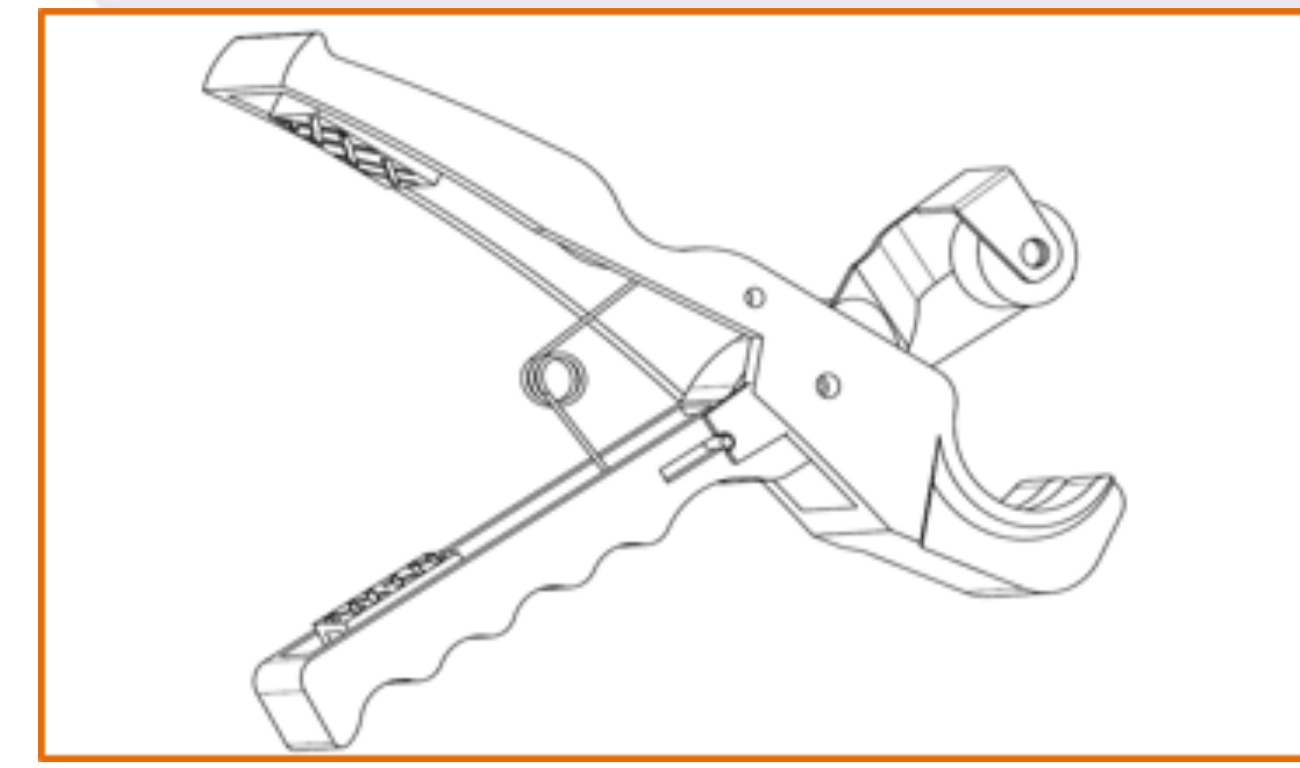
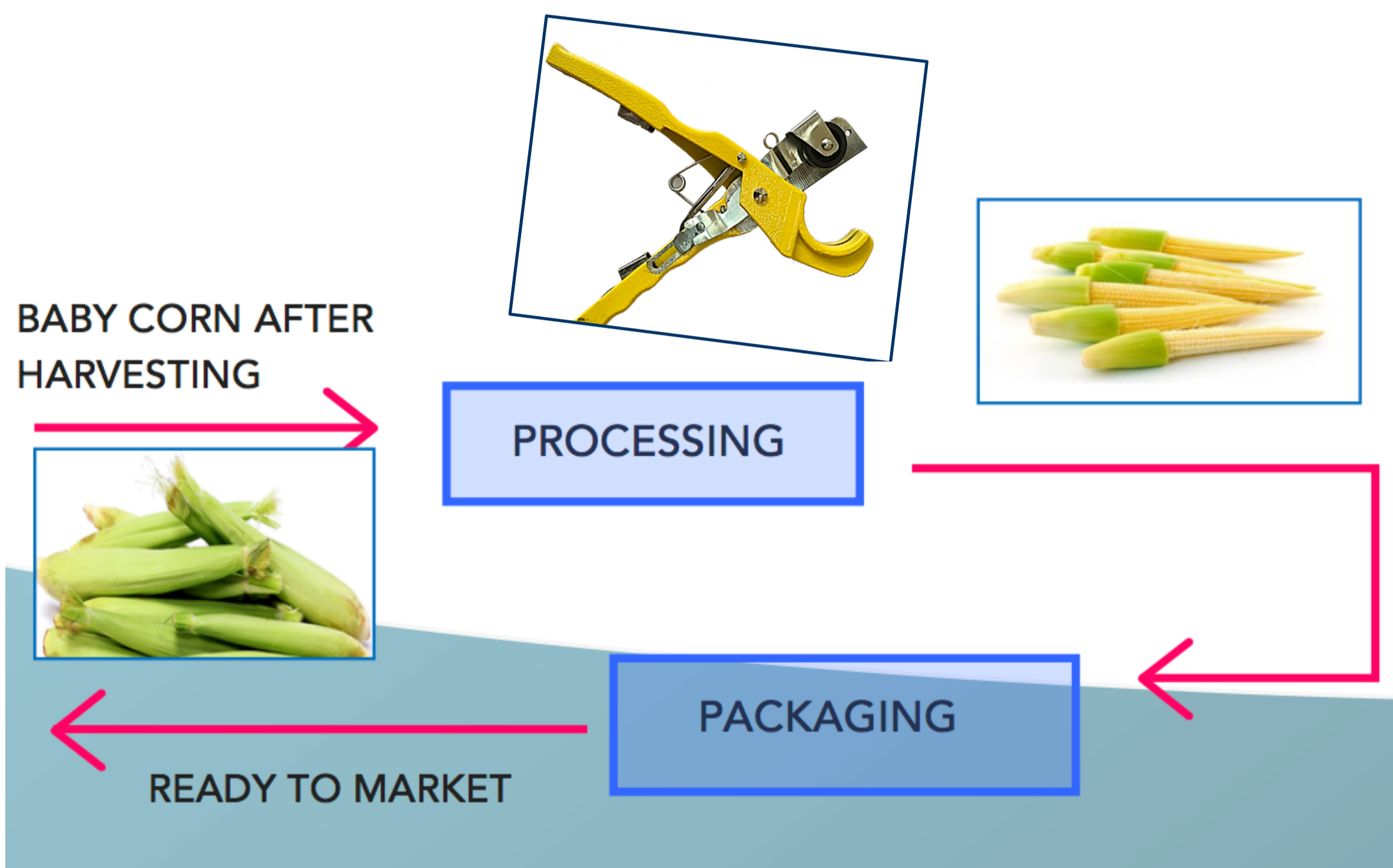


# A Peeling Tool

IPR (PATENT/ID/C) NO. PI 2018700210



## A PEELING TOOL : BABY CORN PROCESSING HAND TOOL



## COMPARISON STUDY

The results show that the processing using the prototype is better than the manual processing:

Item	Processing Method	
	Peeling Tool	Manual processing
Average processing time per single baby corn	11.34 s	26.26 s
Estimated processing rate	316 corn cobs/hr	137 corn cobs/hr
Efficiency	92.67%	83.33%

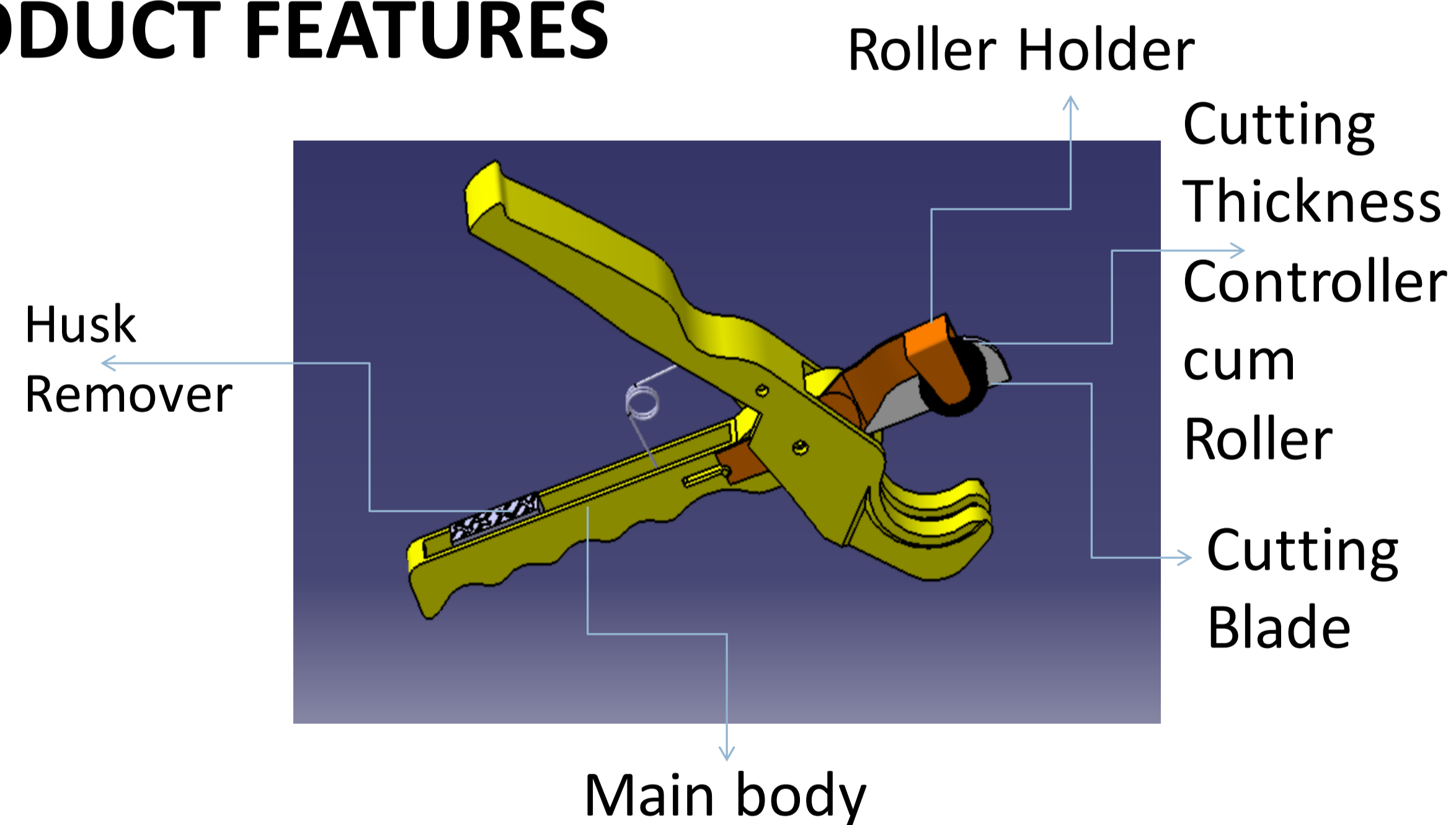
## INTRODUCTION OF TECHNOLOGY

3 SIMPLE STEPS REQUIRED:

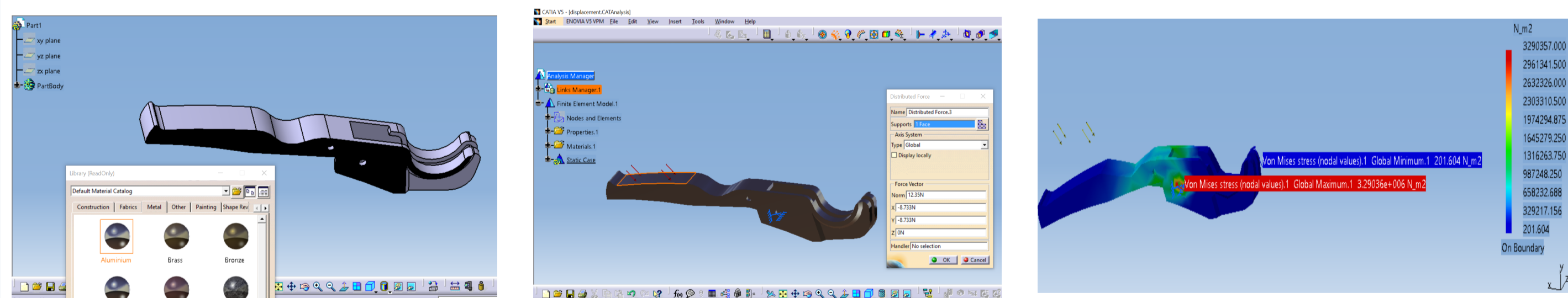
- 1: Cut around  $\frac{3}{4}$  of the cornhusk to the desired thickness.
- 2: Remove the cornhusk
- 3: Cut the stem



## PRODUCT FEATURES



## STRUCTURAL ANALYSIS



- Applied load : 12.35 N
- The maximum stress value obtained (3.29 MPa) was lower than material yield strength of the aluminum alloy which is 240 MPa

## MARKET POTENTIAL

Price of processed baby corn in local market

Average Price (RM/kg) (2013)			Average Price (RM/kg) (2014)		
Farm	Wholesale	Retail	Farm	Wholesale	Retail
-	7.00	8.20	-	7.30	8.60

Source: Statistik Utama Pemasaran FAMA, (2014), Federal Agricultural Marketing Authority (FAMA), Ministry of Agriculture and Agro-Based Industry, Malaysia, page 17-27

Size of local market segment

Crops	2011		2012		2013	
	Planting Acreage (Hectare)	Total Production (Metric Ton)	Planting Acreage (Hectare)	Total Production (Metric Ton)	Planting Acreage (Hectare)	Total Production (Metric Ton)
Sweet corn	9,759	59,845	9,481	52,481	9,955	55,105

Source: Agrofood Statistics (2014), Ministry of Agriculture and Agro-Based Industry, Malaysia

Global market potential

Year	Canned baby corn (Tons)	Value (Million Baht)*	Fresh baby corn (Tons)	Value (Million Baht)*
2002	61,413	1.643	3,954	173
2003	62,830	1.645	8,444	197
2004	63,473	1.675	3,853	244

Source: Department of Agriculture Extension of Thailand, 2005 (\*1 US \$ @ 39 Baht)



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