

**scia systems**



**3D - COATINGS IN BATCHES**

**scia Batch 350**

## Features & Benefits

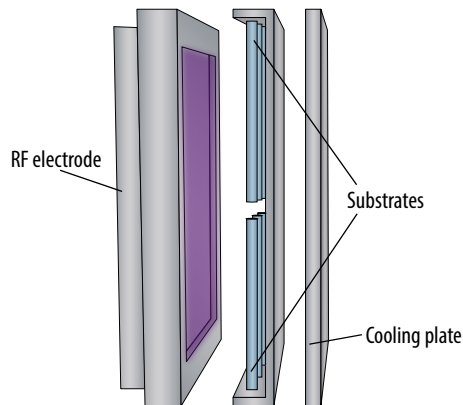
- Coating of different substrate sizes and quantities in batches due to carrier loading
- Two independent RF electrodes for high throughput
- Homogeneous “all-around coating” by individual rotation of each substrate
- Superior barrier performance and fully cohesive film also during mechanical deformation
- Combination of heating, plasma pretreatment and PECVD coating
- Flexible gas and RF conditions

## Applications

- 3-dimensional barrier coating of biocompatible films for medical implants (pacemakers, stents)

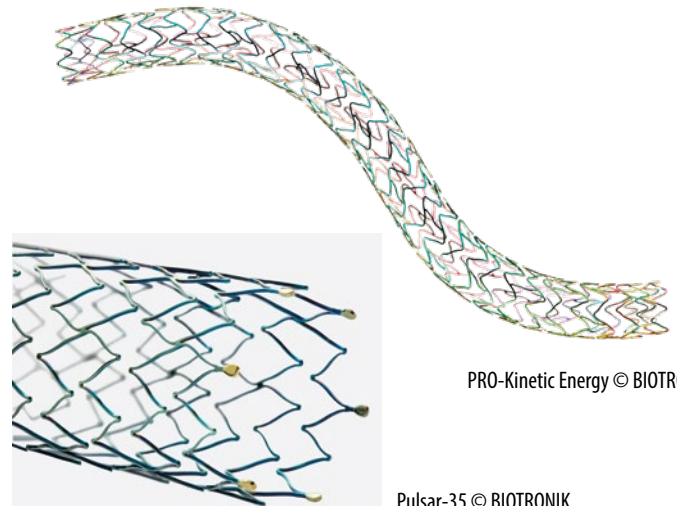
## Principle

- Plasma Enhanced Chemical Vapor Deposition (PECVD)
  - RF parallel plate arrangement with rotation of each substrate for a homogeneous coating of all sides



## Application Example

- Stents for vascular intervention



## Technical Data

<b>Substrate size</b>	Individual sizes loaded on 2 carriers, carrier size up to 350 mm x 240 mm
<b>Substrate carrier</b>	Water cooled, pulsed DC bias (2 kV, 400 mA)
<b>Plasma source</b>	RF parallel plate arrangement, 13.56 MHz
<b>Power Supply</b>	RF-Power max. 2 x 600 W
<b>Electrode setup</b>	Temperature: Heating up to 400 °C Distance: Adjustable between 50 mm and 150 mm
<b>Operation modes</b>	Independent or coupled electrodes
<b>Typical deposition rate</b>	SiC: 5 nm/min
<b>Base pressure</b>	< 5 x 10 <sup>-7</sup> mbar
<b>System dimension (W x D x H)</b>	0.90 m x 1.70 m x 2.20 m (without electrical rack and pumps)
<b>Configuration</b>	Single chamber with manual loading in batches
<b>Software interfaces</b>	SECS II / GEM, OPC

