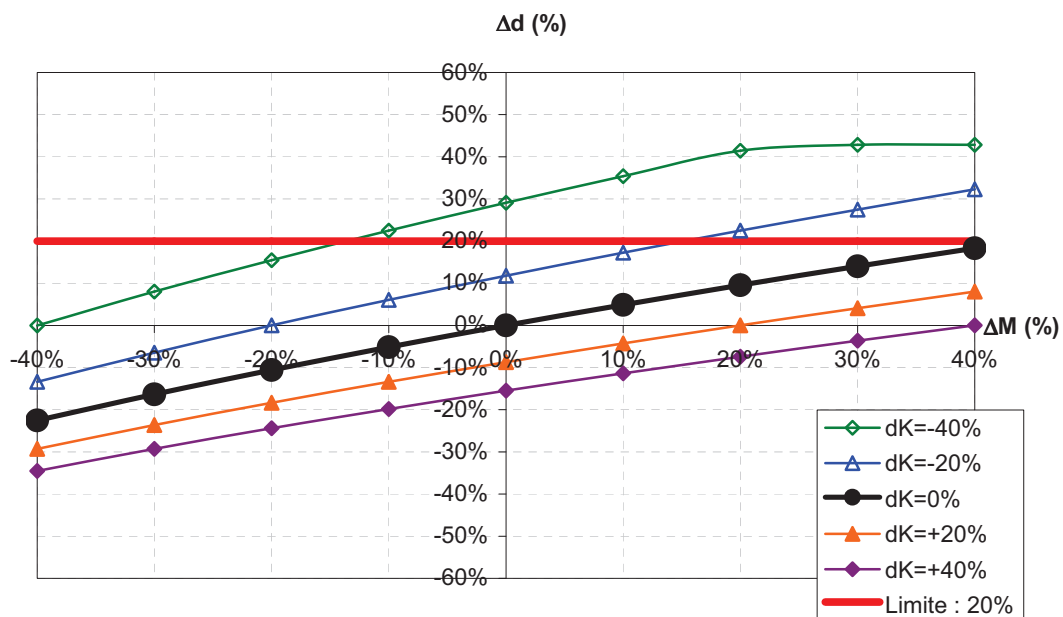
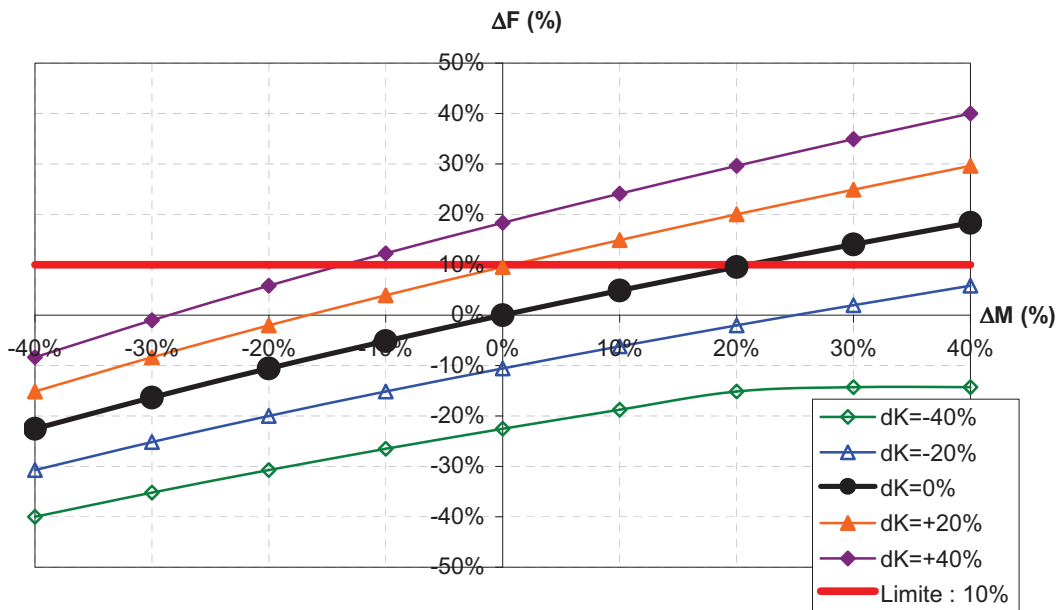
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -12\%$ $\Delta d = 47\%$	$\Delta F = -8\%$ $\Delta d = 53\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,4 s

Classe de sol : C

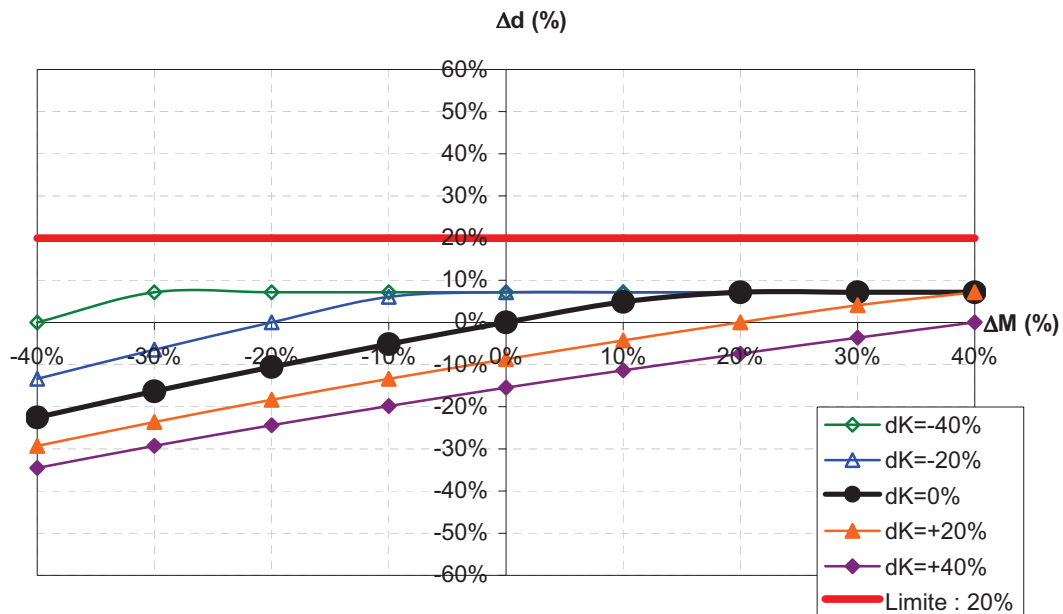
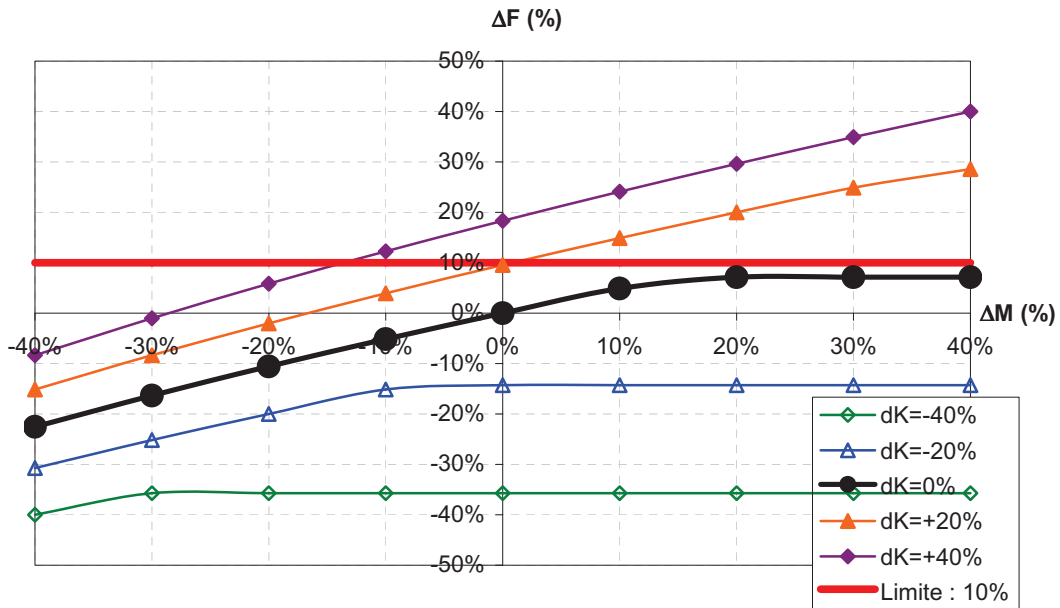
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -23\%$ $\Delta d = 29\%$	$\Delta F = -19\%$ $\Delta d = 35\%$	$\Delta F = -15\%$ $\Delta d = 41\%$	$\Delta F = -14\%$ $\Delta d = 43\%$	$\Delta F = -14\%$ $\Delta d = 43\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 2\%$ $\Delta d = 27\%$	$\Delta F = 6\%$ $\Delta d = 32\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,4 s

Classe de sol : D

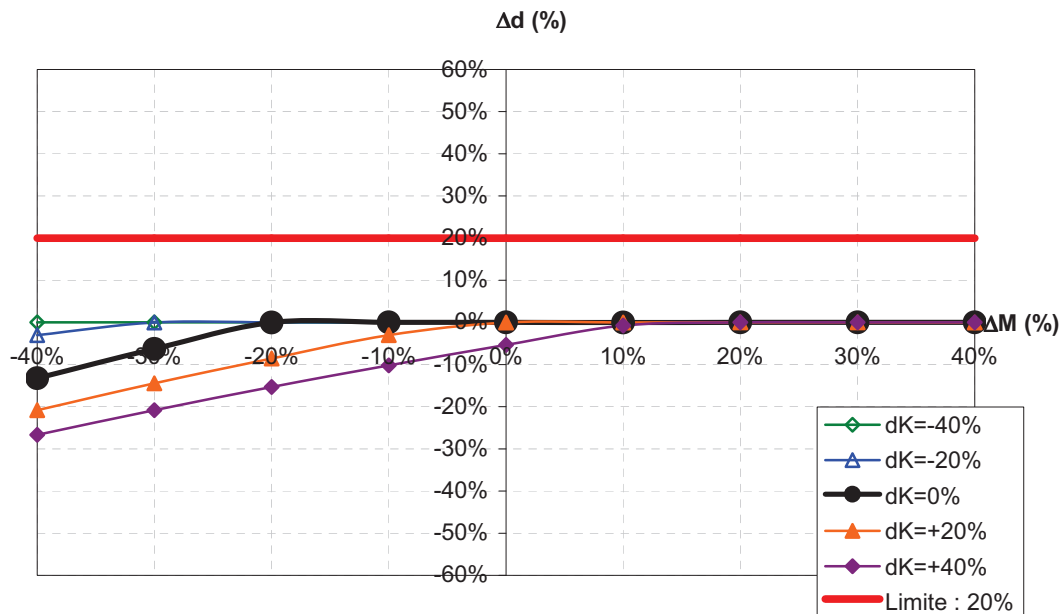
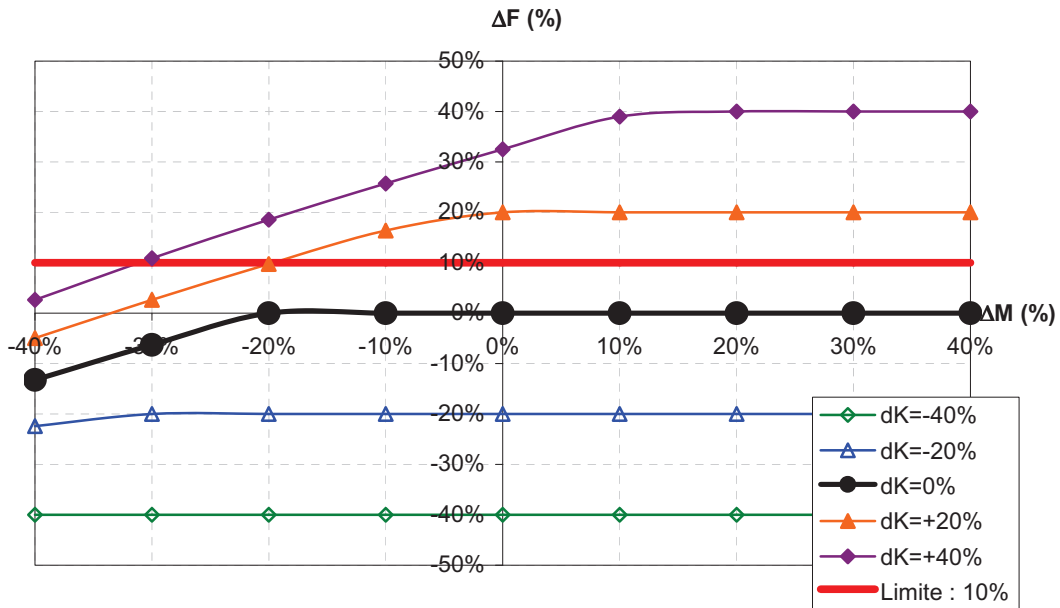
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$	$\Delta F = -36\%$ $\Delta d = 7\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -14\%$ $\Delta d = 7\%$	$\Delta F = -14\%$ $\Delta d = 7\%$	$\Delta F = -14\%$ $\Delta d = 7\%$	$\Delta F = -14\%$ $\Delta d = 7\%$	$\Delta F = -14\%$ $\Delta d = 7\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 7\%$ $\Delta d = 7\%$	$\Delta F = 7\%$ $\Delta d = 7\%$	$\Delta F = 7\%$ $\Delta d = 7\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 29\%$ $\Delta d = 7\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 1,4 s

Classe de sol : E

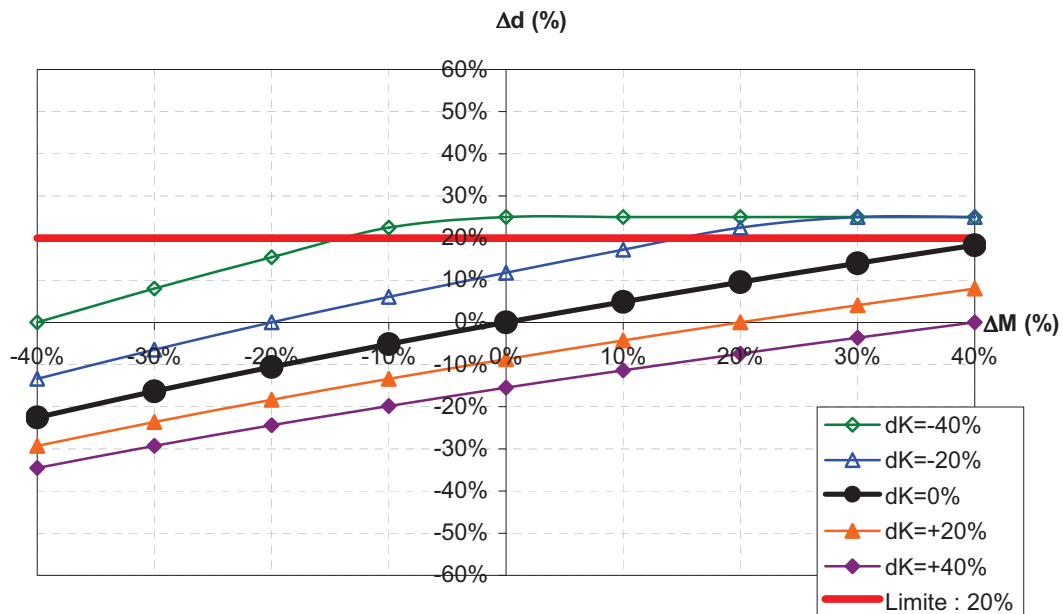
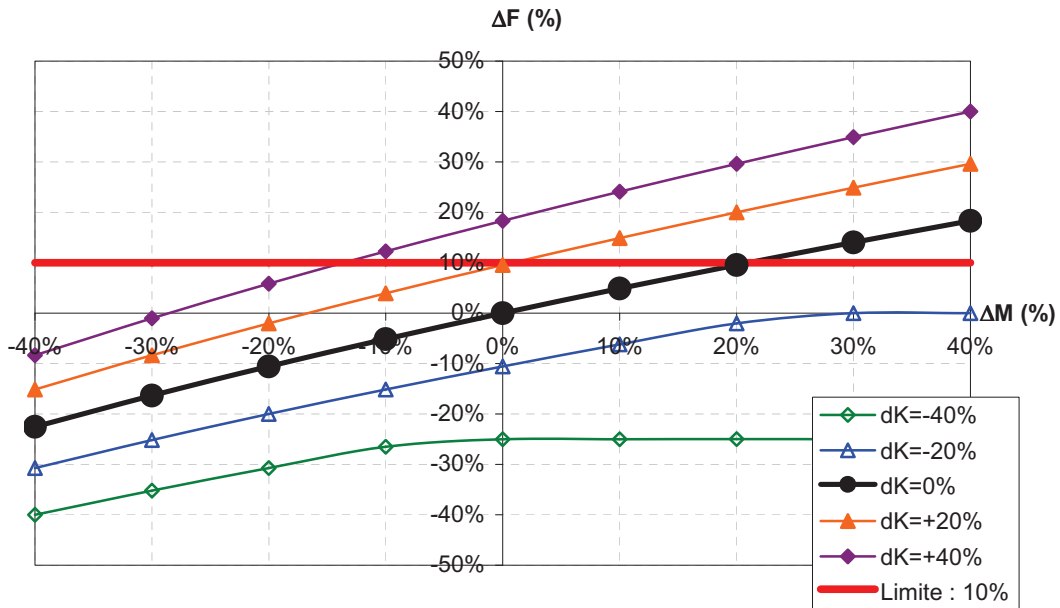
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -22\%$ $\Delta d = -3\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = -13\%$ $\Delta d = -13\%$	$\Delta F = -6\%$ $\Delta d = -6\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = -5\%$ $\Delta d = -21\%$	$\Delta F = 3\%$ $\Delta d = -14\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 16\%$ $\Delta d = -3\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 3\%$ $\Delta d = -27\%$	$\Delta F = 11\%$ $\Delta d = -21\%$	$\Delta F = 19\%$ $\Delta d = -15\%$	$\Delta F = 26\%$ $\Delta d = -10\%$	$\Delta F = 33\%$ $\Delta d = -5\%$	$\Delta F = 39\%$ $\Delta d = -1\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 2,0 s

Classe de sol : A

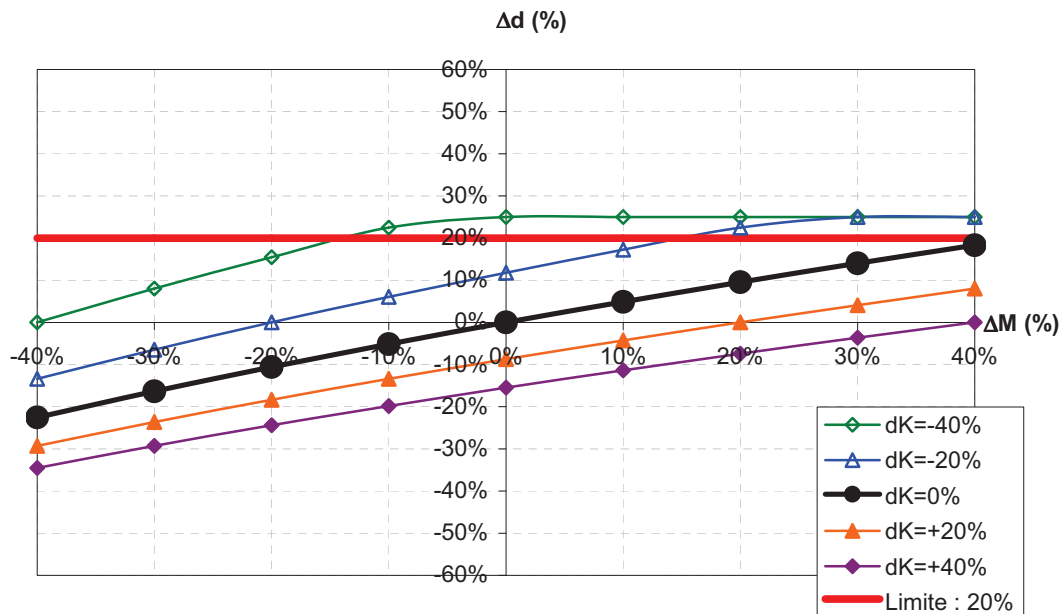
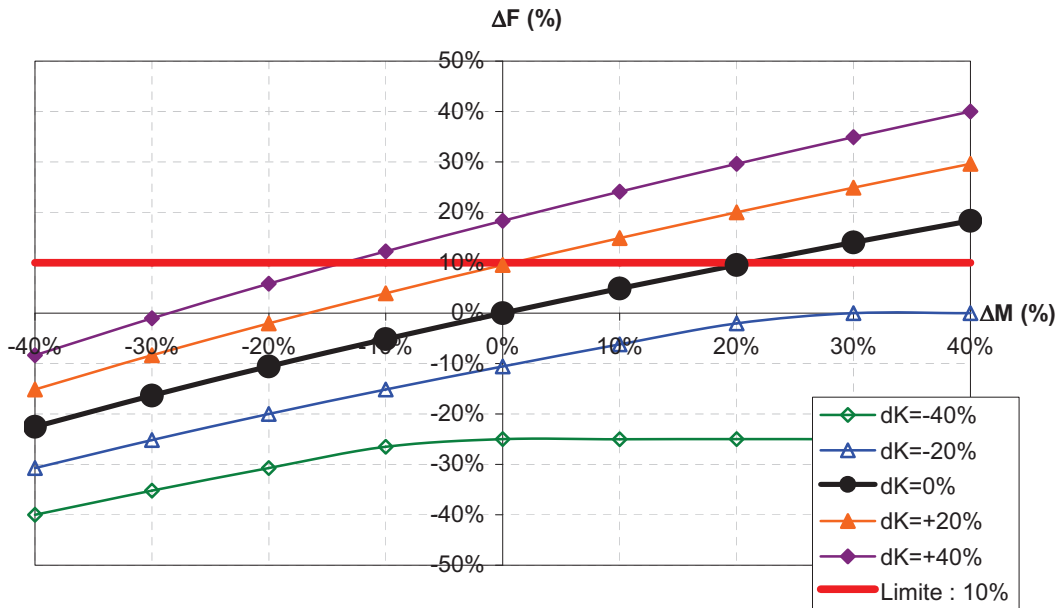
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 0\%$ $\Delta d = 25\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 2,0 s

Classe de sol : B

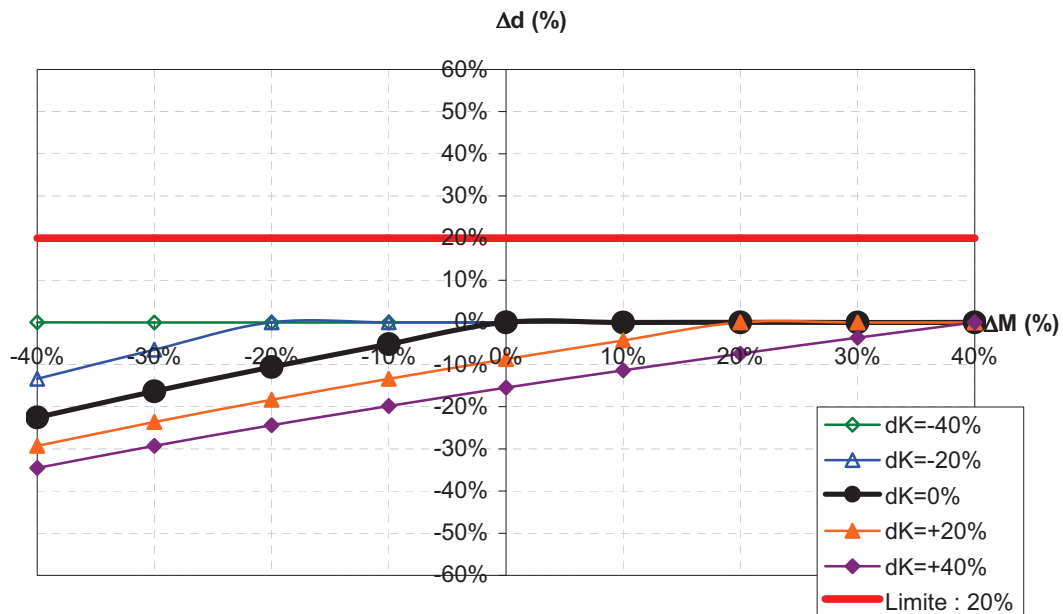
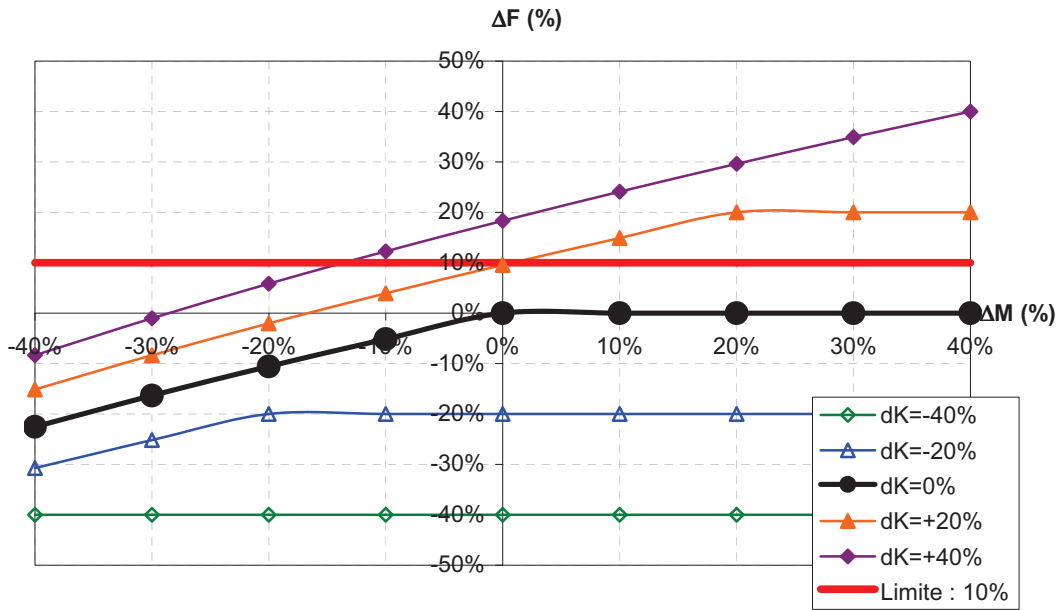
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -35\%$ $\Delta d = 8\%$	$\Delta F = -31\%$ $\Delta d = 15\%$	$\Delta F = -27\%$ $\Delta d = 22\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$	$\Delta F = -25\%$ $\Delta d = 25\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -15\%$ $\Delta d = 6\%$	$\Delta F = -11\%$ $\Delta d = 12\%$	$\Delta F = -6\%$ $\Delta d = 17\%$	$\Delta F = -2\%$ $\Delta d = 22\%$	$\Delta F = 0\%$ $\Delta d = 25\%$	$\Delta F = 0\%$ $\Delta d = 25\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 5\%$ $\Delta d = 5\%$	$\Delta F = 10\%$ $\Delta d = 10\%$	$\Delta F = 14\%$ $\Delta d = 14\%$	$\Delta F = 18\%$ $\Delta d = 18\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 25\%$ $\Delta d = 4\%$	$\Delta F = 30\%$ $\Delta d = 8\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 2,0 s

Classe de sol : C

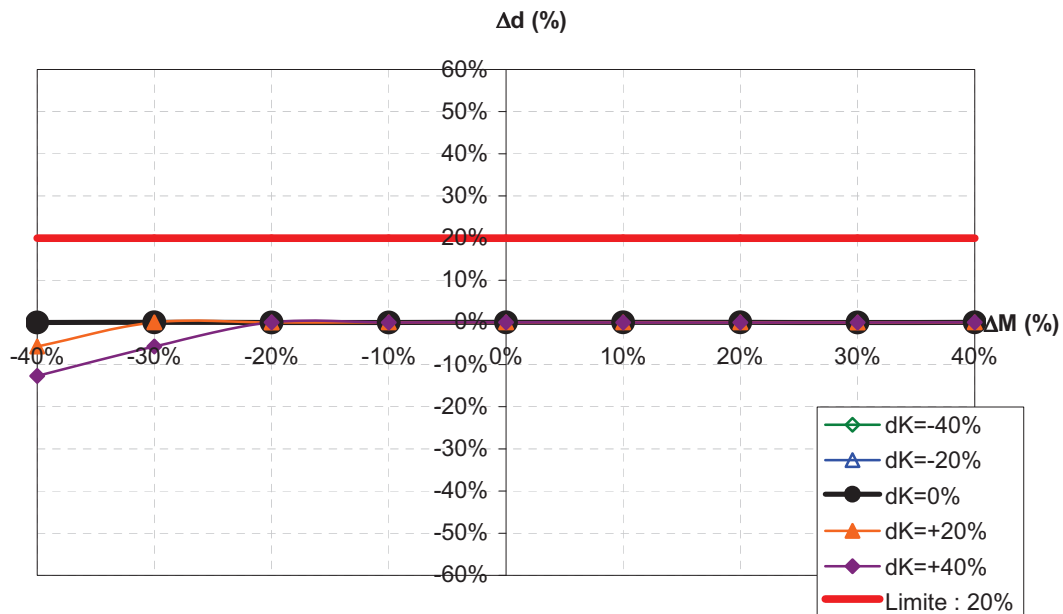
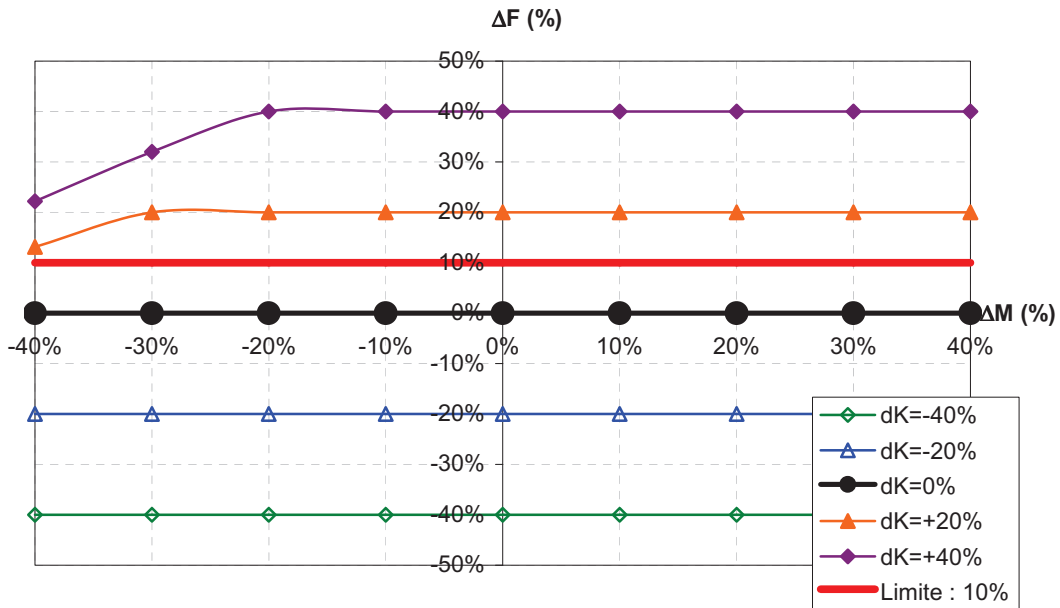
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -31\%$ $\Delta d = -13\%$	$\Delta F = -25\%$ $\Delta d = -6\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = -23\%$ $\Delta d = -23\%$	$\Delta F = -16\%$ $\Delta d = -16\%$	$\Delta F = -11\%$ $\Delta d = -11\%$	$\Delta F = -5\%$ $\Delta d = -5\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = -15\%$ $\Delta d = -29\%$	$\Delta F = -8\%$ $\Delta d = -24\%$	$\Delta F = -2\%$ $\Delta d = -18\%$	$\Delta F = 4\%$ $\Delta d = -13\%$	$\Delta F = 10\%$ $\Delta d = -9\%$	$\Delta F = 15\%$ $\Delta d = -4\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = -8\%$ $\Delta d = -35\%$	$\Delta F = -1\%$ $\Delta d = -29\%$	$\Delta F = 6\%$ $\Delta d = -24\%$	$\Delta F = 12\%$ $\Delta d = -20\%$	$\Delta F = 18\%$ $\Delta d = -15\%$	$\Delta F = 24\%$ $\Delta d = -11\%$	$\Delta F = 30\%$ $\Delta d = -7\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 2,0 s

Classe de sol : D

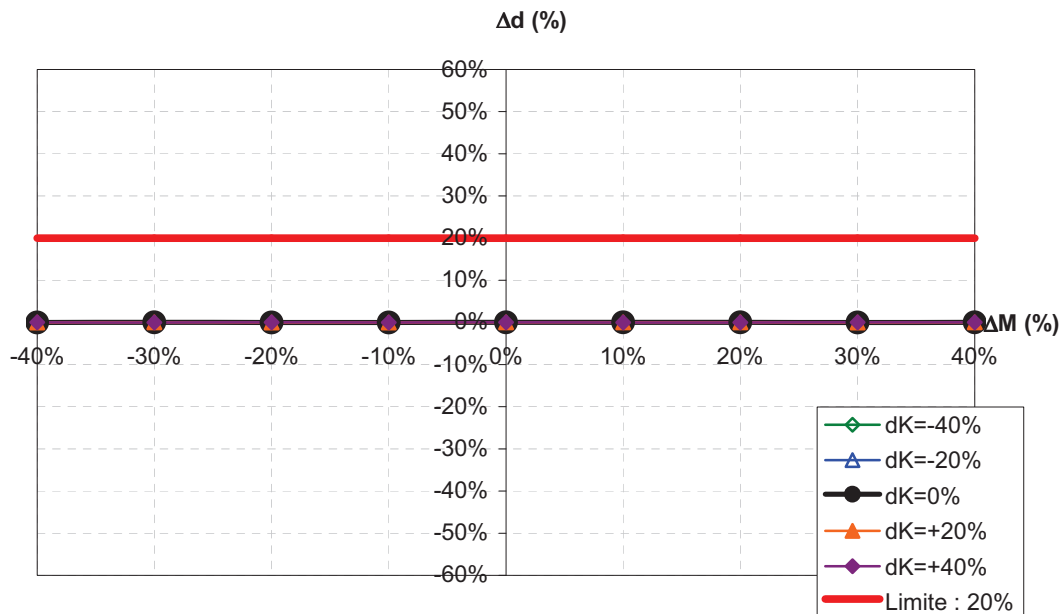
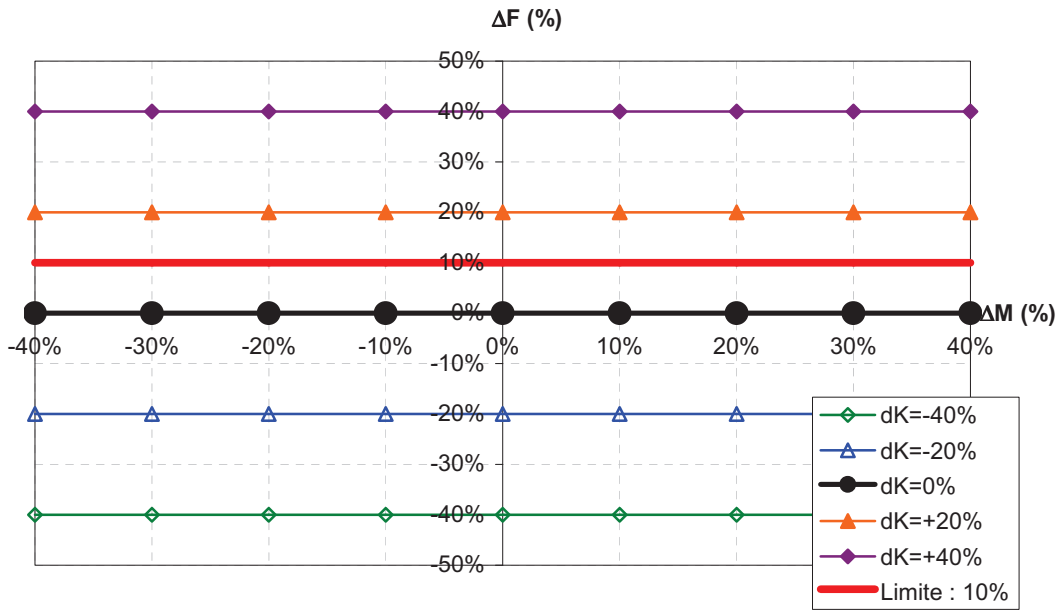
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 13\%$ $\Delta d = -6\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 22\%$ $\Delta d = -13\%$	$\Delta F = 32\%$ $\Delta d = -6\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 2,0 s

Classe de sol : E

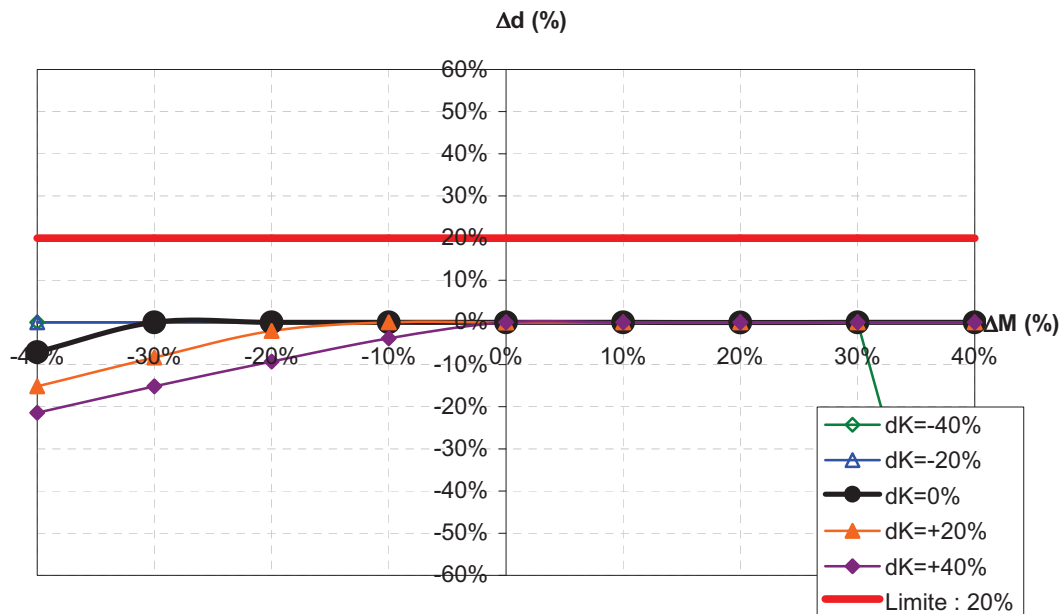
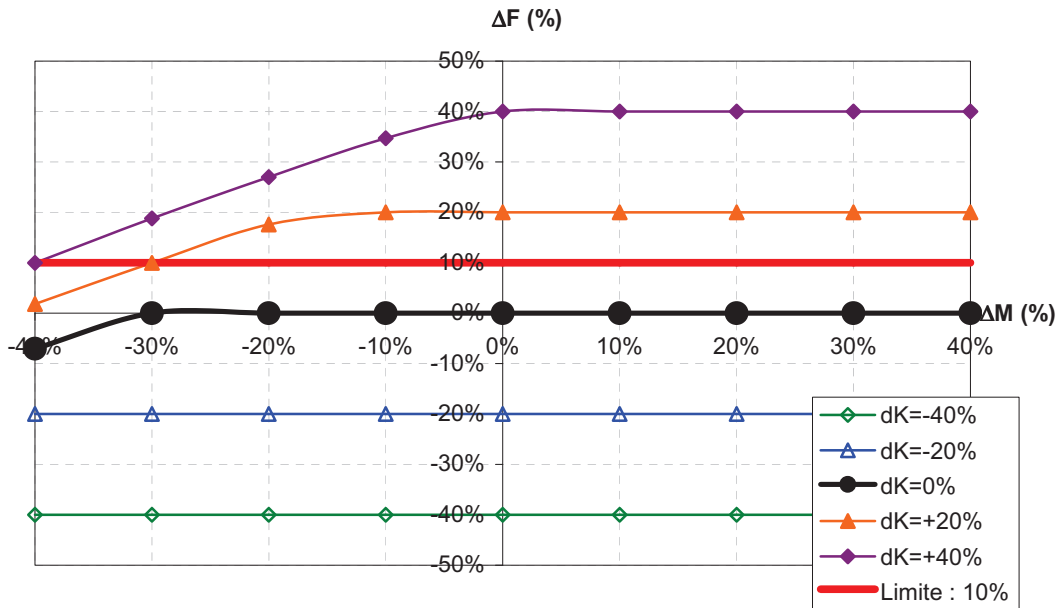
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 3,0 s

Classe de sol : A

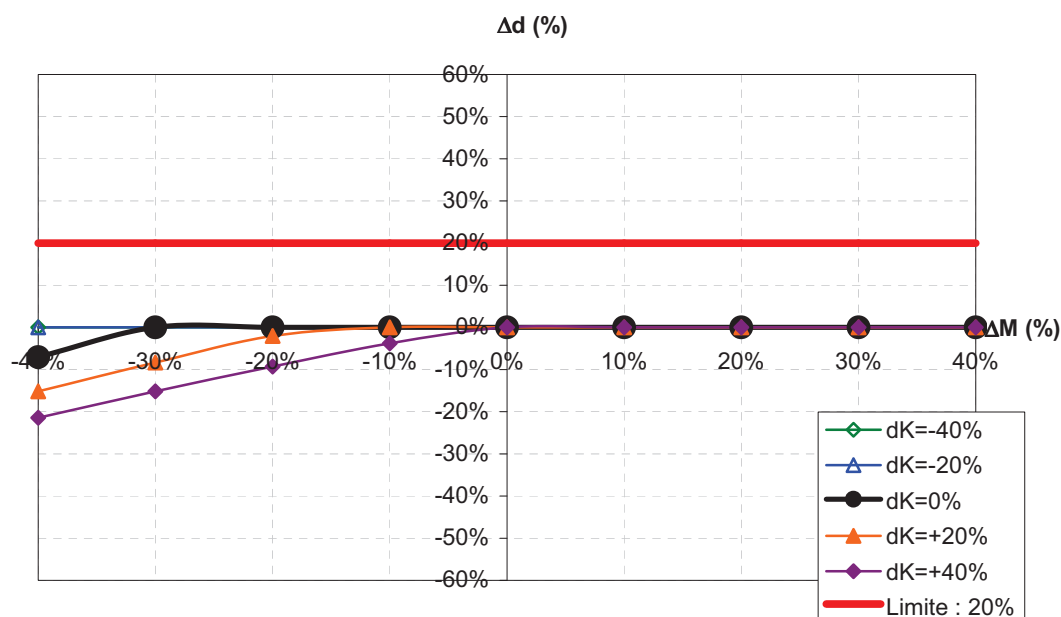
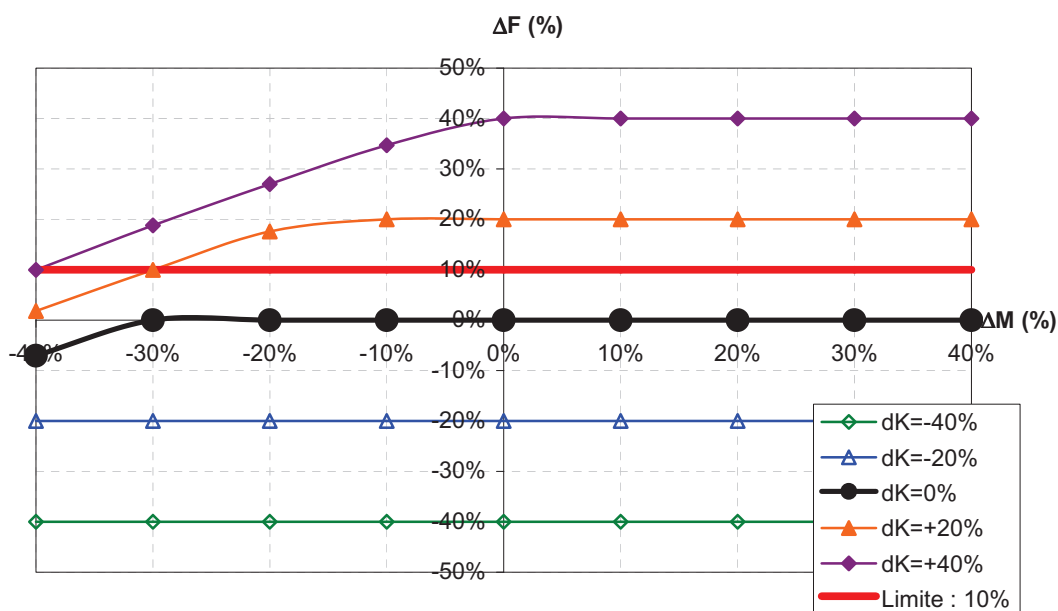
$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = -100\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = -7\%$ $\Delta d = -7\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 2\%$ $\Delta d = -15\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 18\%$ $\Delta d = -2\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 19\%$ $\Delta d = -15\%$	$\Delta F = 27\%$ $\Delta d = -9\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 3,0 s

Classe de sol : B

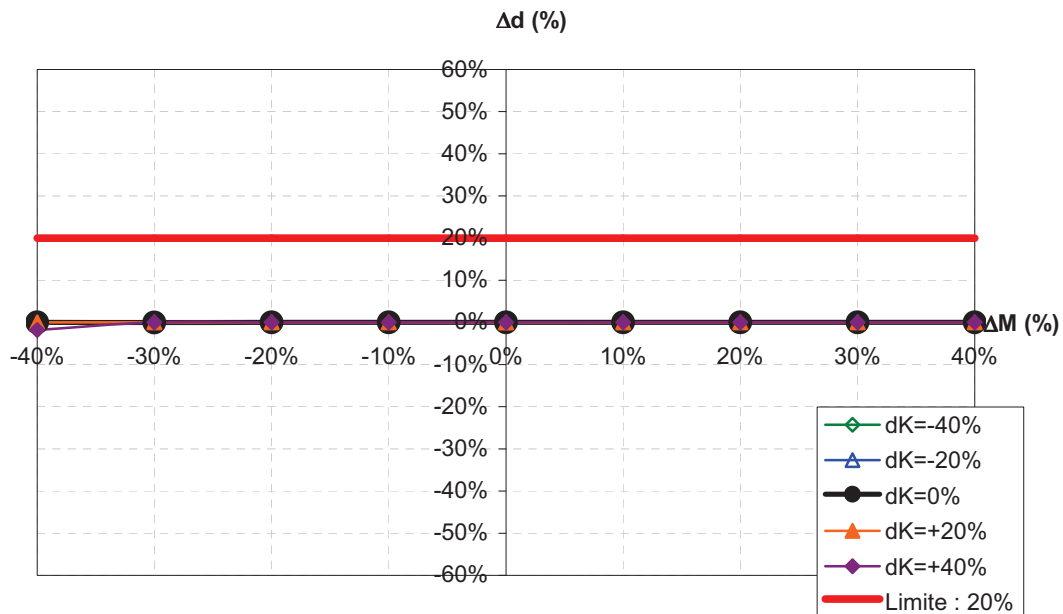
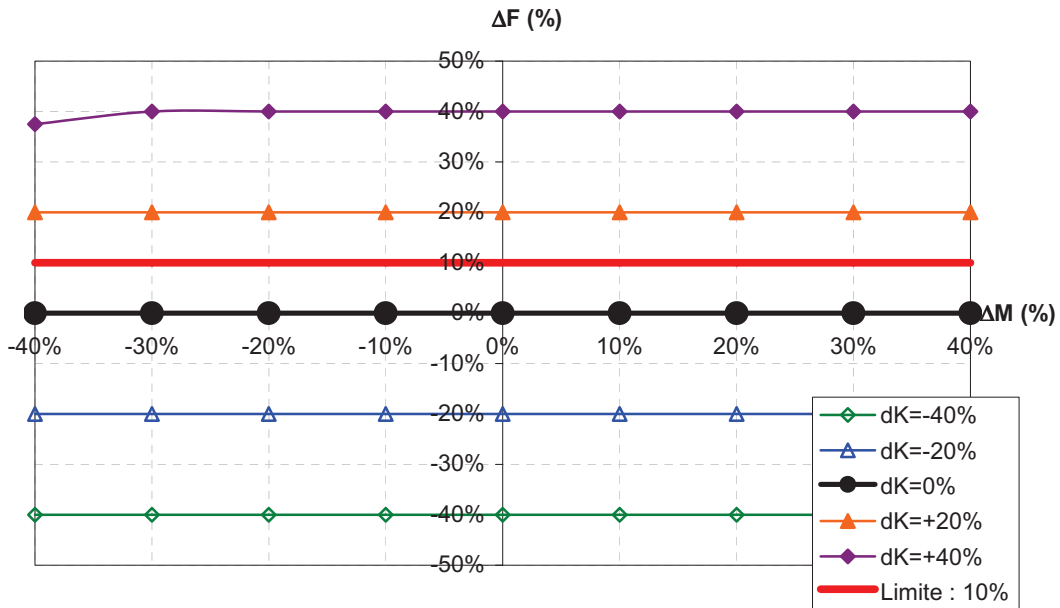
ΔM ΔK	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = -7\%$ $\Delta d = -7\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 2\%$ $\Delta d = -15\%$	$\Delta F = 10\%$ $\Delta d = -8\%$	$\Delta F = 18\%$ $\Delta d = -2\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 10\%$ $\Delta d = -21\%$	$\Delta F = 19\%$ $\Delta d = -15\%$	$\Delta F = 27\%$ $\Delta d = -9\%$	$\Delta F = 35\%$ $\Delta d = -4\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 3,0 s

Classe de sol : C

$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 37\%$ $\Delta d = -2\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$



T = 3,0 s

Classes de sol : D , E

$\frac{\Delta M}{\Delta K}$	-40%	-30%	-20%	-10%	0%	10%	20%	30%	40%
-40%	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$	$\Delta F = -40\%$ $\Delta d = 0\%$
-20%	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$	$\Delta F = -20\%$ $\Delta d = 0\%$
0%	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$	$\Delta F = 0\%$ $\Delta d = 0\%$
20%	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$	$\Delta F = 20\%$ $\Delta d = 0\%$
40%	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$	$\Delta F = 40\%$ $\Delta d = 0\%$

