Pile group design programs compared

Feature	Program					
	PGROUP/ PC-PGROUP	Piglet/ PC-MPILE	DEFPIG	FB-Pier	GROUP	Repute
Latest version (date)	3.0 (1981)	Oct '96/1.5('00)	1.6 (1990)	3.0 (2002)	5.0 (2000)	1.0 (2002)
Engineering features						
Method of analysis (BEM = Boundary Element Method)	Boundary Element Method	Approximate closed form	Simplified BEM	Load-transfer (Winkler spring)	Load-transfer (Winkler spring)	Boundary Element Method
Group effects solution	Continuum-based	Interaction factors	Interaction factors	Empirical	Empirical	Continuum-based
Maximum no of piles (x elements) analysed	200 (x 11)	Piglet 300 (n/a) MPILE 100 (n/a)	36 (x 26↓/50→)	2500 (n/a)	100 (x 100)	100 (x 50)
Multi-layered soil profile/Gibson soil	2-only / ✓	✗ / ✓	✓ / ✓	✓	✓	✓ / ✓
3-dimensional loading	✗	✓	✗	✓	✓	✓
Non-linear soil model	✗	✗	✗	✓ t-z/p-y curves	✓ t-z/p-y curves	✓ hyperbolic
Allows general (asymmetric) pile layout	✗	✓	✗	✓	✓	✓
Piles with different lengths/moduli in group	✓ / ✗	✗ / ✓	✗ / ✗	✓ / ✓	✓ / ✓	✓ / ✓
Independent axial and lateral pile moduli	✗	✓	✓	n/a	n/a	✓
Flexible pile cap/effective pile cap contact*	✗ / ✓	✓ / ✗	✓ / ✓	✓ / ✓	✗ / ✗	✗ / ✗
Pile head pinned/rigidly connected to cap	✗ / ✓	✓ / ✓	✓ / ✓	✓ / ✓	✓ / ✓	✗ / ✓
Rigid layer below pile toe	✗	✗	✓	n/a	n/a	✓
Usability features						
Operating System	DOS	DOS	DOS	Windows	Windows	Windows 9x/ NT4/2000/XP
User interface	Command-line	Text menus	Command-line	GUI	GUI	Notebook-style
Validation of data on input/calculation	✗ / ✗	✓ / ?	✗ / ✗	? / ?	? / ?	✓ / ✓
Graphical display of results	✗	✗	✗	✓	✓	✓
HTML/XML reports using internal/external browser	✗	✗	✗	✗	✗	✓

*All programs provide rigid pile cap/non-effective pile cap contact

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