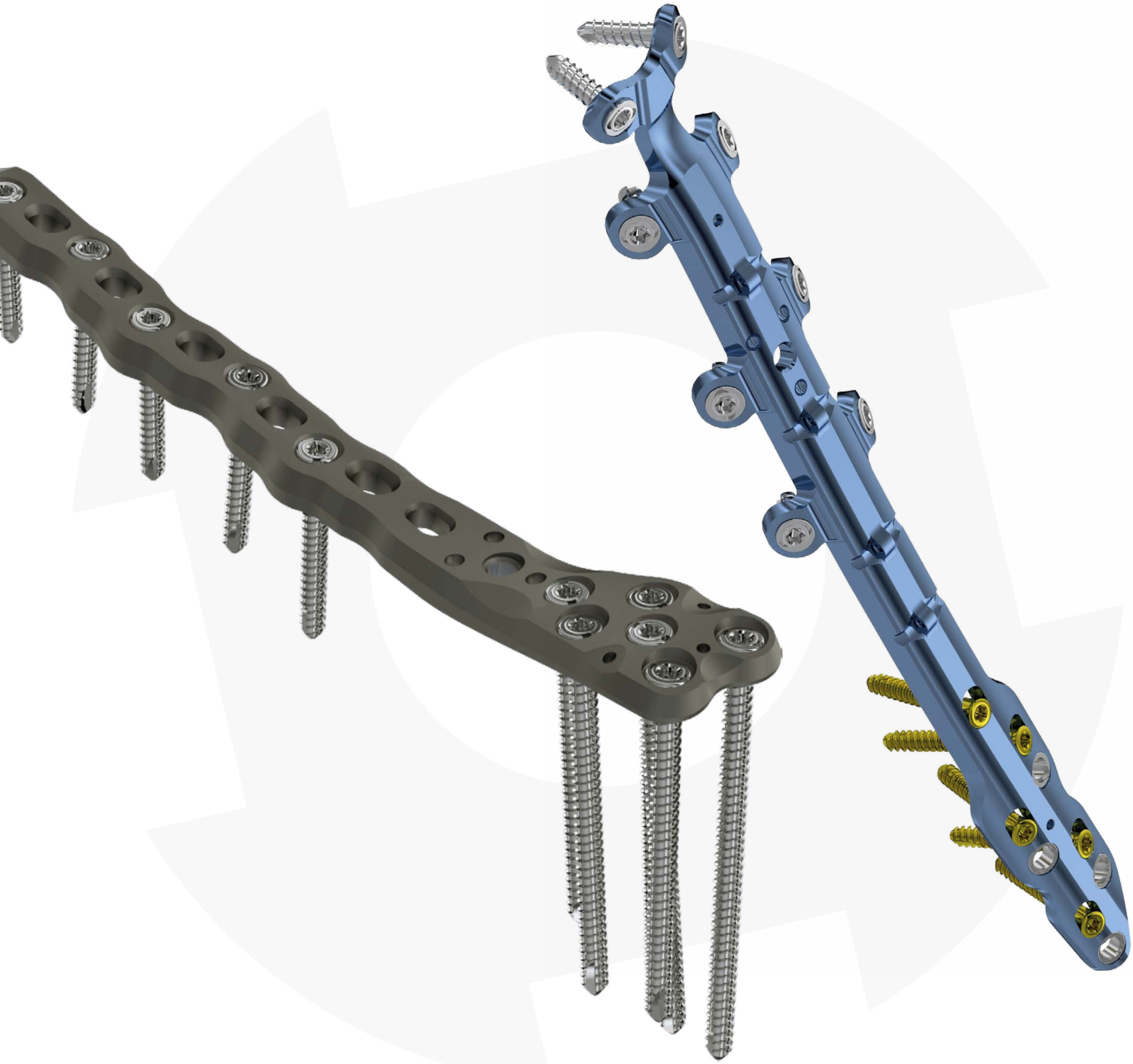
intrauma®

EN



# Periprosthetics catalog.

O'nil The internal fixator

Rail

# / Iron Lady Periprosthetics with Rail option

Fixation devices implanted in periprosthetic bone often have a high incidence of mobilisation caused by several factors; among the most frequent is the technical difficulty in stabilising the fracture due to the presence of the rod, which prevents easy positioning of the screws.

Secondly, the quality of the bone, which is often porotic, can facilitate "pull-out" of the screws, resulting in early breakdown of the fracture.

Intrauma has developed a range of plates especially for the treatment of periprosthetic fractures of the hip, knee and humerus.

The use of the O'nil periprosthetic plate guarantees early mobilisation of the patient and union of the fracture in a time frame comparable to a fracture without a prosthesis.

Thanks to the patented conical locking system between the screw head and the holes in the plate, the O'nil fixator guarantees primary stability by distributing the forces evenly over the entire plate.

Anatomical plates with an arched section reduce positioning difficulties while the multi-planar mounting ensures excellent hold, even in the most complex fractures.

**The Iron Lady plate for periprosthetic hip fractures is a self-supporting structure, which means that cerclage using the O'nil slotted pin no longer has the function of stabilising the plate on the bone but only that of fixating any fragments.**

Absence of pressure on the bone helps to preserve proper vascularisation of the periosteum allowing early rehabilitation and reducing healing time.

Rail Bones in motion

# / Iron Lady Periprosthetics with Rail option

## Features

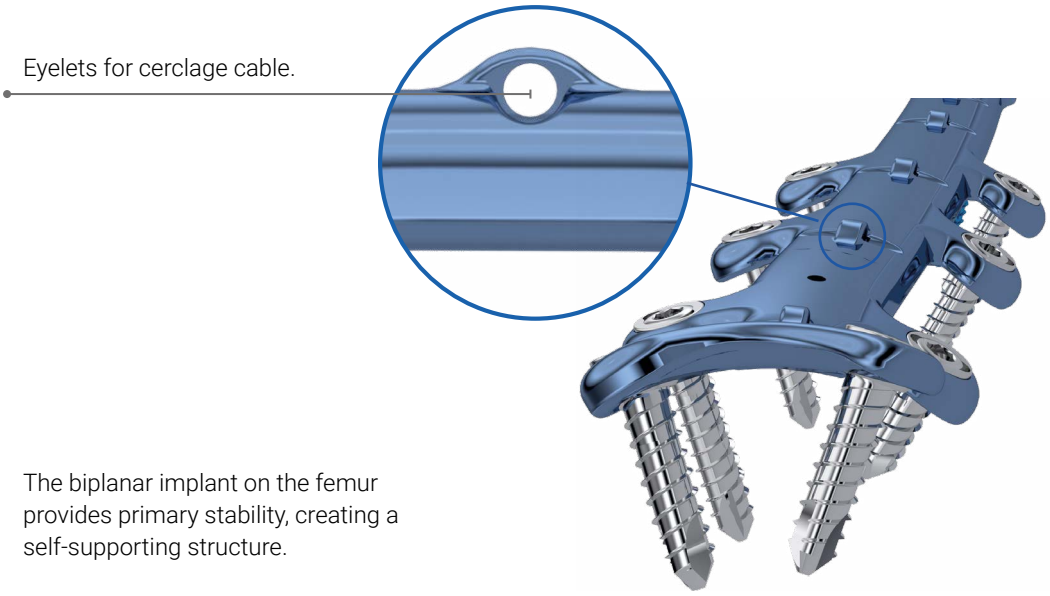
- Anatomical low-profile titanium plate.
- Primary stability is guaranteed by multi-planar screws.
- Cerclage possible through eyelets on the plate and with slotted pins.
- Available in 3 lengths, left and right versions.
- Possibility of using the Rail system.

Proximal IRON LADY

IRON LADY medium

IRON LADY long

# / Iron Lady Periprosthetics Features and benefits




The biplanar implant on the femur provides primary stability, creating a self-supporting structure.

Conical locking slotted pins and pins for Rail eyelets for use with cerclage wires with a maximum diameter of 2mm.

Rail Bones in motion

# / Curved diaphyseal plates

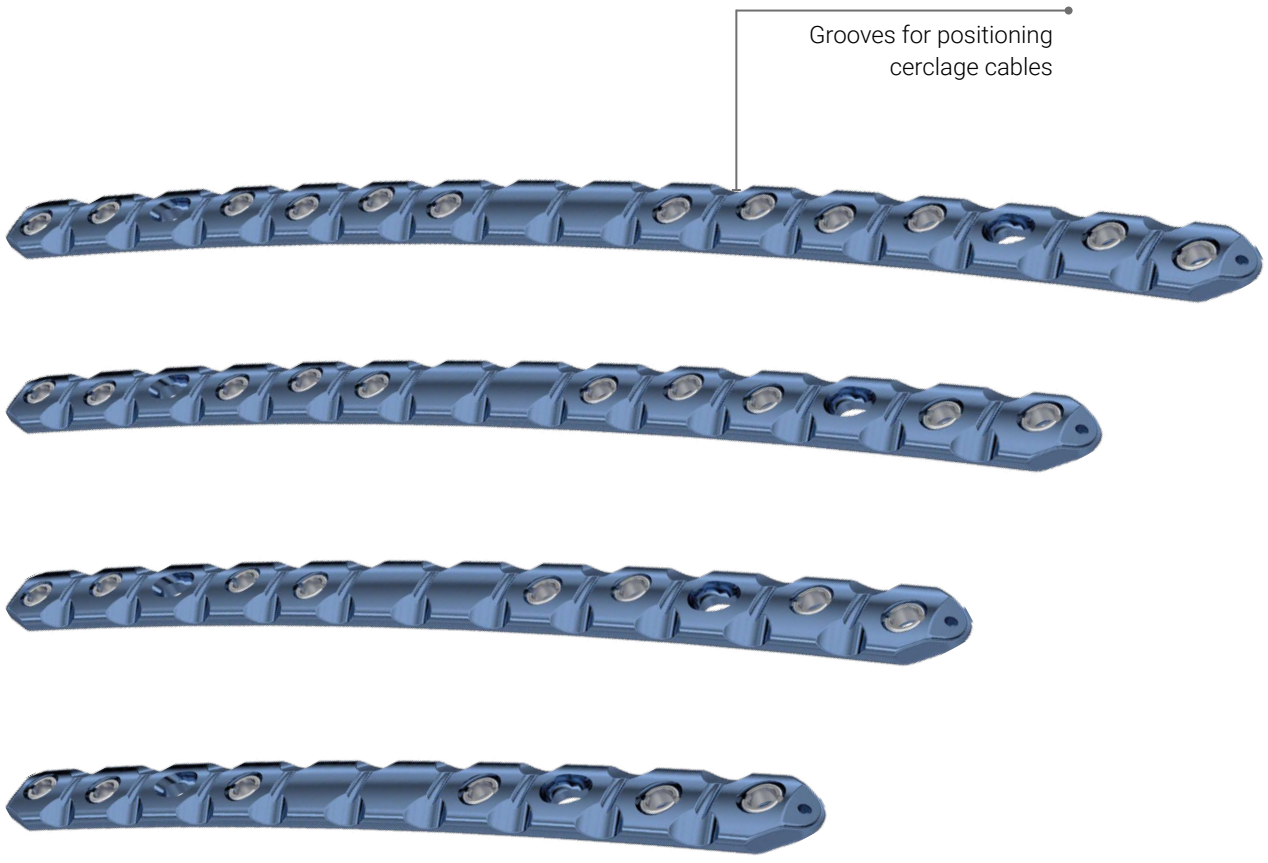
Intrauma has developed a range of curved plates for the **treatment of diaphyseal fractures.**

**The plates ensure primary retention thanks to the patented O'nil system:** the screw head is conically coupled to the hole in the plate, **ensuring even distribution of forces over the entire implant** and eliminating the risk of breakage, screw loosening and cross-threading.

The curved diaphyseal plates for the femur are also indicated for the treatment of periprosthetic fractures and, thanks to the O'nil slotted pin, it is possible to perform cerclage integrally with the plate, guaranteeing primary stability.

The plate is characterised by grooves for positioning the cerclage cables.

The biomechanical qualities of the implants and the absence of pressure on the bone help to preserve proper vascularisation of the periosteum, allowing early rehabilitation and reducing healing times.



# / Periarticular distal femur plate

## Features

- Anatomical low-profile titanium plate.
- 6 holes in the distal part of the plate ensure excellent fixation, even in the presence of osteoporotic bone.
- Available in 6 lengths, left and right versions.

## Indications

- Periprosthetic knee fractures.

# / Distal femur with Rail option

Bridge fixation with angular stability plates is the most widely used method in the treatment of metadiaphyseal and periarticular fractures of the long bones of the lower limb. Delayed union, pseudo-arthrosis, breakage of fixation devices and asymmetrical bone callus formation are often caused by the rigidity of the implants, which do not allow proper load transfer to the stumps.

The patented O'nil angular stability system allows an easy technique and eliminates the risk of cross-threading between the screw head and the plate. The O'nil plates transfer the forces acting on the fracture elastically; by not exerting pressure, they ensure vascularization of the bone. The six screws in the femoral condyles with locked or polyaxial option allow stabilization of the fragments to be optimized, thanks to the correct orientation.

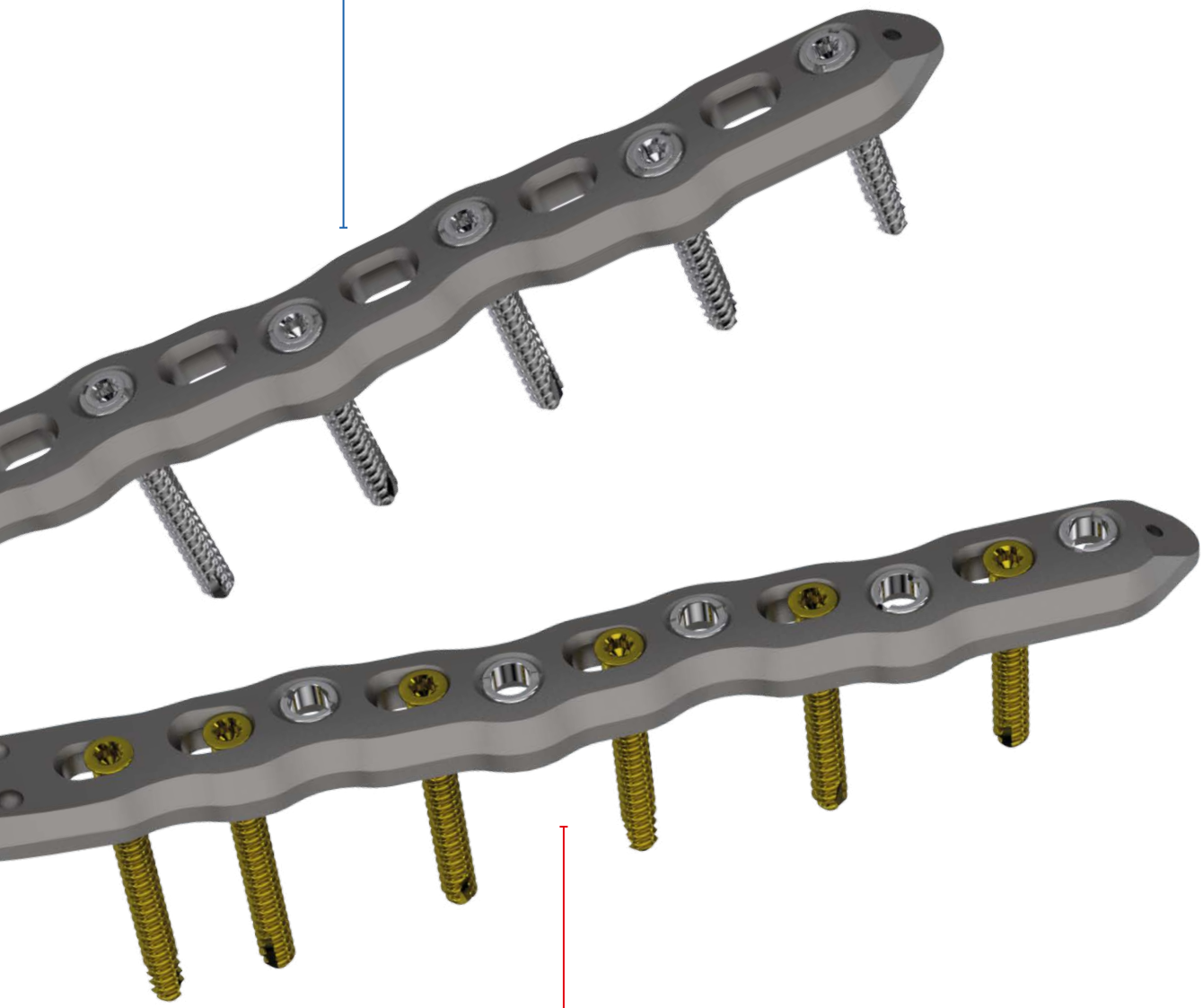
The innovative Rail system is designed to allow use of the most suitable means of fixation for the type of fracture to be treated.

When using the dynamic option system, although resorption and repositioning occur at the level of the fracture rhyme, compression continues to act along the diaphyseal axis, allowing subsequent physiological union and reducing the risk of failure.

## Indications

- Intra- and extra-articular complex fractures of the distal femur
- Distal diaphysis fractures
- Periprosthetic knee fractures

**1 Angular stability**
Angularly stable O'nil screws



**2 Dynamic**
Rail screws in dynamic position

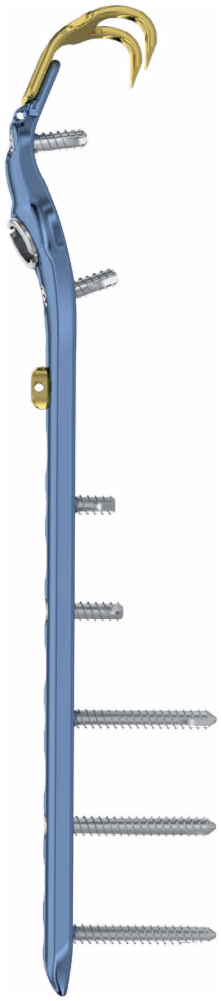
Rail Bones in motion

# / PFF - Proximal femur with Rail option

## Indications

The PFF Rail proximal femur plate is indicated for proximal femur fractures including:

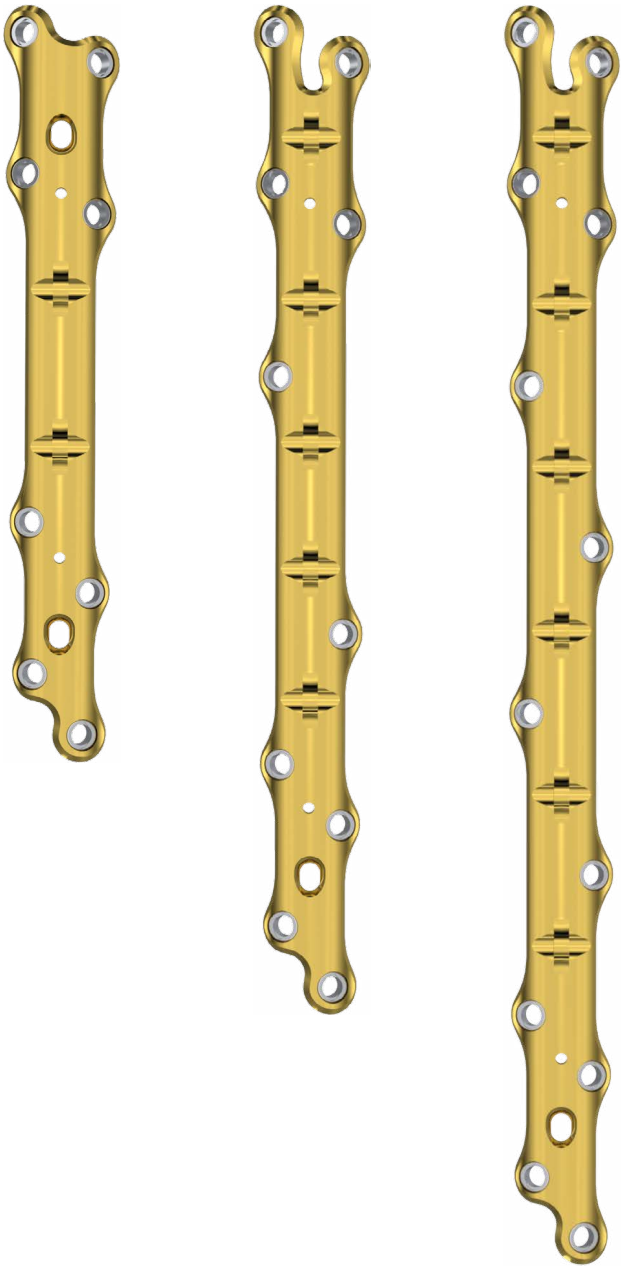
- Fractures of the trochanteric region, simple trochanteric, cervicotrochanteric, trochantero-diaphyseal, pertrochanteric multifragmentary, intertrochanteric, inverted or transverse intertrochanteric fractures or with additional fracture of the medial cortex.
- Fractures of the proximal end of the femur combined with ipsilateral diaphyseal fractures.
- Fractures with presence of metastases of the proximal femur.
- Osteotomies of the proximal femur.
- It is also indicated in the fixation of fractures in porotic bone and in the fixation of non-unions or union defects.



# / Iron Lady Humeral periprosthetics

## Features

- Anatomical semitubular plate.
- The multi-planar implant allows primary stability.
- Available in 3 lengths.
- Plates, screws and bushings made from Titanium Ti6Al4V - ISO 5832-3 to allow MRI.
- Reduced surgical time.



# Ordering informations

| | | | Epiphysis holes | | Diaphysis holes | |
|---|---|---|---|---|---|---|
| Ref. | Description | L. mm | Locked | Free | Locked | Free |
| 145.2003 | IRON LADY Diaphyseal Humerus Plate short | 150 | 0 | 0 | 8 | 2 |
| 145.2004 | IRON LADY Diaphyseal Humerus Plate medium | 200 | 0 | 0 | 10 | 1 |
| 145.2005 | IRON LADY Diaphyseal Humerus Plate long | 250 | 0 | 0 | 12 | 1 |
| 145.3001 | IRON LADY Periprost. Proximal Femur Plate long (L) | 300 | 0 | 0 | 14 | 5 |
| 145.3002 | IRON LADY Periprost. Proximal Femur Plate long (R) | 300 | 0 | 0 | 14 | 5 |
| 145.3003 | IRON LADY Periprost. Proximal Femur Plate medium (L) | 230 | 0 | 0 | 10 | 5 |
| 145.3004 | IRON LADY Periprost. Proximal Femur Plate medium (R) | 230 | 0 | 0 | 10 | 5 |
| 145.3005 | IRON LADY Curved Periprost. Proximal Femur Plate (L) | 250 | 2 | 0 | 10 | 5 |
| 145.3006 | IRON LADY Curved Periprost. Proximal Femur Plate (R) | 250 | 2 | 0 | 10 | 5 |
| 165.1001 | MF Curved Diaphyseal Femur Plate short | 202 | 0 | 0 | 6 | 2 |
| 165.1002 | MF Curved Diaphyseal Femur Plate medium | 242 | 0 | 0 | 8 | 2 |
| 165.1003 | MF Curved Diaphyseal Femur Plate long | 281 | 0 | 0 | 10 | 2 |
| 165.1004 | MF Curved Diaphyseal Femur Plate extra-long | 321 | 0 | 0 | 12 | 2 |
| 162.1001 | DF Rail Distal Femur Plate (L) Short | 160 | 6 | 0 | 3 | 4 |
| 162.1002 | DF Rail Distal Femur Plate (R) Short | 160 | 6 | 0 | 3 | 4 |
| 162.1003 | DF Rail Distal Femur Plate (L) Medium | 210 | 6 | 0 | 5 | 6 |
| 162.1004 | DF Rail Distal Femur Plate (R) Medium | 210 | 6 | 0 | 5 | 6 |
| 162.1005 | DF Rail Distal Femur Plate (L) Long | 260 | 6 | 0 | 7 | 8 |
| 162.1006 | DF Rail Distal Femur Plate (R) Long | 260 | 6 | 0 | 7 | 8 |
| 162.1007 | DF Rail Distal Femur Plate (L) Long Plus | 310 | 6 | 0 | 9 | 10 |
| 162.1008 | DF Rail Distal Femur Plate (R) Long Plus | 310 | 6 | 0 | 9 | 10 |
| 162.1009 | DF Rail Distal Femur Plate (L) Extra-Long | 360 | 6 | 0 | 11 | 12 |
| 162.1010 | DF Rail Distal Femur Plate (R) Extra-Long | 360 | 6 | 0 | 11 | 12 |
| 162.1011 | DF Rail Distal Femur Plate (L) Extra-Long | 410 | 6 | 0 | 13 | 14 |
| 162.1012 | DF Rail Distal Femur Plate (R) Extra-Long | 410 | 6 | 0 | 13 | 14 |
| 165.2001 | PFF Rail Proximal Femur Plate (L) Short | 169 | 3 | 0 | 3 | 4 |
| 165.2002 | PFF Rail Proximal Femur Plate (R) Short | 169 | 3 | 0 | 3 | 4 |
| 165.2003 | PFF Rail Proximal Femur Plate (L) Medium | 219 | 3 | 0 | 5 | 6 |
| 165.2004 | PFF Rail Proximal Femur Plate (R) Medium | 219 | 3 | 0 | 5 | 6 |
| 165.2005 | PFF Rail Proximal Femur Plate (L) Long | 269 | 3 | 0 | 7 | 8 |
| 165.2006 | PFF Rail Proximal Femur Plate (R) Long | 269 | 3 | 0 | 7 | 8 |
| 165.2007 | PFF Rail Proximal Femur Plate (L) Extra-Long | 319 | 3 | 0 | 9 | 10 |
| 165.2008 | PFF Rail Proximal Femur Plate (R) Extra-Long | 319 | 3 | 0 | 9 | 10 |
| 165.2000 | PFF Rail Trochanteric Hook | | | | | |

| | |
|---|---|
| 32.3103 | Conical Cerclage Eyelet Ø3.6mm |
| 32.3104 | Conical Cerclage Eyelet Ø4.8mm |
| 32.3105 | Threaded Conical Cerclage Eyelet Ø4.8mm |
| 32.3106 | Cerclage Eyelet for Rail Slot Ø4.8mm |


32.3103


32.3104


32.3105


32.3106

**Materials:**

Plates | Titanium Ti6Al4V - ISO 5832-3

Curved Diaphyseal Femur Plate | Titanium GR.4 ISO 5832-2

Trochanteric Hook | Titanium GR.4 ISO 5832-2

# Autolocking screws Cortical screws

## / SCREW | Ø3.6MM

| Ref. | L. mm |
|---|---|
| 130.3410 | 10 |
| 130.3412 | 12 |
| 130.3414 | 14 |
| 130.3416 | 16 |
| 130.3418 | 18 |
| 130.3420 | 20 |
| 130.3422 | 22 |
| 130.3424 | 24 |
| 130.3426 | 26 |
| 130.3428 | 28 |
| 130.3430 | 30 |
| 130.3432 | 32 |
| 130.3434 | 34 |
| 130.3436 | 36 |
| 130.3438 | 38 |
| 130.3440 | 40 |
| 130.3442 | 42 |
| 130.3444 | 44 |
| 130.3446 | 46 |
| 130.3448 | 48 |
| 130.3450 | 50 |
| 130.3454 | 54 |
| 130.3458 | 58 |
| 130.3462 | 62 |
| 130.3466 | 66 |
| 130.3470 | 70 |
| 130.3474 | 74 |
| 130.3478 | 78 |
| 130.3482 | 82 |
| 130.3486 | 86 |
| 130.3490 | 90 |

Ti6Al4V - ISO 5832-3

## / SCREW | Ø4.8MM

| Ref. | L. mm |
|---|---|
| 101.4810 | 10 |
| 101.4812 | 12 |
| 101.4814 | 14 |
| 101.4816 | 16 |
| 101.4818 | 18 |
| 101.4820 | 20 |
| 101.4822 | 22 |
| 101.4824 | 24 |
| 101.4826 | 26 |
| 101.4828 | 28 |
| 101.4830 | 30 |
| 101.4832 | 32 |
| 101.4834 | 34 |
| 101.4836 | 36 |
| 101.4838 | 38 |
| 101.4840 | 40 |
| 101.4842 | 42 |
| 101.4844 | 44 |
| 101.4846 | 46 |
| 101.4848 | 48 |
| 101.4850 | 50 |
| 101.4855 | 55 |
| 101.4860 | 60 |
| 101.4865 | 65 |
| 101.4870 | 70 |
| 101.4875 | 75 |
| 101.4880 | 80 |
| 101.4885 | 85 |
| 101.4890 | 90 |
| 101.4895 | 95 |
| 101.4896 | 100 |
| 101.4897 | 105 |
| 101.4898 | 110 |

Ti6Al4V - ISO 5832-3

## / SCREW | Ø3.7MM

| Ref. | L. mm |
|---|---|
| 130.3712 | 12 |
| 130.3714 | 14 |
| 130.3716 | 16 |
| 130.3718 | 18 |
| 130.3720 | 20 |
| 130.3722 | 22 |
| 130.3724 | 24 |
| 130.3726 | 26 |
| 130.3728 | 28 |
| 130.3730 | 30 |
| 130.3732 | 32 |
| 130.3734 | 34 |
| 130.3736 | 36 |
| 130.3738 | 38 |
| 130.3740 | 40 |
| 130.3742 | 42 |
| 130.3742 | 42 |
| 130.3744 | 44 |
| 130.3746 | 46 |
| 130.3748 | 48 |
| 130.3750 | 50 |
| 130.3754 | 54 |
| 130.3758 | 58 |
| 130.3762 | 62 |
| 130.3766 | 66 |
| 130.3770 | 70 |

Ti6Al4V - ISO 5832-3

## / SCREW | Ø4.8MM

| Ref. | L. mm |
|---|---|
| 102.4812 | 12 |
| 102.4814 | 14 |
| 102.4816 | 16 |
| 102.4818 | 18 |
| 102.4820 | 20 |
| 102.4822 | 22 |
| 102.4824 | 24 |
| 102.4826 | 26 |
| 102.4828 | 28 |
| 102.4830 | 30 |
| 102.4832 | 32 |
| 102.4834 | 34 |
| 102.4836 | 36 |
| 102.4838 | 38 |
| 102.4840 | 40 |
| 102.4842 | 42 |
| 102.4844 | 44 |
| 102.4846 | 46 |
| 102.4848 | 48 |
| 102.4850 | 50 |
| 102.4855 | 55 |
| 102.4860 | 60 |
| 102.4865 | 65 |
| 102.4870 | 70 |

Ti6Al4V - ISO 5832-3

# MultiAx screws

## / SCREW | Ø4.8MM

| Ref. | L. mm |
|---|---|
| 103.4814 | 14 |
| 103.4816 | 16 |
| 103.4818 | 18 |
| 103.4820 | 20 |
| 103.4822 | 22 |
| 103.4824 | 24 |
| 103.4826 | 26 |
| 103.4828 | 28 |
| 103.4830 | 30 |
| 103.4832 | 32 |
| 103.4834 | 34 |
| 103.4836 | 36 |
| 103.4838 | 38 |
| 103.4840 | 40 |
| 103.4842 | 42 |
| 103.4844 | 44 |
| 103.4846 | 46 |
| 103.4848 | 48 |
| 103.4850 | 50 |
| 103.4855 | 55 |
| 103.4860 | 60 |
| 103.4865 | 65 |
| 103.4870 | 70 |
| 103.4875 | 75 |
| 103.4880 | 80 |
| 103.4885 | 85 |
| 103.4890 | 90 |
| 103.4895 | 95 |
| 103.4896 | 100 |
| 103.4897 | 105 |

Ti6Al4V - ISO 5832-3

# Rail screws

## / SCREW | Ø4.8MM

| Ref. | L. mm |
|---|---|
| 104.4820 | 20 |
| 104.4822 | 22 |
| 104.4824 | 24 |
| 104.4826 | 26 |
| 104.4828 | 28 |
| 104.4830 | 30 |
| 104.4832 | 32 |
| 104.4834 | 34 |
| 104.4836 | 36 |
| 104.4838 | 38 |
| 104.4840 | 40 |
| 104.4842 | 42 |
| 104.4844 | 44 |
| 104.4846 | 46 |
| 104.4848 | 48 |
| 104.4850 | 50 |
| 104.4852 | 52 |
| 104.4854 | 54 |
| 104.4856 | 56 |
| 104.4858 | 58 |
| 104.4860 | 60 |

Ti6Al4V - ISO 5832-3

# Autolocking cannulated screws

## / SCREW | Ø8.5MM

| Ref. | L. mm |
|---|---|
| 101.8060 | 60 |
| 101.8065 | 65 |
| 101.8070 | 70 |
| 101.8075 | 75 |
| 101.8080 | 80 |
| 101.8085 | 85 |
| 101.8090 | 90 |
| 101.8095 | 95 |
| 101.8100 | 100 |
| 101.8105 | 105 |
| 101.8110 | 110 |
| 101.8115 | 115 |

Ti6Al4V - ISO 5832-3

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