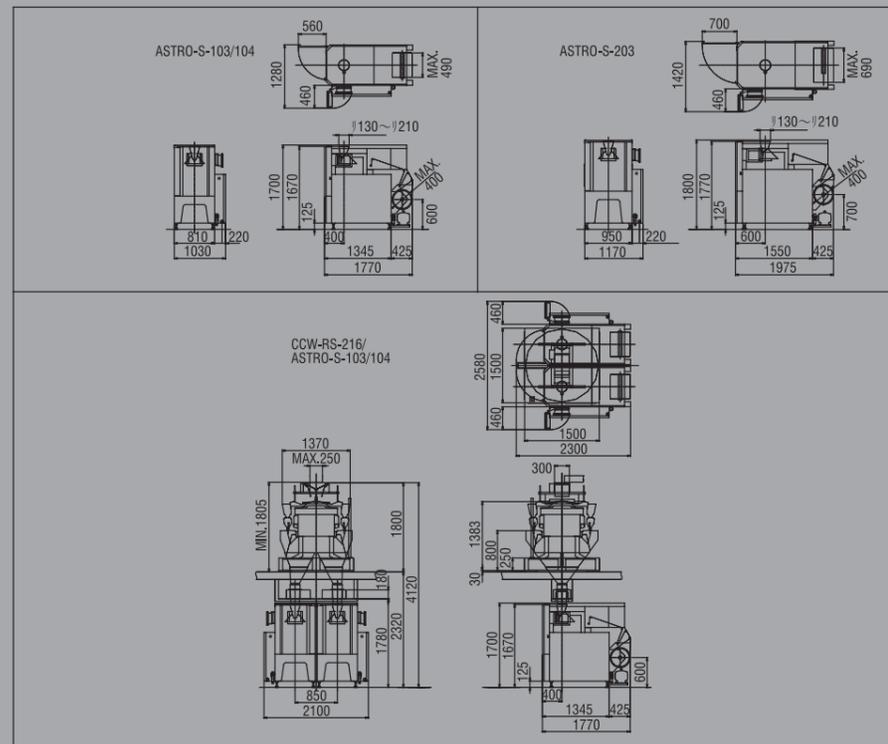


Specifications				
Model	Astro 103 /104	Astro 103 /104 (Block bottom option)	Astro 203	Astro 203 (Block bottom option)
Bag Format	Pillow	Pillow, block bottom, gusset	Pillow	Pillow, block bottom, gusset
Running speed	up to 90/100bpm	up to 45bpm	up to 80bpm	up to 45bpm
Bag Size Width	100 - 230mm	100 - 230mm*	100 - 330mm	100 - 330mm*
Bag Size Length	100 - 600mm**	100 - 600mm**	100 - 600mm**	100 - 600mm**
Film Size Max. roll width	490mm	490mm	690mm	690mm
Bore of film roll core	76.2mm	76.2mm	76.2mm	76.2mm
Max roll diameter	400mm	400mm	400mm	400mm
Max roll weight	40kg	40kg	40kg	40kg
Product	Snack foods such as potato chips, corn chips, tortilla chips, nuts, sticks and popcorn			
Film Feeding Motion	Intermittent	Intermittent	Intermittent	Intermittent
Machine Size	Width	1030mm	1030mm	1170mm
	Height	1700mm	1700mm	1800mm
	Length	1770mm	1770mm	1975mm
Power Supply Power Voltage	3 phase AC380-415V 50/ 60hz			
Allowable Voltage Fluctuation	± 10%			
Air Supply	0.5 - 1MPa (5.1 - 10.2kgf/cm <sup>2</sup> ) 60N/min.			
Net Weight (circa)	1200kg	1200kg	1300kg	1300kg
Operational Temperature	32-104°F (0-40°C) RH30-70% non-condensing			
Options	Date printer, Metal detector, Air jet, Product poker, chain bags, stick handling, narrow bags 65-100mm, gusset bags, block bottom, hole punch bags, corner creased block bottom bags, banner device (promo strip).			
Sealing Jaw Motion	Intermittent single jaw	Intermittent single jaw	Intermittent single jaw	Intermittent single jaw

\* Pillow bag widths only, gusset and block bottom bags ranges are limited based on side and front pack dimensions  
 \*\* 300mm in one pull of the film, 360mm long back seal available as option.



# Astro-S

Quality plus versatile economy in snack foods bagmaking



**ISHIDA EUROPE LIMITED**  
 Kettles Wood Drive  
 Woodgate Business Park  
 Birmingham  
 B32 3DB  
 United Kingdom  
 Tel: +44 (0)121 607 7700  
 Fax: +44 (0)121 607 7888  
 info@ishidaeurope.com

**ISHIDA CZECH REPUBLIC**  
 Tel: +420 317 844 059  
 Fax: +420 317 844 052  
 info@ishidaeurope.cz

**ISHIDA ROMANIA**  
 Tel: +40 (0)21 589 73 52  
 Fax: +40 (0)21 310 34 22  
 info@ishidaeurope.ro

**ISHIDA FRANCE**  
 Tel: +33 (0)1 48 63 83 83  
 Fax: +33 (0)1 48 63 24 29  
 info@ishidaeurope.fr

**ISHIDA RUSSIA AND CIS**  
 Tel: +7 499 272 05 36  
 Fax: +7 499 272 05 37  
 info@ishidaeurope.ru

**ISHIDA GERMANY**  
 Tel: +49 (0)791 945 160  
 Fax: +49 (0)791 945 1699  
 info@ishida.de

**ISHIDA SOUTH AFRICA**  
 Tel: +27 (0)11 976 2010  
 Fax: +27 (0)11 976 2012  
 info@ishida.co.za

**ISHIDA MIDDLE EAST**  
 Tel: +971 (0)4 299 1933  
 Fax: +971 (0)4 299 1955  
 ishida@ishida.ae

**ISHIDA SWITZERLAND**  
 Tel: +41 (0)41 799 7999  
 Fax: +41 (0)41 790 3927  
 info@ishida.ch

**ISHIDA NETHERLANDS**  
 Tel: +31 (0)499 39 3675  
 Fax: +31 (0)499 39 1887  
 info@ishida.nl



# Astro-S

Consistent pack quality and seal integrity at up to 100 bags per minute



## Optimum line performance

### Dependable packaging at speeds up to 100 bags/minute

The Astro-S features Ishida's proprietary packaging machine technology. Our innovative pull-down belt system and servomotor controlled film feeder produce high quality bags at a stable packaging rate.

### Simple film-change and maintenance procedures

The simplified machine design contributes to faster film changes and easy maintenance, resulting in reduced downtime and improved overall operational efficiency.



### Operator-friendly, for minimum downtime

A colour touch-screen offers a simple and easy means of performing various operations and printing. Touch panel operations are icon-based for greater navigation and ease of use. Tabs in the easy-to-follow graphic interface provide quick access to multiple screens for simplified operator control.



### Simple film changeover

The lightweight formers can be changed without using tools, and fewer film rollers insure fast film changes. A simple switch firmly locks the integrated air-chuck roll feed, securing the reel.



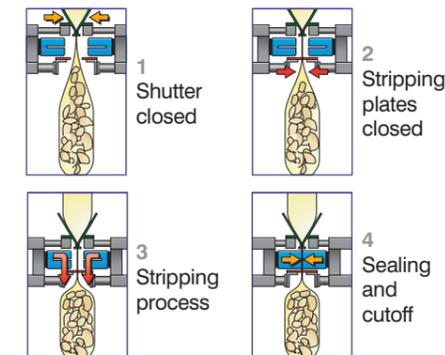
### Stable film feeder

Servomotor control ensure stable feeding of film for reliable packaging at 100 bags/minute.



### Flexible, reliable sealing

The servomotor incorporated in the end seal area ensures optimum seal pressure, seal time and seal temperature for each film. These parameters can be quickly set and programmed using the easy to operate control unit.



### Product stripping ensures minimal film waste

Stripping plates located beneath the sealing jaws can be provided to remove any product from the end seal area prior to making the end seal.



### Pack format options

Enhanced features for a variety of pack styles, including gusset, block bottom and chain bag.

