

# Simply Efficient



## **Blown Film Extrusion Technology**

Designed with easy operation in mind

# **POLYSTAR**

# ENGINEERING THROUGH Simplicity

OMRON SIEMENS Fuji Electric Schneider Electric

POLYSTAR machines are powered by top quality, energy saving and high performing electrical components.



**Stable Operation.  
Maximum Performance.  
Minimum Consumption.**

**World-class Manufacturing Quality**  
— as *Beautiful* as it is **Functional**





Mono layer extrusion

# Twin Head Blown Film Machine

**Bag Production.  
Double The Efficiency.**

- Good output for small film width and thin film.
- Bag on-roll (star-sealed), shopping bags, flat bags, T-shirt bags and etc.
- HDPE, LDPE & LLDPE
- Works with recycled material and CaCO<sub>3</sub>
- Separate controls of temperatures, extrusion output, take up and winding speed on each line of the machine for precise control and easy operation.

Model	Width (mm)	Thickness (mm)		Output (kg/hr)	
		HDPE	LDPE	HDPE	LDPE
DM45 (DM45-500)	100~400	0.008~0.03	0.02~0.1	40~60	50~70
DM55 (DM55-750)	150~650	(8~30 micron)	(20~100 micron)	60~90	70~100
DM75 (DM75-1000)	250~800			100~130	120~140



Mono layer extrusion

# Classic

## Blown Film Machine

**Simple in Design.  
An Easier Way to  
Produce Quality.**

- Garbage bags (star-sealed, bag on-roll, draw string)
- Industrial film of LDPE & LLDPE
- Better cooling effect for LD/LLDPE, thicker film
- Produce single layered sheet with back to back winder
- Works with recycled material and CaCO<sub>3</sub>



Model	Width (mm)	Thickness (mm)		Output (kg/hr)	
		HDPE	LDPE	HDPE	LDPE
HA55 (HA55-1200)	300-1100	0.008-0.03	0.02-0.1	65-85	75-95
HA65 (HA65-1500)	400-1350	(8-30 micron)	(20-100 micron)	85-110	100-140
HA75 (HA75-1800)	500-1600			100-130	120-160

Mono layer extrusion

# Compact

## Blown Film Machine

**Mini. Easy. Ready.**

- Good for producing bags of different colors and sizes
- Flat bags, vegetable bags, T-shirt bags and etc.
- Space saving
- Easy installation and operation
- Works with recycled material and CaCO<sub>3</sub>



Model	Width (mm)	Thickness (mm)		Output (kg/hr)	
		HDPE	LDPE	HDPE	LDPE
MB45 (MB45-750)	200-600	0.008-0.03	0.02-0.05	30-40	35-45
MB55 (MB55-1000)	200-800	(8-30 micron)	(20-50 micron)	40-50	45-55



## Optional Devices

Enhance your  
**POLYSTAR** experience

Manual double winding, fully automatic single or double winding, air shaft  
Rotating die head, bubble controller, manual type (guitar) type screen changer,  
bimetallic screw, corona treatment  
Tension control, edge position control, hot slitting knife  
Gravimetric dosing (4 components), extrusion control, master batch dosing device  
And Etc.



Multi-layer co-extrusion

# ABA Three Layer Blown Film Machine

**Recycled and CaCO<sub>3</sub>. Pushed to the limit.**  
**Cost-saving technology for film and bag producers**

- 2 extruders of different sizes to produce 3 layer film
- Stronger film (strength and durability) thanks to a 3-layered film structure
- Cost saving – high % of recycled material or CaCO<sub>3</sub> used in the middle layer
- Lower investment, faster return: Economic solution comparing to ABC extruders

Model	Width (mm)	Thickness (mm)		Output (kg/hr)	
		HDPE	LDPE	HDPE	LDPE
CE-ABA-45-55 (45-55-1200)	300-1000	0.01-0.03	0.02-0.1	65-110	85-120
CE-ABA-55-65 (55-65-1700)	400-1500	(10-30 micron)	(20-100 micron)	90-130	100-160



Multi-layer co-extrusion

# AB Two Layer LDPE / LLDPE Blown Film Machine

## Application:

- Agricultural (mulch) film and construction film
- Detergent bags, heavy duty bags and shopping bags
- Garment packaging and shrink film
- Consumer packaging and many others

Model	Width (mm)	Thickness (mm)	Output (kg/hr)
		LDPE	LDPE
CE-AB-55-55 (55-55-1400)	800-1250	0.02-0.1	90-120
CE-AB-65-65 (65-65-1700)	1000-1500	(20-100 micron)	110-160



# SIMPLICITY IN OPERATION SUCCESSFUL PROJECTS

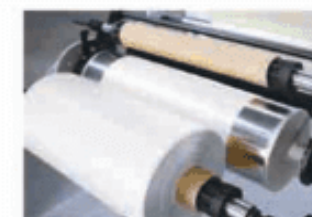
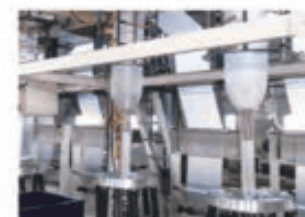
## Leading Mexican Bag Producer Maximizes Production Efficiency

When producing film rolls suitable for bottom-sealed, shopping and t-shirt bag conversions (ranges from 150~600mm in width), it is difficult to achieve higher output by using a bigger extruder for such small film width, unless an IBC (internal bubble cooling) is used. POLYSTAR's twin (double) head blown film machine provides an economic alternative and has a much faster return on investment comparing to a blown film machine equipped with IBC. In the twin head machines, one can reach much higher output with bigger extruders (55mm or 75mm) even when producing at smaller film width. It is especially effective for bag makers who are looking for less expensive solutions with higher output.



## Simple. Compact. Efficient

- PRODUCTS / Star-sealed garbage bags, T-shirt bags, supermarket bag-on-roll (perforation)
- COUNTRY / Mexico
- # OF POLYSTAR MACHINES / 13
- BLOWN FILM MODELS / DM75, HA65, HA75



The twin head blown film machine allows producers to make different sizes of film width on the same machine on each winder at the same time (simultaneously). The high extrusion output is dispersed into two separate die head channels instead of one single die head.

*What's special about POLYSTAR's twin head machine is that it has separate controls of temperatures, extrusion output, take up and winding speed on each line of the machine for precise control and easy operation.*







## Garbage Bag Producer Expands with POLYSTAR

- PRODUCTS / Draw-string garbage bags, shopping bags, T-shirt bags
- COUNTRY / Vietnam
- # OF POLYSTAR MACHINES / 20
- BLOWN FILM MODELS / DM55, HA55, HA65

The leading Vietnamese bag producer with monthly production of 1,500 tons puts its trust in POLYSTAR as the company aggressively expands and upgrades its manufacturing quality and efficiency. The Ho Chi Minh-based producer exports 100% of its bags to the European and Japanese markets.

HDPE thin T-shirt bags with virgin material are used for the Japanese market and LDPE thicker shopping bags with CaCO<sub>3</sub> and recycled material are used for the European markets. These products can both be produced on the same DM55-750 machine. The switch between producing

HDPE/LD/LLDPE can be done simply by changing the die heads and air rings of the machines. Space saving, lower energy consumption, higher productivity are the reasons why the company continues to invest in POLYSTAR every year for both quality product and manufacturing efficiency.



## Indonesia HDPE film Producer Enhances Quality In Co-extrusion Lines

- PRODUCTS / Flat bags, T-shirt bags, agricultural film
- COUNTRY / Indonesia
- # OF POLYSTAR MACHINES / 11
- BLOWN FILM MODELS / ABA, AB, MB45

The ABA 3 layer blown film machine is mainly used for shopping, T-shirt and garbage bag production. The biggest advantage of the ABA is that a high percentage of calcium carbonate compound can be used in the middle (B) layer. Besides reducing a significant amount of virgin raw material used in the formula, another advantage of the ABA machine is that the 3-layer film that it produces is 30% stronger than the film produced by a monolayer extruder with the same thickness.

In some markets where shopping and T-shirt bag production has become extremely competitive, film producers are replacing their existing monolayer extruders with ABA 3 layer blown film machines to reduce production cost.



***"Great mixing. Superior film quality. Stronger film strength. We would definitely recommend POLYSTAR to other film producers."***

***– Production Director, Mr. Hendrix.***





# Long Term Partnership. Russian PE Film Producer with 63 POLYSTAR Machines

- PRODUCTS / Die-cut bags, flat bags, vegetable bags, shrink film, T-shirt bags
- COUNTRY / Russia
- # OF POLYSTAR MACHINES / 63
- BLOWN FILM MODELS / ABA, HA65, HA55, MB45



Speaking of producing the finest film and bags for large chain restaurants, beer and car companies in Russia, a significant amount of the production comes from a leading producer located in St. Petersburg, Russia with 2,000 tons production capacity per month.

The company has been one of the largest shrink film producers in Russia for over 30 years, producing LD/LLDPE flexible packaging film for food and bottle packaging, as well as agricultural and industrial film with European extrusion and printing machines since the 1990s.

In 2012, as part of the major expansion program of the company, it decided to get into HDPE and LDPE bag production - particularly in T-shirt bags, T-shirt bag-on-roll, flat bags, side seal bags and patch handle bags. After a closely-examined comparison of numerous suppliers in Taiwan, Turkey, India and China, the company has placed its trust in POLYSTAR for the first investment of 20 machines in 2012, and has continued investing every year for the next six years until today. Up until now it has already installed 60 blown film extrusion and 3 recycling machines from POLYSTAR in St. Petersburg with more machines on the way.

Sharing their important purchasing decision back in the year of 2012, Mr. Viktor was particularly impressed by the ease-of-use of the POLYSTAR machines.

When asked about his experience of working with POLYSTAR, he commented in a positive and confident manner: "We have repeated our order with POLYSTAR five times in six years. The

can talk about, but I think what we are getting from POLYSTAR is more than just the machines," he added, "It's trust, it's partnership, and I'm very happy that we can find a partner like this and develop our businesses together." "Whenever we are expanding and in need of new machines, POLYSTAR is always the first company that comes to our mind."

**"The design was so simple, compact, on-point and was exactly what we were looking for," "Our technical manager and I came to a conclusion really fast after we visited POLYSTAR's factory in Taiwan." "And to be honest, we had surveyed and visited many other machine manufacturers before making this decision."**  
.....Mr. Viktor

Mr. Viktor is happy and proud of their decision as the company has grown up steadily over the past 6 years and has secured a large, healthy market share in the PE bag sector.

machines are stable and they have in-time service for spare parts. We feel confident working with them. Reliable, responsible, excellent built quality machines. There are many things we





## **POLYSTAR MACHINERY**

No. 101, Ln. 279, Sec. 1, Fu Chiang Road,  
Yung kang Dist., Tainan City 710, Taiwan  
T +886-6-2730889 F +886-6-2730887  
E sales@polystarco.com  
**www.polystarco.com**