Motor Selection Matrix

Factors	Cost	Position Recall Accuracy	Rotataional Accuracy	System Torque	Speed Range	Total Marks
Weight	2	3	1	2	2	
Single Phase 208V Servo	3	2	3	3	2	25
3 Phase 230V Servo	2	2	3	3	2	23
3 Phase 575V Geared Motor	1	1	2	3	1	15

Cost	Add 1 for every $1000 under $5000
Position Recall	Add 1 for resolution x .1 past 1 degrees
Rotational Accuracy	Add 1 for resolution x .1 past 1 degrees
System Torque	Max 3, -1 for 100Nm below target
Speed Range	Add 1 for if speed is within range, Add 2 if can achieve any speed target within range

Safety Matrix

Factors	Number of Disconnects	Control Voltage	Complexity of Integration	Total Marks
Weight	2	2	2	
Single Phase 208V Servo	2	2	2	12
3 Phase 230V Servo	2	2	2	12
3 Phase 575V Geared Motor	1	1	1	6

Number of Disconnects	Max 2, subtract 1 for every additional disconnect besides On/Off and E-Stop
Control Voltage	Add 1 if can be operated at DC control, Add 2 if can be operated directly from Microcontroller power
Complexity of Integration	Max 3, subtract 1 for each additional system to integrate wotor with controller