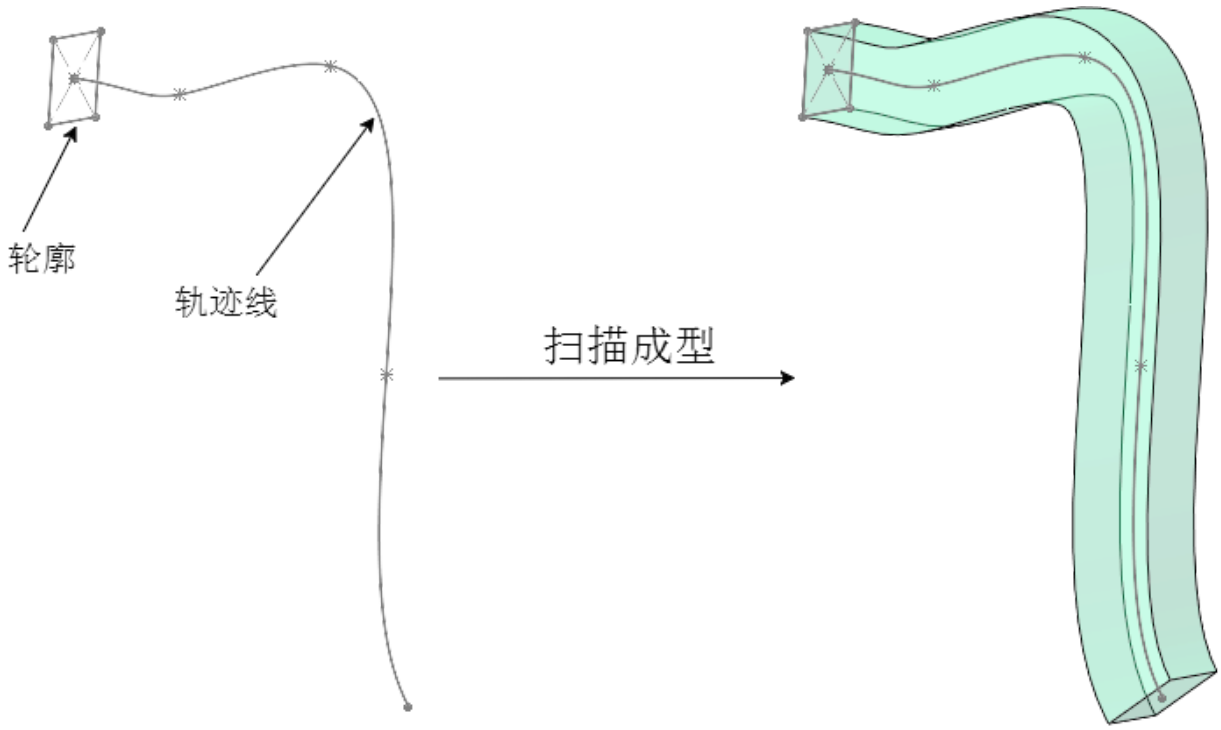
郭隆邦 2023-02-02

13. 扫描ExtrudeGeometry

通过`ExtrudeGeometry`除了可以实现拉伸成型，也可以让一个平面轮廓`Shape`沿着曲线扫描成型。

查看案例源码，你可以看到`ExtrudeGeometry`的一个扫描变换案例。



1.扫描轮廓

```js
// 扫描轮廓：Shape表示一个平面多边形轮廓
const shape = new THREE.Shape([
    // 按照特定顺序，依次书写多边形顶点坐标
    new THREE.Vector2(0,0), //多边形起点
    new THREE.Vector2(0,10),
    new THREE.Vector2(10,10),
    new THREE.Vector2(10,0),
]);
```

2.扫描轨迹

```js
// 扫描轨迹：创建轮廓的扫描轨迹(3D样条曲线)
const curve = new THREE.CatmullRomCurve3([
    new THREE.Vector3( -10, -50, -50 ),
    new THREE.Vector3( 10, 0, 0 ),
    new THREE.Vector3( 8, 50, 50 ),
    new THREE.Vector3( -5, 0, 100)
]);
```

3.扫描造型

```js
//扫描造型：扫描默认没有倒角
const geometry = new THREE.ExtrudeGeometry(
    shape, //扫描轮廓
    {
        extrudePath:curve,//扫描轨迹
        steps:100//沿着路径细分精度，越大越光滑
    }
);
```

← 12. 拉伸ExtrudeGeometry

14. 多边形轮廓Shape简介→