

DESIGNING A SHOULDER SOCKET FOR USE OF FIVE FORCE SENSING RESISTORS

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A patient combining transhumeral amputation and brachial plexus injury presented an opportunity to revisit the design of a frame sockets for control using multiple FSR's. The superior socket wings bear on the user more medially than with a myo frame leaving all the anatomy at the acromion free to move in two directions. Both the initial socket and the definitive used adjustable-height mounts for the five FSR's. Key to the initial fitting was a separate clear-plastic arc for the FSR's. The ends of the arc and the attachment angle could be varied along with the location and depth of the individual FSR's. The fitting was a success and the user returned to work.