Preparation of production files

Sumipro is prepared to work with many different types of files or drawings.*
We always look for a way to achieve the best results for your products.

If you’re unfamiliar with CNC (Computer Numerical Control), it enables our diamond turning machines to transform computer-based designs into **G-Code**.

* **G-Code** is a programming language made up of letters and digits and tells CNC machines where and how to move. Using what are called Cartesian coordinate locations, the machine is fed instructions including direction, speed and depth, enabling it to create products from a computer image.

* If the files are not delivered according to specification, it is possible to convert them to usable files but there are additional programming costs involved.

### 3D files:
We prefer STEP files (*.stp, *.stl) or other similar 3D files (*.dwg, *.sldprt or *_.xt)
It is possible to use.

- The 3D model should be a solid without errors or gaps
- Orientation of the model should be not shifted or tilted.

### 2D files:
DXF files are a good choice if you’re working with 2D vector images, we can convert them to G-Code.

### Formulas:
We accept equations for freeform or aspherical products provided with a sag table.
*Including off-axis aspheres, torics, biconics, cylinders, polynomial freeform products.*
Data files:

It’s also possible to deliver machine data files or just plain textfiles (*.txt, *.nc, *.xls) in the following format:

...
X6.99586 Z-0.28987
X6.98920 Z-0.28939
X6.98253 Z-0.28890
X6.97587 Z-0.28841
X6.96920 Z-0.28793
X6.96254 Z-0.28744
...

Technical drawings

Of course it’s always possible to deliver technical drawings. The purpose of this engineering drawing is to clearly and accurately capture all geometric features of a product/component, including surface roughness, dimensions etc, so that we can produce the required product.

Technical drawings for quotations

For quotations we only accept technical drawings to make sure all features of a product/component, including surface roughness, dimensions and quantity are known. This is the only way to calculate a realistic price for the required product(s).