

# Searching for manufacturer of straightened Platinum/Iridium micro-wires for medical device.

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## Summary

A Swedish start-up company developing biosensors for medical devices is looking for manufacturer and experts in the field of electrode wires. Specifically, they look for someone that can strengthen, align and cut micrometer thin Platinum/Iridium electrode wires to be used in a medical device implanted in the brain. Partners are sought that are able to strengthen, "de-curve", align and cut the wire automatically and that are interested in a technical cooperation and/or manufacturing agreement.

## Description

The company is a start-up company in the medical technology area. The market is Parkinson patients who are no longer answering to their medicine. For these patients the remaining option is Deep Brain Stimulation (DBS) where deep structures in the brain is stimulated.

The electrode wires (90% Platinum and 10% Iridium), to be straightened (de-curved) and cut into 100 mm pieces, are used in a new type of DBS probe for Parkinson's disease. Several electrode wires are built into a biodegradable carrier and implanted in the brain. In order to achieve optimum quality, the electrode wires must be very straight (very small curvature) in the manufacturing.

The electrode wires are supplied on reels and have remaining curvature. This curvature is currently removed in a manual process which is time consuming followed by manual cutting.

The expertise sought is a company that can straighten these electrode wires (from reel) to a maximum "bow" of 1 mm per 100 mm cut pieces automatically. Partners are sought for a technical cooperation or manufacturing agreement.

## Expertise sought

Looking for a partner that have technical expertise in thin wire handling, alignment/de-curving and precision cutting. The wire is a Pt/Ir micro-wire (20 um diameter). The production output is 100 mm cut pieces of 20 um Pt/Ir wire with a maximum bow of 1 mm per 100 mm.

Initially the volumes are moderate (1000-5000 pieces annually). The volumes are expected to increase when the commercial phase (>10000 annually) is reached.

## Requested partner

Type of partner sought: industry (but can be other type if they have correct expertise and equipment).

Specific area of activities of the partner: fine or micro mechanical, electrical industry working with thin wires, for medical devices, and other applications with high technical and quality demands. Experience in straightening wires with a diameter of 20 um made of Platinum and Iridium.

Tasks to be performed: The partner should be able to supply pieces of cut and straight wire from wire rolled on a reel.

## Technology Keywords

Clinical Research, Trials, Medical Biomaterials, Micro- and Nanotechnology related to Biological sciences, Neurology, Brain Research

## Market Keywords

Electromedical and medical equipment, Medical instruments, Other therapeutic (including defibrillators), Pacemakers and artificial organs, Surgical implants