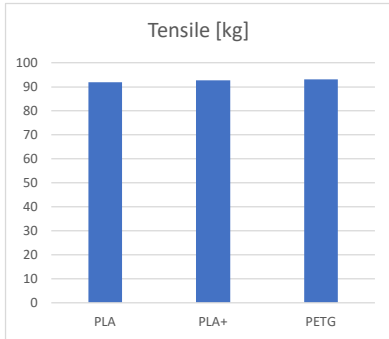


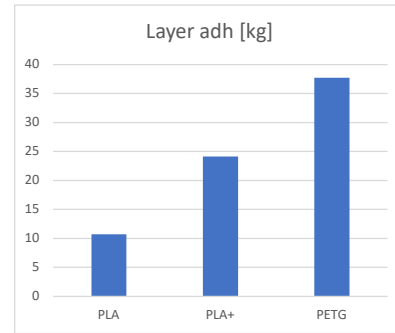
Eryone filaments:

Average			
Tensile	test 1	test 2	Tensile [kg]
PLA	91	92.8	91.9
PLA+	92.6	93	92.8
PETG	92.4	93.8	93.1



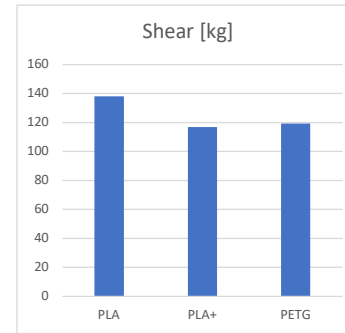
Minimal area: 4x4 mm

Average			
Layer adhesion	test 1	test 2	Layer adh [kg]
PLA	8	13.4	10.7
PLA+	30.6	17.6	24.1
PETG	33.4	42	37.7



Minimal area: 4x4 mm

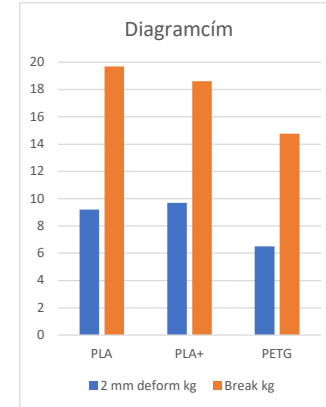
Average			
Shear	test 1	test 2	Shear [kg]
PLA	138.2	138	138.1
PLA+	120	113.8	116.9
PETG	114.6	124.2	119.4



Double shear area
2 x Ø5 mm

Bending	2 mm deform kg	Break kg
PLA	9.2	19.7
PLA+	9.7	18.6
PETG	6.5	14.75

*PETG didn't broke

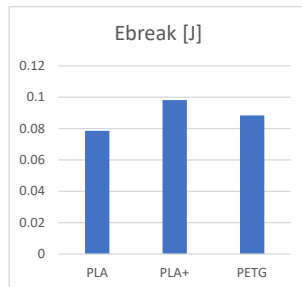


*Based is ISO 178
distance between supports: 50 mm
Test specimen 80x10x4 mm

Impact test
based on ISO 180 (IZOD test specimen)

Tensile	dist from 0 [mm]	E _{break} [J]
PLA	16	0.07848
PLA+	20	0.0981
PETG	18	0.08829

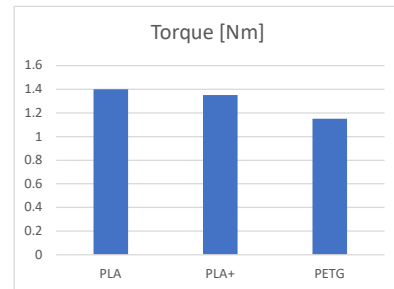
$$E_{br} = m * g * H = 0.5 \text{ kg} * 9.81 \text{ m/s}^2 * H \text{ [m]}$$



Test specimen: 80x10x4, notch 2mm deep

Torque (twist) test

Torque	test 1	test 2	Torque [Nm]	twists
PLA	1.4	1.4	1.4	90°
PLA+	1.4	1.3	1.35	360°
PETG	1.1	1.2	1.15	80°



Test specimen: D6 mm, 30 mm between two sides (+holder weights)

Temperature test, first movement at:

Torque	°C
PLA	46
PLA+	48
PETG	60

ERYONE FILAMENTS
MyTechFun, 2021-05-02