

# EDUCATION IN MOTION

■ WHERE THEORY MEETS PRACTICE ■

## Power Wheelchair Seat Frame Comparison



After considering the importance of drive wheel position, often the next step in this process is deciding which seat frame will best meet the client's needs both today and down the road. As we expect power wheelchairs to suit the client for multiple years, it is important to have adaptability and adjustability in the seat frame. Consider the client's diagnosis, co-morbidities and potential for change in function, size and shape. Consider their skin integrity risk and how they mitigate these risks. How is the person able to perform a weight shift or position change; is this likely to change? Consider how the client gets in and out of the wheelchair; is this likely to change? Consider what activities the client wants to do while sitting in the wheelchair and what power seat functions are required to allow this participation?






The seat frame you choose will determine the weight capacity, seat size adjustability, compatibility with power seat functions and postural support it offers. Each seat frame type will also have slightly different options for foot supports and arm supports which may affect how a client can function independently in their world.

As with all equipment decisions, there are always considerations and compromises but hopefully, by understanding the key features and benefits of each of the seat frame options, you can give advice to clients about which might best suit their lifestyle and usage.

(Continued)

# Power Wheelchair Seat Frame Comparison

The following chart compares and contrasts the specifications of QUICKIE® Power Wheelchair Seat Frame offerings. This should be considered a guide, realizing that many other wheelchair features and client goals need to be considered when recommending the entire power wheelchair.

Power Seat Function	SEDEO® UP WITH PRO ADVANCED	SEDEO® PRO ADVANCED	SEDEO® PRO™	SEDEO® LITE	CAPTAIN SEAT
<b>QUICKIE Power Options</b>					
<b>Client Usage</b>	Sitting all day/majority of day	Sitting all day/majority of day	Sitting majority of day	Sitting majority of day	Sitting shorter periods of day
<b>Skin Protection Requirements</b>	Very high / High	Very High	High	Moderate	Low
<b>Skin Protection Methods</b>	Totally dependent on power seat functions (PSF) Very High	Totally dependent on PSF Very High	Dependent on PSF High with potential to increase over time	Client able to perform weight shift but also requires assistance from PSF Moderate and stable	Client able to perform weight shift but also may benefit from tilt for resting position or lift for access Low and stable
<b>Postural Protection Methods</b>	Totally dependent on multiple PSF, posture cannot be attained or maintained by a single power seat function  Requires combination of multiple PSF positions for good postural alignment  Requires specific positions, programmed by the combination of actuator movements for good postural alignment. These are called "Biometric Repositioning Positions"  Requires specific standing posture due to physical or functional or range of motion (ROM) limitation	Can manage activities of daily living (ADLs), instrumental activities of daily living (IADLs) or vocational tasks with combination of tilt, recline and lift  Requires combination of multiple PSF positions for good postural alignment  Requires specific positions, programmed by the combination of actuator movements for good postural alignment. These are called "Biometric Repositioning Positions"  Requires specific end position in supine or tilt/recline/power legs due to physical or functional or ROM limitations	Can manage ADLs, IADLs or vocational tasks with combination of tilt, recline and lift  Can attain good postural alignment with tilt and recline  Can manage ADLs, IADLs or vocational tasks with combination of tilt, recline and lift  Because of the client's postural complexity, they would benefit from integration of the back support into the seat frame minimizing loss of seat depth	Can attain good postural alignment with tilt  Only needs tilt and/or semi-recline to maintain safe and comfortable position  Can attain good postural alignment with just tilt and/or semi-recline  Can manage activities with just tilt and lift	Can manage activities with just tilt or lift  Can attain good postural alignment with single PSF or without any PSF  Can manage activities with just tilt or lift  Can attain good postural alignment with captains seat mildly contoured back support. Because of the client's postural complexity, they would benefit from integration of the back support into the seat frame minimizing loss of seat depth

(Comparison Table Continued)

# Power Wheelchair Seat Frame Comparison

Power Seat Function	SEDEO® UP WITH PRO ADVANCED	SEDEO® PRO ADVANCED	SEDEO® PRO™	SEDEO® LITE	CAPTAIN SEAT
Special Use	Client needs standing function	Client needs full supine function or combined actuator movements	Can participate in ADL's, IADLs or vocational tasks with just tilt, lift and/or recline. They do not need actuators to move together to create specific posture	Can manage activities with just tilt and lift	Comfort would benefit from adjustable seat recline
	Client would benefit from power center mount legrests for management of leg position, increased maneuverability and ease of use	Client would benefit from power center mount legrests for management of leg position, increased maneuverability and ease of use	Needs higher speed while in lift position to allow for safe travel in urban environments - for crossing streets within time allowed	Client would benefit from the seat frame having back canes for easy removal of back support	Can manage activities with just tilt or lift
Activity Participation	Requires standing function to allow participation in ADLs, IADLs or vocational tasks.	Requires combination of multiple PSF to allow participation in ADLs, IADLs or vocational tasks. These are called "Biometric Repositioning Positions"	Can participate in ADL's, IADLs or vocational tasks with just tilt, lift and/or recline. They do not need actuators to move together to create specific posture	Can manage activities with just tilt and lift	Can manage activity with just lift or tilt
	Requires specific anterior tilted position to allow participation in ADLs, IADLs or vocational tasks.	Requires specific positions programmed by combination of actuator positions for participation in ADLs, IADLs or vocational tasks. These are called "Biometric Repositioning Positions"	Does not require specialized programming of actuator positions for participation		
	Requires specific standing "posture" due to physical, functional or ROM limitations.	Requires specific end position in supine or tilt/recline/power legs due to physical or functional or ROM limitations	Needs higher speed while in lift position to allow participation and involvement with peers/co-workers		

## References

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