

## Fiber Coil Winding Service

### 1<sup>st</sup> .Capabilities

With a 5 year legacy of winding all types of precision optical fiber coils, Idealphotonics has the coil winding business unit with a team of highly experienced scientists, engineers, and winders, together capable of winding the best in optical fiber coils in accordance with customers' requirements. Cost effective and fast winding systems allow Idealphotonics to provide a complete range of products, from simple delay lines and payout spools to strategic quadrupole gyro coils of several kilometers in length. We provide optical fibers and then put them on the most appropriate stands whatever the material they are made of is (copper, aluminium, plastic...). We can also work without stand and realize optical fibers crowns. Otherwise, a wide range of optical fibers types (single-mode, multi-mode, PM, from UV to IR) and dimensions are available, a well as coating materials (polymer, polyimide...).

Finally, we are at your disposal in order to meet your expectations and to solve yours problems as regards fiber optic coil winding, size and components integration among others.

Our optical fibers spools lead to numerous applications in the fields of optical sensors, delay lines and fiber optic launch cables in particular.

### 2<sup>nd</sup> .Features

- Using the quadruple method without paper in the process;
- High crosstalk and low attenuation;
- It can be customized with different precious requirements;
- The crosstalk is little change in full temperature condition ;
- Flexible installation.

### 3<sup>rd</sup> .Application

- FOG
- FOCT
- Optoelectronic sensor system

### 4<sup>th</sup> .Ordering information

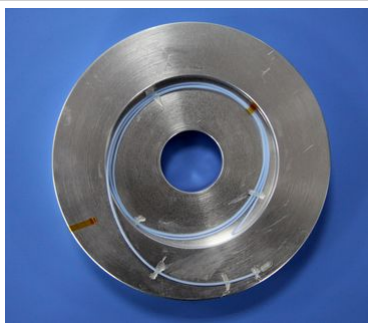
## a.Coil structure parameters

|                         |                                    |
|-------------------------|------------------------------------|
| specifications          |                                    |
| Fiber core diameter     | From 13 mm to 500 mm               |
| Fiber external diameter | From 30 μm to 600 μm               |
| Fiber length            | Up to 50 km                        |
| Turn number per layer   | From 8 to 250 turn                 |
| Fiber tension           | From 20 g to 2 kg                  |
| Coating material        | Polymer, polyimide, others         |
| Spool stand             | Copper, aluminium, plastic, others |

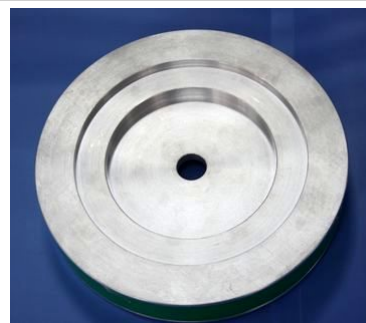
## b.Coil properlities

| Items              | Parameter | Unit  |
|--------------------|-----------|-------|
| Coil inner diamete | 1310/1550 | nm    |
| Crosstalk          | <-18      | dB    |
| Attenuation        | <1.0      | dB/km |

## All kinds of fiber coil



Current Transformer Delay Coil



Large-size High-precision Coil



Small Size Without Skeleton  
Coil



All Off Fiber Optic Coil



Oval Coil



High Precision Side Tropsch  
Coil



Small Size Cylindrical Coil



Small Size Oval Coil