

GOAL: Developing an Autonomous system to improve the manual process of the diamond tin registering, tracking and packing					
Objective	Functions	Technical requirements	Possible Components	Data	Task
Registering Tin/Can	Fit identifier on tin/can	Quantitative data, methodology	RFID, NFC, QR, Barcode		
Move Tin/Can into the machine	Detect the tin/can	Quantitative data, methodology (Magnetic induction sensor)	MCPIP-T8L-101, Camera Vision		
	Move to the machine	Quantitative data, methodology (grasping, releasing, moving)	Robotic arm manipulator		
Localization of the tin	Dynamic during movement / Static: phisical stopper to set tin in same end position every cycle	Quantitative data, methodology	conveyor, camera vision, system body		
Validation	Read the identifier	Quantitative data, methodology	Tag reader, camera vision		
	Confirm seal integrity	Quantitative data, methodology	Camera		
	Measure weight	Quantitative data, methodology	Scale		
Detect Tin	Detect the tin at Caning Machine Exit				
Move Tin/Can	Move Tin/Can from machine				
	Confirm seal integrity				
Packing the tin Consingment					

[illegible]