

F: (+48) 12 652 51 56

2020-02-10

INQUIRY No: 130004423

Dear Sirs:

Please submit your best offer for new CCV line for rubber flat and round cables. The line will be installed at TFKable - Krakow plant, Wielicka 114 Poland

General line specification:

- 1. Round cable final diameter range (after extrusion): 17 mm to 90 mm,
- 2. Flat cable final dimensions range (after extrusion): Width 30 mm to 90 mm, Hight 7 mm to 30 mm Full cable types are given in Excel table in attachment.
- 3. Catenary line,
- 4. Saturated steam pressure up to 25 bar,
- 5. Building levels: Extruders level +15,38 m, pay-off accumulator level +6,0 m, clean room level +21,38 m, End Seal level 0,0 m (or +2,2 steel platform).
- 6. Main pay-offs 2 x 2400 mm, 10 tons, DIN standard,
- 7. Main accumulator ~200 m cable length
- 8. Additional pay-offs 4 x 1600 mm, DIN standard,
- 9. Additional accumulators (4 pcs.) ~50 m cable length
- 10. Extruders: 150mm, 150mm and 60 mm for stripe or skin,
 - temperature range: 35 °C to 120 °C (electrical heating, water cooling),
 - L/D = 20,
 - Rubber compound feeding system: strip and pellet (pellet from clean room on level +21,38 m),
- 11. Extrusion crosshead: one layer with stripe or skin, two layers with stripe or skin,
 - manual centering for each layer,
 - easy dismantling extruder connectors,
 - hassle-free tool changing,
 - hassle-free crosshead cleaning,
 - rubber compounds:

rubber based on CR – viscosity 35 – 70 MU, hardness after vulcanization 40 – 75 ShA rubber based on CPE (CM) - viscosity 105 MU, hardness after vulcanization 50 - 90 ShA rubber based on CSM - viscosity 40 - 60 MU, hardness after vulcanization 50 - 80 ShA rubber based on EPDM - viscosity 35 - 90 MU, hardness after vulcanization 50 - 90 ShA rubber based on SBR - viscosity 45 - 70 MU, hardness after vulcanization 45 - 70 ShA

- 12. Vulcanization tube: ~ 150 m length,
- 13. Cooling through after vulcanization tube maximum length as possible,
- Dyrektor Zakładu Bydgoszcz 14. Accumulator ~200 m cable length,
 - 15. Take-ups 2 x 2800 mm, 15 tons, DIN standard,

Jarosław Romanowski

Wiceprezes Zarządu

ds. Finansowych

Piotr Mirek

Członek Zarzadu

ZARZĄD SPÓŁKI

Monika Cupiał-Zgrvzek Prezes Zarządu

Bartłomiej Zgryzek

Wiceprezes Zarządu ds. Treasury, M&A, Investor Relations

Woiciech Wiltowski Wiceprezes Zarządu

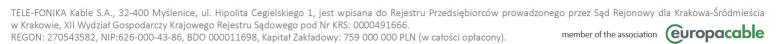
ds. Sprzedaży













Additional equipment:

- 16. Hot cable diameter measuring device with line speed control module,
- 17. Cooled cable diameter measuring head,
- 18. Spark tester,
- 19. Laser length counter,
- 20. Ink jet printer,
- 21. Embossing unit for cable marking,
- 22. Electrostatic talc applicator,
- 23. Electrostatic graphite applicator,
- 24. Conductor preheater,
- 25. Extrusion tools 10 sets,
- 26. But welder for copper conductor (5 class) cross section 0,75 mm2 to 10 mm2,
- 27. Longitudinal paper tape applicator before extrusion crosshead,
- 28. Software for process calculation for technologist specialists,
- 29. Computer and software for PLC programing for maintenance service,
- 30. Dedicated LED TV screen for visual presentation of the production process

The offer should include:

- 1. Technical details of the service or product offered.
- 2. Offer validity date not shorter than 6 months.
- 3. Net price broken down into individual components according to the scope of works, etc.
- 4. Delivery terms
- 5. Payment terms
- 6. Deadline for implementation
- 7. Warranty period and conditions.
- 8. Environmental parameters: if any.











The offer should be sent on e-mail, only to the address: <u>oferty@tfkable.com</u>, no later than on two weeks after receiving the inquiry. Commercial offers sent to a different address than the one given above will be treated as invalid.

Please, sent the technical specification to the address: grzegorz.lach@tfkable.com, also until two weeks. After the deadline, we reserve the right to refuse your offer. In the case of submitting an offer, please refer to the inquiry numer: 130004423 and maintain the continuity of correspondence.







