

## What you need to know about our computer aided design (CAD) of the Integration Unit (IU)

Our team has modelled our design of the Integration Unit using the CAD software, Solidworks. In this build kit, we have included important components that you will need in order to build your own IU.

**Note:** Not all fasteners, hinges and electricals are included within this model. For safety reasons, we strongly advise that you identify what fasteners you have available and perform the correct calculations to select and position them appropriately. All wiring of electricals should be completed by a qualified electrician.

### PPM Integration Unit Assembly:

The assembly file of the IU is named P\_a\_integrationunit\_00.SLDASM in the 'Assembly/Components' folder. You can also find it by sorting the component files by size. It will be the largest file containing all components. Ensure all components are downloaded within the same file in order to open the IU assembly file.

### Naming Convention:

#### **Machine:**

S - Shredder  
P - Power, Storage (Integration)  
I - Injector  
C - Compressor  
E - Extruder

#### **Category:**

a - Assembly (assemblies of parts)  
m - Mechanical (any part that is intended to move eg. blades) - only used for parts  
e - Electrical (any part that relates to electricity eg. electrical box) - only used for parts  
s - Static (any part that is not intended to move eg. hopper) - only used for parts  
p - Product (Moulds, Products etc)

### Naming file example:

<b>S</b> <b>a</b> _assemblyname_00	example 1 (Shredder assembly, first revision)
<b>E</b> <b>m</b> _partname_05	example 2 (Extruder mechanical part, 5th revision)
<b>I</b> <b>p</b> _topplate_07	example 3 (Product, top plate, 7th revision)

### Rules:

- The letter in the first block denotes the machine from which the part or assembly is from and should be in capital form.
- The letter in the second block denotes whether it is an assembly or a part (mechanical, electrical or static) and should be lower case form.
- The third block consists of the name of the assembly or part in lower case format.
- The fourth block denotes the revision number of the assembly or part. Ensure double digits are used (eg '\_09' for the ninth revision)
- All blocks should be separated by an underscore as shown above.

### Editing parts and assemblies:

- Download the latest part or assembly from the drive and begin to edit
- Or begin making a new part on Solidworks

### Saving files:

- Save parts as .sldprt or save assemblies as .sldasm files using naming convention
- You can also use the 'Pack and Go' feature on Solidworks to save assemblies of components and create a zip folder.
- Update the revision number in the file's name and save it.
- Always archive your previous revisions.