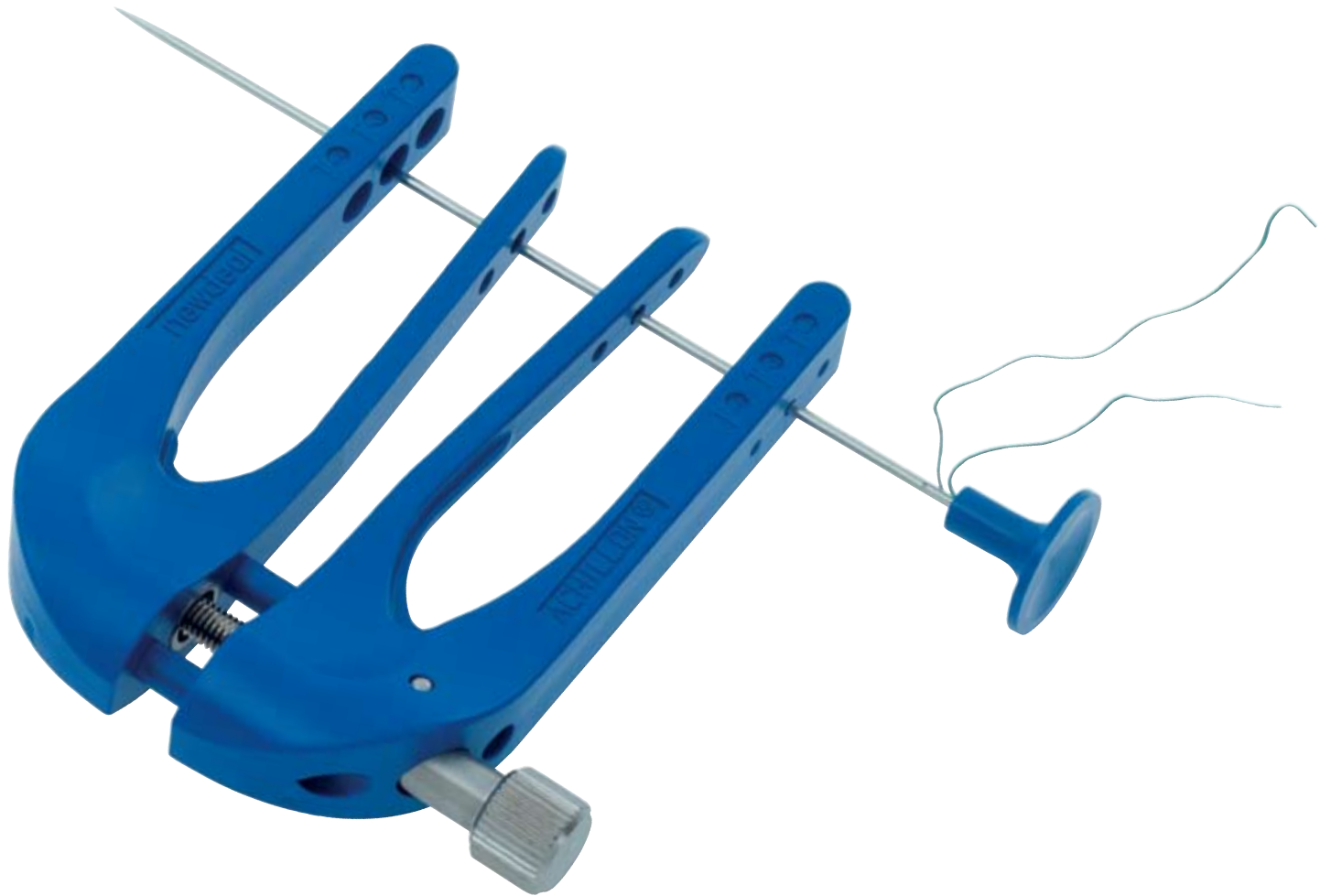




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# ACHILLON®

## ACHILLIES TENDON SUTURE SYSTEM

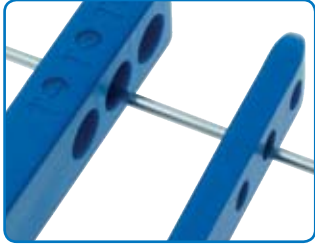


**SURGICAL TECHNIQUE**

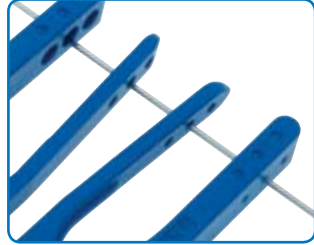
**LOWER  
EXTREMITY  
SOLUTIONS**

 **INTEGRA™**  
Extremity Reconstruction

# TECHNIQUE



Precise order and direction for introduction of the sutures



4° angle to conform to the anatomy



Needle driver  
Material: Polycarbonate



Adjustment screw  
Material: Stainless Steel 316 L.

## Description

The Achillon System is an elegant method to treat acute Achilles tendon ruptures. It is a minimally invasive procedure that allows direct visual control of the repair, as well as percutaneous introduction of the sutures. The surrounding soft tissues and the tendon itself are treated with care to avoid any local trauma. It includes:

- One Achillon instrument
- One needle driver
- Two surgical needles of 1.6 mm diameter



Adjustment screw provides for appropriate adaptation to the tendon stump

## Indications

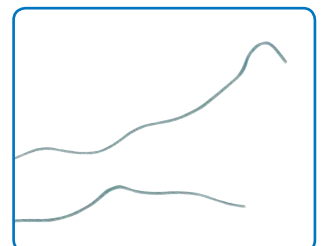
- Acute rupture (< 10 days)
- Rupture located between 2 and 8 cm above calcaneum
- Open or closed rupture



Achillon Instrument  
Material: Polycarbonate

## Contraindications

- Previous local surgery
- Chronic or neglected rupture



Sutures size: 0 USP  
(3.5 metric)

# S U R G I C A L

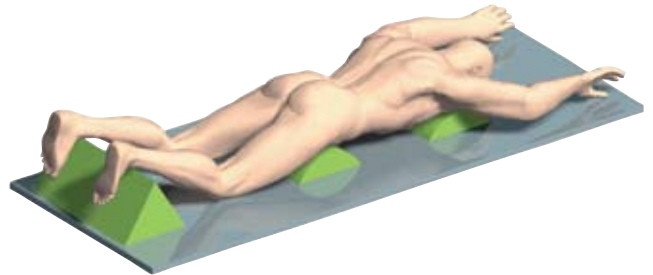
## Surgical Technique

THIS TECHNIQUE HAS BEEN DEVELOPED WITH THE HELP OF MATHIEU ASSAL, MD



As the manufacturer of this device, Integra does not practice medicine and does not recommend this or any other surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and using the appropriate techniques for implanting the device in each patient.

The patient is placed prone on the surgical table with standard protection on the various pressure points. Both ankles are elevated and a tourniquet is applied (except if contraindicated).

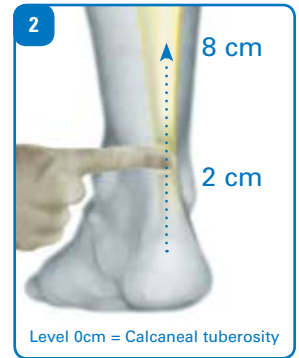


**1** Antibiotic prophylaxis pre-op.  
Do not use plastic drape (percutaneous technique).  
Inflate tourniquet.

**2** Accurately feel the gap (soft spot) corresponding to the rupture site (in more than 90% of cases it is located 4 cm above calcaneal tuberosity). The indication for use of the Achillon® System is for ruptures occurring between 2 and 8 cm proximal to the calcaneal tuberosity.

**3** Incision: vertical and medial to the tendon, 1.5 to 2 cm in length, proximally from the soft spot. With a scalpel blade (N°15, smallest size), delicately dissect the thin subcutaneous tissue.

**4** Retract the skin layer with 2 small hook retractors (Guillies type). Carefully identify the paratenon. Make a 2 cm vertical incision in the paratenon.



# TECHNIQUE

## Surgical Technique

- 5 Place a stay suture in each edge of the paratenon. The space under the paratenon has to be cleared proximally and distally in order to visualize its “tunnel shape.” This maneuver will facilitate the introduction of the Achillon.
- 6 Identify both the proximal and distal tendon stumps. The plantaris tendon may be visualized on the medial side. Note: In most cases the tendon stumps have become frayed. If the rupture spot is particularly difficult to locate, the skin incision can be extended proximally or distally.
- 7 Introduce the Achillon in the closed position (minimal width) proximally UNDER THE PARATENON. The tendon stump should fall between the internal branches of the instrument.
- 8 As soon as the Achillon is introduced, it is progressively widened. The tendon stump is held with fine forceps or a clamp passed under the Achillon (Kocher or Mosquito).
- 9 Before introducing the sutures, the appropriate position and angulation of the Achillon is confirmed by external digital palpation. The tendon stump should fall between the internal branches of the instrument. Using the needle driver, the first needle is introduced according to arrows and numbers printed on the instrument.
- 10 3 sutures are passed and left external to the body.





## Surgical Technique

- 11 The Achillon is gently withdrawn in order to prevent any suture or soft tissue damage. As it is being withdrawn, the Achillon is progressively closed. Note: From an extracutaneous position, the sutures become subperitendinous. Thus, the tendon itself becomes the only site of tissue attachment for the suture.
- 12 A clamp is placed on the 3 sutures coming out laterally and another clamp is placed on the 3 sutures coming out medially. Each clamp must remain on its respective side. In this way, sutures will not cross the midline. Note: If any suture fails, it has to be replaced by repeating the previous technique.
- 13 The same sequence is performed on the distal stump. The Achillon is introduced under the paratenon and pushed until it touches the calcaneum. Again 3 sutures are passed.
- 14 Correctly organize the suture pairs. They must not cross the midline: the sutures coming out on the lateral side have to remain lateral, and those on the medial side have to remain medial.
- 15 The sutures are tied by corresponding pairs. The tendon reduction is controlled under direct vision. If the tendon is frayed and prevents any landmark for control of length, then the tendon tension should be compared to the opposite leg.
- 16 Careful closure of paratenon and skin. The ankle is maintained in 30° of plantar flexion with a splint, during the first 3 weeks. It is then progressively brought to the neutral position over the following 5 weeks. Always be aware of patient compliance.





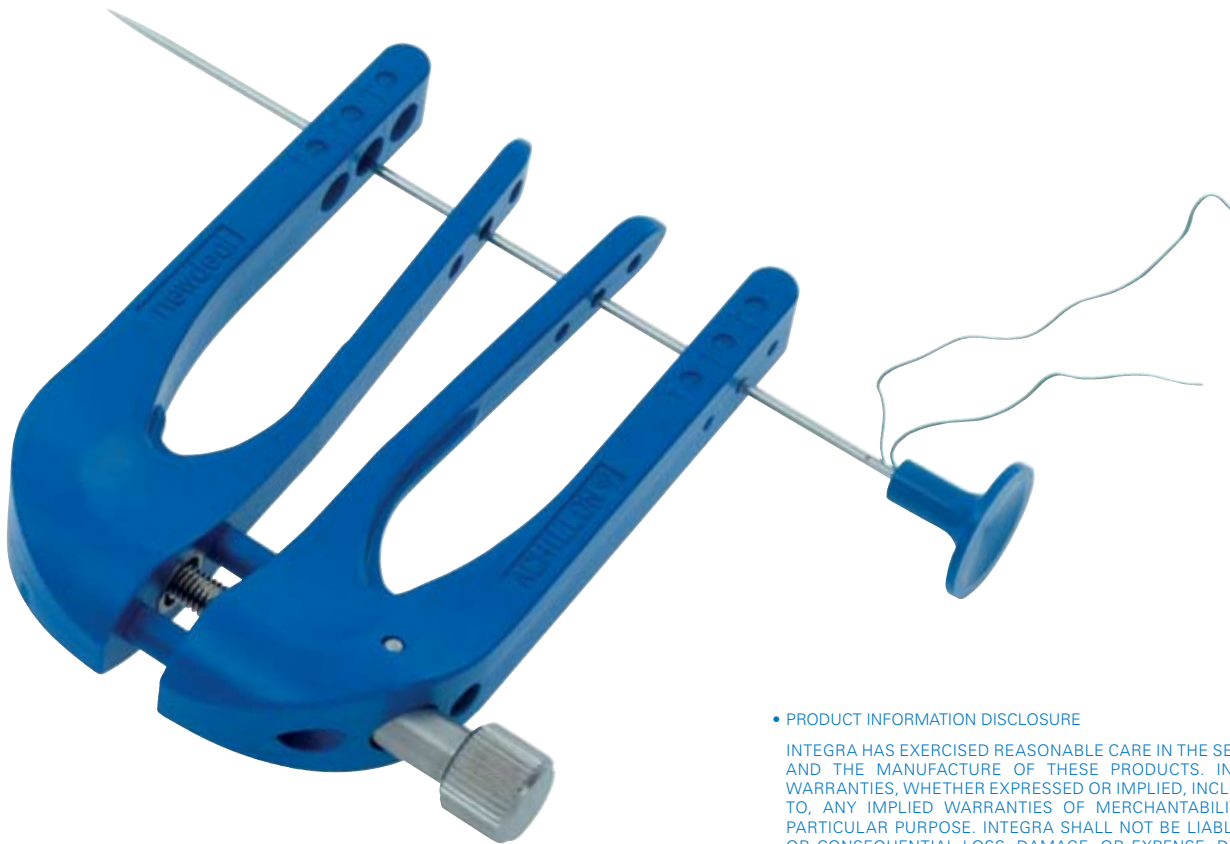
# ACHILLON<sup>®</sup>

## ACHILLIES TENDON SUTURE SYSTEM

### ACHILLON

Reference  
119 700ND

Description  
One Achillon instrument, One needle driver, Two surgical needles of 1.6 mm diameter.



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- The products are manufactured and referenced within the frame of the standards in force.
- Implantation procedures are described in the surgical technique.
- WARNING: Federal law (USA) restricts this device to sale by or on the order of a physician.



INTEGRA<sup>™</sup>

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