Calculation of settlement with improvement through stone columns
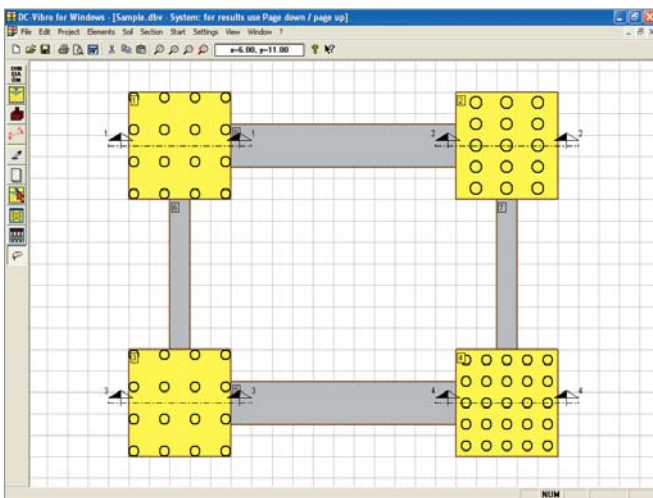## DC-Vibro

- Analysis of the soil improvement with the approach by Priebe, bearing capacity analysis acc. to DIN 1054:2005, DIN 4017:2006, SIA 267
- German, English, French, Romanian program version
- Any number of footings with individual soil layers for every analysis section
- Single, strip and circular footings as well as infinite load area
- Different load cases
- Variable soil layers with different column diameters
- Column parameters defined per layer, e.g. for mortar injected stone columns

Depth	Foundation stress	Superimposed stress from soil	Stress ratio Found./Soil	s without improvement for foundation	s infinite load area with improv.	Factor footing	Settlement of footing with improv.
[m]	σ_f [kN/m²]	σ_s [kN/m²]		[mm]	[mm]	[%]	[mm]
0.50	275.00	9.50	28.95	0.00	0.00	100.00	0.00
1.50	190.85	28.50	6.70	9.79	6.51	88.24	5.75
2.50	129.18	47.50	2.72	18.77	8.89	74.26	6.60
3.00	112.42	57.00	1.97	7.40	4.45	62.93	2.80
4.00	88.71	66.00	1.34	12.28	8.42	53.10	4.47
5.00	71.47	75.00	0.95	7.89	13.52	28.17	3.81
5.50	64.39	79.50	0.81	3.37	6.76	22.67	1.53
6.50	52.62	91.00	0.58	1.93	4.72	32.67	1.54
7.00	47.72	96.75	0.49	0.83	2.36	26.79	0.63
8.00	39.55	108.25	0.37	1.44	9.15	100.00	1.44
9.00	33.11	119.75	0.28	1.20	9.16	100.00	1.20
10.00	27.99	131.25	0.21	1.01	9.16	100.00	1.01
11.00	23.90	142.75	0.17	0.86	9.16	100.00	0.86
Sum				66.78	92.27		31.66

Improvement of the settlement

- Column arrangement in a triangular or rectangular grid with different distances
- Immediate display of the arrangement by preview function
- Calculation of the settlement with improvement, alternatively comparison without improvement
- Calculation of the bearing capacity with and without improvement

- Fast editing of the parameters by jumping from the results to the input
- Clear display of results with section graphics
- Display of the stresses and settlements in a diagram

Top view of footings with column grid

Section graphics with columns and soil layers