Name:

SHOULDER

Muscle Strength Testing Results

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	Position	HHD placement	L	R	Normal	% BW	# tested
Abduction	Seated, 90* abduction	Proximal to elbow			26.0 Lb 11.8 KgF	19.6	1362
Flexion	Seated, 90* flexion	Proximal to elbow			26.9 Lb 12.2 KgF	16.7	1833
Internal Rotation	Seated, 0*, elbow bent	Palmar wrist			39.4 Lb 17.9 KgF	23.7	3647
External Rotation	Seated, 0*, elbow bent	Dorsal wrist			27.7 Lb 12.6 KgF	17.7	2546

Shoulder References

Cools, A. M. J., Vanderstukken, F., Vereecken, F., Duprez, M., Heyman, K., Goethals, N., & Johansson, F. (2016). Eccentric and isometric shoulder rotator cuff strength testing using a hand-held dynamometer: reference values for overhead athletes. Knee Surgery, Sports Traumatology, Arthroscopy, 24(12), 3838–3847. https://doi.org/10.1007/s00167-015-3755-9

Cools, A. M., Johansson, F. R., Cambier, D. C., Velde, A. vande, Palmans, T., & Witvrouw, E. E. (2010). Descriptive profile of scapulothoracic position, strength and flexibility variables in adolescent elite tennis players. British Journal of Sports Medicine, 44(9), 678–684. https://doi.org/10.1136/bjsm.2009.070128

Cools, A. M., Palmans, T., & Johansson, F. R. (2014). Age-related, sport-specific adaptions of the shoulder girdle in elite adolescent tennis players. Journal of Athletic Training, 49(5), 647–653. https://doi.org/10.4085/1062-6050-49.3.02

Cibulka, M. T., Enders, G., Jackson, A., Maines, S., von der Haar, J., & Bennett, J. (2015). The Relationship Between Passive Glenohumeral Total Rotation and the Strength of the Internal and External Rotator Muscles, a Preliminary Study. IJSPT, 10(4), 434–440.

Roach, C. J., Cameron, K. L., Westrick, R. B., Posner, M. A., & Owens, B. D. (2013). Rotator cuff weakness is not a risk factor for first-time anterior glenohumeral instability. Orthopaedic Journal of Sports Medicine, 1(1), 1–6. https://doi.org/10.1177/2325967113489097

Cheung, A. T. H., Ma, A. W. W., Fong, S. S. M., Chung, L. M. Y., Bae, Y. H., Liu, K. P. Y., Kam, K. W. K., & Chung, J. W. Y. (2018). A comparison of shoulder muscular performance and lean mass between elite and recreational swimmers Implications for talent identification and development. Medicine (United States), 97(47). https://doi.org/10.1097/MD.0000000000013258

Decleve, P., Cant, J. van, de Buck, E., van Doren, J., Verkouille, J., & Cools, A. M. (2020). The self-assessment corner for shoulder strength: Reliability, validity, and correlations with upper extremity physical performance tests. Journal of Athletic Training, 55(4), 350–358. https://doi.org/10.4085/1062-6050-471-18

Doraisamy, M. A., & Anshul. (2011). Effect of latent myofascial trigger points on strength measurements of the upper trapezius: A case-controlled trial. Physiotherapy Canada, 63(4), 405–409. https://doi.org/10.3138/ptc.2010-27

Douma, R. K. W., Soer, R., Krijnen, W. P., Reneman, M., & van der Schans, C. P. (2014). Reference values for isometric muscle force among workers for the Nether lands: A comparison of reference values. BMC Sports Science, Medicine and Rehabilitation, 6(1). https://doi.org/10.1186/2052-1847-6-10

Gillet, B., Begon, M., Sevrez, V., Berger-Vachon, C., & Rogowski, I. (2017). Adaptive alterations in shoulder range of motion and strength in young tennis players. Journal of Athletic Training, 52(2), 137–144. https://doi.org/10.4085/1062-6050.52.1.10

Habechian, F. A. P., van Malderen, K., Camargo, P. R., & Cools, A. M. (2018). Changes in shoulder girdle strength in 3 consecutive years in elite adolescent swimmers: a longitudinal cohort study. Brazilian Journal of Physical Therapy, 22(3), 238–247. https://doi.org/10.1016/j.bjpt.2018.01.001. W. (1991). *Hand-held*

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