GANTRY TAKE-UP
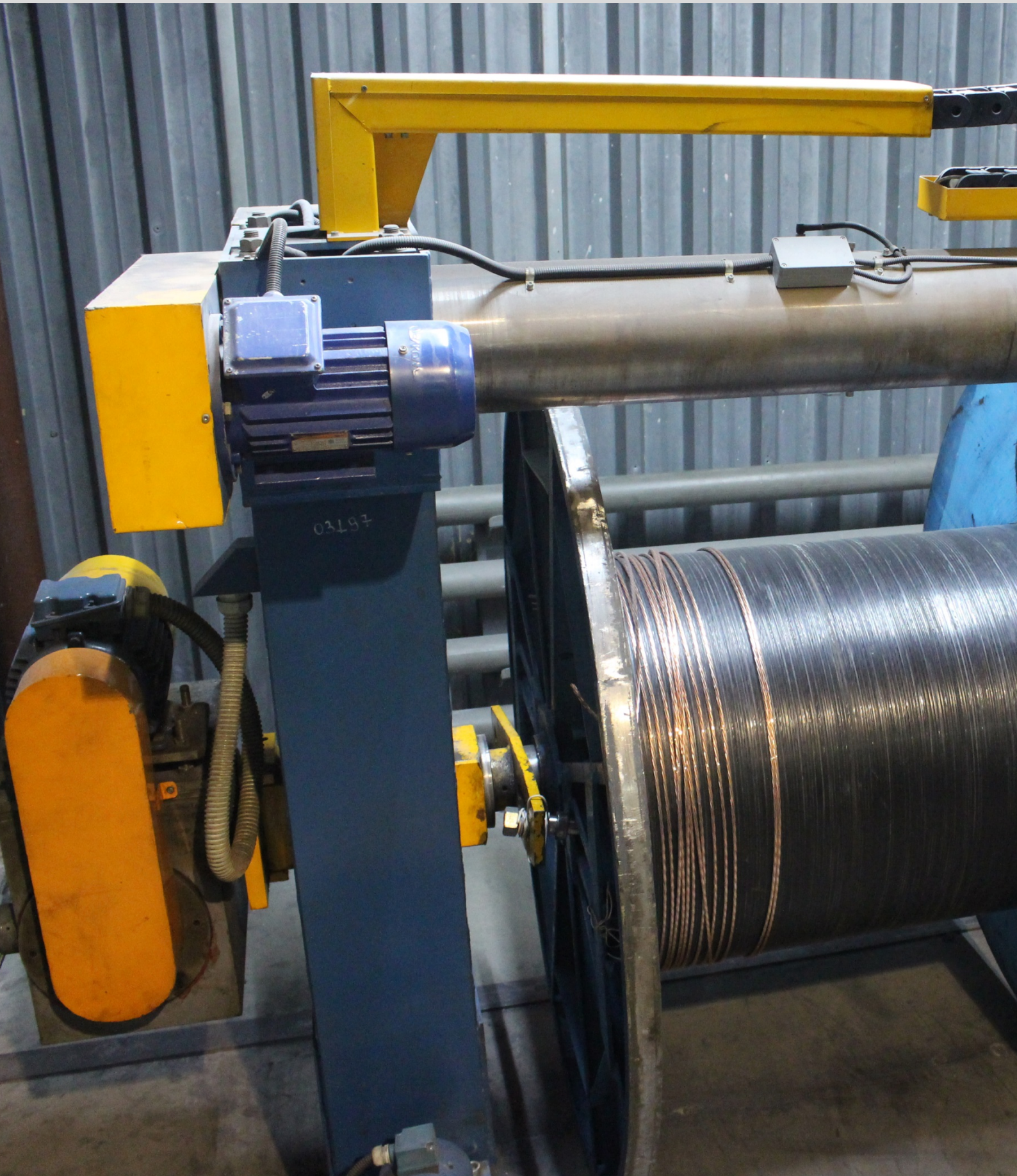
TAKE-UP TU-1600

Equipment purpose
Gantry take-up with an independent drive is used for uniform winding conductor, wire or cable on the wooden and metal drums with the flange diameter ranging from 800 mm to 1600 mm in the constant tension mode.

Take-up structure
Equipment consists of non-stationary and stationary racks with drive and non-drive up-down pintles ensuring the clamping of the drum. The whole construction is installed on the rails and automatically moves from side to side that it allows to produce a uniform layout of products on the drum. Boxes with up-down pintles have reciprocating motion along vertical guides using separate screw mechanisms for drum lifting and lowering with drive by motor reducer. Product laying is occurred as a result of the take-up movement along the axis of take-up drum per one turn which is equal to the diameter of taken-up product. Equipment motion is produced from the electrical motor of take-up. Up-down pintle motion of take-up is produced by electrical motor with capacity of 5,5 kW through the multilevel reducer. Changeable cones with various sizes and configurations are used for installing drums with different diameters on the take-up.

Technical specification
Maximum pulling force – 350 kg
Maximum linear speed – 150 m/min
Cable diameter – 5-50 mm
Maximum drum weight – 5000 kg
Drum diameter: 800-1600 mm
Drum width: 475-1200 mm
Speed of rapid portal movement – 2 m/min
Overall dimensions, length x height x width = 2500 x 2240 x 2020 mm
Weight – 2800 kg

Drive technical specification
1. AIR 112M4 P=5,5 kW, n=1500 rpm
2. 4-speed gearbox
Range of drum rotation frequencies:
I gear: 1,5-20 rpm
II gear: 2,5-40 rpm
III gear: 6,0-80 rpm
IV gear: 11-160 rpm
3. Portal moving: motor reducer 5MC5S-112ES-5,4-1,1-320-Y2
Chain gear i=2(Z1=18, Z2=36)
4. Lifting-lowering of up-down pintle: 3MP-40-28-250-110-U2
5. Part of up-down pintle: AIR 80B6 n=1000, P=1,1kW
Chain gear i=2(Z1=18, Z2=54)

Production time - 4 months