

References

Acar, Y. B., Durgunoglu, H. T., and Tumay, M. T. (1982). "Interface properties of sand," *Journal of the Soil Mechanics and Foundations Division, ASCE*, 108(GT4), 648-654.

American Society for Testing and Materials. (1990). "Standard test method for classification of soils for engineering purposes," Practice No. D2487-90, *1990 Book of ASTM Standards*, 04.08, Philadelphia, PA.

_____. (1991). "Standard test method for minimum index density and unit weight of soils and calculation of relative density," ASTM D4254-91, West Conshohocken, PA.

_____. (1992). "Standard test method for specific gravity of soils," ASTM D854-92, West Conshohocken, PA.

_____. (1993a). "Standard classification of soils for engineering purposes (Unified Soil Classification System)," ASTM D2487-93, West Conshohocken, PA.

_____. (1993b). "Standard practice for description and identification of soils (visual-manual procedure)," ASTM D2488-93, West Conshohocken, PA.

_____. (1993c). "Standard test method for maximum index density and unit weight of soils using a vibratory table," ASTM D4253-93, West Conshohocken, PA.

Bosscher, P. J., and Ortiz, C. (1987). "Frictional properties between sand and various construction materials," *Journal of Geotechnical Engineering, ASCE*, 113(9), 1035-1039.

- Brandon, T. L., Duncan, J. M., and Gardner, W. S. (1990). "Hydrocompression settlement of deep fills," *Journal of Geotechnical Engineering*, ASCE, 116(10), 1536-1548.
- Brummund, N. F., and Leonards, G. A. (1973). "Experimental study of static and dynamic friction between sand and typical construction materials," *Journal of Testing and Evaluation*, ASTM, 1(2), 162-165.
- Clough, G. W., and Duncan, J. M. (1969). "Finite element analyses of Port Allen and Old River Locks," Report No. TE-69-3, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Clough, G. W., and Duncan, J. M. (1971). "Finite element analyses of retaining wall behavior," *Journal of the Soil Mechanics and Foundations Division*, ASCE, 97(SM12), 1657-1673.
- Desai, C. S., and Rigby, D. B. (1997). "Cyclic interface and joint shear device including pore pressure effects," *Journal of Geotechnical and Geoenvironmental Engineering* 123(6), 568-579.
- Desai, C. S., Drumm, E. C., and Zaman, M. M. (1985). "Cyclic testing and modeling of interfaces," *Journal of Geotechnical Engineering*, ASCE, 111(6), 793-815.
- Desai, C. S., Muqtadir, A., and Scheele, F. (1986). "Interaction analyses of anchor-soil systems," *Journal of Geotechnical Engineering*, ASCE, 112(5), 537-553.
- Desai, C. S., Zaman, M. M., Lightner, J. G., and Siriwardane, H. J. (1984). "Thin-layer elements for interfaces and joints," *International Journal for Numerical and Analytical Methods in Geomechanics* 8(1), 19-43.
- Duncan, J. M., and Chang, C. Y. (1970). "Nonlinear analysis of stress and strain in soils," *Journal of the Soil Mechanics and Foundations Division*, ASCE, 96(SM5), 1629-1653.
- Duncan, J. M., and Clough, G. W. (1971). "Finite element analyses of Port Allen Lock," *Journal of the Soil Mechanics and Foundations Division*, ASCE, 97(SM8), 1053-1067.

- Duncan, J. M., Byrne, P., Wong, K. S., and Mabry, P. (1980). "Strength, stress-strain and bulk modulus parameters for finite element analyses of stresses and movements in soil masses," Report No. UCB/GT/80-01, Department of Civil Engineering, University of California, Berkeley.
- Duncan, J. M., Williams, G. W., Sehn, A. L., Seed, R. B. (1991). "Estimation earth pressures due to compaction," *ASCE Journal of Geotechnical Engineering* 117(12), 1833-1847.
- Ebeling, R. M., and Filz, G. M. "Soil-structure interaction analyses of rock founded gravity and cantilevered walls" (in preparation), U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- Ebeling, R. M., and Mosher, R. L. (1996). "Red River U-Frame Lock No. 1 backfill-structure-foundation interaction," *ASCE Journal of Geotechnical Engineering* 122(3), 216-225.
- Ebeling, R. M., and Wahl, R. E. (1997). "Soil-structure-foundation interaction analysis of new roller-compacted concrete North Lock Wall at McAlpine Locks," Technical Report ITL-97-5, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Ebeling, R. M., Duncan, J. M., and Clough, G. W. (1990). "Methods of evaluating the stability and safety of gravity earth-retaining structures founded on rock - Phase 2 study," Technical Report ITL-90-7, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Ebeling, R. M., Pace, M. E., and Morrison, E. E. (1997). "Evaluating the stability of existing massive concrete gravity structures founded on rock," Technical Report REMR-CS-54, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Ebeling, R. M., Peters, J. F., and Clough, G. W. (1992). "User's guide for the incremental construction soil-structure interaction program SOILSTRUCT," Technical Report ITL-90-6, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Ebeling, R. M., Peters, J. F., and Mosher, R. L. (1997). "The role of non-linear deformation analyses in the design of a reinforced soil berm at Red River U-Frame Lock No. 1," *International Journal for Numerical and Analytical methods in Geomechanics* 21, 753-787.

- Ebeling, R. M., Clough, G. W., Duncan, J. M., and Brandon, T. L. (1992). "Methods for evaluating the stability and safety of gravity earth retaining structures founded on rock," Technical Report REMR-CS-29, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Ebeling, R. M., Mosher, R. L., Abraham, K., and Peters, J. F. (1993). "Soil-structure interaction study of Red River Lock and Dam No. 1 subjected to sediment loading," Technical Report ITL-93-3, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Esterhuizen, J.J. (1997). "Progressive failure of slopes in lined waste impoundments," Doctoral Dissertation, Geotechnical Engineering Division, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg.
- Evgin, E., and Fakharian, K. (1996). "Effect of stress paths on the behaviour of sand-steel interfaces," *Canadian Geotechnical Journal* 33(6), 853-865.
- Fakharian, K., and Evgin, E. (1995). "Simple shear versus direct shear tests on interfaces during cyclic loading," *Proceedings Third International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics*, St. Louis, MO, April 2-7, 1995. S. Prakash, ed., University of Missouri at Rolla, III, 13-16.
- Fakharian, K., and Evgin, E. (1996). "An automated apparatus for three-dimensional monotonic and cyclic testing of interfaces," *Geotechnical Testing Journal* 19(1), 22-31.
- Fakharian, K., and Evgin, E. (1997). "Cyclic simple-shear behavior of sand-steel interfaces under constant normal stiffness condition," *Journal of Geotechnical and Geoenvironmental Engineering* 123(12), 1096-1105.
- Filz, G. M. (1992). "An analytic and experimental study of earth loads on rigid retaining walls," Doctoral Dissertation, Geotechnical Engineering Division, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg.
- Filz, G. M., and Duncan, J. M. (1997). "Vertical shear loads on nonmoving walls. I: Theory," *ASCE Journal of Geotechnical Engineering* 123(9), 856-862.

- Filz, G. M., Duncan, J. M., and Ebeling, R. M. (1997). "Vertical shear loads on nonmoving walls. II: Applications," *ASCE Journal of Geotechnical Engineering* 123(9), 863-873.
- Gómez, J. E., Filz, G. M., and Ebeling, R. M. (1999). "Development of an improved numerical model for concrete-to-soil interfaces in soil-structure interaction analyses; Report 1, Preliminary Study," Technical Report ITL-99-1, U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- Goodman, R. E., Taylor, R. L., and Brekke, T. L. (1968). "A model for the mechanics of jointed rock," *Journal of the Soil Mechanics and Foundations Division, ASCE*, 94(SM3), 637-659.
- Headquarters, U.S. Army Corps of Engineers. (1994). "Stability of gravity walls, vertical shear," Engineer Technical Letter 1110-2-352, Washington, DC.
- Headquarters, U.S. Army Corps of Engineers. "Stability analyses of concrete structures" (in preparation), Engineer Manual 1110-2-2100, Washington, DC.
- Heuze, F. E., and Barbour, T. G. (1982). "New models for rock joints and interfaces," *ASCE Journal of the Geotechnical Engineering Division* 108(GT5), 757-776.
- Hryciw, R. D., and Irsyam, M. (1993). Behavior of sand particles around rigid ribbed inclusions during shear," *Soils and Foundations* 33(3), 1-13.
- Huck, P. J., and Saxena, S. K. (1981). "Response of soil-concrete interface at high pressure." *Proceedings of the Tenth International Conference on Soil Mechanics and Foundation Engineering*, Stockholm, 15-19 June 1981. A. A. Balkema, Rotterdam, The Netherlands, 2, 141-144.
- Jaky, J. (1948). "The coefficient of earth pressure at rest," *Journal of the Society of Hungarian Architects and Engineers*, 1944.
- Janbu, N. (1963). "Soil compressibility as determined by oedometer and triaxial tests." *European Conference on Soil Mechanics and Foundation Engineering*, Wiesbaden, Germany, 1, 19-25
- Kishida, H., and Uesugi, M. (1987). "Tests of the interface between sand and steel in the simple shear apparatus," *Géotechnique* 37(1), 45-52.

- Kondner, R. L. (1963). "Hyperbolic stress-strain response: Cohesive soils," *Journal of the Soil Mechanics and Foundations Division*, ASCE, proc. Paper 3429, 89(SM1), 115-143.
- Kondner, R. L., and Zelasko, J. S. (1963). "A hyperbolic stress-strain formulation for sands." *Proceedings, 2nd Pan-American Conference on Soil Mechanics and Foundations Engineering*, Sao Paulo, Brazil, July 16-24 1963. I, 289-324.
- Kramer, S. L. (1996). "Geotechnical earthquake engineering," *Prentice-Hall*, Upper Saddle River, NJ.
- Kulhawy, F. H., and Peterson, M. S. (1979). "Behavior of sand-concrete interfaces," *Proceedings of the 6th Panamerican Conference on Soil Mechanics and Foundation Engineering*, Lima, Perú, December 2-7, 1979. II, 225-236.
- Lade, P. V., and Duncan, J. M. (1975). "Elastoplastic stress-strain theory for cohesionless soil," *ASCE Journal of the Geotechnical Engineering Division* 101(GT10), 1037-1053.
- _____. (1976). "Stress path-dependent behavior of cohesionless soil," *ASCE Journal of the Geotechnical Engineering Division* 102(GT1), 51-68.
- Lee, P. A., Kane, W. F., Drumm, E. C., and Bennett, R. M. (1989). "Investigation and modeling of soil-structure interface properties." *Foundation engineering: current principles and practice*. ASCE Geotechnical Special Publication 22, 580-587.
- Matsui, T., and San, K. C. (1989). "An elastoplastic joint element with its application to reinforced slope cutting," *Soils and Foundations* 29(3), 95-104.
- Morrison, C. S. (1995). "The development of a modular finite element program for analyses of soil-structure interaction," Doctoral Dissertation, Geotechnical Engineering Division, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg.
- Peterson, M. S., Kulhawy, F. H., Nucci, L. R., and Wasil, B. A. (1976). "Stress-deformation behavior of soil-concrete interfaces," Contract Report B-49 to Niagara Mohawk Power Corporation, Syracuse, NY.

- Potyondy, J. G. (1961). "Skin friction between various soils and construction materials," *Géotechnique* 11(4), 339-353.
- Pyke, R. (1979). "Nonlinear soil models for irregular cyclic loadings," *ASCE Journal of the Geotechnical Engineering Division* 105(GT6), 715-726.
- Seed, R. B., and Duncan, J. M., (1986). "FE analyses: compaction-induced stresses and deformations," *Journal of Geotechnical Engineering*, ASCE, 112(1), 23-43.
- Sehn, A. L. (1990). "Experimental study of earth pressures on retaining structures," Doctoral Dissertation, Geotechnical Engineering Division, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg.
- Shallenberger, W. C., and Filz, G. M. (1996). "Interface strength determination using a large displacement shear box." *Proceedings of the Second International Congress on Environmental Geotechnics*, Osaka, Japan, 5-8 November 1996. M. Kamon, ed., A. A. Balkema, Rotterdam, The Netherlands.
- Stankowski, T., Runesson, K., and Sture, S. (1993). "Fracture and slip of interfaces in cementitious composites. I: Characteristics," *Journal of Engineering Mechanics*, ASCE 119(2), 292-314.
- Stark, T. D., Ebeling, R. M., and Vettel, J. J. (1994). "Hyperbolic stress-strain parameters for silts," *ASCE Journal of Geotechnical Engineering* 120(2), 420-441.
- Stark, T. D., Williamson, T. A., and Eid, H. T. (1996). "HDPE geomembrane/geotextile interface shear strength," *Journal of Geotechnical Engineering* 122(3), 197-203.
- Uesugi, M., and Kishida, H. (1985). "Discussion: Cyclic testing and modeling of interfaces," *Journal of Geotechnical Engineering*, ASCE, 113(9), 1086-1087.
- _____. (1986a). "Frictional resistance at yield between dry sand and mild steel," *Soils and Foundations*, 26(4), 139-149.
- _____. (1986b). "Influential factors of friction between steel and dry sands," *Soils and Foundations*, 26(2), 33-46.

- Uesugi, M., Kishida, H., and Tsubakihara, Y. (1988). "Behavior of sand particles in sand-steel friction," *Soils and Foundations* 28(1), 107-118.
- _____. (1989). "Friction between sand and steel under repeated loading," *Soils and Foundations* 29(3), 127-137.
- Uesugi, M., Kishida, H., and Uchikawa, Y. (1990). "Friction between dry sand and concrete under monotonic and repeated loading," *Soils and Foundations* 30(1), 115-128.
- Wilson, E. L. (1975). Finite elements for foundations, joints and fluids." *Finite Elements in Geomechanics*. G. Gudehus, ed., John Wiley, London.
- Wong, P. C., Kulhawy, F. H., and Ingraffea, A. R. (1989). "Numerical modeling of interface behavior for drilled shaft foundations under generalized loading." *Foundation engineering: current principles and practice*, ASCE Geotechnical Special Publication 22, 565-579.
- Wood, D. M. (1990). "Soil behavior and critical state soil mechanics." Cambridge University Press, New York, N.Y.
- Yoshimi, Y., and Kishida, T. (1981). "A ring torsion apparatus for evaluating friction between soil and metal surfaces," *Geotechnical Testing Journal* 4(4), 145-152.
- Yuan, Z., and Chua, K. M. (1992). "Exact formulation of axisymmetric-interface-element stiffness matrix," *ASCE Journal of Geotechnical Engineering* 118(8), 1264-1271.
- Zaman, M. M., Desai, C. S., and Drumm, E. C. (1984). "Interface model for dynamic soil-structure interaction," *ASCE Journal of Geotechnical Engineering* 110(9), 1257-1273.