

Title	Installation and method for manufacturing a reeled article with $RC-0$ type structure
Authors	Dimitrachi Sergiu, <i>Scientific leader (conducător științific)</i> ; Dimitrachi Nicolae, <i>doctorand</i> ; Iov Vasile, <i>doctorand</i> ; Iliescu Grigore, <i>student</i> ; Ciolan Alexandru, <i>student</i> .
Institution	Technical University of Moldova
Patent no.	MD 1010 Y 2016.02.29
Description EN	<p>The invention relates to processes for making coiled pieces and can be used in construction of precision instruments, in radio electronics and computing techniques, in manufacturing of phase shift elements and elements for selective circuits.</p> <p>That equipment performs a process of producing coiled pieces with a type of structure $RC-0$ that provides manufacturing of microelements phase shifters type $RC-0$ constructed on the base of resistive coaxial microcable.</p> <p>The indirect measurement of the preset phase shift of the signal with required frequency provided by a given process is a superior precision. The measurement error and the manufacturing of phase shifter element with the preset signal phase shift with the given frequency, not exceed 0,01...0,05%.</p> <p>The measuring of the phase shift occurs in dynamic mode, during the process of manufacturing of the element, without breaking both cover coaxial conductor and internal insulation of coaxial. The quality factor of this class of phase shifters greatly exceeds (a hundred times and more) quality factor of phase shifters also made based on coaxial microcable.</p> <p>Their thermal stability is $\sim 5 \cdot 10^{-6}$ $1/^{\circ}\text{C}$ versus $5 \cdot 10^{-3}$ $1/^{\circ}\text{C}$ proper for discrete phase shifters. The dimensions and the weight as compared to discrete phase shifters (on equal terms) are hundreds times smaller and more, because the capacity and the resistance of the phase shifter element are combined in a single phase shifter element with micrometer sizes.</p>
Class no.	5. Industrial and laboratory equipments