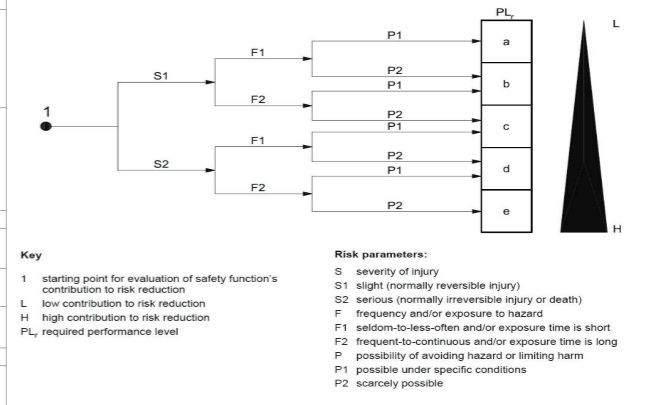


PROTOCOL APPROVAL		
PREPARED BY	DESIGNATION	SIGNATURE AND DATE
Sahana I H	Automation	
REVIEWED BY BRML	DESIGNATION	SIGNATURE AND DATE
Vaibhav Bhosale	Automation	
Pabitra Hazra	Design	
REVIEWED BY STRIDES PHARMA	DESIGNATION	SIGNATURE AND DATE
APPROVED BY STRIDES PHARMA	DESIGNATION	SIGNATURE AND DATE



Assessment reference:	16049	Number of operatives:	1
Type of machine:	Sachet Cartoning Machine	Number of shifts per week:	
Machine location:	Bangalore	Usage (hours per week):	
Machine description:	Sachet Cartoning Machine	Operating manuals:	Supplied
Machine manufacturer:	BAR	SOP's	As required, per post assembly Hazop.
Machine model:	p780	Operatives' training record:	
Machine serial number:	p780-16049-01-2022	Warning signs:	As required, per post assembly Hazop.
Modifications from 'as-supplied':	None	Raw materials:	
Energy sources:	Electrical Power and Compressed Air	Maintenance manual:	Supplied
Energy source ratings:	Electrical - 3phase, 415V Pneumatic - Air @6bar.	Maintenance training record:	Operators & maintenance to be trained upon installation
Safety measures:	(eg. PLd safety architecture)	Access by untrained visitors:	Prohibited
Assessment carried out by:	OB, RB		
Assessment date:	23-08-2022		
Assessment reviewed by:			
Assessment review date:			
Version:	1.0		

LO (Likelihood of Occurrence)		
0.033	Almost impossible	Only in extreme circumstances
1	Highly unlikely	Though conceivable
1.5	Unlikely	But could occur
2	Possible	But unusual
5	Even chance	Could happen
8	Probable	Not surprising
10	Likely	To be expected
15	Certain	No doubt

FE (Frequency of Exposure)	
0.5	Annually
1	Monthly
1.5	Weekly
2.5	Daily
4	Hourly
5	Constantly

HRN	Risk
0-5	Negligible
5-50	Low, significant
50-500	High
Over 500	Unacceptable

HRN = LO x FE x DPH x NP

DPH (Degree of Possible Harm)		
0.1	Scratch or bruise	
0.5	Laceration or mild ill-effect	
2	Break of minor bone or minor illness (temporary)	
4	Break of major bone or major illness (temporary)	
6	Loss of one limb, eye, hearing (permanent)	
10	Loss of two limbs or eyes (permanent)	
15	Fatality	

NP (Number of Persons at risk)	
1	1-2 persons
2	3-7 persons
4	8-15 persons
8	16-50 persons
12	50+ persons

**RML Assumptions:** Machine has no electronic guarding at all at initial assessment, frame is present.  
**Keywords:** See "Example Keywords" sheet for further keywords

No.	Assembly	Machine Location	Type of Hazard	Potential consequences	Comments	Initial assessment						Action required	Re-assessment after taking action					Residual Risk Action Required	
						LO	FE	DPH	NP	HRN	Risk level		LO	FE	DPH	NP	HRN		Risk level
5	Flap Folding Assembly	Major Flap Closing Assembly	Kinetic energy (Crushing Shearing)	-Injuries include amputations, lacerations, contusions crushing of tissues and bones, and broken bones. -The risk of getting hit by one of the pneumatic tool's attachments	<b>Hazards</b> - Impact of operator being struck by rapidly moving mechanisms. <b>Why is the hazard there</b> - Mechanisms are required to manipulate the flaps so the box can be closed/loaded. <b>What drives the hazard</b> - Pneumatic. <b>How could harm be caused</b> - Operators get body or limbs in the path of moving mechanisms. <b>Why would the hazard occur</b> - Operator inspection or intervention around the flap folding equipment. <b>Potential occurrence of hazard</b> - Possible <b>Possible harm</b> - Lacerations, bruising	2	4	2	1	16	Low, significant	Operator / Maintenance Staff Awareness Warning Signs	2	4	2	1	16	Low, significant	Operator / Maintenance Staff Awareness and Training