

## 510(k) Summary

**Date Prepared:** September 23, 2015

**Contact:** Khalid Sethi  
Senecka Spine  
46 Harrison Street  
Johnson City, NY 13790  
607-237-4724  
Fax: 607-584-0387

**Regulatory Contact:** Rich Jansen, Pharm. D.  
Silver Pine Consulting, LLC  
richj@s-pineconsulting.com

**Trade Names:** Seneka I Polyscrew Pedicle Fixation System  
**Product Class:** Class III  
**Classification:** 21 CFR §888.3070 Pedicle Screw Spinal System  
**Common Name:** Pedicle Screw System  
**Product Codes:** NKB, MNI, MNH  
**Panel Code:** 87

### Indications for Use:

The Seneka I Polyscrew Pedicle Fixation System is intended for posterior, noncervical pedicle fixation as an adjunct to fusion in skeletally mature patients using autograft and/or allograft for the following indications: degenerative disc disease (DDD) (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e., fracture or dislocation); spinal stenosis; curvatures (i.e., scoliosis, kyphosis, and/or lordosis); tumor; pseudoarthrosis; and failed previous fusion.

### Device Descriptions:

The Seneka I Polyscrew Pedicle Fixation System is comprised of: straight and pre-curved rods, pedicle screw assemblies with both cannulated and non-cannulated screws, reduction screws, domino connectors, offset connectors and a set screw. Various forms and sizes of these implants are available so that adaptations can be utilized to take into account the unique pathology of individual patients. The Seneka I system can be implanted via the open surgical approach.

Components are made of Ti6Al4V ELI, a titanium based alloy, which complies with ASTM F136, cobalt chrome per ASTM F1537 or CP Titanium per ASTM E2371-13.

### Predicate Device(s):

The Seneka I Polyscrew Pedicle Fixation System is substantially the primary predicate device which is the Moss Miami System (DePuy Spine) (K022623). Additional predicate devices include Optima Spinal System (U&I) (K031585) and Xia Spinal System (Stryker) (K001319).

**Performance Standards:**

The pre-clinical testing performed includes static and dynamic compression bending, and static torsion per ASTM F1717-10.

**Technological Characteristics:**

Senecka Spine has compared the Seneka I Polyscrew Pedicle Fixation System to the predicate devices in regards to indications for use, materials, function, sizes and mechanical test results. These comparisons demonstrate substantial equivalence to the predicate devices.

**Conclusion:**

Senecka Spine concludes that the Seneka I Polyscrew Pedicle Fixation System is substantially equivalent to the predicate devices and raises no new questions of safety or effectiveness.