Enhancement of Nylon Carbon Fiber/增强尼龙碳纤

Material introduction / 材料介绍

Introduction / 介绍:

Enhanced nylon carbon fiber is a 25% carbon fiber reinforced high temperature nylon 3 D printing wire with a double-layered structure. The outer layer of the wire is pure nylon resin with high bonding strength, and the inner core of the wire is short carbon fiber reinforced high temperature nylon.

增强尼龙碳纤是一款具有双层包覆结构的25%碳纤维增强高温尼龙3D打印线材。线材外层为高粘接强度的纯尼龙树脂 ， 线材内芯为短切碳纤维增强的高温尼龙。

Material advantages / 材料优点:

25% carbon fiber reinforced high temperature nylon.

25%碳纤维增强高温尼龙

The strength of the Z-direction interlayer is higher than that of ordinary nylon carbon fiber.

Z方向层间比普通尼龙碳纤的强度高

The overall mechanical properties and heat resistance are good.

整体机械性能与耐热性好

Accuracy/精度: ± 300μ m or ±0.3%

Performance Parameter / 性能参数 :

Thermal deformation temperature /热变形温度:	(ISO 75:Method A): 126.4℃(1.80MPa)
Thermal deformation temperature /热变形温度:	(ISO 75:Method B): 187.5℃(0.45MPa)
Stretch modulus /拉伸模量:	(ISO 527,X-Y, Z): 8789.10±458.32 Mpa, 4213.96±87.46 MPa)
Tensile strength /拉伸强度:	(ISO 527,X-Y, Z): 103.25±2.96 Mpa, 51.51±2.01 MPa)
Strain elongation /断裂延长率:	(ISO 527,X-Y,Z): 1.49±0.09%,1.55±0.12%
Flexural modulus /弯曲模量:	(ISO 178): 8568.60±172.79 Mpa
Bending strength /弯曲强度:	(ISO 178): 170.09±4.88 Mpa
Impact strength of the gap /缺口冲击强度:	(ISO 179): 6.57±0.38 KJ/m2

Application / 应用场景:

Widely used in automobile, electronics, aerospace and other fields.

广泛应用于汽车、电子、航空航天等领域。