

Automatically controlled air ring SmartLip TL mc⁸ for blown film lines

Optimised blown film extrusion process ...

SmartLip TL mc⁸ is a high performance air ring with triple-lip design combined with a comfortable height adjustment offering a significant increase in extruder output as well as vastly improved thickness tolerances.

... the triple-lip version ...

SmartLip TL mc⁸ works with three air streams. For cooling purpose the lowest air stream blows downwards and just as the lubricating middle air stream it can be adjusted separately during production. This enables many applications and even its usage as a dual-lip air ring only.

... for efficient blown film lines.

SmartLip TL mc⁸ air ring is suitable for new lines as well as for retrofitting existing lines. Specially adapted for a particular die it can easily be interchanged with the original air ring.



The formula of success

- one-storey triple-lip automatically controlled air ring
- comfortable height adjustment device
- team of experts to estimate all parameters of the extrusion line

Advantages

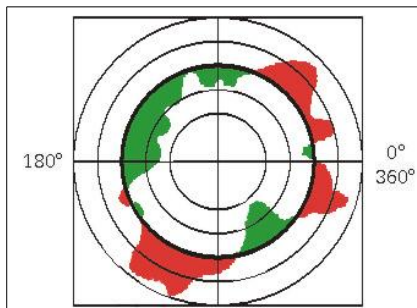
- Higher efficiency of the line by higher output
- Improved mechanical blown film properties like dardrop value and tear resistance up to 40%
- Better shrinkage values
- Increased energy efficiency

Automation

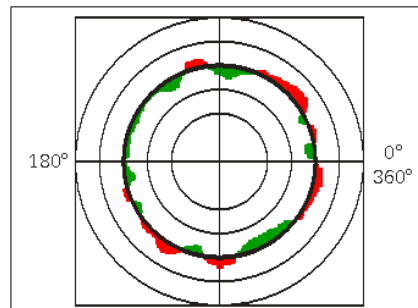
- Safer production process
- Post-centring of die unnecessary
- Automatic correction of gauge profile during production process
- Simple to extend with other Octagon control systems

Octagon Control Modules: Technically proven, efficient, easily extendable

What may be achieved?



Outgoing profile without control 10 %



Automatically controlled profile 3,6 %

Special features

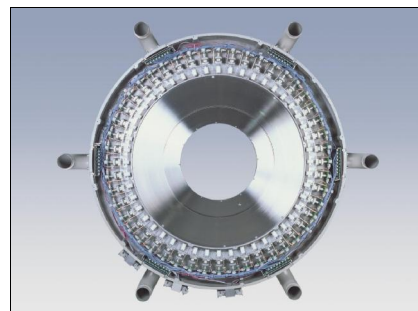
- Extruder output increased considerably
- Excellent melt properties in interim lip range
- Adapters available for different die diameters
- Optional remote fault diagnostics Diag-Win Basic / Comfort
- Energy efficiency



Function description

Adjustment units allow the cooling air to be redistributed around the die diameter as required thereby correcting thin and thick spot of the profile.

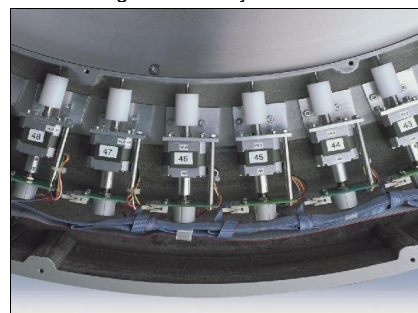
A control step takes place each time a complete profile has been measured.



Arrangement of adjustment units

Sophisticated design

Control of the adjustment units is via stepper motors which are resistant to temperature. A totally protected design prevents any contamination of mechanical elements. Maintenance of the drive assembly is therefore reduced to a minimum.



Installation of stepper motors

Line specific features

The SmartLip TL mc⁸ air ring is suitable for almost any type of blown film extrusion line:

Air ring models

Defined by die diameter the following models are available:

Model	die diameter	adj. units
TL 350	up to 250 mm	32
TL 500	up to 400 mm	48
TL 700	up to 600 mm	48

Oversize models available upon inquiry.

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