An aspect of the invention relates to a ~~claim 1.~~machining tool, wherein the robotic machining tool comprises a power transmission mechanism, a circular machining belt, a tightening mechanism and a contact mechanism for tool contact with an object to be machined; the power transmission mechanism of the machining tool is configured to have a mechanical connection through a connection part with a rotational power source; the contact mechanism and the power transmission mechanism have a desired distance therebetween such that a contact roller of the contact mechanism and a power transmission roller of the power transmission mechanism have a contact arm of a desired length therebetween, a length of the contact arm needing no change for tightening; the circular machining belt is looped between the contact roller and the power transmission roller for causing the circular machining belt to move between the contact roller and the power transmission roller in response to the rotation of the power transmission mechanism for machining the object; and the tightening mechanism comprises at least one spring structure and at least one spring roller for pressing sections of the circular machining belt between the contact mechanism and power transmission mechanism towards each other for tensioning the machining belt.

It should be appreciated that all combinations of the various embodiments and features of the invention are possible and within the scope of the present invention as claimed.

The present solution provides advantages. The new features in coupling of both the machine tool as such and the machining belt become easier and reduce manual work. Furthermore, the machining belt needs no repetitive tensioning.

Brief description of the drawings

In the following the invention will be described in greater detail by means of exemplary embodiments with reference to the attached drawings, in which

Figure 1A shows a side view of an example of a machining tool with one spring roller;

Figure 1B shows an example of the machining tool from an oblique angle;

Figure 2, shows an example of a tightening mechanism comprising more than one spring roller and turnable direction of an arm;

Figure 3 shows an example of the machining tool from a back side with a view of an example of a gear inside the machining tool; and

Figure 4 shows examples of contact arms.

Description of embodiments

Exemplary embodiments of the present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which some, but not necessarily all embodiments of the invention are shown. Indeed, the invention may be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Although the specification may refer to "an" embodiment in several locations, this does not necessarily mean that each such reference is to the same embodiment, or that the feature only applies to a single embodiment. A single feature of an embodiment may be combined with one or more features of a different embodiment or different embodiments to provide further embodiments.

Figure 1A presents a machining tool 100 directly from a side and Figure 1B presents the machining tool 100 from an oblique direction. The machining tool 100 comprises a power transmission mechanism 102, a circular