



SYNERGEERING
GROUP

WORKING WITH US

A technical guide for RAPIDNYLON™ parts



**UNDERSTANDING US
SO WE CAN BETTER
SUPPORT YOU**

WORKING WITH US



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SENDING CORRECT DATA:

- Send **STL** file format with **SAG** (triangle tolerance) to 0.01mm.
- Send **ONLY** the parts you want produced into a **RapidNylon™ part**- Remove all other parts left in CAD, or it too will be produced.
- Send **separate parts as separate files**- Files with more than one shell will be produced as one part.

YOU SHOULD ALSO KNOW:

- We cannot produce any walls or features thinner than 0.8mm (this also applies to thread sizes).
- We cannot produce knife edges.



SENDING US AN RFQ:

The following is **REQUIRED** when sending data:

- Your Name
- Company Name
- Address
- Email
- Phone Number
- Quantities needed of each part
- Date parts are needed (page-4)

We assume all data is sent in **mm** unless otherwise specified.

STANDARD Timing:

**5-9
DAYS**

Standard timing for RapidNylon™ parts is 5-9 days.

Or sooner depending on schedule.

This timing begins the moment that you give us the “go” AND final data.

**WE DON'T NEED
THE PO
UNTIL WE SHIP!**

RUSH Timing:

If you need your parts sooner than our standard timing, please give us an **EXACT** date that you require us to **SHIP** them.

We will need authorization AND final data on the kick-off date we specify in order to meet your timing.

We cannot guarantee any timing before a project is authorized or before we have final data.



Understanding Timing Charges:

Charges for RapidNylon™ parts are heavily based on the timing you require for them. Standard (5-9 Day) timing is where you will receive the best price.

If you require that your parts be a RUSH or complete on a certain date, we have to build your parts by themselves.

WE DO NOT RE-USE MATERIAL:

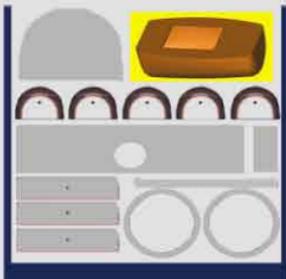
Material surrounding parts (or what does not turn into a solid part) is exposed to heat during a build. When this happens, it changes the material properties and produces less accurate parts.

Therefore, we do not re-use material and dispose of what is not used.

Standard timing:

Your parts are built in a full build.

Your charges are primarily based on the total “box size” of parts. The remaining space will be filled with other parts.



VS.

Rush timing:

Your parts are built alone.

Your charges are primarily based on how “tall” we have to build since your parts are alone in the build.



 = The amount of material that is charged

* These are only basic illustrations to demonstrate our build chamber based on timing.

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INSERTS:

Inserts can be added to your parts post build.

What We Do- Heat stake the inserts (threaded, brass, helicoils) directly into parts post build.

What You Do- Design to the appropriate size

*A good rule of thumb is to slightly under size holes in CAD

Inform us of the following:

- Size of insert
- Quantity
- Placement (screen shot)

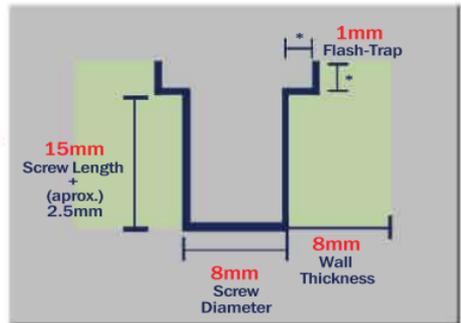
We carry heat staked brass M6 & M8 inserts. If you need something else, please have them shipped to us (include a few extras).



Diagram Based On M8 Insert

Length-12.7mm

Diameter-10.3mm



SPLITTING PARTS:

Why We Do It- Even though we have the LARGEST LS machines on the planet, it's common we need to split parts due to size.

What We Do- Heavy CAD work is done before parts are built in order to build them in pieces. Sometimes material is needed in split area. (usually a 4mm thickness is required).

What You Do- Nothing. Do not change your data. That's why we're the pros!



RapidNylon's™ *Infiltration*:

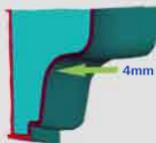
What is it?	A post process that is applied to parts inside and out.
What We Do	Apply an epoxy like coating to parts inside and out after they are produced. This coating absorbs into the parts about 1.0 mm.
Do You Need It?	<u>You ONLY need <i>infiltration</i> if:</u> <ul style="list-style-type: none">■ Your parts are going to be exposed to any kind of liquid.■ They need to be air tight.
What You Do	Let us know parts need to be <i>infiltrated</i> !



HOLLOWING PARTS:



Solid Part



Hollowed Part

Why We Do It- Some parts are just too thick (and large) for us to build accurately. Therefore, we may require for them to be “hollowed”.

What We Do- A simple data change before parts are built to create a 4mm wall thickness theme throughout, or thicker if the application requires it.

What You Do- Nothing, but be informed of the change.

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COLOR:

What Is It?- The fastest & most cost efficient way to add color to your RapidNylon™ part.

What We Do- Apply 2-3 coats of spray on Krylon® Fusion die, directly onto your RapidNylon™ part.

What You Do- Let us know the Krylon® color you would like us to use.



PAINT:

What Is It?- A “Class A” paint job to your RapidNylon™ part.

What We Do- Sand, prime, and apply several coats of paint directly to your RapidNylon™ part.

What You Do- Choose from 1,000’s of Pantone® color options, and fill out the required RapidNylon™ Paint form.



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