gold standards for everyBody
JAZZ is a unique posterior fixation system meeting the highest requirements of surgeons for spinal treatments from T1 to L5 (indications page 4).

JAZZ is intended to be used with titanium alloy or CpTi 5.5 mm diameter rods.

JAZZ can be combined with any CALYPSO implant, providing surgeons with hybrid assembly options using either hooks, pedicle screws and the various connectors.

JAZZ is made of three elements:

- A Multi-purpose Ti alloy Connector which is clipped onto 5.5 diameter rods (Ti alloy or CpTi).
- A highly resistant flat biocompatible polyester braid allowing a very efficient interface around the bony structures due to the optimal stress distribution.
- A locking screw that ensures a perfect two-in-one bond of the braid and connector.

MECANICALS TESTS

JAZZ has been tested according to ASTM F1717.
INDICATIONS

The indications for use include, but are not limited to, the following applications:

1. Spinal trauma surgery, used in sublaminar, interspinous, or facet wiring techniques;

2. Spinal reconstructive surgery, incorporated into constructs for the purpose of correction of spinal deformities such as scoliosis, kyphosis, spondylolisthesis;

3. Spinal degenerative surgery, as an adjunct to spinal fusions.

BIBLIOGRAPHY


2. Orthopaedic Surgery Spine 2007


4. Euro Spine Journal 2009

5. Acta Neurochirurgica 2009

6. Journal of Children’s Orthopaedics 2010
SURGICAL TECHNIQUE

OPEN BRAID VERSION

Upon his own choice, the surgeon can use CALYPSO screws and hooks before setting up the Jazz connectors. In this case, please refer to the specific surgical technique of the CALYPSO system.

PREPARATION OF JAZZ MULTI-PURPOSE CONNECTORS

The braid is passed at first through the superior slot of the JAZZ stirrup, taking care to first introduce the part that includes the malleable stainless steel strip.

Note!
The superior slot is located on the side of the largest diameter orifice that receives the locking screw.
OPERATIVE TECHNIQUE

PASSAGE OF THE BRAID AROUND THE ANATOMICAL STRUCTURES

Upon surgeon choice, the braids are passed around the vertebral structures (laminas, transverse or spinous processes) selected during the pre-operative planning or intra-operatively, at any desired level, from T1 to L5.

Use the malleable stainless steel strip to easily pass the braid. A « C hook-shaped » bending, with a more or less long and acute curvature, can facilitate the passage of the braid around the bony structures.

PASSING THE BRAID BACK THROUGH THE STIRRUP

After passing around the anatomical structures, the distal end of the braid is passed back again into the JAZZ stirrup, through the inferior slot located on the side of the threaded hole (the orifice of the smallest diameter receiving the screw), resulting in forming a loop around the bone anchoring elements. At the end, the opening of the largest diameter that receives the screw must be oriented toward the operator.
CLOSING OF THE BRAIDS

The braid is closed using the pre-mounted buckle:
1. Passing at first through the buckle being on the same side than the tip of the braid (A), from bottom to top,
2. Then passing the braid through the buckle on the opposite side of the tip of the braid (B), from top to bottom,
3. Finally passing again inside the first part of buckle (A), but this time from top to bottom.

Depending on the desired path to the Braid Tensioner, the length of the loop is to be adjusted.

PREPARATION OF THE RODS

The rods are available in length up to 400mm. Length and conformation of the rod are determined with the Rod Templates or Rod Caliper, both included in the Calypso system. The bending is performed using the CALYPSO French Bender. Beyond 400 mm, the length of the construct is assessed during the surgical planning and rod bending is performed per-operatively by the surgeon.

CONNECTION OF THE IMPLANTS TO THE RODS

The JAZZ Multi-purpose Connectors are clipped onto the rod manually or with the help of the Snapping Forceps.

At this stage, the implant is already stable on the rod.
OPERATIVE TECHNIQUE

JAZZ BRAID TENSIONER

Hexagonal screwdriver 3,5

Stirrup

Screw

Stem (90°)

Stem 120°

Stem 135°

Mobile Capstan

Locking / unlocking Mechanism of the stem

Mobile Capstan

Rail

Winch

Capstan

Wheel

Straight handle

Locking / unlocking Mechanism
IMPLANTS CONNECTION TO THE RODS AND SCREW INSERTION

The Jazz connectors can be connected to the rod by hand but it is advised to use the Snapping Forceps and especially to keep it in place to help the screw insertion.

At this stage, the connector is already stable on the rod. It is mandatory to insert the screw but without any contact with the rod, before the connection to the Tensioner and consequently before any tensioning.

The braid Tensioner allows choosing between various angulations of stems (G). It is up to the surgeon to determine the most appropriate angulation related to the patient indication and situation.

The selected Stem and the Straight Handle can be assembled to the Tensioner.

CONNECTION TO THE BRAID TENSIONER

The starting position of the Tensioner can be easily set, pushing on the button of the mobile capstans (A) that allows to unlock the mobile capstans (B) and to move it freely onto the rail (C).

The braid is passed around the capstan (D), taking care that the braid is engaged onto the wheel (E) at the extremity of the rail (C).

If possible, avoid any contact of the braid metallic buckle with the metallic part of the Tensioner.

TENSION / REDUCTION OF THE BRAID

The tension and the reduction maneuvers are performed by turning the Straight Handle (F) clockwise.

The anti-backout mechanism of the mobile capstan prevents the loss of any tension/reduction.

If necessary, the tension/reduction can be partially or fully released by pushing on the button of the mobile capstan (A).
DISTRACTION / COMPRESSION AND DEROTATION MANEUVERS

Distraction, compression and derotation maneuvers can be easily performed using the Distractor and Compressor as well as the Rotation Forceps provided in the Calypso instrument set.

For distraction/compression, it is necessary to keep the Braid Tensioner in place on the Jazz Connector to be moved, in order to maintain the tension. If not, the braid being not locked, it will slip on a length corresponding to the connector displacement.

CUT OF THE BRAID

Once the final positioning of the Jazz connector is achieved, the excess of braid is cut at about 1 cm from the stirrup.

Important !
The buckle and the malleable stainless steel strip must IMPERATIVELY be removed. These components are considered as temporary instruments that must NOT be implanted.

TWO-IN-ONE FINAL LOCKING

The locking screw is firmly tightened with the 3.5 Hexagonal Screwdriver. The JAZZ connector and the braid are then locked and cannot be manipulated anymore.

The anti-back-out mechanism is then released by pushing on the mobile rack trigger in order to disengage the braid from all capstans.

If necessary, it is always possible to loosen the locking screw in order to release the connector and the braid.

Note :
The final locking can be optimized using the Snapping Forceps in conjunction with the 3.5 Screwdriver. The aim will be to compress the braid to allow the screw to reach its optimal position with less friction on the longitudinal rod. It will also act as an anti-rotation device, opposing the possible angular sweeping of the stirrup (torque induced by the tightening force applied on the locking screw).
PASSAGE OF THE BRAID AROUND THE ANATOMICAL STRUCTURES

Upon surgeon choice, the braid is passed around the vertebral structures (laminas, transverse or spinous processes) selected during the pre-operative planning or intra-operatively, at any desired level, from T1 to L5.

Use the malleable stainless steel strip to easily pass the braid. A « C hook-shaped » bending, with a more or less long and acute curvature, can facilitate the passage of the braid around the bony structures.

« LARK’S HEAD KNOT »

The braid end fitted with the malleable stainless steel strip is passed inside the loop formed by the braid to form a so-called « lark’s head knot ».

To fully close the knot around the anatomical structures, it is mandatory to perform a lever movement, back and forth, while pulling on the braid.
PASSAGE INTO THE CONNECTOR

The braid can be engaged in the stirrup in a single pass from the bottom up, through the slot on the side of the orifice of the smallest diameter receiving the locking screw. The opening of the largest diameter that receives the locking screw should be oriented toward the operator.

After this step is complete, one can decide to cut the braid at about 1cm below the metal strip (under no circumstances is the braid to be cut in the closed-loop portion). Pursue the surgical technique from the step «Preparation of the rods» of the «open braid technique».

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OPERATIVE TECHNIQUE

EXAMPLE OF A HOOK CONSTRUCT

EXAMPLE OF JAZZ CONSTRUCT
REFERENCES IMPLANTS

Jazz - Open braid
150150  Multi-purpose 5,5 mm Titanium Spine Connector
Open braid

Jazz - Loop braid
150152  Multi-purpose 5,5 mm Titanium spine connector
Loop braid

Screw connector
150151  Screw connector
REFERENCES  INSTRUMENTS

Tensioner Generation 2
(assembly)

- Tensioner Gen. II
  - 550295

Componants

- Tensioner Gen. II - Rail
  - 551295

- Tensioner Gen. II - Mobile Capstan
  - 551296

- Tensioner Gen. II - Winch
  - 551297

Straight Handle

- Straight Handle
  - 550026

Stem

- Tensioner Gen. II - Stem 90°
  - 550298

- Tensioner Gen. II - Stem 120°
  - 550299

- Tensioner Gen. II - Stem 135°
  - 550300

Braid Forceps

- 550057

Braid Puller Forceps

- 550058

Snapping Forceps

- 550059

Screw Holder

- 550060

Hexagonal screwdriver 3.5

- 550012
WARNINGS AND PRECAUTIONS

- Federal Law restricts this device to sale by or on the order of a physician.
- Refer to the instruction leaflet about indications and contra-indications and technical specifications of the product.
- Refer to "Patient Booklet" for the patient recommendations.
- A patient card for holders of spine implants is contained in the Patient Booklet. It is important to complete the last page of the booklet before inserting the card in its appropriate slot.