

Bead Apexing Lines



Fully Automatic Bead Apexing Lines 13" - 22" For PCR & LT tires

This new generation of the Bead Apexing lines has been designed based on many years of production experience in various tire factories worldwide and can be used for production of beads with apex for the high performance tyres.

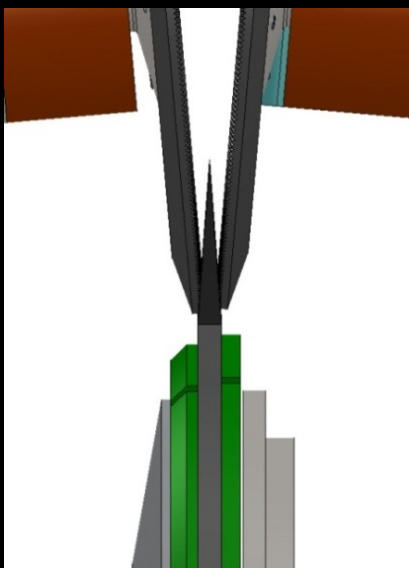
The key advantage of this line is the powerful stitching of apex to the bead **from both sides** by specially designed stitching discs, which guarantee that the apex will never separate from the bead during the turn-up stage at the tire building machine.

Apex extrusion, cooling down, feeding to the drum, application on the bead, cutting and splicing are fully automatic. The butt splice quality is excellent and constant, while the production output is 6 beads per minute, or approx. 8.000 beads per day.

New Fully Automatic Bead Loading/Unloading and Separator placing Robot allows to run several lines by just one operator.

Optional splice quality control system can be installed to detect the open splice/folds in automatic mode.

The line can be supplied with Intereuropean own design apex extruder, or with any other suitable existing or commercially available extruder.



Apex Stitching from both sides

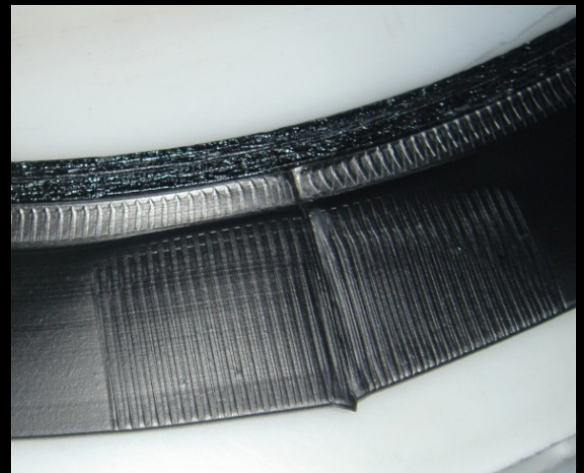


Bead Apexing Line 13"-20" General Layout

Bead Apexing Line 13" - 22"

for PCR & LT tires

MACHINE PARAMETERS	DESCRIPTION	PRODUCT PARAMETERS	VALUES
Net machine cycle time	<10 sec. (approx. 6 beads per minute)	Bead type	Square / Hex / Round
Number of operators	1 per shift	Bead diameter	13" - 22"
Centring accuracy of apex application (apex off-centre)	+/- 0,5 mm	Bead width	5,4 - 9,5 mm
Apex splice type	Head-to-head (butt joint)	Bead height	5,4 - 9,5 mm
Apex splice method	Automatic	Apex type	Triangular
Number of apex splices	1	Apex base	Flat
Apex application method	Automatic by 2-disk stitching device with adjustable application pressure	Apex height	15 - 60 mm
Apex cutting method	automatic by dual blade knife	Apex fitting angle	80°- 90°
Knife temperature	Hot	Apex width	5,4 - 9,5 mm
Bead Lock & Centering on the drum	By Expansion of the drum segments	Apex temperature (after cooling)	Max 30°C
Type of apex feeding	By direct extrusion	Viscosity of apex (Mooney Standard at 100°C)	Min - 65 Max - 82
Apex Extruder Features:		Environment temperature	Max 30 °C
- Extruder Type	Cold Feed 75mm (pin type)	Hardness of apex after curing	70 - 90 (shore A)
- Extruder Feeding System	By feeding conveyor with metal detector		
- Feeding compound sheet dimension	125 mm (width) x 8 mm (thickness)		
- Extruder Speed Control	Automatic by Dancer Roll		
Extruder Temperature Control Unit :			
- max temperature	110°C		
- tolerance of temperature control	set ± 2°C		
- independent control zones	4 zones (head / body 1/ body 2 / screw)		
Apex cooling system	Cooling drums fed by cold water from dedicated Pack Chiller		
Number of cooling drums	2		
Cooling drums features	- Adjustable drum axes position - Spiral water circulation system		
Apex festoon capacity	~ 5 m standard ~ 20 m with tention control (optional)		



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