

Core Insulation Line RK-C



High-Performance Minicoax, CATV and RF cables do have one important common basis: defined tractive force, continuous excellent quality, and exact roundness of the conductor. Additionally, the surface has to be smooth and well adhesive. Bubbles, dust and dirt, copper flitters or bruises on the surface effect the structure of the dielectric and therefore would cause SRL, attenuation increase and/or intermodulation in the finished cable.



Cooling section equipped for individual temperature regulation ensures least shrinkage and lasting foam structure. A Multipass cooling trough allows for economical length of cold water section.

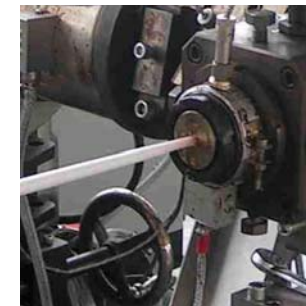


RDC-U: Ultrasonic cleaning station for perfect adhesion, minimize attenuation and intermodulation in combination with a dual die sizing stage.

Rosendahl's adjustable and non-clogging high pressure gas injection system for constant composition of melt and even foam structure.



Computer added design and manufacturing for exact layout of extrusion equipment according to specific characteristics of compounds and gas admixture.



Rosendahl's Cascade Extrusion Technology guarantees highest insulation quality. A special design of the gas injection system consisting of high-pressure generator and precision injection needle allow a fast and exact dosing of the gas at any production mode, and thus constant high quality for the whole batch. Screws, barrels, and crossheads are engineered and manufactured, taking into consideration the difference in behavior of melts containing dissolved gas. To reach lowest attenuation and best electrical properties concentricity, roundness, form-structure, and cell size are vital parameters.

Coaxial Cable

PR 1001701E/02.08

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Core Insulation Line RK-C

- Homogenous and constant extrusion without impurities
- Consecutively lasting and even foamstructure of the dielectric
- Easy operating of complex processes with the RIO Line Control System
- Turn key solutions for RF cable manufacturing
- Best dielectric properties by physical foaming up to 86%
- CO₂ foaming
- Low Attenuation designs

Bandwidth

The increasing needs of bandwidth force cable production to an increased level of perfection. Rosendahl's manufacturing systems for high-performance coaxial cables have been continuously developed to meet the requirements of diameter, eccentricity, capacity, symmetry, velocity, and flexibility in today's and future production processes. Best dielectric properties of PE insulation is kept with Rosendahl's physical foaming technology and equipment. Rosendahl's Line Control System RIO supports even the most complex tuning of

Low Attenuation

Low attenuation RF cables are becoming a requirement in the wireless communication. With the reduced attenuation and the parameters which are required to achieve it, the maximum power ratings of the cables are increased, signal propagation is enhanced, and cable weight is reduced.

All of these improvements make the cable more efficient, reduce costs in manufacturing and installation as well as operating costs of base stations.

Additionally, Rosendahl also provides manufacturing technology and know-how for new manufacturing lines and existing Rosendahl lines, and evaluates and upgrades third party equipment.



Cascade Extrusion for maximum process stability and highest quality of the dielectric: two separately adjustable processing units provide homogenous melt according to a defined temperature profile, even distribution of nucleating agents and dissolved gas, and a minimum pulsations at the outlet.

Turnkey Solutions

Rosendahl supplies turn key RF cable manufacturing solutions as insulation, forming, welding & corrugation, jacketing, test equipment, and rewinding/packaging equipment including technology transfer and know-how for cable and tool designs, materials, manufacturing, production planning, and training.



Line Data	RK-C 2	RK-C 4	RK-C 6
Pay-off	TW <i>RDFA</i>	AUFR	AUFR
Control Accumulator	TSW 1250	TSW 1250	TSW 1250
Straightening Unit	RA 7-3,5	RA 7-9/15/25	RA 7-9/15/25
Wire Conditioning	RDKR/ <i>RDKU</i>	RDKR/ <i>RDKU</i>	RDKU
Capstan	DSA 800	BA 1250 RF	BA 1250 RF
Tension Measuring	3R 1000		
Preheating Unit	HF	HF	HF
Skin Extruder (inner)	ROEX	ROEX 30	ROEX 24
Crosshead	single layer	single layer	single layer
Diameter Measuring	Laser	Laser	Laser
Melting Extruder	ROEX 60.30	RE 1.80.30	RE 1.100.30
Gas Injection System	RSD 800	RSD 800	RSD 800
Cooling Extruder	RE 1.80.30	RE 1.100.30	RE 1.120.30
Skin Extruder (outer)	ROEX 30.24	ROEX 30.24	ROEX 45
Gear Pump	M28/28 <i>M22/22</i>	M36 G5 liquid	M45-G5 liquid
Crosshead	double layer	Heated	Heated
Masterbatch Dosing	ROMIX 60	ROMIX 80	ROMIX 100
Hopper Loader	+	+	+
Diameter Measuring	Laser	Laser	Laser
Capacitance Measuring	inline hot	inline hot	inline hot
Cooling Section 1	heated	heated	heated
Cooling Section 2	<i>heated/chilled</i>	<i>heated/chilled</i>	<i>heated/chilled</i>
Capacitance Measuring	inline cold	inline cold	inline cold
Diameter Measuring	Laser	Laser	Laser
Capstan	BA1250 RF	BA1250 RF	BA1250 RF
Dancer	TR 1250	TR 1250	TR 1250
Take-up	AUFR	<i>AUF, AUFR</i>	<i>AUF, AUFR</i>
Accumulator/Pay-off, takeup	<i>option</i>	<i>option</i>	<i>option</i>
Centricity Gauge	<i>option</i>	<i>option x-Ray</i>	<i>option x-Ray</i>
FFT Analysis	<i>option</i>	<i>option</i>	<i>option</i>
Processing Data			
Conductor	CU, CCS,AL 0,8- 3,5 (5) mm	CU, CCS,CCA, CU tube (3,5) 7 -17,2 (-21,2) mm	CU, CCS,CCA, CU tube (3,5) 7 -17,2 (-21,2) mm
Diameter Over Insulation (PE blend)	3,5-15 mm	11,5-44 mm (-52,5 mm)	11,5-44 mm (-52,5 mm)
Foaming Degree	60-78%	60-86%	60-86%
Max. Line Speed	200 mpm	200 mpm	200 mpm



Crosshead: Oil headed/cooled to optimize process conditions for highest foam rates. Floor mounted support, with trolley.

Computing data for measuring processes and product parameters (hot, cold) by Rosendahl's Line Control System RIO allows preventive regulation of the production mode with features such as Fast Fourier Trend analysis, process control, recipe management, etc.



ROMIX: The cost effective, precise material blending solution.

■ optional