1 Morphology chart

Functions	1	2	3	4	5
Navigation	Lines on the floor	GPS location +	Preprogrammed	Sensor fusion	Bluetooth RTLS
system		pallet detection	map	(IMU + GPS)	
Micro	Arduino nano	STM32xx	RaspberryPi	Option 4	Option 5
$\operatorname{controller}$ /					
processor					
Pallet	Option 1	Option 2	Option 3	Option 4	Option 5
${f recognition}$					
Coding	Option 1	Option 2	Option 3	Option 4	Option 5
$\operatorname{standard}$					
Mast Stage	Simplex	Duplex	Triplex	Quadriplex	
Lift solution	Linear Actuator	L.A +	Threaded Rod	String&Bearing	Rack&Pineon
		RollerChain			
Lifting sensing	End stops	Encoder	Stepper Motors	Option 4	Option 5
	Top&Down				
Motors	Option 1	Option 2	Option 3	Option 4	Option 5
Sensors Fork	Pressure (Weight)	Pallet recognition	Option 3	Option 4	Option 5
Sensors Body	Ultrasonic	Infrared Distance	LiDAR	Optical Sensors	Option 5
	Distance				
	HC-SR04				
Sensors x	Option 1	Option 2	Option 3	Option 4	Option 5

^{*} Green cells indicates chosen option.