

Photo**centric**



LIQUID CRYSTAL MAGNA AND DAYLIGHT RESINS

2023


TecSol3D

Photo**o**centric

Inventors of LCD 3D Printing

Since 2002 Photocentric have been at the cutting edge of innovation in photopolymer, filing our first 3D printing patent on using LCD screens in 2015 and launching the first 3D LCD printer into the market the following year.

Patent holders in visible light curing technologies, we have innovated in a broad range of applications to optimise productivity and cost. We remain at the forefront of innovation, providing customers with a new vision of digital manufacturing.

Our Values



Innovation



Value



Education



Integrity



The Industrial Revolutionaries

Photocentric are leading the way in helping businesses evolve and grow with large scale, fast, affordable 3D printing, and the flexibility that our Additive Manufacturing (AM) solutions provide.

We have been successful in bridging the gap between prototyping and injection moulding for clients from many industries by providing both hardware and polymer at competitive prices, using LCD screen technology for 3D printing - the concept we invented.

To support our award-winning 3D printers, our in-house chemists have developed a range of 3D printing materials to suit a wide range of industries while creating a large bespoke portfolio of speciality materials for specific applications.

LCD Technology



Durable LCD screen



Energy efficient



Reliable



Faster printing



Cost effective



Superior surface finish

The Benefits of Daylight Technology

Daylight is far better for screen life, lower in energy usage and safer, but it also makes printing more reliable, delivering a more even cure than higher intensity UV with its greater depth of penetration. It is much more effective to use daylight with dark coloured or particle rich formulations as the longer wavelength travels further.

The problem with AM



Parts not functional



Parts too expensive



No scale

Our solution



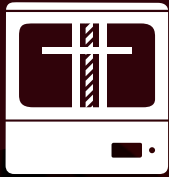
Functional parts



Affordable parts



Large format manufacturing



Liquid Crystal
MAGNA

The versatility of the LC Magna supercharges product design, enabling you to move from prototyping to production volumes in hours.





TecSol3D



Liquid Crystal
MAGNA

LC Magna Size does matter ...

From the inventors of LCD 3D Printing, this brand-new revision of the Photocentric LC Magna builds on the success of the original, delivering fast, highly accurate prints suitable for a huge variety of industries and applications. This new version of LC Magna has been completely re-engineered, delivering even greater performance and reliability.



Product highlights



Impressive build volume of 510 x 280 x 350mm (21.1 x 11 x 13.8")



Brand-new hydrophobic platform boosts productivity and reduces waste.



Print speeds are significantly faster when compared to the original LC Magna.*



Upgraded electronics including a brand-new control system, custom screen driver and faster processing.



Photocentric's patented 'Blow-Peel' release technology enables reliable large surface area printing.



Supports layer thicknesses between 25 to 350 microns, delivering the optimum balance of speed and resolution.

*depending upon material and print.



Liquid Crystal
MAGNA



Liquid Crystal
MAGNA



Photocentric

Construction

Meticulous attention to detail has been taken with the component selection for this new version of the LC Magna, the v.2. Informed by extensive feedback from existing customers, this new version has undergone significant re-engineering to further improve reliability and performance.

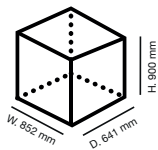
Highlights

- Six brand-new PWM fans provide quiet, efficient cooling, enabling faster production timescales, particularly for those models with small footprints.
- A brand-new build platform with a revolutionary hydrophobic coating increases processing speed, increases yield and enables easier platform cleaning.
- Total Internal Refraction (TIR) lenses have been selected, delivering a more collimated light cure and, as a result, far greater accuracy across the build plate.
- Advanced thermal cutoffs protect the LC Magna and your work from damage.
- Trinamic motor drivers provide smooth and quiet operation.
- Precision engineered mechanical components support reliable and consistent performance.
- Rugged construction designed for daily use in industrial environments including tough crack-proof door.
- Brand-new and improved PCB design and construction.

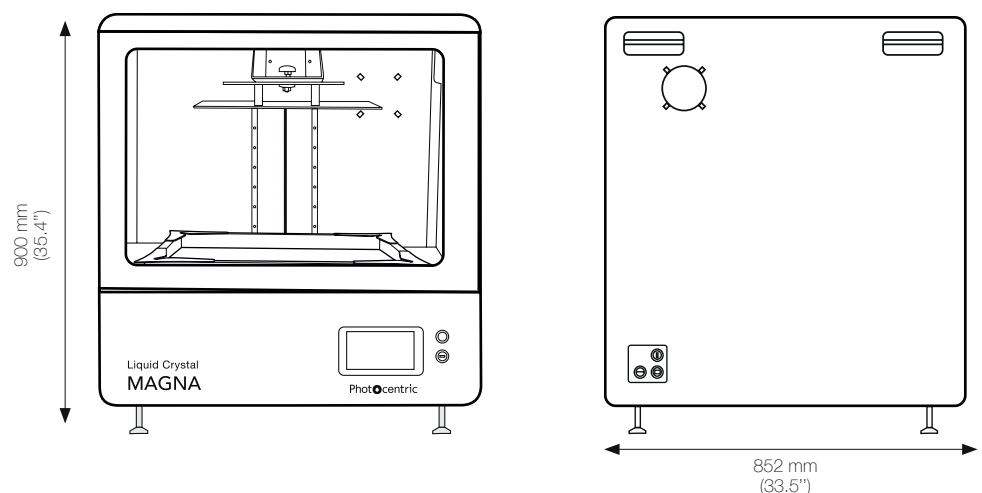
* Further information on print speeds and layer thickness can be found on the Photocentric website.

Dimensions

Weight: 110kg (242.5 lbs)



The diagram of this cube illustrates the basic dimensions of the LC Magna. These dimensions do not take account of the adjustable feet on the base of the machine.

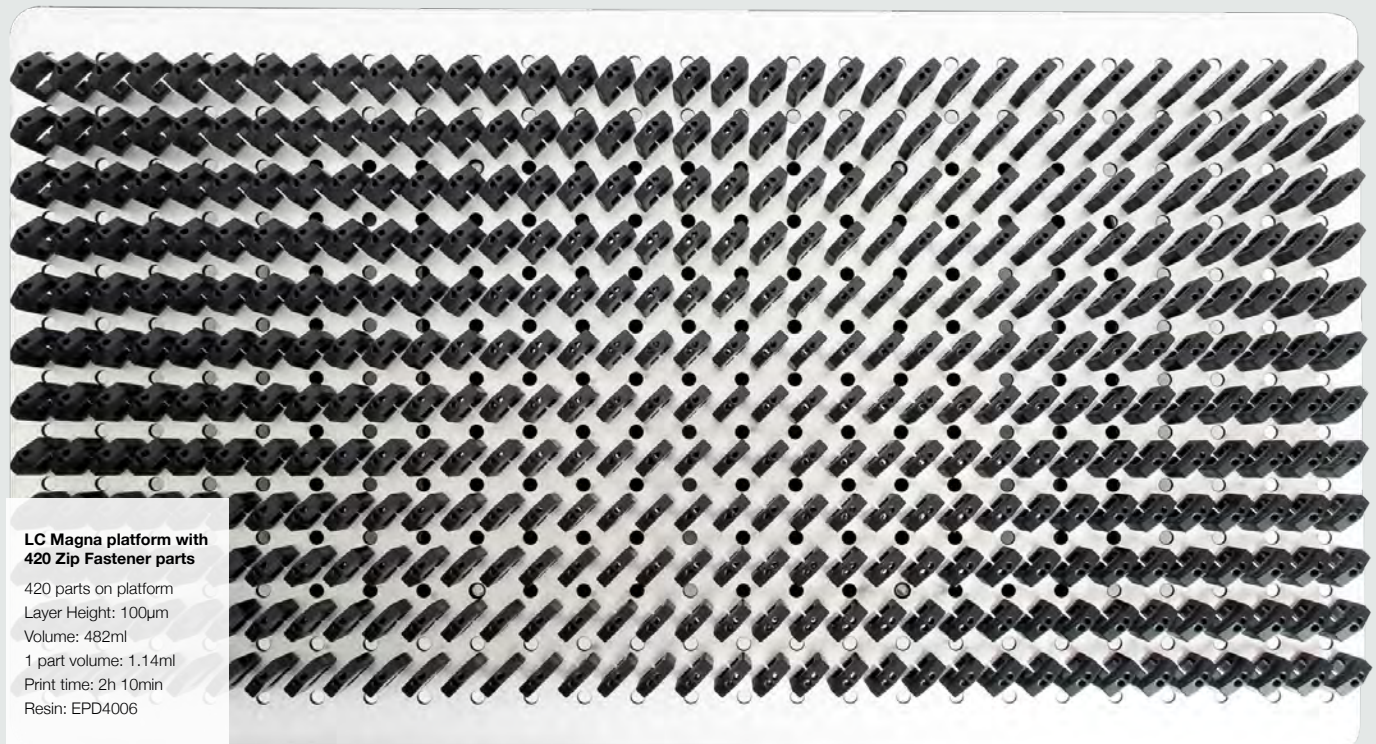


Product Datasheet Available

Detailed information on the LC Magna and its technical specification can be found in its datasheet and on the Photocentric website.

Operation

Whether it's small batch, on-demand or full production, the LC Magna 3D Printer is your perfect partner to consistently deliver accurate, affordable, end-use parts at scale.



Highlights

- A trusted production partner with 1000's of units successfully deployed around the world.
- Calibrated in the factory facilitating a quick installation on site.
- RGB indicators display production status.
- Brand-new quad-core processor with a large 7" capacitive touch screen with new GUI.
- Platform optimised for peel forces delivers quicker print speeds and better washing.
- Photocentric's patented 'Blow-Peel' release technology ensures reliability over large surface area printing.
- Brand-new custom screen driver.
- New software integration enables communication with the OPC-UA Machine Tool (Umati) protocol, further enabling integration with MES systems such as 3YOURMIND.
- Interchangeable platforms enable rapid turnaround ideal for full production environments.
- Safety-rated interlock switches within platform assembly and build chamber.
- A revised and updated control system delivers even greater levels of reliability and performance - with regular updates and revisions provided.

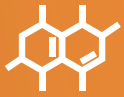
Beat your competitors

Presenting a 3D printer that can deliver significant speed, volume and cost savings to your business today. The evolution of the LC Magna continues with a host of performance enhancements added for 2022.



How LC Magna Compares

Machine	Build volume	Speed	Accuracy	Cost per part
Photocentric LC Magna	★★★★★ Very Large	★★★★★ Very Fast	★★★★ Good	★★★★ Very Low
Formlabs Form 3	★★ Small	★ Very Slow	★★★★ Good	★★ High
Formlabs Form 3L	★★★★ Large	★★★ Fast	★★★★ Good	★★ High
Nexa XiP	★★ Small	★★ Slow	★★★★ Good	★★ High
Stratasys Objet30 V5 Pro &Prime	★★★ Medium	Data not available	★★★★★ High	★★ High



Resins Daylight

This innovative range of high-performance resins has been specifically developed for use on our LC Magna.



Technical Datasheets Available

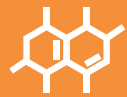
More detailed information can be found on each of these resins on their technical datasheets. These datasheets can be found on the Photocentric website.





Technical Datasheet

Magna Dental Model



Daylight Resin

Photocentric



Magna Dental Model

Accuracy (Low – High)



Shore Hardness (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour



White

Available in
5kg & 10kg bottle



Magna Platform pictured shows 48 x Aligner Models

Photocentric Magna Dental Model White has been specially created for 3D printing highly detailed and accurate dental models. It provides outstanding accuracy and minimal shrinkage with at least 80% of scanned models within $\pm 100\mu\text{m}$ tolerance, perfect for Aligner Dental Model production. Using Magna Dental Model White ensures a dry surface finish, accurate details, and great mechanical stiffness with a high Shore hardness rating for 3D printed parts.

Optimised for:

- Orthodontic models for clear aligner manufacture
- Thermoforming
- Study, opposing and denture base models

Unique features:



Minimal shrinkage of 0.5%



High accuracy



High stiffness and hardness



Magna Dental Model Properties

Tensile Properties

Tensile Modulus *	3020 MPa	ASTM D638
Ultimate Tensile Strength *	63 MPa	ASTM D638
Elongation at break *	4.3%	ASTM D638

Flexural Properties

Flexural Modulus *	2200 MPa	ASTM D790
Flexural Strength *	95 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	22.7 J/m	ASTM D256
Impact Strength Notched Izod *	3.2 kJ/m ²	ISO 180

General Properties

Shore Hardness *	90 Shore D	ASTM D2240
Heat Deflection Temperature	95°C	ASTM D648
Viscosity	900 cPs	At 25°C Brookfield spindle 3
Density	1.09 g/cm ³	
Storage	10<T>50°C	

* Mechanical properties stated based on fully cured material.



We are constantly reviewing and improving our range of high-performance materials. For the very latest information, please visit the Photocentric website



Technical Datasheet

Magna Dental Model

 Daylight Resin

Photocentric



Magna Dental Model

Accuracy (Low – High)



Shore Hardness (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour

 Beige

Available in
5kg & 10kg bottle



Magna Platform pictured shows 48 x Aligner Models

Photocentric Magna Dental Model Beige has been specially created for 3D printing highly detailed and accurate dental models. It provides outstanding accuracy with at least 90% of scanned models within $\pm 100\mu\text{m}$ tolerance, perfect for Aligner Dental Model production. Using Magna Dental Model Beige ensures a dry surface finish, accurate detail and great mechanical stiffness, shorter print and post process cycles with a high Shore hardness of 84D.

Optimised for:

- Orthodontic models for clear aligner manufacture
- Thermoforming
- Study, opposing and denture base models

Unique features:



Easy to print and post process



High accuracy



High stiffness and hardness



Magna Dental Model Properties

Tensile Properties

Tensile Modulus *	2750 MPa	ASTM D638
Ultimate Tensile Strength *	56 MPa	ASTM D638
Elongation at break *	2.7%	ASTM D638

Flexural Properties

Flexural Modulus *	2570 MPa	ASTM D790
Flexural Strength *	84 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	19.5 J/m	ASTM D256
Impact Strength Notched Izod *	2.5 kJ/m ²	ISO 180

General Properties

Shore Hardness *	84 Shore D	ASTM D2240
Water Absorption (Short Term)	0.13%	ASTM D570
Viscosity	150 cPs	At 25°C Brookfield spindle 3
Density	1.10 g/cm ³	
Storage	10<T>50°C	

Biocompatibility

Cytotoxicity*	Passed	ISO 10993-5
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* Mechanical properties stated based on fully cured material.

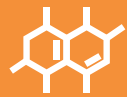


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Technical Datasheet

Magna Hard



Daylight Resin

Photo**centric**

 Magna Hard

Tensile Modulus (Low – High)



Impact Strength (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour

 Black

Available in
5kg bottle



Electronic housing

Photocentric's Daylight Magna Hard formulation is ideal for making large objects displaying extreme hardness with no compression under high force, negligible plastic deformation due to yield strength before breaking and with minimal shrinkage. Parts also exhibit exceptionally high tensile properties with reasonable elongation.

Optimised for:

- Printing large functional parts
- Prototyping
- Mass manufacture of custom end-use parts

Unique features:



Strong, tough and long-lasting



High Accuracy



Magna Hard Properties

Tensile Properties

Tensile Modulus *	2600 MPa	ASTM D638
Ultimate Tensile Strength *	52 MPa	ASTM D638
Elongation at break *	10%	ASTM D638

Flexural Properties

Flexural Modulus *	1550 MPa	ASTM D790
Flexural Strength *	65 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	55 J/m	ASTM D256
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General Properties

Shore Hardness *	86 Shore D	ASTM D2240
Heat Deflection Temperature	85°C	ASTM D648
Viscosity	450 cPs	At 25°C Brookfield spindle 3
Density	1.1 g/cm ³	
Storage	10<T>50°C	

* Mechanical properties stated based on fully cured material.

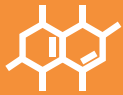


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Technical Datasheet

Magna Draft



Daylight Resin

Photocentric



Magna Draft

Tensile Modulus (Low – High)



Print Speed (Slow – Fast)



Compatible Printers



Liquid Crystal
MAGNA

Colour



Turquoise

Available in
5kg bottle



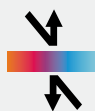
Fluid Manifold

Photocentric's Draft resin is our fastest printing resin yet. Specifically designed to allow for detailed large parts to be printed in shorter times for rapid prototyping and production. This resin works up to a 350µm layer height, with short curing times- reducing print times dramatically.

Optimised for:

- Ideal for prototyping
- Fast printing
- Translucency allows for easy inspection of hollowed parts

Unique features:



Printed parts exhibit very high strength



Fast post curing



Resilient with little compression



Magna Draft Properties

Tensile Properties

Tensile Modulus *	3200 MPa	ASTM D638
Ultimate Tensile Strength *	84 MPa	ASTM D638
Elongation at break *	4.4%	ASTM D638

Flexural Properties

Flexural Modulus *	2840 MPa	ASTM D790
Flexural Strength *	109 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	22.6 J/m	ASTM D256
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General Properties

Shore Hardness *	90 Shore D	ASTM D2240
Heat Deflection Temperature*	75°C	ASTM D648
Viscosity	970 cPs	At 25°C Brookfield spindle 3
Density	1.16 g/cm ³	
Storage	10<T>50°C	

Biocompatibility

Cytotoxicity*	Passed	ISO 10993-5
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* Mechanical properties stated based on fully cured material.

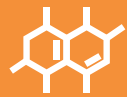


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Technical Datasheet

HighTemp DL400



Daylight Resin

Photocentric



HighTemp DL400

Tensile Modulus (Low – High)



Temperature Resistance (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour



Amber

Available in
5kg bottle



Full size motorcycle fuel tank

Photocentric's HighTemp DL400 is the first Photocentric high temperature resistant resin possessing superior properties of both strength and stiffness. It can handle impact, compression, fatigue, high temperatures and moisture without bending or deforming, able to print with an impressive layer thickness of 350µm.

Optimised for:

- | | |
|--|--|
| <input type="radio"/> Hot fluid and gas manifolds | <input type="radio"/> Moulds and inserts |
| <input type="radio"/> Heat resistant housings and fixtures | <input type="radio"/> Outdoor applications |

Unique features:



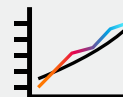
Temperature resistant
(HDT 230 °C)



Excellent long-lasting
performance under heat
and stress



Print at 350 µm
layer thickness



Simulating the
strength and
stiffness of glass
filled Nylon 6



Minimal shrinkage



Dry and smooth surface
finish and ability to print
fine details



HighTemp DL400 Properties

Tensile Properties

Tensile Modulus *	4000 MPa	ASTM D638
Ultimate Tensile Strength *	80 MPa	ASTM D638
Elongation at break *	4%	ASTM D638

Flexural Properties

Flexural Modulus *	3300 MPa	ASTM D790
Flexural Strength *	109 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	15.6 J/m	ASTM D256
Impact Strength Notched Izod *	3.1 kJ/m ²	ISO 180

General Properties

Hardness *	95 Shore D	ASTM D2240
Heat Deflection Temperature *	230 °C	ASTM D648 (0.455 MPa)
Water Absorption (Short Term)	0.35%	ASTM D570
Viscosity	650 cPs	At 25°C Brookfield spindle 3
Density	1.10 g/cm ³	
Storage	10<T>50°C	

Biocompatibility

Cytotoxicity*	Passed	ISO 10993-5
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*Mechanical properties stated based on fully cured material.



We are constantly reviewing and improving our range of high-performance materials.
For the very latest information, please visit the Photocentric website



Technical Datasheet

Rigid DL240 Plant-Based

 Daylight Resin

Photocentric

Rigid DL240 Plant-Based

Accuracy (Low – High)



Shore Hardness (Low – High)



Compatible Printers



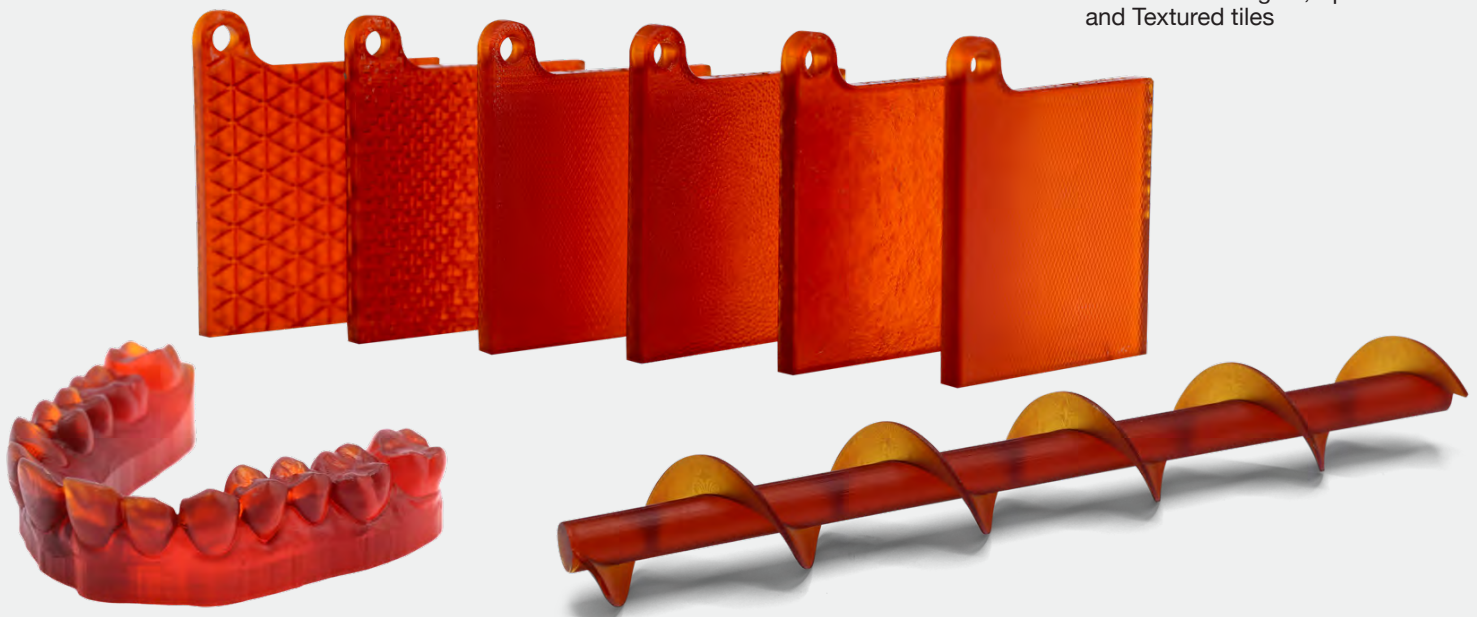
Liquid Crystal
MAGNA

Colour



Dark Amber

Available in
5kg bottle



Dental model aligner, Spiral
and Textured tiles

Rigid DL240 Plant-Based is a high-performance rigid 3D printing resin which consists of 50% bio-based raw materials, offering a substantial reduction on net CO₂ emission compared to conventional resins. It is remarkably easy to handle and process, along with exhibiting outstanding properties.

Rigid DL240 Plant-Based has high accuracy, with over 98% of scanned data within +/- 100µm for dental models printed horizontally and over 83% of scanned data within +/- 100µm for dental models printed vertically, increasing output for overnight production. It enables quick design iterations by offering 250 and 350µm layer thickness print profiles.

Optimised for: Fast & Accurate Prototyping Dental Models for Aligner manufacturing

Unique features:



High accuracy



Exceptional surface finish and smooth feel



Quick design iterations



Rigid



50% of components from plant-based materials



Dry to touch



Fast post curing



Rigid DL240 Plant-Based Properties

Tensile Properties	Green	Post-Cured	Method
Tensile Modulus	1210 MPa	2440 MPa	ASTM D638
Tensile Strength (Break)	27 MPa	56.6 MPa	ASTM D638
Tensile Strength (Yield)	24.3 MPa	64.5 MPa	ASTM D638
Elongation at Break	19.2%	6.1%	ASTM D638
Flexural Properties			
Flexural Strength	-	108 MPa	ASTM D790
Flexural Modulus	-	2656 MPa	ASTM D790
Impact Properties			
Impact Strength Notched Izod	-	12.2 J/m	ASTM D256
Impact Strength Notched Izod	-	2.2 kJ/m ²	ISO 180
General Properties			
Shore Hardness	-	88 Shore D	ASTM D2240
HDT (@ 0.455 MPa)	-	78.4°C	ASTM D648
HDT (@ 1.82 MPa)	-	62.6°C	ASTM D648
Water absorption (%)* after 24 hrs	-	0.470%	ASTM D570
Water absorption (%)* after 72 hrs	-	0.625%	ASTM D570
Water absorption (%)* after 7 days	-	0.933%	ASTM D570
Liquid Properties			
Viscosity	580 cPs	At 25°C Brookfield spindle 3	
Density	1.10 g/cm ³	-	
Storage	10<T>50°C	-	

* Post cured for 2 hours at 60°C with Photocentric Cure L2



Technical Datasheet

Magna Durable

 Daylight Resin

Photocentric

Magna Durable

Tensile Modulus (Low – High)



Impact Strength (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour

 Black

Available in
5kg bottle



Photocentric's Daylight Magna Durable formulation is ideal for 3D printing functional parts that are durable and long-lasting, with high impact strength that can also bend without breaking. Printed parts are able to flex under strain and return to their original form.

Optimised for:

- Jigs and fixtures
- Cover-plates and enclosures
- Suitable for end-use parts

Unique features:



Smooth surface
finish



Tough, durable,
and long lasting



High definition



Magna Durable Properties

Tensile Properties

Tensile Modulus *	1570 MPa	ASTM D638
Ultimate Tensile Strength *	42 MPa	ASTM D638
Elongation at break *	30%	ASTM D638

Flexural Properties

Flexural Modulus *	1460 MPa	ASTM D790
Flexural Strength *	52 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	91 J/m	ASTM D256
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General Properties

Shore Hardness *	60 Shore D	ASTM D2240
Heat Deflection Temperature	45°C	ASTM D648
Water Absorption (Short Term)	1%	ASTM D570
Viscosity	1200 cPs	At 25°C Brookfield spindle 3
Density	1.09 g/cm ³	
Storage	10<T>50°C	

Biocompatibility

Cytotoxicity*	Passed	ISO 10993-5
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* Mechanical properties stated based on fully cured material.

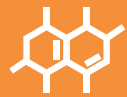


We are constantly reviewing and improving our range of high-performance materials.
For the very latest information, please visit the Photocentric website



Technical Datasheet

Magna Duramax



Daylight Resin

Photocentric

Magna Duramax

Tensile Modulus (Low – High)



Impact Strength (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour



Black

Available in
5kg bottle



Bike Saddle

Photocentric's Daylight Magna Duramax formulation has been created for manufacturing functional parts that are durable and long lasting with high impact strength. Parts are stiff but can flex under strain, and quickly returning to their original form.

Optimised for:

- | | |
|--|---|
| <ul style="list-style-type: none">○ Jigs and fixtures requiring minimal deflection | <ul style="list-style-type: none">○ Cover-plates and enclosures |
| <ul style="list-style-type: none">○ Fastenings, tools & couplings | <ul style="list-style-type: none">○ Suitable for end-use parts |

Unique features:



Smooth surface finish



Tough, durable, and long lasting



Exhibits intricate details



High strength and stiffness



Magna Duramax Properties

Tensile Properties

Tensile Modulus *	1760 MPa	ASTM D638
Ultimate Tensile Strength *	50 MPa	ASTM D638
Elongation at break *	19%	ASTM D638

Flexural Properties

Flexural Modulus *	1600 MPa	ASTM D790
Flexural Strength *	70 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	51 J/m	ASTM D256
Impact Strength Notched Izod *	5.4 kJ/m ²	ISO 180

General Properties

Shore Hardness *	70 Shore D	ASTM D2240
Heat Deflection Temperature	60°C	ASTM D648
Water Absorption (Short Term)	1.4%	ASTM D570
Viscosity	395 cPs	At 25°C Brookfield spindle 3
Density	1.11 g/cm ³	
Storage	10<T>50°C	

* Mechanical properties stated based on fully cured material.



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Technical Datasheet

Durable DL110H

 Daylight Resin



Photocentric

Durable DL110H

Tensile Modulus (Low – High)



Impact Strength (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour

 Black

 White

 Smoky Quartz
Translucent

Available in
5kg bottle

Photocentric's Durable range is the most popular material among Photocentric's functional materials. They can handle impact, compression, bending and stress fatigue without breaking or deforming.

Optimised for:

- Jigs and fixtures requiring minimal deflection at elevated temperature such as drills holders and air intakes
- Cover-plates and enclosures like automotive and motorsport interiors
- Fastenings, tools & couplings
- Strong and stiff prototypes

Unique features:



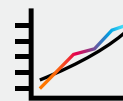
Heat deflection temperature 80 °C



High impact strength



Tough, durable, and long lasting



Simulating the strength and stiffness of ABS



High definition and can hold fine details



Smooth surface finish



Print at 350 µm layer thickness (Translucent only)



Durable DL110H Properties

Tensile Properties

Tensile Modulus *	2100 MPa	ASTM D638
Ultimate Tensile Strength *	60 MPa	ASTM D638
Elongation at break *	14%	ASTM D638

Flexural Properties

Flexural Modulus *	2080 MPa	ASTM D790
Flexural Strength *	81 MPa	ASTM D790

Impact Properties

Impact Strength Notched Izod *	110 J/m	ASTM D256
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General Properties

Hardness *	85 Shore D	ASTM D2240
Heat Deflection Temperature	80 °C	ASTM D648
Water Absorption (Short Term)	1.06%	ASTM D570
Viscosity	480 cPs	At 25°C Brookfield spindle 3
Density	1.14 g/cm ³	
Storage	10<T>50°C	

* Mechanical properties stated based on fully cured material.

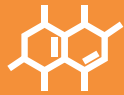


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Technical Datasheet

Flexible DL220B



Daylight Resin

Photocentric



Flexible DL220B

Shore Hardness (Low – High)



Elongation (Low – High)



Compatible Printers



Liquid Crystal
MAGNA

Colour



Black
Translucent



Phone case

Creating complex geometries like lattices, with ‘Flexible’ materials, allows the user to maximise the benefits of 3D printing, making a part with dynamic properties with only one step manufacturing instead of several.

Photocentric is introducing its first ever industrial Daylight Flexible Resin- ‘Flexible DL220B’ – an optimised solution for applications which require a combination of impact absorption, high elongation, efficient energy damping, good tear strength and exceptionally low water absorption.

Printing of flexible materials has never been easier, owing to its superior green strength and excellent definition.

Optimised for:

● Sport protection

● Shock and impact absorption

● Cushioning

● Vibration damping

Unique features:



Remarkable elongation at break
>200%



Slow rebound and efficient energy damping



Exceptionally low water absorption
(<1% after 7 days)



High definition



Flexible DL220B Properties

Tensile Properties	Green	Post-Cured	Method
Tensile Modulus	20 MPa	66.4 MPa	ASTM D412
Tensile Strength (Break)	2.6 MPa	14 MPa	ASTM D412
Elongation at Break	107%	211%	ASTM D412
Mechanical Properties			
Tear Strength	-	21 kN/m	ASTM 624 Type C
Rebound Resilience	-	19.6%	ASTM D7121
General Properties			
Shore Hardness	-	80 Shore A	ASTM D2240
Water absorption (%)* after 24 hrs	-	0.32%	ASTM D570
Water absorption (%)* after 72 hrs	-	0.53%	ASTM D570
Water absorption (%)* after 7 days	-	1.09%	ASTM D570
Liquid Properties	Value	Method	
Viscosity	1600 cPs	At 25°C Brookfield spindle 3	
Density	1.06 g/cm ³	-	
Storage	10<T>50°C	-	

* Post cured for 10 hours at 60°C with Photocentric Cure L2



We are constantly reviewing and improving our range of high-performance materials. For the very latest information, please visit the Photocentric website

3D Printing Partnership



The brand of BASF 3D Printing Solutions was created to focus upon the development of materials for the industrial-scale manufacture of end use products. Sectors covered include automotive and aerospace, consumer goods, industrial, medical, and dental industries. BASF invests in research and development, as well as in business development of the industrial and functional applications of 3D printing.



Ultracur3D® EPD3500

Strong translucent daylight resin with superior strength and stiffness.

Best used for:

- Engineering
- Prototypes
- Translucent parts

Tensile Modulus (Low – High) 2500 MPa



Hardness (Soft – Hard) Shore D 79



Ultracur3D® EPD4006

Ideally suited for making large-scale objects where a hard finish is essential.

Best used for:

- Ideal for functional applications
- Parts requiring high impact resistance
- Smooth surface finish

Tensile Modulus (Low – High) 1800 MPa



Impact Strength (Low – High) 46 J/m



Ultracur3D® EPD1006

Perfect for creating functional parts capable of movement and flexibility without breaking.

Best used for:

- Ideal for functional parts
- Engineering
- Prototyping

Tensile Modulus (Low – High) 1500 MPa



Impact Strength (Low – High) 35 J/m



Ultracur3D® EPD1086

A multi-purpose daylight resin suitable for a wide variety of applications with balanced mechanical properties.

Best used for:

- Cost-effective solution
- Engineering
- Prototyping

Tensile Modulus (Low – High) 1810 Mpa



Hardness (Soft – Hard) Shore D 81



Ultracur3D® EPD2006

Rigid, durable and long lasting material which guarantees parts display the finest details possible - also has good temperature resistance.

Best used for:

- Parts requiring resilience with little compression
- Engineering
- Prototyping

Tensile Modulus (Low – High) 2370 MPa



Impact Strength (Low – High) 11 J/m



Ultracur3D® FLD5006

Optimised for applications which require a combination of high energy return, high elongation and tear strength.

Best used for:

- Footwear e.g. midsoles
- Cushioning e.g. bike saddle
- Grips and handles

Tensile Modulus (Low – High) 2370 MPa



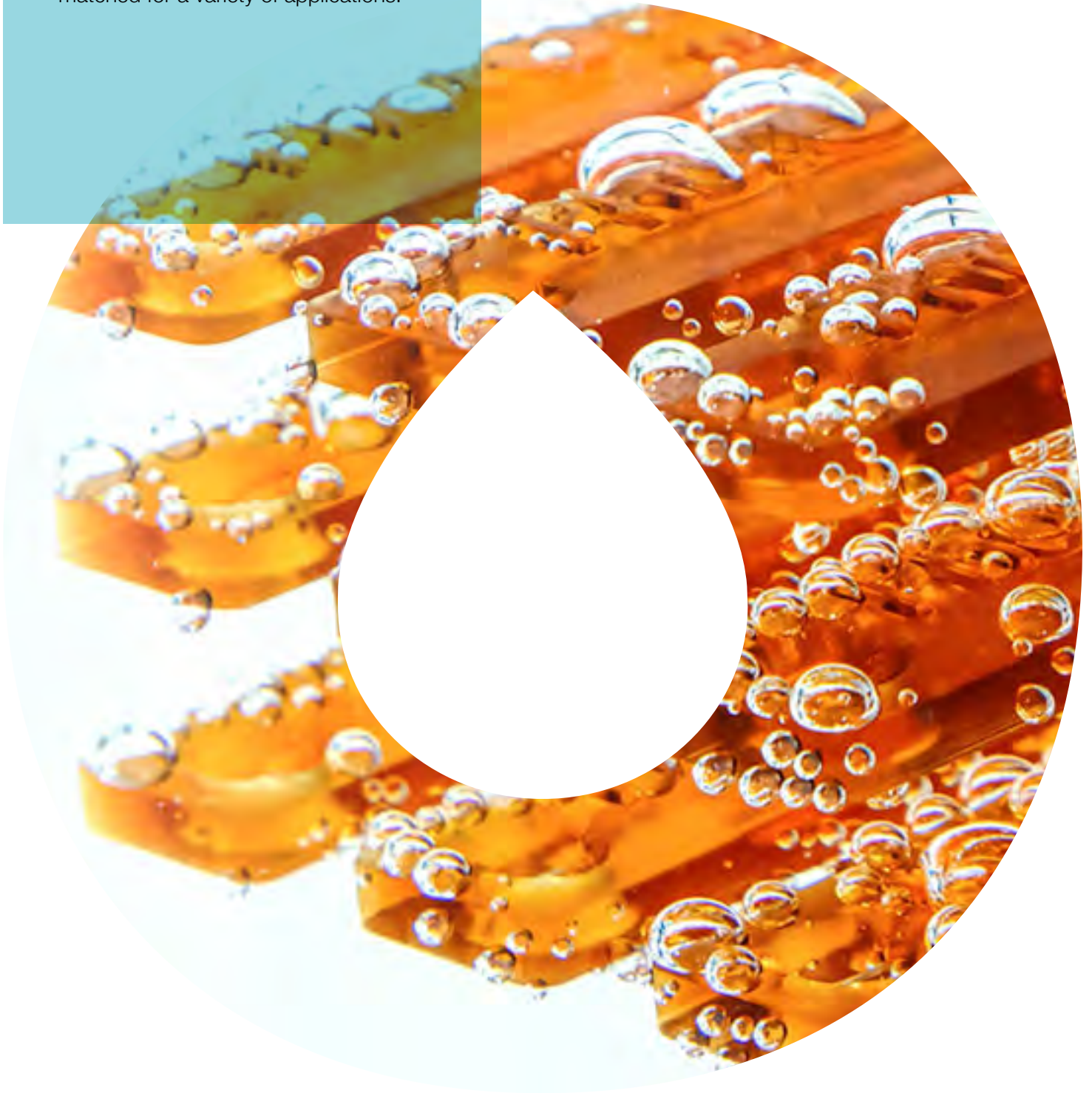
Rebound Resilience (Low – High)





Post Processing

We have a range of dedicated post processing solutions perfectly matched for a variety of applications.



Post Processing Large Volumes of Prints

Air Wash L

Designed to operate 24 hours a day and ideal for supporting large scale production. With an 80 litre capacity the Air Wash L uses air agitation to deliver a more thorough clean on complex parts.



Using Air Agitation



Increase throughput with 24/7 operation



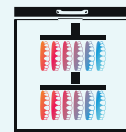
Streamline the process



Plug and Play



A more thorough clean



Clean in one process

Cure L2

Compatible with the LC Magna and other 3D printers that have platforms with internal dimensions of 550 (H) x 350 (D) x 500 (W) mm. Heating from 0-60°C.



Large chamber volume



Time regulated control



Strong parts with optimum properties



Plug and Play



Innovators in Software

With regular updates and performance enhancements, our software solutions ensure that you are able to produce the best possible print, every time.



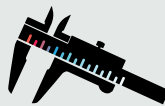
Photocentric Studio

Powerful and intuitive, Photocentric Studio 3D software has been created to simplify the print experience. Available with the LC Magna and LC Opus, Photocentric Studio includes a suite of tools to support a variety of industries and applications.

Benefits include



Aided productivity



High level print quality



Simplified workflow



Photocentric Additive

Jointly developed by Photocentric and CoreTechnologie, the innovative Photocentric Additive software, sets new standards, enabling 3D models from all common CAD formats to be read and prepared for additive manufacturing processes directly, as an exact, intelligent and light, B-Rep geometry.

Benefits include



3D textures revolutionise part design



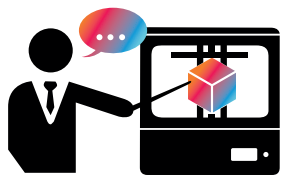
Geometry optimisation



Nesting and optimisation of the build platform

Support When You Need It

As a manufacturer of both printing materials and 3D printers, we can offer comprehensive support for any element of your additive manufacturing (AM) solution.



Training

To help you get the best out of your Photocentric product, a wealth of information is available directly from our website. To complement this, we also offer dedicated training programmes, delivered in a way that suits you, which can also be tailored to your specific requirements.



Service & Spares

Spare parts for our products are available globally, either directly from us or from our network of Photocentric partners - available 24/7 these can be ordered online, minimising any downtime.



Extended Warranty

Photocentric products are designed and manufactured in the UK to the highest quality standard and come with a warranty. To provide our customers with additional peace of mind in the unlikely event that something goes wrong, we also offer a range of extended warranties and support packages.





TecSol3D

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