

Kit Robot Agent

Kitting Cell v0

Data	Messages	Scheduler	Actions
Map<Int, Boolean>StandPositions Int NumKitsToRequest //Initially 0 Kit MyKit //Shared data with Stand List<Kit> KitsOnStand Stand stand Conveyor conveyor Camera camera	//From Conveyor HereIsKit(Kit k){ MyKit = k; k.KS = PickedUp; NumKitsToRequest--; } //From Stand NeedKit(int location){ StandPositions.put(location, true); NumKitsToRequest++; } //From Stand MoveKitToInspectionArea(Kit k){ k.KS = MarkedForInspection; } //From Camera KitPassedInspection(){ KitsOnStand.get(0).KS = Inspected; }	if(MyKit != null) if(MyKit.KS = PickedUp) PlaceMyKitOnStand() If $\exists k$ in KitsOnStand ϵ k.KS = MarkedForInspection call PlaceKitInInspectionArea(k) If $\exists k$ in KitsOnStand ϵ k.KS = Inspected call ShipKit(k) if(NumKitsToRequest > 0) call RequestKit()	RequestKit(){ Conveyor.NeedKit(); } PlaceMyKitOnStand(){ // Find int i in //StandPositions.keys() ϵ //StandPositions.get(int) = true DoPlaceKitOnStand(i); StandPositions.add(i, false); Stand.HereIsKit(MyKit, i); } PlaceKitInInspectionArea(Kit k){ DoPlaceKitInInspectionArea(k); k.KS = AwaitingInspection; camera.InspectKit(k); } ShipKit(Kit k){ DoPlaceKitOnConveyor(); conveyor.TakeKitAway(k); stand.ShippedKit(); } DoPlaceKitOnStand(int location){ //Animation} DoPlaceKitInInspectionArea(Kit k){//Animation} DoPlaceKitOnConveyor(){ //Animation}