PLASMICS Delta S



CHAMBER HEATING

Provides up to 80° chamber temperature capability

Impeller for optimal airflow and heat distribution

INDUCTION NOZZLE

Water-cooled for superior temperature control up to 450°C

Made from abrasion resistant tool steel capable of extruding high performance filaments

ULTEM, PA, PC, CF, GF compatible without significant nozzle wear

FILAMENT STORAGE

Eliminates the need for a dedicated

Clean and efficient workspace presentation

PLASMICS

LED INDICATOR

Aesthetic all-around led light to indicate printer state

> Color Coded Printer States: Standby, Printing, User interaction required

FILAMENT SENSOR ARRAY

Continuous measurement of filament diameter X, Y and length

> Enables dynamic adjustment of extrusion multiplier for Filament Quality Protocol

DOUBLE GLAZED DOOR

Touch Safe 100% of the time

HEATED BUILD PLATE

Up to >130°C heated build plate with homing marks for exact prints

Filament stored within the printer

filament storage device

INTRODUCING:

The Delta S - The new complete 3D printing solution by Plasmics. It is equipped with our INo Technology, the world's first commercially available induction-heated nozzle along with further professional grade capabilities like a heated buildspace, a filament sensor array and a water-cooled effector to enable the creation of industrial-grade prints utilizing FDM.

The Delta S features the ability to extrude high-performance fiber-reinforced filaments, offers the highest degree of capability and superior reliability.

FACTS:

Plasmics Induction Nozzle Technology Filament Sensor Array

200 x 250mm Print Volume

Up to 80°C (176°F) Heated Chamber

Up to 130°C (266°F) Heated Build Plate

Open Source Software (Klipper, Mainsail)

Full metal Frame

Carbon Fiber Arms for Printhead

Multilayer Insulated Buildspace

110-240V Outlet Voltage Compatible



PLASMICS INo Trident



ALUMINIUM CASING

Weight: less than 30g

Dimensions: ø 24.6mm * h 61.5mm

NOZZLE

Up to **450°C Nozzle temp** enabling high end filament capabilities

1.75mm, 2.85 under development

Made from abrasion resistant **tool steel**

Capable of extruding **GF**, **CF**, **PEKK** filaments without wear

Thermocouple for **fast** temperature measurement

FLEXIBLE MOUNT

Can be mounted from the top or the side making it compatible with almost every 3D Printer

INDUCTION HEATING

No temperature overshoot

Heats up the nozzle from room temp to 250°C in less than 8 seconds

Cool down below glass transition temperature in less than **10s**

FACTS:

The First Commercially Available Induction Heated Nozzle

Klipper Integrated Marlin And Duet under Developement

Higher efficiency than compareable Hotends

Dedicated Electronics To Power The Induction Coil

Low Mass For Maximum <u>Acceleration Without Ringing</u>

Nozzle Made From Abrasion Resistant Armor Grade **Tool Steel**

> NeverBlock Technology For Uninterrupted Printing

INTRODUCING:

The Plasmics Ino Trident - the world's first commercially available induction heated nozzle for 3D printing. The Plasmics INo technology employs a modulated magnetic field to convert energy into heat, resulting in faster heat-up and faster cool-down compared to a conventional resistance heated nozzle.

This improves extrusion temperature stability which results in

better print quality and speeds up **multi material** prints by a significant factor. The **INo Trident** is convection cooled whilst the **Delta S** uses the

water-cooled INo technology system.

ABOUT PLASMICS

Plasmics was founded in 2018 and has worked almost exclusively in stealth mode since then. Plasmics singular focus is developing the worlds most sophisticated and easy to use 3D printing solution and the INo Trident is the first publicly available piece of our vision.

We will enable the effortless manufacturing of various medical devices such as orthoses, protheses, casts, corsets.

Our system will help people to enjoy a better quality life with perfectly fitted prosthesis' manufactured within a few hours instead of weeks.