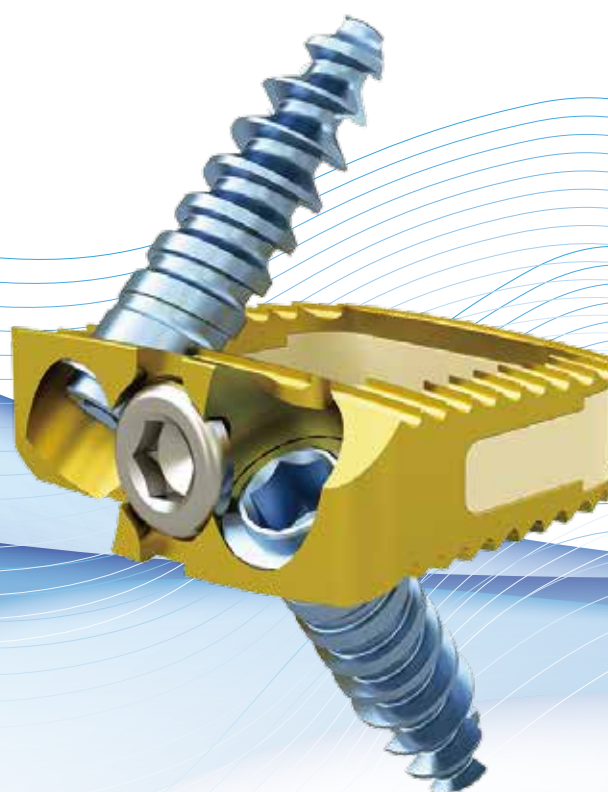


Redmond® C

Cervical Cage Surgical Technique

BIOACTIVE

Stand Alone
Design



Utilizes the advantages of *Titanium* and *Peek* in one implant

Indications & Contraindications

Introduction

Anterior cervical discectomy and fusion (ACDF) is a commonly employed surgical technique in the treatment of cervical spondylosis. There had been recent attempts to enhance interbody cage implants through the use of composite-designs combining materials titanium (Ti) and polyetheretherketone (PEEK).

Redmond® Cervical Cage utilizes the advantages of titanium and PEEK in one implant.

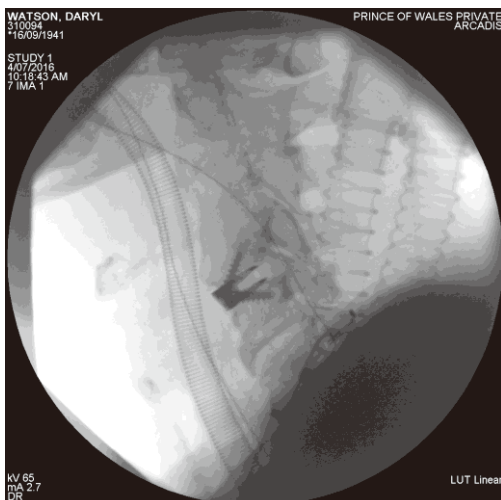
Indication

The diseases use with autogenous bone graft for spinal interbody fusion operation, including:

- Use for Degenerative Disc Disease(DDD) and Degenerative Cervical Scoliosis at 1 or 2 levels from C3 to C7
- Grade 1 spondylolisthesis or retrolisthesis at the involved level(s)
- Anterior approach for cervical

Contraindications

- Severe Osteoporosis
- Active infection of the involved vertebral bodies

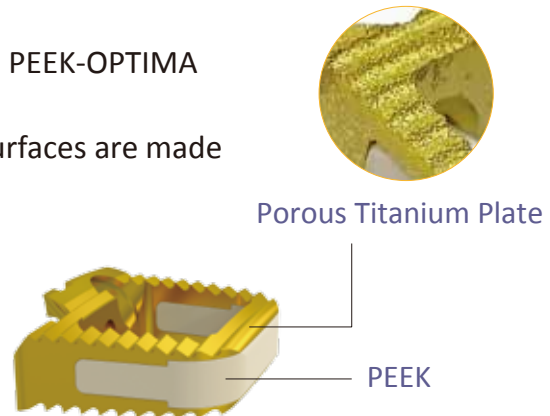


Clinical case-Postoperative

System Overview

■ Titanium and PEEK implant

- Spacer component is made of medical grade PEEK-OPTIMA (polyetheretherketone) and Ti-6Al-4V EL I
- Teeth on the superior and inferior implant surfaces are made of titanium with **Porous technology**
- **Excellent early new bone formation**
- **Provides excellent skeletal attachment**



■ Locking Screw

improve thread purchase

Variable Screw



Self Drilling

Diameter: 4.0mm
Length: 12 ~18 mm



Self Tapping

Diameter: 4.0mm
Length: 12~18 mm



Oversized

Diameter: 4.5mm
Length: 12~18 mm

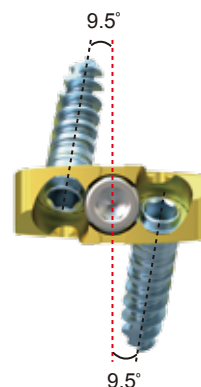
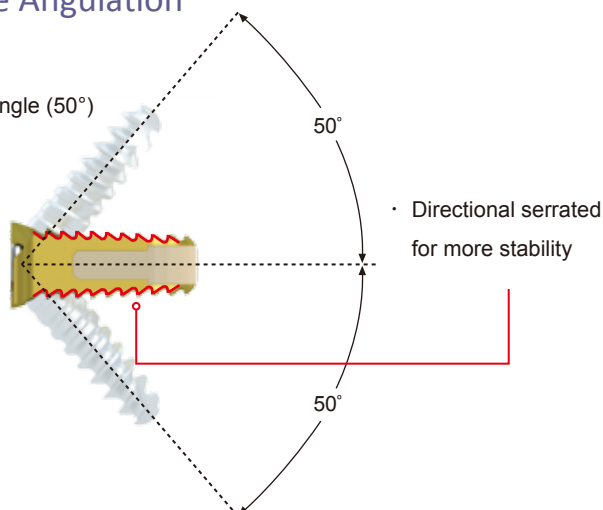
Locking Cap



Diameter: 2.5mm
Length: 3.4mm

■ Cage Angulation

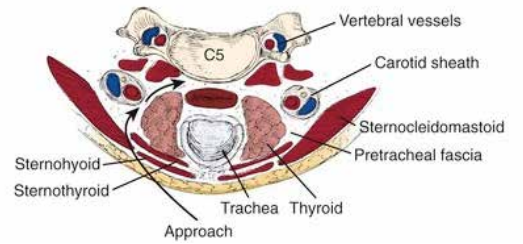
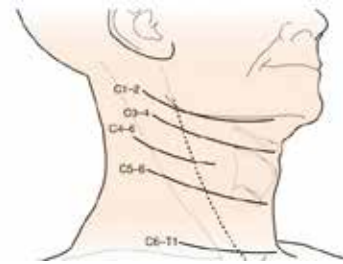
- Screw angle (50°)



Surgical Technique

Approach

Patient in a supine position, the correct operative cervical spine level by radiographic check. Approaching and expose the vertebral disc for doing a complete discectomy through the standard anterior approach to the C spine. Distraction the vertebral body by caspa distractor and perform discectomy then prepare the endplates.



01 Trial Sizing

- > Choose appropriate disc height need using the trial sizing. For correct Redmond cervical cages are determined by insert the trial.
- > From item no. 229-79xx to 229-80xx the height and footprint are as below
Height: 5 -10 mm , Length : 14 -16 mm
- > Well position is important, put into the trials in the disc space correct the alignment and carefully check by radiographies.



Note:

Trails height and Redmond C cages are both same shape no difference. The endplates need to fit with the trial totally while the final trial sizing. Anterior osteophytes may interfering insertion position recommend to remove prevent cause the Redmond C cage failure.

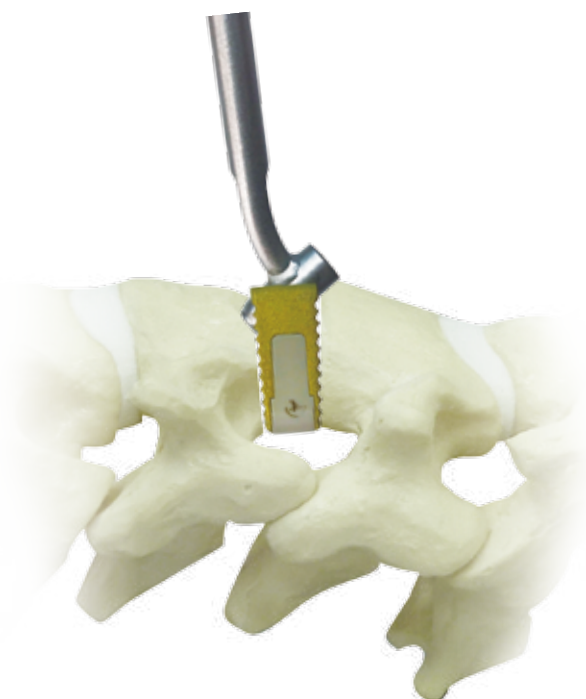
02 Implantation

- > Hold the Redmond C Cages
The device is using the holder (405-0801) to insertion. After tighten and secure the Redmond C cage we need to put bone graft filled with. Placing the Redmond C cage into the graft block (232-2901)
- > Redmond C Insertion
Insert the device into the disc space carefully put in the device into the distracted segment. Verify the position with radiographies and make sure with the both endplates are fully contact with the Redmond C cage. From the lateral view of radiographies the Redmond C can easier to identify inferior and superior titanium plate image.



03

- > Confirm the device correct position:
It is important to take the lateral and A/P radiographies for checking the insertion position.
(I don't know the key wording)



04 Prepare Screwing



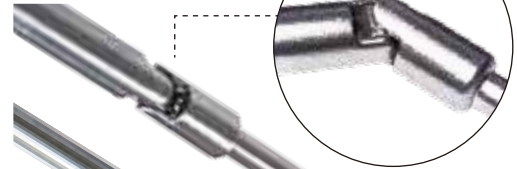
- > Using the angle guide (232-1105) to prepare initial screw holes.
- > The instruments of prepare the pilot hole are universal-joint awl plus (232-0202) and angle guide.



05 Insert Screws:

- > Apply the screw on the universal-joint screwdriver (232-3301) or apply on the straight screwdriver (202-3301).
- > Redmond C cage is a two screw fixation device. The screws angle is design for 50° bilateral. It is recommend aiming first screw at superior endplate side.

universal-joint screwdriver
(232-3301)



straight screwdriver
(202-3301)



06 Securing the Locking Cap

- > Final secure the locking cap by using the cap holder (232-1301).
- > When 2 screws are placed cap holder can carry the cap insert in front of the 2 screws. For secure the screws prevent back-out.





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