PolyJet
Systems
and Materials

stratasys

PolyJet

Precision,
Power,
Pace and
Productivity

Agilus30 White geometric orb

→

Dream it.
Print it.

PolyJet™ 3D printers empower designers, engineers, educators and healthcare professionals to create and problem-solve without the limitations of traditional methods of modeling. The power lies with PolyJet technology, curable liquid photopolymers capable of producing very fine layers for smooth surfaces, intricate details and vivid color.

Stratasys® PolyJet technology helps bring to life ideas in virtually any spectrum of colors, and any combination of translucency, opacity, rigidity and elasticity, while simulating a number of desired materials and finishes.

The versatility of PolyJet technology is based on a wide range of available material properties and a suite of 3D printers to suit varied budgets and applications. No matter the industry, PolyJet technology provides the power to hone ideas quickly and accurately.

- Help designers save 50 percent of their time. Product designers and developers can create realistic prototypes and models with full-color elements, labels and true-to-life textures in one operation, to gain focus-group feedback before committing to full production.

- Full-color, flexible materials enable lifelike anatomical models for physician training and pre-surgical planning that lower operating room costs and improve patient outcomes.

- Educators can empower students to design, test and discover in a matter of days, not weeks.

- Dental labs can increase productivity by making multiple models and try-ins in a single print operation to boost production capacity and fuel growth.

Simple choice.
Any application.

PolyJet 3D printers are scaled to meet diverse needs in capability and production capacity. The printers fall within two groups: single-material printers that jet one material (base resin) at a time and multimaterial printers with the capacity to jet several base resins simultaneously.

Print single materials.

Single-material printers start with affordable desktop models, featuring PolyJet technology's fine resolution and smooth surface finish. Depending on the specific model, these printers employ a single base resin or several base resins, with a choice of either rigid or flexible characteristics. All single-material printers use SUP705™ support material, removable with a water jet. Several models are also compatible with SUP706B™ soluble support for hands-free, labor-saving support removal.

Vivid cyan light

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Print multiple materials.

Multimaterial printers offer the most in PolyJet versatility, performance and productivity, exploiting the benefits of multi-jetting technology. Multimaterial printers enable mixed parts — the combination of several base resins in the same part — and Digital Materials, which is the blending of individual base resins to create new materials with distinct properties. Mixed trays are also possible, meaning one build tray can accommodate multiple parts made with different materials, increasing production efficiency. Large-capacity needs are easily handled by the J4100™, boasting the largest build volume of any PolyJet 3D printer.

The PolyJet lineup also includes the J55™ 3D printer, created for the office or studio environment. With a small footprint, quiet operation and full color capabilities, the J55 puts the power of PolyJet right at your fingertips.

At the top of the versatility and performance spectrum is the J8 Series™, with the versatility to meet any design need. The J826 Prime and J850 Prime are equipped with over 500,000 colors, texture-mapping and the full complement of rigid materials. For engineering applications that don't require color, the J850 Pro provides all the multimaterial and accuracy capabilities of the J850 Prime, at a lower cost. These printers allow users to produce everything from visually stunning, highly realistic prototypes and tools featuring soft-touch parts to visually and tactilely realistic medical models.
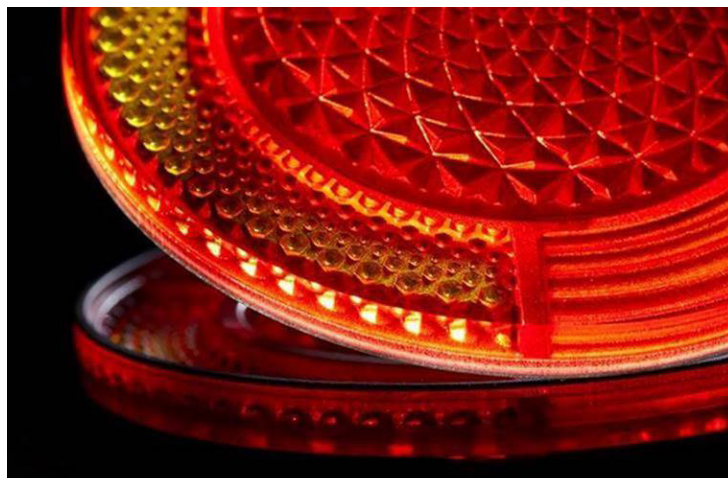
The Stratasys J8 Series* is Pantone Validated™

Pantone color blocks

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Vivid tail light

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Glasses frame

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*PANTONE Validation™ available on J826 Prime and J850 Prime

Colored dental models

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Agilus console
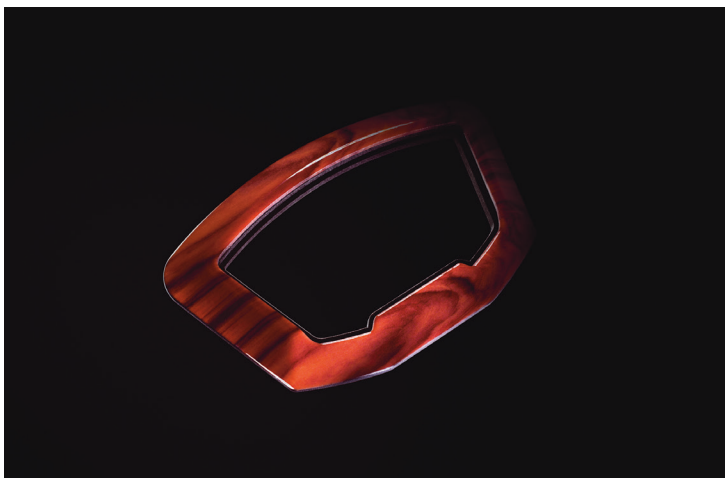
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Anatomical model

→

These printers provide the capability to produce everything from visually stunning, highly-realistic prototypes and tools featuring soft-touch parts to visually and tactilely realistic medical models.

Auto console in vivid color

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Get More Materials and More Potential With PolyJet Printers

	Objet30 V5		J55™
	Objet30 Pro™	**Objet30 Prime™**	
Maximum Build Size (XYZ)	294 x 192 x 148.6 mm (11.57 x 7.55 x 5.85 in.)	294 x 192 x 148.6 mm (11.57 x 7.55 x 5.85 in.)	140 x 200 x 190 mm (5.51 x 7.87 x 7.48 in.) 1,174cm²
System Size	826 x 600 x 620 mm (32.5 x 23.6 x 24.4 in.)	826 x 600 x 620 mm (32.5 x 23.6 x 24.4 in.)	651 x 661 x 1511 mm (25.63 x 26.02 x 59.49 in.)
System Weight	106 kg (234 lbs)	106 kg (234 lbs)	228 kg (503 lbs.)
Layer Thickness	28 microns (0.0011 in.) 16 microns (0.0006 in.) for VeroClear™ material	28 microns (0.0011 in.) for Tango™ materials 36 microns for fast draft mode 16 microns (0.0006 in.) for all other materials	18 microns (0.0007 in.)
Accuracy*	0.1 mm (0.0039 in.)	0.1 mm (0.0039 in.)	Deviation from STL dimensions, for 1 Sigma (67%) of models printed with rigid materials, based on size: under 100 mm – ±150µ; above 100 mm – ±0.15% of part length.** Deviation from STL dimensions, for 2 Sigma (95%) of models printed with rigid materials, based on size: under 100 mm – ±180µ; above 100 mm – ±0.2% of part length.**
Model Material Options	• **Rigid Opaque:** VeroWhitePlus™, VeroGray™, VeroBlue™, VeroBlackPlus™ • **Transparent:** VeroClear • **Simulated Polypropylene:** Rigur™, Durus™ • High Temperature • DraftGrey™	• **Rigid Opaque:** VeroWhitePlus, VeroGray, VeroBlue, VeroBlackPlus • **Transparent:** VeroClear, RGD720 • **Simulated Polypropylene:** Rigur, Durus • High Temperature • **Rubberlike:** TangoGray™ and TangoBlack™ • Biocompatible Clear (MED610) • DraftGrey	• **Rigid Transparent:** VeroCyanV, VeroMagentaV, VeroYellowV • **Rigid Opaque:** VeroPureWhite, VeroBlackPlus, VeroUltra™BlackS, VeroUltraWhiteS • **Transparent:** VeroClear and VeroUltraClearS • DraftGrey
Digital Material Options	–	–	–
Support Material	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)	SUP710™
Software	GrabCAD Print™	GrabCAD Print	GrabCAD Print

* Varies depending on part geometry, size, orientation, material and post-processing method.

**Measured when ambient temperature is 23 °C and relative humidity is 50%.

	Objet260 Connex1™	Objet500 Connex1™
Maximum Build Size (XYZ)	255 x 252 x 200 mm (10.0 x 9.9 x 7.9 in.)	490 x 390 x 200 mm (19.3 x 15.4 x 7.9 in.)
System Size	870 x 1200 x 735 mm (34.2 x 47.2 x 29 in.) **Material Cabinet:** 330 x 1170 x 640 mm (13 x 46.1 x 25.2 in.)	1400 x 1260 x 1100 mm (55.1 x 49.6 x 43.4 in.) **Material Cabinet:** 330 x 1170 x 640 mm (13 x 46.1 x 25.2 in.)
System Weight	264 kg (581 lbs) **Material Cabinet:** 76 kg (168 lbs)	430 kg (948 lbs) **Material Cabinet:** 76 kg (168 lbs)
Layer Thickness	Horizontal build layers range between 16 microns - 30 microns (.0006 in. - .001 in.) depending on the print mode.	Horizontal build layers range between 16 microns - 30 microns (.0006 in. - .001 in.) depending on the print mode.
Accuracy*	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100µ; above 100 mm – ±200µ. – ±100µ; above100 mm – ±200µ or ± 0.06% of part length, whichever is greater	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100µ; above100 mm – ±200µ or ± 0.06% of part length, whichever is greater
Model Material Options	• **Rigid Opaque:** VeroWhitePlus, Vero PureWhite™, VeroBlackPlus, VeroGray and VeroBlue • **Rubberlike:** Agilus30™ (Transparent), Agilus30 Black, TangoPlus™, TangoBlackPlus™, TangoBlack, TangoGray • **Transparent:** VeroClear and RGD720™ • **Simulated Polypropylene:** Rigur and Durus • High Temperature • Biocompatible Clear (MED610)	• **Rigid Opaque:** VeroWhitePlus, Vero PureWhite, VeroBlackPlus, VeroGray and VeroBlue • **Rubberlike:** Agilus30 (Transparent), Agilus30 Black, TangoPlus, TangoBlackPlus, TangoBlack, TangoGray • **Transparent:** VeroClear and RGD720 • **Simulated Polypropylene:** Rigur and Durus • High Temperature • Biocompatible Clear (MED610)
Digital Material Options	–	–
Support Material	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)
Software	Objet Studio	Objet Studio

* Varies depending on part geometry, size, orientation, material and post-processing method.

J8 Series	J826 Prime
Maximum Build Size (XYZ)	255 x 252 x 200 mm (10 x 9.9 x 7.9 in.)
System Size	820 x 1310 x 665 mm (32.28 x 51.57 x 26.18 in.) **Material Cabinet:** 656 x 1119 x 637 (25.8 x 44 x 25.1)
System Weight	234 kg (516 lbs.) **Material Cabinet:** 153 kg (337 lbs.)
Layer Thickness	Horizontal build layers range between 14 microns - 27 microns (.00055 in. - .001 in.) depending on the print mode.
Accuracy*	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100μ; above100 mm – ±200μ.
Model Material Options	• **Rigid Opaque:** Vero family including natural and color shades and VeroUltra opaque materials in black and white. • **Rigid Transparent:** Vero Vivid family that includes VeroCyanV, VeroMagentaV, VeroYellowV • **Rubberlike:** Agilus family of flexible materials • **Transparent:** VeroClear and VeroUltraClear • DraftGrey
Digital Material Options	Unlimited number of composite materials including: • Over 500,000 colors • Digital ABS Plus and Digital ABS2 Plus in ivory and green • Rubberlike blends in a variety of Shore A values • Translucent color tints • Opaque Colors
Support Material	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)
Software	GrabCAD Print

* Varies depending on part geometry, size, orientation, material and post-processing method.

J8 Series	J850 Prime	J850 Pro
Maximum Build Size (XYZ)	490 × 390 × 200 mm (19.3 x 15.35 x 7.9 in.)	490 × 390 × 200 mm (19.3 x 15.35 x 7.9 in.)
System Size	1,400 x 1,260 x 1,100 mm (55.1 x 49.6 x 43.3 in.) **Material Cabinet:** 656 x 1119 x 637 (25.8 x 44 x 25.1)	1,400 x 1,260 x 1,100 mm (55.1 x 49.6 x 43.3 in.) **Material Cabinet:** 656 x 1119 x 637 (25.8 x 44 x 25.1)
System Weight	430 kg (948 lbs) **Material Cabinet:** 152 kg (335 lbs)	430 kg (948 lbs) **Material Cabinet:** 152 kg (335 lbs)
Layer Thickness	Horizontal build layers range between 14 microns - 27 microns (.00055 in. - .001 in.) depending on the print mode and 55 microns (.002 in.) for super high speed printing mode.	Horizontal build layers range between 14 microns - 27 microns (.00055 in. - .001 in.) depending on the print mode and 55 microns (.002 in.) for super high speed printing mode.
Accuracy*	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100µ; above100 mm – ±200µ or ± 0.06% of part length, whichever is greater.	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100µ; above100 mm – ±200µ or ± 0.06% of part length, whichever is greater.
Model Material Options	• **Rigid Opaque:** Vero family including natural and color shades and VeroUltra opaque materials in black and white. • **Rigid Transparent:** Vero Vivid family that includes VeroCyanV, VeroMagentaV, VeroYellowV • **Rubberlike:** Agilus family of flexible materials • **Transparent:** VeroClear and VeroUltraClear • DraftGrey	• **Rigid Opaque:** Vero and VeroUltra families of Opaque materials in black and white • **Rubberlike:** Agilus family of flexible materials • **Transparent:** VeroClear and VeroUltraClear • DraftGrey
Digital Material Options	Unlimited number of composite materials including: • Over 500,000 colors • Digital ABS Plus and Digital ABS2 Plus in ivory and green • Rubberlike blends in a variety of Shore A values • Translucent color tints • Opaque Colors	Composite materials including: • Digital ABS Plus and Digital ABS2 Plus in ivory • Rubberlike blends in a variety of Shore A values • Translucent shade tints • Opaque Colors
Support Material	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)	SUP705 (water jet removable) SUP705B (APJ) SUP706B (soluble)
Software	GrabCAD Print	GrabCAD Print

* Varies depending on part geometry, size, orientation, material and post-processing method.

	J750™ Digital Anatomy™	J4100™
Maximum Build Size (XYZ)	490 × 390 × 200 mm (19.3 x 15.35 x 7.9 in.)	1000 x 800 x 500 mm (39.3 x 31.4 x 19.6 in.) **Max model weight on tray:** 135 kg
System Size	1,400 x 1,260 x 1,100 mm (55.1 x 49.6 x 43.3 in.) **Material Cabinet:** 670 x 1,170 x 640 mm (26.4 x 46.1 x 25.2 in.)	1960 x 2868 x 2102 mm (77.5 x 113 x 83 in.)
System Weight	430 kg (948 lbs) **Material Cabinet:** 152 kg (335 lbs)	2,200 kg (4,850 lbs)
Layer Thickness	Horizontal build layers range between 14 microns - 27 microns (.00055 in. - .001 in.) depending on the print mode.	Horizontal build layers range between 27 microns - 55 microns (0.001 in. - 0.002 in.) depending on the print mode.
Accuracy*	**Vero Materials:** Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – ±100μ; above100 mm – ±200μ or ± 0.06% of part length, whichever is greater. **Digital Anatomy Materials:** Not validated for accuracy, see technical documentation for design guidelines.	Up to 600 microns for full model size (for rigid materials only, depending on geometry, build parameters and model orientation)
Model Material Options	• **Rigid Opaque:** Vero family including natural and color shades and VeroUltra opaque materials in black and white. • **Rigid Transparent:** Vero Vivid family that includes VeroCyanV, VeroMagentaV, VeroYellowV • **Rubberlike:** TangoPlus, TangoBlackPlus and Agilus family • **Transparent:** VeroClear, VeroUltraClear, RGD720 and Biocompatible Clear (MED610) • **Digital ABS:** Digital ABS Plus Ivory (RGD515 Plus & RGD531), Digital ABS Plus Green (RGD515 Plus & RGD535) • VeroFlex and VeroFlexVivid Families • Biocompatible Clear (MED610) Digital Anatomy materials to mimic human tissue and replicate anatomies • TissueMatrix™: Ultra-soft material • GelMatrix™: Enables support removal from blood vessel models • BoneMatrix™: High-strength material for bone and connective tissue	• **Rigid Opaque:** VeroPureWhite, VeroBlackPlus, VeroGray, VeroBlue, VeroUltraBlack, VeroUltraWhite • **Rubberlike:** Agilus family of flexible materials • **Transparent:** VeroClear, VeroUltraClear • **Digital ABS:** Digital ABS Plus Ivory (RGD515 Plus & RGD531), Digital ABS Plus Green (RGD515 Plus & RGD535)
Digital Material Options	Unique anatomy engine, enabling: • More than 100 pre-validated anatomical presets • Automatic generation of microstructures, including muscle fibers and porous bone regions • Quick support removal from blood vessel models • Opaque Colors	• Transparent shades and patterns • Rigid Opaque shades • Rubberlike blends in a range of Shore A values • Simulated polypropylene blends in rigid and flexible options • Opaque Colors
Support Material	SUP705 (water jet removal) SUP705B (APJ) SUP706B (soluble) GelMatrix (gel-like)	SUP705 (water jet removable) SUP705B (APJ)
Software	GrabCAD Print GrabCAD Print Digital Anatomy	GrabCAD Print

* Varies depending on part geometry, size, orientation, material and post-processing method.
** Except VeroWhitePlus and DraftGrey.

Countless Combinations.
Limitless Possibilities.

PolyJet 3D printers use photopolymers that feature properties ranging from rubberlike to transparent and characteristics like high toughness and heat resistance.

Digital Materials expand the possibilities by blending two or more base resins to create thousands of material combinations. Achieve full-color capabilities, translucencies, Shore A values and other properties for maximum product realism.

Material	Highlights
Digital Materials	• Wide range of flexibility, from Shore A 27 to Shore A 95 • Rigid materials ranging from simulated standard plastics to the toughness and temperature resistance of Digital ABS Plus • Vibrant colors in rigid or flexible materials, with over 500,000 color options on the Stratasys J850 and J835 • Available on PolyJet multi-jetting 3D printers • Opaque Colors are available for J7/J8 Series and J55 printers
Digital ABS Plus	• Simulates ABS plastics by combining strength with high temperature resistance • Digital ABS2 Plus offers enhanced dimensional stability for thin-walled parts • Ideal for functional prototypes, snap-fit parts for high or low temperature usage, electrical parts, castings, mobile telephone casings and engine parts and covers
High Temperature	• Exceptional dimensional stability for thermal functional testing • Combine with PolyJet rubberlike materials to produce varying Shore A values, gray shades and high temperature parts with overmolding • Ideal for form, fit and thermal functional testing, high-definition models requiring excellent surface quality, exhibition models that endure strong lighting conditions, taps, pipes and household appliances, hot air and hot water testing
Transparent	• Print clear and tinted parts and prototypes with VeroClear, VeroUltraClear, VeroUltraClearS, VeroVivid family, and RGD720 • Combine with color materials for stunning transparent shades • Ideal for form and fit testing of see-through parts, like glass, consumer products, eyewear, light covers and cases, visualization of liquid flow, medical applications, artistic and exhibition modeling
Rigid Opaque	• Brilliant color options for unprecedented design freedom • Combine with rubberlike materials for overmolding, soft touch handles and more • Ideal for fit and form testing, moving and assembled parts, sales, marketing and exhibition models, assembly of electronic components and silicone molding
Simulated Polypropylene	• Simulates the appearance and functionality of polypropylene • Ideal for prototyping containers and packaging, flexible snap-fit applications and living hinges, toys, battery cases, laboratory equipment, loudspeakers and automotive components
Rubberlike	• Offers various levels of elastomer characteristics • Combine with rigid materials for a variety of Shore A values, from Shore A 27 to Shore A 95 • Ideal for rubber surrounds and overmolding, soft-touch coatings and nonslip surfaces, knobs, grips, pulls, handles, gaskets, seals, hoses, footwear, and exhibition and communication models
Biocompatible	• Features high dimensional stability and colorless transparency • Has five medical approvals including cytotoxicity, genotoxicity, delayed type hypersensitivity, irritation and USP plastic Class VI • Ideal for applications requiring prolonged skin contact of more than 30 days and short-term mucosal-membrane contact of up to 24 hours

PolyJet Materials in Detail

	Digital ABS Plus	High Temperature	Transparent			
Materials	Digital ABS Plus, Ivory, made of RGD515 Plus & RGD531	RGD525	RGD720, VeroMagentaV (RGD852)*, VeroYellowV (RGD838)*, VeroCyanV (RGD845)*	VeroClear (RGD810)	VeroUltraClear (RGC820)	VeroUltraClearS (RGD821)
Tensile Strength	55 – 60 MPa (8,000 – 8,700 psi)	70 – 80 MPa (10,000 – 11,500 psi)	50 – 65 MPa (7,250 – 9,450 psi)	50 – 65 MPa (7,250 – 9,450 psi)	39 – 43 MPa (5,650 – 6,240 psi)	26 – 37 MPa (3,770 – 5,370 psi)
Elongation at Break	25 – 40%	10 – 15%	15 – 25%	10 – 25%	20 – 35%	45 – 60%
Modulus of Elasticity	2,600 – 3,000 MPa (375,000 – 435,000 psi)	3,200 – 3,500 MPa (465,000 – 510,000 psi)	2,000 – 3,000 MPa (290,000 – 435,000 psi)	2,000 – 3,000 MPa (290,000 – 435,000 psi)	1,400 – 2,100 MPa (203,000 – 304,600 psi)	1500 – 2000 MPa (217,000 – 290,000 psi)
Flexural Strength	65 – 75 MPa (9,500 – 11,000 psi)	110 – 130 MPa (16,000 – 19,000 psi)	80 – 110 MPa (12,000 – 16,000 psi)	75 – 110 MPa (11,000 – 16,000 psi)	58 – 72 MPa (8,400 – 10,400 psi)	48 – 60 MPa (6,700 – 8,700 psi)
Flexural Modulus	1,700 – 2,200 MPa (245,000 – 320,000 psi)	3,100 – 3,500 MPa (450,000 – 510,000 psi)	2,700 – 3,300 MPa (390,000 – 480,000 psi)	2,200 – 3,200 MPa (320,000 – 465,000 psi)	1,900 – 2,300 MPa (275,000 – 333,000 psi)	1300 – 1800 MPa (189,000 – 261,000 psi)
HDT, °C @ 1.82 MPa	51 – 55 °C (124 – 131 °F)	55 – 57 °C (131 – 135 °F)	45 – 50 °C (113 – 122 °F)	45 – 50 °C (113 – 122 °F)	Before photobleaching: 47 – 49 °C (117 – 120 °F) After photobleaching: 48 – 52 °C (118 – 126 °F)	45 – 48 °C (113 – 118 °F)
Izod Notched Impact	90 – 110 J/m (1.69 – 2.06 ft lb/inch)	14 – 16 J/m (0.262 – 0.300 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft lb/inch)
Water Absorption	–	1.2 – 1.4%	1.5 – 2.2%	1.1 – 1.5%	1.25 – 1.4%	1.2 – 1.4%
Tg	47 – 53 °C (117 – 127 °F)	62 – 65 °C (144 – 149 °F)	48 – 50 °C (118 – 122 °F)	52 – 54 °C (126 – 129 °F)	52 – 54 °C (126 – 129 °F)	47 – 48 °C (117 – 118 °F)
Shore Hardness	85 – 87 Scale D	87 – 88 Scale D	83 – 86 Scale D	83 – 86 Scale D	80 – 85 Scale D	75 – 80 Scale D
Rockwell Hardness	67 – 69 Scale M	78 – 83 Scale M	73 – 76 Scale M	73 – 76 Scale M	70 – 75 Scale M	60 – 70 Scale M
Polymerized Density	1.17 – 1.18 g/cm³	1.17 – 1.18 g/cm³	1.18 – 1.19 g/cm³	1.18 – 1.19 g/cm³	1.18 – 1.19 g/cm³	1.17 – 1.18 g/cm²
Ash Content	–	0.38 – 0.42%	0.01 – 0.02%	0.02 – 0.06%	0.02 – 0.06%	0.02 – 0.06%

* Tinted Transparent

	Rigid Opaque (Vero Family)			Rigid Opaue (VeroUltra Family)	
Materials	Vero PureWhite (RGD837), VeroGray (RGD850), VeroBlackPlus (RGD875), VeroWhitePlus (RGD835), VeroYellow (RGD836), VeroCyan (RGD843), VeroMagenta (RGD851), VeroMagentaV (RGD852)*, VeroYellowV (RGD838)*, VeroCyanV (RGD845)*	VeroBlue (RGD840)	DraftGrey	VeroUltraWhite (RGD825) VeroUltraBlack (RGD865)	VeroUltraWhiteS (RGD824) VeroUltraBlackS (RGD864)
Tensile Strength	50 – 65 MPa (7,250 – 9,450 psi)	50 – 60 MPa (7,250 – 8,700 psi)	50 – 65 MPa (7,250 – 9,450 psi)	50-65 (7250-9430 psi)	50-65 (7250-9430 psi)
Elongation at Break	10 – 25%	15 – 25%	10 – 25%	5-20 %	5-20 %
Modulus of Elasticity	2,000 – 3,000 MPa (290,000 – 435,000 psi)	2,000 – 3,000 MPa (290,000 – 435,000 psi)	2,000 – 3,000 MPa (290,000 – 435,000 psi)	2000 - 3000 MPa (290000 - 435000 psi)	2000 - 3000 MPa (290000 - 435000 psi)
Flexural Strength	75 – 110 MPa (11,000 – 16,000 psi)	60 – 70 MPa (8,700 – 10,200 psi)	75 – 110 MPa (11,000 – 16,000 psi)	65-85 (9400-12300 psi)	65-85 (9400-12300 psi)
Flexural Modulus	2,200 – 3,200 MPa (320,000 – 465,000 psi)	1,900 – 2,500 MPa (265,000 – 365,000 psi)	2,200 – 3,200 MPa (320,000 – 465,000 psi)	2000-2800 (290000-406100 psi)	2000-2800 (290000-406100 psi)
HDT, @ 0.45 MPa	–	–	–	48-52 °C (118-126 °F)	48-52 °C (118-126 °F)
HDT, °C @ 1.82 MPa	45 – 50 °C (113 – 122 °F)	45 – 50 °C (113 – 122 °F)	45 – 50 °C (113 – 122 °F)	44-47 (111-117 °F)	44-47 °C (111-117 °F)
Izod Notched Impact	20 – 30 J/m (0.375 – 0.562 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft lb/inch)	20 – 30 J/m (0.375 – 0.562 ft-lb/inch)	20-30 J/m (0.375 – 0.562 ft-lb/in.)	20-30 J/m (0.375 – 0.562 ft-lb/in.)
Water Absorption	1.1 – 1.5%	1.5 – 2.2%	1.1 – 1.5%	1.1-1.4%	1.1-1.4%
Tg	52 – 54 °C (126 – 129 °F)	48 – 50 °C (118 – 122 °F)	52 – 54 °C (126 – 129 °F)	54-56 °C (124-133 °F)	49-56 °C (120 - 133 °F)
Shore Hardness	83 – 86 Scale D	83 – 86 Scale D	83 – 86 Scale D	83-86	83 – 86
Rockwell Hardness	73 – 76 Scale M	73 – 76 Scale M	73 – 76 Scale M	–	–
Polymerized Density	1.17 – 1.18 g/cm^3	1.18 – 1.19 g/cm^3	1.17 – 1.18 g/cm^3	1.19-1.23	1.19-1.23
Ash Content	0.23 – 0.26% (VeroGray, VeroWhitePlus), 0.01 – 0.02% (VeroBlackPlus, VeroMagentaV, VeroYellowV)	0.21 – 0.22%	0.23 – 0.26%	–	–

* Opaque only when printed with core

	Rubberlike				
Materials	TangoBlack (FLX973)	TangoGray (FLX950)	Agilus30 Clear (FLX935), Agilus30 Black (FLX 985)	Agilus30 White (FLX945)	TangoBlackPlus (FLX980), TangoPlus (FLX930)
Tensile Strength	1.8 – 2.4 MPa (115 – 350 psi)	3.0 – 5.0 MPa (435 – 725 psi)	2.4 – 3.1 MPa (348 – 450 psi)	2.1 – 2.6 MPa (305 – 377 psi)	0.8 – 1.5 MPa (115 – 220 psi)
Elongation at Break	45 – 55%	45 – 55%	220 – 240%	185 – 230%	170 – 220%
Shore Hardness	60 – 62 Scale A	73 – 77 Scale A	30 – 35 Scale A	30 – 40 Scale A	26 – 28 Scale A
Polymerized Density	1.14 – 1.15 g/cm^3	1.16 – 1.17 g/cm^3	1.14 – 1.15 g/cm^3	1.14 – 1.15 g/cm^3	1.12 – 1.13 g/cm^3

	VeroFlex, VeroFlexVivid	Simulated Polypropylene
Materials	VeroFlex Black (RGD895), VeroFlex Clear (RGD896), VeroFlex White (RGD894), VeroFlex Cyan (RGD891), VeroFlex Magenta (RGD892), VeroFlex Yellow (RGD893), VeroFlex CyanV (RGD898), VeroFlex MagentaV (RGD899), VeroFlexYellowV (RGD890)	Durus White (RGD430)
Tensile Strength	43 – 64 MPa (6,237 – 9,282 psi)	20 – 30 MPa (2,900 – 4,350 psi)
Elongation at Break	8 – 20%	40 – 50%
Modulus of Elasticity	950 – 1600 MPa (137,786 – 232,060 psi)	1,000 – 1,200 MPa (145,000 – 175,000 psi)
Flexural Strength	48 – 88 MPa (6,962 – 12,763 psi)	30 – 40 MPa (4,350 – 5,800 psi)
Flexural Modulus	1,600 – 2,300 MPa (232,061 – 333,587 psi)	1,200 – 1,600 MPa (175,000 – 230,000 psi)
Shore Hardness	75 – 85 Scale D	74 – 78 Scale D
HDT, @ 0.45 MPa	42 – 50 °C (108 – 122 °F)	
HDT, °C @ 1.82MPa	–	32 – 34 °C (90 – 93 °F)
Izod Notched Impact	20 – 30 J/m (0.375 – 0.562 lb/in)	40 – 50 J/m (0.749 – 0.937 ft lb/inch)
Water Absorption	–	1.5 – 1.9%
Tg	–	35 – 37 °C (95 – 99 °F)
Polymerized Density	–	1.15 – 1.17 g/cm^3
Ash Content		0.10 – 0.12%

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