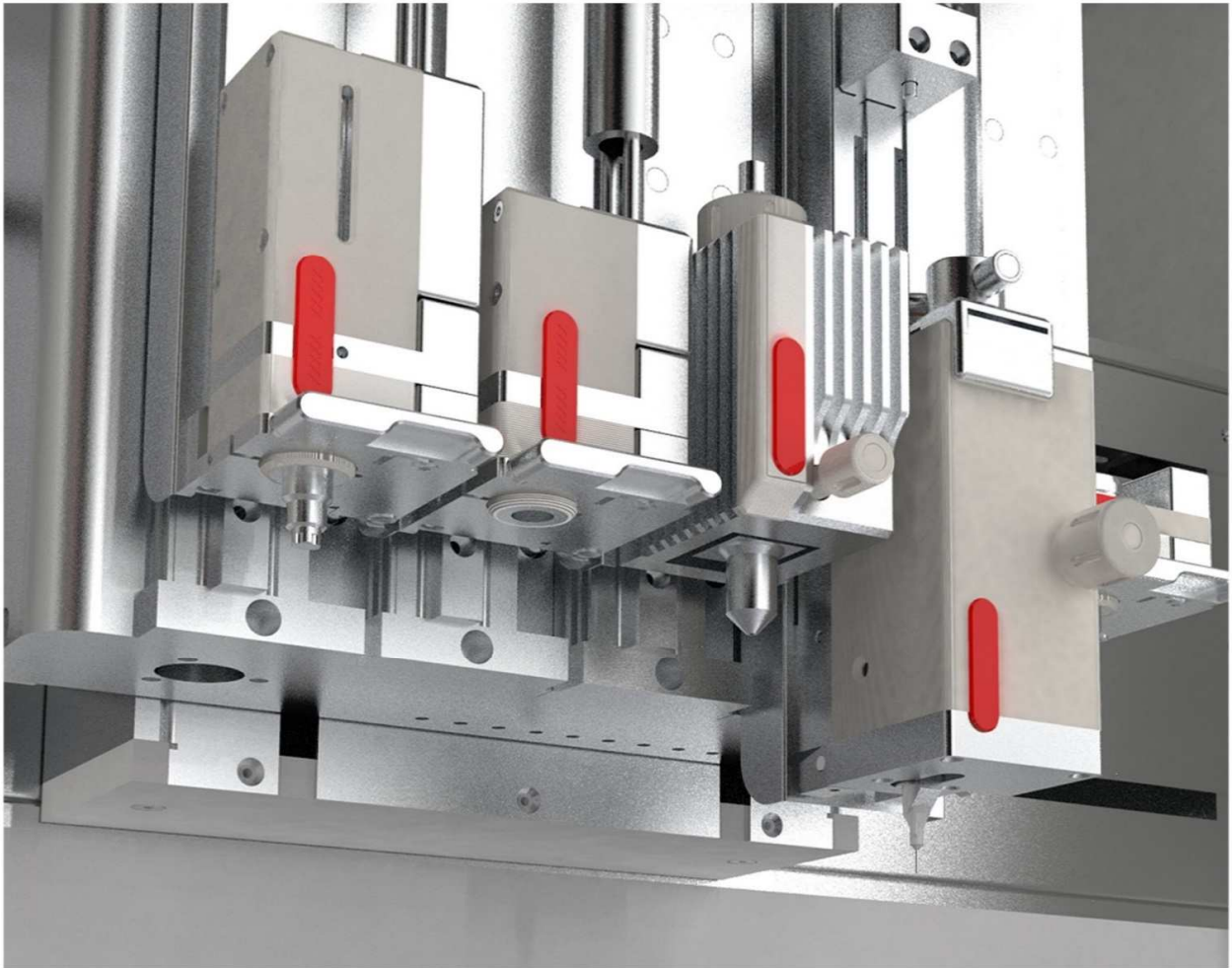


REGEN+U



BIOMATERIAL PRINTING  
COMPATIBILITY TABLE

	PNEUMATIC STRAND DISPENSER / PNEUMATIC DROP DISPENSER	VOLUMETRIC STRAND DISPENSER	PNEUMATIC MELT EXTRUSION	ELECTROSPINNING KIT
<b>THERMORESPONSIVE POLYMERS (temperature management options required)</b>				
ECM components (collagen,elastin)	√ <sup>(1,2)</sup>	√ <sup>(2)</sup>		
Synthetic polymers (poloxamer, PVP)	√ <sup>(3)</sup>			√ (SES) <sup>(35)</sup>
Biopolymers (Gelatin, Matrigel)	√ <sup>(4,5)</sup>			√ (SES) <sup>(35)</sup>
<b>THERMOPLASTICS</b>				
Polycaprolactone			√ <sup>(6)</sup>	√ (MEW) <sup>(7)</sup>
Poly(lactic acid)	√ <sup>(8)</sup>		√ <sup>(9)</sup>	
Poly(lactic-co-glycolic) acid			√ <sup>(9)</sup>	√ (MEW) <sup>(35)</sup>
Polyurethanes	√ <sup>(10)</sup>		√ (Melting point close to 250°C) <sup>(11)</sup>	
<b>CERAMICS AND METALS</b>				
Hydroxyapatite	√ (solution/gel) <sup>(12)</sup>		√ (composite) <sup>(13)</sup>	√ (MEW, composite with thermoplastics) <sup>(35)</sup>
Calcium phosphates	√ (solution/gel) <sup>(14)</sup>		√ (composite) <sup>(15)</sup>	√ (MEW, composite) <sup>(35)</sup>
Magnesium	√ (indirect printing) <sup>(16)</sup>			
Silver	√ (solution/gel) <sup>(17)</sup>		√ (composite) <sup>(35)</sup>	
IOPs	√ (solution/gel) <sup>(18)</sup>		√ (composite) <sup>(35)</sup>	√ (MEW, composite) <sup>(35)</sup>
<b>PHOTOCROSSLINKABLE</b>				
Functionalized PEG	√ <sup>(19)</sup>			
Gel-MA	√ (T management) <sup>(20)</sup>			
HAMA	√ <sup>(21)</sup>	√ <sup>(22)</sup>		
Photocurable Silicones	√ <sup>(23)</sup>			
<b>OTHER COMMONLY USED BIOMATERIALS</b>				
Alginate	√ (physical crosslinking) <sup>(24)</sup>	√ (physical crosslinking) <sup>(22)</sup>		
Cellulose	√ <sup>(25)</sup>	√ <sup>(35)</sup>		
Hyaluronic Acid	√ <sup>(26)</sup>	√ <sup>(35)</sup>		
Silk Fibroin	√ <sup>(27)</sup>	√ <sup>(35)</sup>		√ (SES) <sup>(35)</sup>
Gellan Gum	√ <sup>(28)</sup>			
Chitosan	√ <sup>(29)</sup>	√ <sup>(35)</sup>		√ (SES) <sup>(35)</sup>
Peptide Gels	√ <sup>(30)</sup>	√ <sup>(35)</sup>		√ (SES) <sup>(35)</sup>
Decellularized ECM	√ <sup>(31)</sup>	√ <sup>(35)</sup>		
Graphene			√ (composite) <sup>(32)</sup>	√ (MEW, composite) <sup>(35)</sup>
Carbon Nanotubes	√ (solution/gel) <sup>(33)</sup>	√ (solution/gel) <sup>(35)</sup>	√ (composite) <sup>(34)</sup>	√ (MEW, composite) <sup>(35)</sup>

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