



**3devo**

# Desktop Extruder: Comparison Guide

Comparing 3devo's Filament Makers to  
other desktop-extrusion players

Felfil

ReDeTec

nozteK

Omni  
Dynamics

FILASTRUDER

Filafab

flabot

Wellzoom



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# Introduction

As the only all-in-one desktop filament maker on the market, 3devo facilitates a wide range of applications optimized for different types of polymers. We understand we're not the ideal solution for everyone - that is why we have created this comparison guide.

This document provides an in-depth outline comparing 3devo's filament makers amongst other desktop-extrusion players. We have taken key components necessary for a proper extrusion and compared it across multiple product within the market. This document is intended as a technical comparison tool with two primary purposes:

1. To provide a clear overview of the key features that each 3devo filament maker provides
2. AND to offer support in the selection of the optimal product that suites your needs by offering a visible comparison between associated products

Each brand will have a feature overview followed by a complete comprehensive analysis.

The document does not cover other 3devo products except for the filament makers. To learn more about our filament ecosystem, including the plastic shredder and polymer dryer, please head over to our [website](#) to learn more.

*The information in this document only provides basic information. Please refer to each individual product specification sheet for a complete listing of all features for a given product.*

Extruders that will be covered:

- Filastruder
- Felfil
- OmniDynamics
- ReDeTec
- Filabot
- Filafab
- Noztek
- Wellzoom

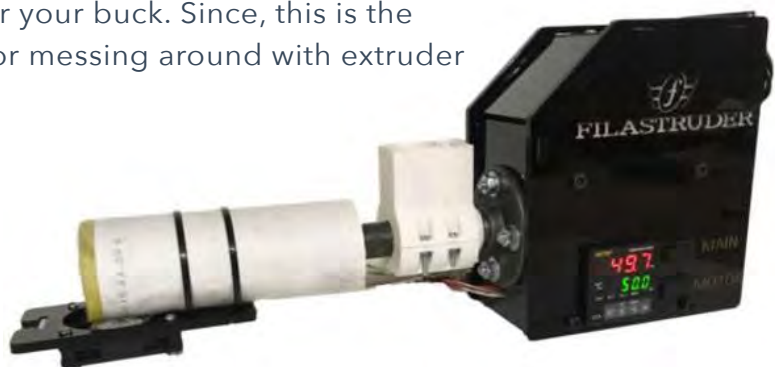
# Filastruder & 3devo

Company	3devo				Filastruder
Model	Composer 350	Composer 450	Precision 350	Precision 450	Filastruder Kit
Max extruder temperature	350°C	450°C	350°C	450°C	200-400 (260)°C
Number of components	1	1	1	1	1
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal
Heatzones	4	4	4	4	1
Heat zone control	Yes	Yes	Yes	Yes	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Build in
Type of filament cooling	Air	Air	Air	Air	Air
Winding system	Built in	Built in	Built in	Built in	Seperate
Filament diameter control	Automatic	Automatic	Automatic	Automatic	None
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 271
Winding system price (€)	Included	Included	Included	Included	€ 153
Filament cooling system price (€)	Included	Included	Included	Included	None available
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 424

If you are up for an adventure, the Filastruder is the way to go. Since this is a kit set-up, prepare yourself for the numerous hours you will need to invest before extruding. This machine is a great example of being a product that is designed from the viewpoint of price and function, which allows this product to be the cornerstone of a great product offering.

Filastruder also gives you the best bang for your buck. Since, this is the most cost-effective option, this is perfect for messing around with extruder components and getting a good basis.

**Ideal user:** The adventurous first-timer





# Felfil & 3devo

Company	3devo				Felfil		
Model	Composer 350	Composer 450	Precision 350	Precision 450	Felfil EVO (assembled)	Felfil EVO (kit)	Felfil EVO (basic)
Max extruder temperature	350°C	450°C	350°C	450°C	200-400 (250)°C	200-400 (250)°C	N/A
Number of components	1	1	1	1	1	1	1
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal	Horizontal
Heatzones	4	4	4	4	1	1	1
Heat zone control	Yes	Yes	Yes	Yes	No / Does not apply	No / Does not apply	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No	No	No
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	None available	None available	None available
Type of filament cooling	Air	Air	Air	Air	None	None	None
Winding system	Built in	Built in	Built in	Built in	None available	None available	None available
Filament diameter control	Automatic	Automatic	Automatic	Automatic	None	None	None
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 651	€ 543	€ 271
Winding system price (€)	Included	Included	Included	Included	None available	None available	None available
Filament cooling system price (€)	Included	Included	Included	Included	None available	None available	None available
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 651	€ 543	€ 271

The felfil is great for beginners who want to start extruding right away. All you have to do is set the proper heating temperature and gear motor speed to start making your own filament. The time needed to for assemble is quite short, so don't expect that to take up too much of your time.

Be aware that you won't be making industry-standard filament with this machine just yet. This is meant to be a plug-and-play device, so don't get your hope up for industrial pocket extruder.

**Ideal user:** First-timer that isn't quite ready for a whole extrusion system



# OmniDynamics & 3devo

Company	3devo				OmniDynamics
Model	Composer 350	Composer 450	Precision 350	Precision 450	Strooder
Max extruder temperature	350°C	450°C	350°C	450°C	200-400 (250)°C
Number of components	1	1	1	1	1
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal
Heatzones	4	4	4	4	1
Heat zone control	Yes	Yes	Yes	Yes	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	None available
Type of filament cooling	Air	Air	Air	Air	None
Winding system	Built in	Built in	Built in	Built in	Seperate
Filament diameter control	Automatic	Automatic	Automatic	Automatic	None
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 1094
Winding system price (€)	Included	Included	Included	Included	€ 217
Filament cooling system price (€)	Included	Included	Included	Included	None available
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 1311

This device is small and compact. Ideally for micro-extruding. Think of this as a playground before you get the ball rolling with a more professional desktop extrusion system.

**Ideal user:** First-timer that isn't quite ready for a whole extrusion system



# ReDeTec & 3devo

Company	3devo				ReDeTec
Model	Composer 350	Composer 450	Precision 350	Precision 450	ProtoCycler +
Max extruder temperature	350°C	450°C	350°C	450°C	200-400 (260)°C
Number of components	1	1	1	1	3 ( Optional grinder, extruder, control system)
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal
Heatzones	4	4	4	4	1
Heat zone control	Yes	Yes	Yes	Yes	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No - only one scw type available
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Build in
Type of filament cooling	Air	Air	Air	Air	Air
Winding system	Built in	Built in	Built in	Built in	Build in
Filament diameter control	Automatic	Automatic	Automatic	Automatic	Automatic
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 1,525
Winding system price (€)	Included	Included	Included	Included	Included
Filament cooling system price (€)	Included	Included	Included	Included	None available
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 1,525

This may be an all in one solution, but keep in mind that this machine is meant to handle smaller quantities. Besides, you'll be using a lot of muscle using the manual shredder winder.

If you are, indeed, working with smaller quantities this might be your best bet.

**Ideal user:** First-timer that isn't quite ready for a whole extrusion system



# Filabot & 3devo

Company	3devo				Filabot	
Model	Composer 350	Composer 450	Precision 350	Precision 450	EX6 Full setup	EX2 Full setup
Max extruder temperature	350°C	450°C	350°C	450°C	400°C+ (350°C maximum recommended)	400°C+ (350°C maximum recommended)
Number of components	1	1	1	1	3 (Extruder, Airpath, spooler)	3 (Extruder, Airpath, spooler)
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal
Heatzones	4	4	4	4	4	1
Heat zone control	Yes	Yes	Yes	Yes	Yes	Yes
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	Yes (dependent on screw type)	Yes (dependent on screw type)
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Included in setup	Included in setup
Type of filament cooling	Air	Air	Air	Air	Air	Air
Winding system	Built in	Built in	Built in	Built in	Included in setup	Included in setup
Filament diameter control	Automatic	Automatic	Automatic	Automatic	Manual	Manual
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 8,976	€ 2447
Winding system price (€)	Included	Included	Included	Included	€ 1,994	€ 1,994
Filament cooling system price (€)	Included	Included	Included	Included	€ 633	€ 633

If you are ready for something higher-end and a has a larger price tag, Filabot is one of the most popular professional desktop extruders out there. The consistency of the filament diameter can be impressive once you have found the right temperature setting for extruding, but this requires hours for experimentation since pre-sets are not integrated.

One disadvantage of the Filabot is if you don't include their cooling system, the string of filament won't have enough time to cool which can cause variations in diameter - having your hard work go unnoticed.

**Ideal user:** Intermediate/advanced level individuals who already have experience in extrusion or material science





# Filafab & 3devo

Company	3devo				Filafab		
Model	Composer 350	Composer 450	Precision 350	Precision 450	Pro 350 EX	Pro 350	Pro 100 EX
Max extruder temperature	350°C	450°C	350°C	450°C	200-400 (250)°C	200-400 (220)°C	200-400 (250)°C
Number of components	1	1	1	1	3 (Extruder, Airpath, spooler)	3 (Extruder, Airpath, spooler)	3 (Extruder, Airpath, spooler)
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal	Horizontal
Heatzones	4	4	4	4	1	1	1
Heat zone control	Yes	Yes	Yes	Yes	No / Does not apply	No / Does not apply	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No - only one screw type available	No - only one screw type available	No - only one screw type available
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Separate	Separate	Separate
Type of filament cooling	Air	Air	Air	Air	Air	Air	Air
Winding system	Built in	Built in	Built in	Built in	Separate	Separate	Separate
Filament diameter control	Automatic	Automatic	Automatic	Automatic	Speed and temperature control available	Speed and temperature control available	Temperature control available
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 1,705	€ 1,477	€ 1,021
Winding system price (€)	Included	Included	Included	Included	€ 553 / € 793 (FilaPull)	€ 553 / € 793 (FilaPull)	€ 553 / € 793 (FilaPull)
Filament cooling system price (€)	Included	Included	Included	Included	€ 460	€ 460	€ 460
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 2,958	€ 2,2730	€ 1,481

The Filafab extruder is specifically designed for hobbyists, students, and semi-professionals. There might be some diameter deviation issues since this machine focuses on the convenience of usage rather than the quality. If you are looking for a low-end solution to get your experiments running, this would be a cost-effective solution.

**Ideal user:** Intermediate/advanced level



# Noztek & 3devo

Company	3devo				Noztek	
Model	Composer 350	Composer 450	Precision 350	Precision 450	Full Filament Extrusion Setup	Touch & Touch HT (HT Dual PID)
Max extruder temperature	350°C	450°C	350°C	450°C	400°C+ (600, 750 on request)	400°C+ (600)
Number of components	1	1	1	1	4 (Excalibur extruder, water bath, tolerance puller, filament winder)	1
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal
Heatzones	4	4	4	4	3	1
Heat zone control	Yes	Yes	Yes	Yes	Yes (independent control)	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No - only one screw type available	No - only one screw type available
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Included in setup	Seperate
Type of filament cooling	Air	Air	Air	Air	Water	Water
Winding system	Built in	Built in	Built in	Built in	Included in setup	Seperate
Filament diameter control	Automatic	Automatic	Automatic	Automatic	Manual - tolerance puller is part of the setup	Manual - tolerance puller required
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 9,122	€ 2,189
Winding system price (€)	Included	Included	Included	Included	€ 1,996	€ 1,996
Filament cooling system price (€)	Included	Included	Included	Included	€ 450	€ 450
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 15,968 (setup price)	€ 4,635

Not only does it come readily assembled, but it also is among the least expensive extruders of its class. They offer different models, so it's ultimately up to you based on your current/future applications. Keep in mind that since it is a multi-component system, you might have difficulties finding equilibrium between all parts. Of course, you can only purchase the extruder body, but that would just leave you with useless stands of plastic.

**Ideal user:** Intermediate/advanced level



# Wellzoom & 3devo

Company	3devo				Wellzoom		
Model	Composer 350	Composer 450	Precision 350	Precision 450	Lline II +	Line II	Extruder B
Max extruder temperature	350°C	450°C	350°C	450°C	450°C (600 on request)	320°C (600 requires customization)	300°C MAX
Number of components	1	1	1	1	3 (Extruder, water cooler, winder)	3	1
Direction of extrusion	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal	Horizontal
Heatzones	4	4	4	4	2	2	1
Heat zone control	Yes	Yes	Yes	Yes	Yes (independent control)	Yes (independent control)	No / Does not apply
Mixing zone	Yes - Mixing screw	Yes - Mixing screw	No - Instead contains a high-flow screw	No - Instead contains a high-flow screw	No - only one scew type available	No - only one scew type available	No - only one scew type available
Filament cooling	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Built in dual-fan system	Included in setup	Included in setup	Seperate
Type of filament cooling	Air	Air	Air	Air	Water	Water	None
Winding system	Built in	Built in	Built in	Built in	Included in setup	Included in setup	Seperate
Filament diameter control	Automatic	Automatic	Automatic	Automatic	None	None	None
Extruder unit price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 533	€ 533	€ 533
Winding system price (€)	Included	Included	Included	Included	€ 253	€ 253	€ 253
Filament cooling system price (€)	Included	Included	Included	Included	N/A	N/A	N/A
Total price(€)	€ 5,350	€ 6,350	€ 4,850	€ 5,850	€ 2,357 (setup price)	€ 2,085 (setup price)	€ 533

Wellzoom is purposely designed for non-professional users. The design is based on a simple concept, which incorporates a simple operation panel to reduce the risk of maloperation. Wellzoom would be ideal if you are looking to produce in small quantities of composite material for experimentation. There might be some diameter deviation issues since this machine focuses on the convenience of usage rather than the quality. The whole desktop extruder line includes 3 components: Wellzoom extruder, water-cooling tractor, and the auto-winder.

**Ideal user:** Intermediate/advanced level



# Why 3devo?

One important feature people tend to forget when purchasing a desktop extruder is additional support. Desktop extrusion is a fairly new tool on the market, which might be a steep learning curve for some. Without a dedicated support team by your side, you might spend endless hours adjusting settings just to find yourself in the same place you first began.

At 3devo, we want to make your extrusion experience as simple as possible. Hence our slogan, **Materials Made Simple**. Our mission is to see our customers succeed. We are more than just hardware, but also a devoted team that gets you to where you want to be.

## 3devo is the right choice for you if you need:

### Great support

Our goal is to prevent the preventable. That's why our material specialists and extrusion experts offer great support to get you up and running in no time, while teaching you the fundamentals.

### An all-in one solution

You want to make filament, right? So why only buy part of a multi-step extrusion line? We offer a complete filament production line packed into one machine.

### Speed

Our well-integrated filament maker lets you can get started right away. Less down time and more time extruding.

### Affordability

You're after a tool that offers great results within an reasonable price range. We make it affordable for anyone to take initiative over their own polymer experiments.

## 3devo

Get started today with the proper tools that can handle almost any polymer. All packed into one compact machine.

**Book a  
Demo**

