



# MKSMARTY·GT

**Bubble Cage for Blown Film Lines** 

**MKSMARTY•GT** is a range of calibration baskets designed to guide the extruded bubble with steady precision and stability. The MKSmarty•GT series of cages handle film widths from a minimum of 220 mm to a maximum of 3050 mm. The design of MKSmarty•GT is innovative, with simple, precise and adjustable radial and vertical positioning (patented).

### PRINCIPLE OF OPERATION

The calibration basket is a fundamental part of the blown film extrusion process, influencing both film quality and profile tolerance. For any bubble diameter within the machine's range, the MKSmarty•GT guide rollers define a regular 6- or 8-sided polygon and precisely maintain the bubble constantly centred and calibrated after the cooling ring.



# **MAIN FEATURES**

#### **EASY INSTALLATION**

MKSmarty•GT can be easily installed on existing blown film extrusion lines, replacing the old calibration basket.

## **PRECISE MOVEMENT**

MKSmarty•GT has a patented opening and closing movement that keeps the rollers tangential and evenly distributed along the bubble circumference, with their medial plane always oriented on the bubble axis for any bubble diameter set.

## **INTERCHANGEABLE GUIDES**

The rollers are installed on interchangeable guides, allowing a quick replacement with equivalent rollers with different coatings suitable for the product being processed or simply for maintenance and cleaning.

#### LIFTING SYSTEM

MKSmarty•GT is equipped with a lifting system with 4 trapezoidal screws and a stroke available in variants from 500 mm to 2400 mm.

# **ROLLERS**

MKSmarty•GT can be configured with various types of guide rollers and different types of coatings, such as: carbon fibre rollers, rollers coated with expanded silicone, wool sleeves or FDA approved coatings.

#### **LEVELS**

MKSmarty•GT can be fitted with 5 to 8 rollers per arm, depending on the space available and the customer's specific needs.

## **IBC INTEGRATION**

MKSmarty•GT is designed for integration with SYIBC sensors for bubble inflation control and adjustment. When supplied with SYIBC ultrasonic sensors, the calibration basket is equipped with support brackets and designed for plug-and-play wiring.

# **OPTIONS**

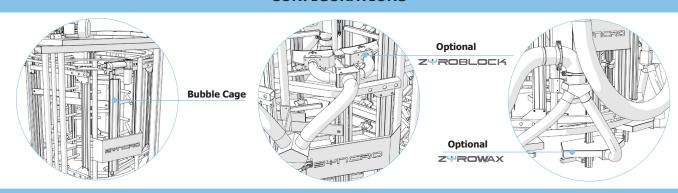
MKSmarty•GT offers additional optional devices: Zyroblock: the additional bubble cooling system that effectively reduces the film temperature.

Zyrowax: the suction system for monomers generated by the melt escaping from the high-temperature extrusion head.

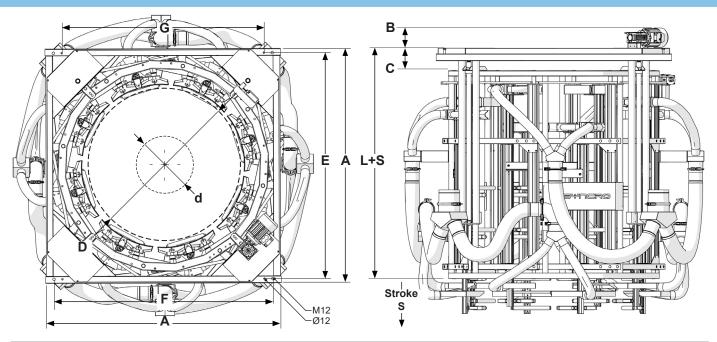
Both systems can be integrated into the calibration basket.

In addition, MKSmarty•GT can be supplied with an open/closed and up/down control box, flat display, positioning system and adjustable open/ closed speed control cards.

# **CONFIGURATIONS**



# **TECHNICAL DATA**



	Model*	Ø Hot bubble		LayFlat		Dimension	Dimension	Dimension	Dimension	Dimension	Weight
Model*		Ø d min	Ø D max	LF min**	LF max**	A (mm)	B/C (mm)	E (mm)	F (mm)	G (mm)	(kg)
6 Arms	MK1000-6	140	690	220	1050	1286	160	1226	1181	1061	320
	MK1200-6	200	800	310	1220	1286		1226	1181	1061	350
	MK1400-6	223	953	350	1450	1510		1450	1405	1285	380
8 Arms	MK1600-8	306	1045	480	1640	1510		1450	1405	1285	450
	MK1850-8	338	1185	530	1860	1675		1615	1570	1450	480
	MK2050-8	375	1331	590	2090	1815		1755	1710	1530	510
	MK2350-8	414	1503	650	2360	1958		1898	1853	1673	540
	MK2550-8	446	1650	700	2780	2126		2066	2021	1841	580
	MK2750-8	490	1771	770	2780	2294		2234	2189	2009	580
	MK2950-8	522	1898	820	2980	2294		2234	2189	2009	600
	MK3000-8	529	1943	830	3050	2294		2234	2189	2009	610

<sup>\*</sup> The dimensions refer to the bubble cage in standard configuration; the dimensions of the bubble cage in Zyroblock or Zyrowax configuration will be provided on request.

<sup>\*\*</sup> Indicates the cold film, during processes the diameter could be increased up to 5%.

	Standard	Option							
Stroke S (mm)	1000	500	750	1250	1500	1800	1900	2400	
Dimension L (mm)	1300	700	950	1450	1700	2000	2100	2600	



MKSmarty•GT en - 07/25 Ed.