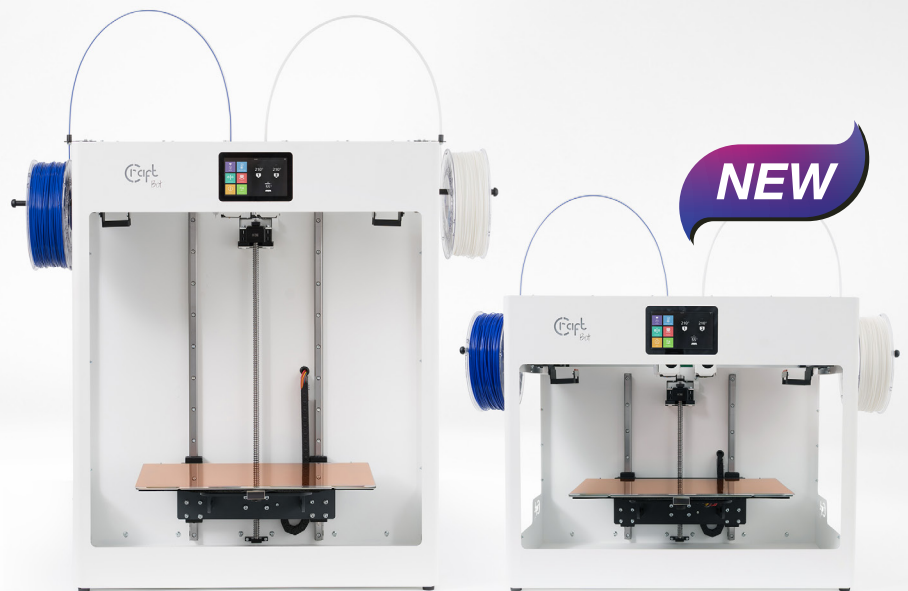


CraftBot FLOW GENERATION

DUAL EXTRUDER:
DOUBLE YOUR
PERFORMANCE

5 YEARS
OR 5000 HOURS
WARRANTY



Our mission is to offer a user-friendly 3D ecosystem, which are also reliable, plug&play printers based on our users' needs and feedback. Our users always inspire us to do our best. We have created our best 3D printer range - dedicated to efficiency and innovation.

KEY FEATURES – inspired by you

EFFECTIVITY

INDEPENDENT DUAL EXTRUDER: Our IDEX printers with their huge print volume and high quality independent dual extruders are able to print two objects in the same time (mirror or parallel mode) as well as PVA printing.

HUGE PRINT VOLUME – the CraftBot Flow IDEX XL is THE BIGGEST IDEX PRINTER OF THE WORLD.

UNIQUE DESIGNED PRINTING BED - FOR THE STRONG ADHESION & EASY REMOVAL:

The heated bed comprises of metal, tempered glass, and Kapton this ensures the maximum adhesion during printing, while the flexible top plate makes the removal easy even in the case of very flat objects.

MESH BED LEVELING - SIMPLIFY THE CALIBRATION PROCESS: Beside the automatic XY calibration we have built in a semi-automatic, electronically aided Z calibration as well into our IDEX printers.

RELIABILITY

REINFORCED STEEL FRAME - MAKES CRAFTBOTS "TANK" : reinforced double-shell structure and robust extruded aluminium profiles along the Z axis.

NEW FILAMENT MONITORING SENSOR - for the smooth operation

ALL-METAL HOTEND: Exceptional quality printings and less filament jam.

HIGH - TECHNOLOGY

NEW PR3DATOR MOTHERBOARD - FOR THE MAXIMUM SPEED: 32 Bit fast for more accurate and precise control. Our mainboard is equipped the industry leading motor control system, extended features and great interface connections.

RASPBERRY PI IS THE ENGINE OF HMI - ENABLES MORE FLEXIBLE DEVELOPMENTS: A brand new microcomputer which supports your effective working time. Ultra-fast response times, unified user interface, stable Linux operating system in a modern, hi-tech design, future-proof execution. **4GB internal storage.**

WEB INTERFACE, IOT - FOR THE INDUSTRY 4.0 COMPATIBILITY: Each printer has its own responsive interface with a simple control option connected to the owner PC via a secure intranet connection. In addition the built-in camera facilitates working processes. The platform-independent access, the programmable API, the fine-tuning CraftWare software and compatibility with even a heterogeneous printer farm bring you a totally personalized option to control your work.

5" COLOR TOUCH SCREEN - for the innovative design

LED STATUS INDICATOR - maximize the user experience

**PLUG&PLAY 3D PRINTER
WITH 5 YEARS WARRANTY**

With all of the exciting new features Flow Generation still holds true to our original values:



SPECIFICATION

PRINTING

Technology	Fused Filament Fabrication (FFF)
Layer resolution	50 micron
Position precision	XYZ accuracy: 12.5x12.5x5 micron
Filament diameter	1.75 mm
Filament types	PLA, ABS, HIPS, PET, Nylon, etc.
Nozzle	0.4 mm
Print speed	up to 200 mm/s
Power consumption	max. 500 W

TEMPERATURE

Ambient temperature	5 - 40 °C
Storage temperature	0 - 50 °C
Operating nozzle temperature	180 - 300 °C
Operating heated build plate temperature	30 - 110 °C


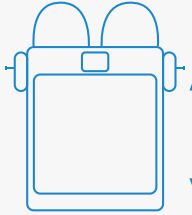
SOFTWARE

Software package	CraftWare
File types	OBJ, STL

COLOR

Grey  and white 

PHYSICAL DIMENSION

	 CraftBot FLOWIDEX build volume: 250 mm	 CraftBot FLOWIDEX XL build volume: 500 mm
Build volume	425 x 250 x 250 mm - 16.7 x 9.8 x 9.8"	425 x 250 x 500 mm - 16.7 x 9.8 x 19.7"
Frame dimension	635 x 450 x 540 mm - 25 x 17.7 x 21.2"	635 x 450 x 790 mm - 25 x 17.7 x 31.1"
Shipping weight (net. weight):	45,5 kg (32 kg)	53 kg (38 kg)
Shipping box size:	760 x 560 x 730 mm - 30 x 22 x 28"	760 x 560 x 985 mm - 30 x 22 x 38"



For a perfect user experience, we provide a unique maintenance – and nozzle kit for our craftbot printers.

GET IN TOUCH!

CraftUnique Ltd.

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Budapest 1087, Hungary

Phone: +36 1 700 8060

E-mail: info@craftunique.com

CraftBot is made in the EU.

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PolyLite™ PLA

PolyLite™ PLA is a high-quality PLA designed for reliability and ease of printing.

Physical Properties

Property	Testing method	Typical value
Density	ASTM D792 (ISO 1183, GB/T 1033)	1.17 - 1.24 (g/cm ³ at 21.5 °C)
Glass transition temperature	DSC, 10 °C/min	61 (°C)
Vicat Softening temperature	ASTM D1525 (ISO 306 GB/T 1633)	63 (°C)
Melt index	210 °C, 2.16 kg	7-11 (g/10 min)
Melting temperature	DSC, 10 °C/min	150 (°C)
Crystallization temperature	DSC, 10 °C/min	114 (°C)

Tested with 3D printed specimen of 100% infill

Mechanical Properties

Property	Testing method	Typical value
Young's modulus (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	2636 ± 330 (MPa)
Tensile strength (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	46.6 ± 0.9 (MPa)
Elongation at break (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	1.9 ± 0.2 (%)
Bending modulus	ASTMD790 (ISO 178, GB/T 9341)	3283 ± 132 (MPa)
Bending strength	ASTMD790 (ISO 178, GB/T 9341)	85.1 ± 2.9 (MPa)
Charpy impact strength	ASTM D256 (ISO 179, GB/T 1043)	2.7 ± 0.2 (kJ/m ²)
Tensile strength (Z)	ASTM D638 (ISO 527, GB/T 1040)	43.5 ± 3.1 (MPa)

All testing specimens were printed under the following conditions:

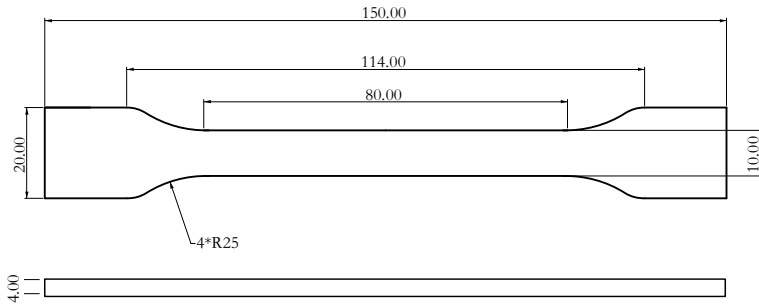
nozzle temperature = 205 °C, printing speed = 60 mm/s, build plate temperature = 40 °C, infill = 100%

All specimens were conditioned at room temperature for 24h prior to testing

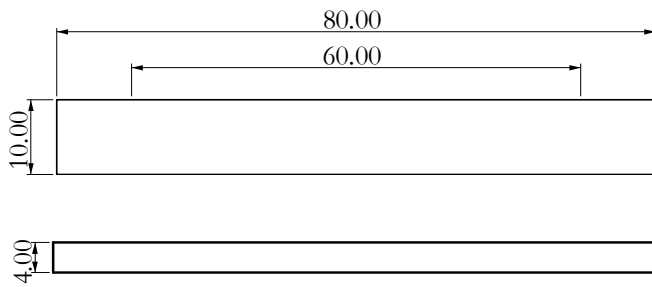
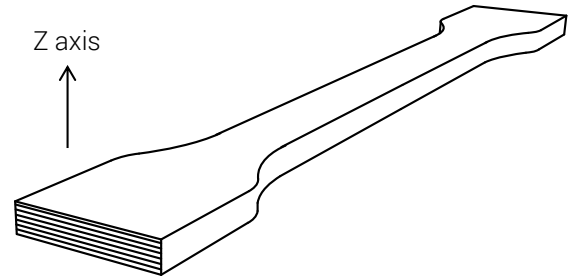
Recommended printing conditions

Parameter	
Nozzle temperature	190 - 230 (°C)
Build Surface material	BuildTak®, Glass, Blue Tape
Build surface treatment	Glue, Magigoo
Build plate temperature	25 - 60 (°C)
Cooling fan	Turned on
Printing speed	40-60 (mm/s)
Raft separation distance	0.2 (mm)
Retraction distance	1 (mm)
Retraction speed	20 (mm/s)
Recommended environmental temperature	Room temperature - 45 (°C)
Threshold overhang angle	45 (°)
Recommended support material	PolySupport™ and PolyDissolve™ S1

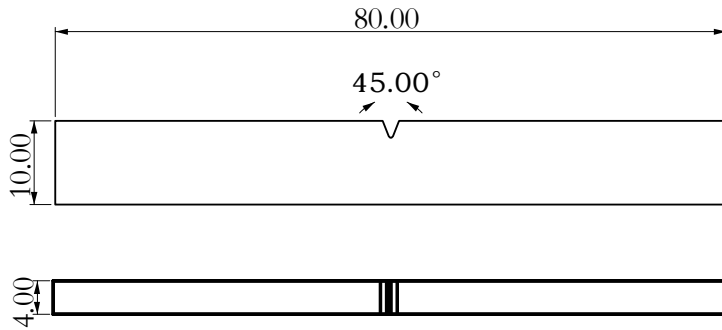
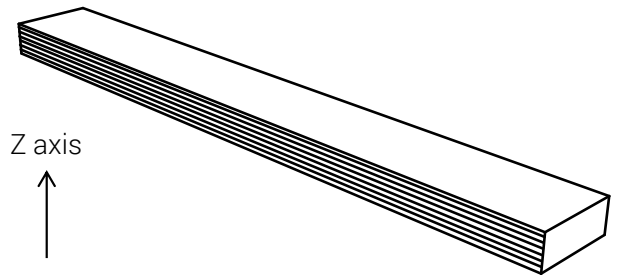
Based on 0.4 mm nozzle and Simplify 3D v.4.0. Printing conditions may vary with different nozzle diameters



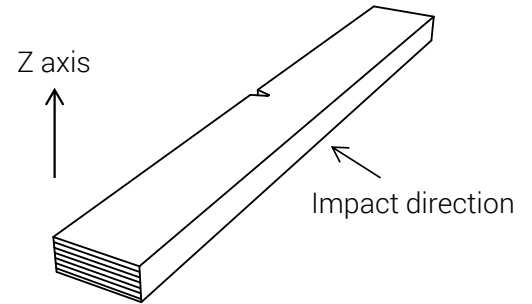
Tensile testing specimen; ASTM D638 (ISO 527, GB/T 1040)



Flexural testing specimen; ASTM D790 (ISO 178, GB/T 9341)



Impact testing specimen; ASTM D256 (ISO 179, GB/T 1043)



Disclaimer:

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Polymaker materials for the intended application. Polymaker makes no warranty of any kind, unless announced separately, to the fitness for any use or application. Polymaker shall not be made liable for any damage, injury or loss induced from the use of Polymaker materials in any application.