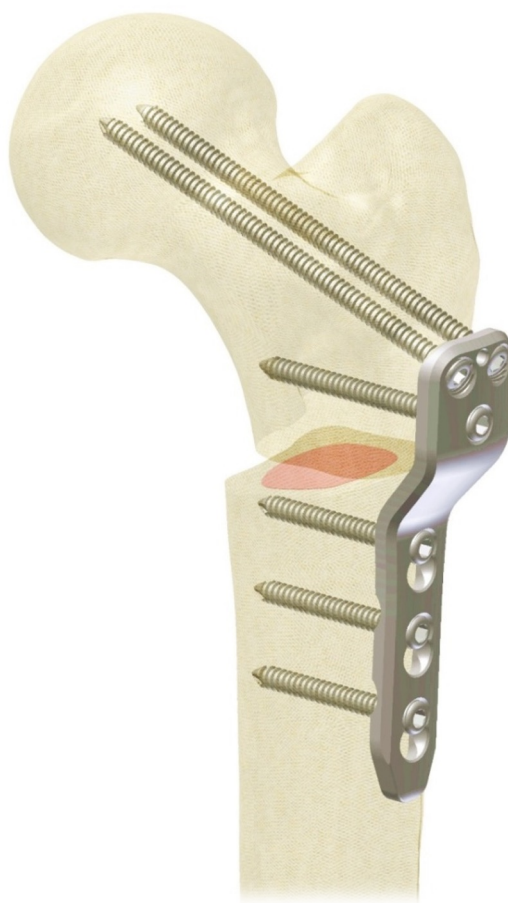


# ASTRON<sup>LCP</sup>

## Pediatric LCP Plating System

For Osteotomies and Fracture Fixation of the Proximal and Distal Femur



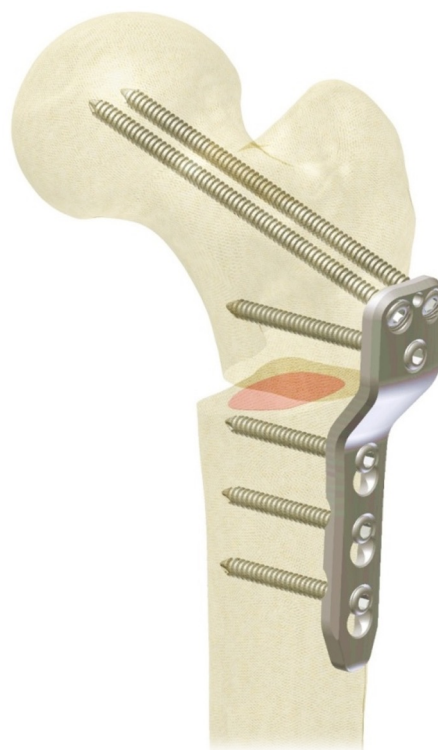
## SYSTEM OVERVIEW

The ASTRON™ Pediatric LCP Plating System is designed for stable fixation of varus, valgus or rotational osteotomies and trauma applications in pediatric orthopaedics and is designed to meet the specific requirements of pediatric orthopaedic surgery.

The ASTRON™ Pediatric LCP Plating System offers a wide range of locking compression plates with a universal design for the left and right femur. The head of the plate features threaded holes for locking screws that either angle into the femoral neck in the proximal femur or parallel to the growth plate in the distal femur in place of the traditional angled blade.

In the proximal femur plates, an additional diverging calcar screw ensures increased fixation in the bone. The 100° and 110° plates are designed with an offset for osteotomies.

Plate shafts feature limited-contact profiles and Combi holes. The Combi hole combines a dynamic compression unit (DCU) hole with a locking screw hole. Combi holes provide the choice of axial compression and locking capability throughout the length of the plate shaft.



## Features and Benefits

### Angular stability

Angular stability reduces the risk of primary and secondary loss of correction. Improved connections between screw and plate, as well as within the cortical bone, make casting unnecessary in the majority of cases.

### Intraoperative correction and flexibility

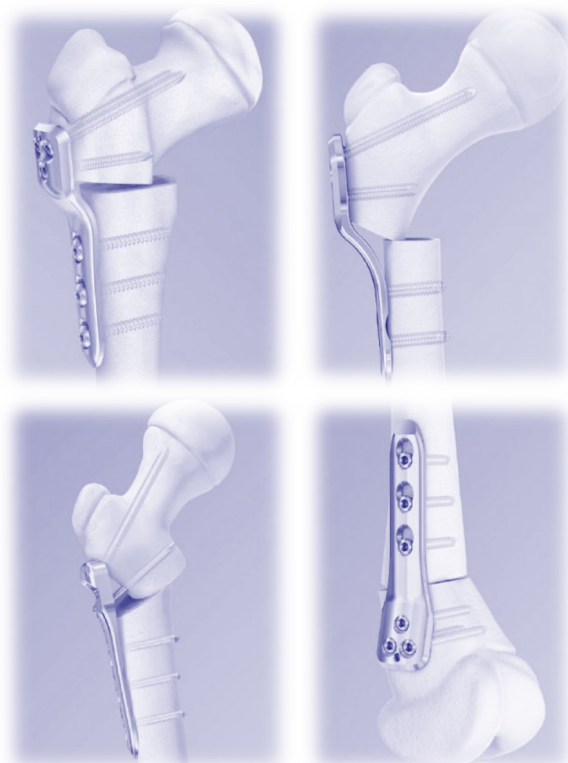
Initial plate positioning with Kirschner wires allows for intraoperative flexibility and correction. The range of plate sizes, angles and screw lengths allows optimal patient fit.

### Medialization

Additional medialization can be obtained using the 3.5 mm and 5.0 mm Pediatric LCP Plates, requiring one offset for each plate size.

### Low-profile design

Plate design and locking construct reduce muscle disruption and soft tissue irritation.



## Indications

The ASTRON™ Pediatric LCP Plating System consists of different plates for different indications.

### Pediatric LCP Hip Plate 2.7

The plate is intended for use in infants up to three years, depending on body weight and bone quality.

- Neglected dislocation of the hip in combination with open reduction
- Developmental coxa valga
- Severe hip dysplasia



### Pediatric LCP Hip Plate for varus osteotomies

The plate is intended for use in pediatric patients up to adolescence and for small-stature adult patients.

Specific indications include:

- Idiopathic valgus hip
- Idiopathic and acquired subluxation of the femoral head
- Femoral head subluxation in neuromuscular diseases/problems
- High retroversion and anteversion in combination with a high CCD-angle

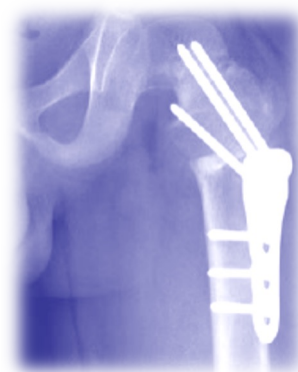


### Pediatric LCP Hip Plate for valgus osteotomies

The plate is intended for use in pediatric patients up to adolescence and for small stature adult patients.

Specific indications include:

- High riding of greater trochanter and low shortening of the leg
- Perthes' disease
- Congenital pseudarthrosis of the femoral neck Deformity of SCFE (Slipped Capital Femoral Epiphysis)
- PFFD (Proximal Femoral Focal Deficiency)
- Idiopathic coxa vara
- Posttraumatic pseudarthrosis of the femoral neck



### Pediatric LCP Hip Plate (3.5 & 5.0) 120° & 130° for fracture treatment and rotation correction

The Plate is indicated for trans-trochanteric fractures with sufficient medial support, and femoral neck fractures Type I to III (refer to AO fracture classification).



### Pediatric Condylar Plate

The Plate is intended for use in pediatric patients up to adolescence and for small-stature adult patients.

Specific indications include:

- Fixed flexion contracture of knee in neurological conditions
- Deformity correction in the distal femur
- Rotational malalignment of the femur (if distal correction preferred)
- Supracondylar fractures of the femur



# IMPLANT INFORMATION



2.7 mm Pediatric LCP Hip Plate, Angle 100°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15259002 | MOI 35259002 | 100°  | 2           | 46 mm  |

Recommended Use: Varus Osteotomies

Screws: 2.7 mm Locking Screws / 2.7 mm Cortex Screws



2.7 mm Pediatric LCP Hip Plate, Angle 110°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15260002 | MOI 35260002 | 110°  | 2           | 46 mm  |

Recommended Use: Varus Osteotomies

Screws: 2.7 mm Locking Screws / 2.7 mm Cortex Screws



2.7 mm Pediatric LCP Hip Plate, Angle 130°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15261002 | MOI 35261002 | 130°  | 2           | 46 mm  |

Recommended Use: Fracture

Screws: 2.7 mm Locking Screws / 2.7 mm Cortex Screws



2.7 mm Pediatric LCP Straight Plate, with Limited Contact

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15262005 | MOI 35262005 | 5           | 60 mm  |
| MOI 15262006 | MOI 35262006 | 6           | 70 mm  |
| MOI 15262007 | MOI 35262007 | 7           | 80 mm  |
| MOI 15262008 | MOI 35262008 | 8           | 90 mm  |
| MOI 15262009 | MOI 35262009 | 9           | 100 mm |
| MOI 15262010 | MOI 35262010 | 10          | 110 mm |

Recommended Use: Fracture

Screws: 2.7 mm Locking Screws / 2.7 mm Cortex Screws



2.7 mm Pediatric Locking Reconstruction Plate

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15263004 | MOI 35263004 | 4           | 40 mm  |
| MOI 15263005 | MOI 35263005 | 5           | 50 mm  |
| MOI 15263006 | MOI 35263006 | 6           | 60 mm  |
| MOI 15263007 | MOI 35263007 | 7           | 70 mm  |
| MOI 15263008 | MOI 35263008 | 8           | 80 mm  |
| MOI 15263009 | MOI 35263009 | 9           | 90 mm  |
| MOI 15263010 | MOI 35263010 | 10          | 100 mm |

Recommended Use: Fracture

Screws: 2.7 mm Locking Screws



### 2.7 mm Pediatric Locking T-Plate

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15264003 | MOI 35264003 | 3           | 44 mm  |
| MOI 15264004 | MOI 35264004 | 4           | 54 mm  |
| MOI 15264005 | MOI 35264005 | 5           | 64 mm  |

Recommended Use: Fracture

Screws: 2.7 mm Locking Screws



### 3.5 mm Pediatric LCP Condylar Plate, Angle 90°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15265003 | MOI 35265003 | 90°   | 3           | 75 mm  |
| MOI 15265005 | MOI 35265005 | 90°   | 5           | 101 mm |
| MOI 15265007 | MOI 35265007 | 90°   | 7           | 127 mm |

Recommended Use: Distal Femur Osteotomies and Fractures

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 100°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15719003 | MOI 35719003 | 100°  | 3           | 73 mm  |

Recommended Use: Varus Osteotomies

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 110°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH | OFFSET |
|--------------|--------------|-------|-------------|--------|--------|
| MOI 15720003 | MOI 35720003 | 110°  | 3           | 73 mm  | 8mm    |
| MOI 15289003 | MOI 35289003 | 110°  | 3           | 73 mm  | 12mm   |

Recommended Use: Varus Osteotomies

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 120°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15721004 | MOI 35721004 | 120°  | 4           | 75 mm  |

Recommended Use: Fractures

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 130°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15722003 | MOI 35722003 | 130°  | 3           | 62 mm  |
| MOI 15723005 | MOI 35723005 | 130°  | 5           | 88 mm  |
| MOI 15724007 | MOI 35724007 | 130°  | 7           | 114 mm |
| MOI 15268009 | MOI 35268009 | 130°  | 9           | 140 mm |

Recommended Use: Fractures

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 140°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15725003 | MOI 35725003 | 140°  | 3           | 73 mm  |

Recommended Use: Valgus Osteotomies

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Hip Plate, Angle 150°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15726003 | MOI 35726003 | 150°  | 3           | 70 mm  |

Recommended Use: Valgus Osteotomies

Screws: 3.5 mm Locking Screws / 3.5 mm Cortex Screws



### 3.5 mm Pediatric LCP Straight Plate, with Limited Contact

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15271005 | MOI 35271005 | 5           | 60 mm  |
| MOI 15271006 | MOI 35271006 | 6           | 70 mm  |
| MOI 15271007 | MOI 35271007 | 7           | 80 mm  |
| MOI 15271008 | MOI 35271008 | 8           | 90 mm  |
| MOI 15271009 | MOI 35271009 | 9           | 100 mm |
| MOI 15271010 | MOI 35271010 | 10          | 110 mm |
| MOI 15271012 | MOI 35271012 | 12          | 130 mm |

Recommended Use: Fracture

Screws: 3.5 mm Locking Screws



### 3.5 mm Pediatric Locking Reconstruction Plate

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15272005 | MOI 35272005 | 5           | 50 mm  |
| MOI 15272006 | MOI 35272006 | 6           | 60 mm  |
| MOI 15272007 | MOI 35272007 | 7           | 70 mm  |
| MOI 15272008 | MOI 35272008 | 8           | 80 mm  |
| MOI 15272010 | MOI 35272010 | 10          | 100 mm |
| MOI 15272012 | MOI 35272012 | 12          | 120 mm |

Recommended Use: Fracture

Screws: 3.5 mm Locking Screws



### 3.5 mm Pediatric Locking T-Plate

| REF (S.S)    | REF (TIT)    | SHAFT HOLES | LENGTH |
|--------------|--------------|-------------|--------|
| MOI 15273003 | MOI 35273003 | 3           | 54 mm  |
| MOI 15273005 | MOI 35273005 | 5           | 78 mm  |
| MOI 15273007 | MOI 35273007 | 7           | 102 mm |

Recommended Use: Fracture

Screws: 3.5 mm Locking Screws



### 3.5 mm Pediatric Locking L-Plate

| REF (S.S)    | REF (TIT)    | R/L   | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15274003 | MOI 35274003 | Right | 3           | 54 mm  |
| MOI 15274005 | MOI 35274005 | Right | 5           | 78 mm  |
| MOI 15274007 | MOI 35274007 | Right | 7           | 102 mm |
| MOI 15275003 | MOI 35275003 | Left  | 3           | 54 mm  |
| MOI 15275005 | MOI 35275005 | Left  | 5           | 78 mm  |
| MOI 15275007 | MOI 35275007 | Left  | 7           | 102 mm |

Recommended Use: Fracture

Screws: 3.5 mm Locking Screws



### 5.0 mm Pediatric LCP Condylar Plate, Angle 90°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15276003 | MOI 35276003 | 90°   | 3           | 95 mm  |
| MOI 15276005 | MOI 35276005 | 90°   | 5           | 127 mm |
| MOI 15276007 | MOI 35276007 | 90°   | 7           | 159 mm |

Recommended Use: Distal Femur Osteotomies and Fractures

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



### 5.0 mm Pediatric LCP Hip Plate, Angle 100°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15727003 | MOI 35727003 | 100°  | 3           | 90 mm  |

Recommended Use: Varus Osteotomies

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



### 5.0 mm Pediatric LCP Hip Plate, Angle 110°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH | OFFSET |
|--------------|--------------|-------|-------------|--------|--------|
| MOI 15728003 | MOI 35728003 | 110°  | 3           | 90 mm  | 8 mm   |
| MOI 15290003 | MOI 35290003 | 110°  | 3           | 90 mm  | 14 mm  |

Recommended Use: Varus Osteotomies

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



#### 5.0 mm Pediatric LCP Hip Plate, Angle 120°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15729004 | MOI 35729004 | 120°  | 4           | 95 mm  |

Recommended Use: Fractures

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



#### 5.0 mm Pediatric LCP Hip Plate, Angle 130°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15730003 | MOI 35730003 | 130°  | 3           | 79 mm  |
| MOI 15731005 | MOI 35731005 | 130°  | 5           | 111 mm |
| MOI 15732007 | MOI 35732007 | 130°  | 7           | 143 mm |
| MOI 15279009 | MOI 35279009 | 130°  | 9           | 175 mm |

Recommended Use: Fractures

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



#### 5.0 mm Pediatric LCP Hip Plate, Angle 140°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15733003 | MOI 35733003 | 140°  | 3           | 90 mm  |

Recommended Use: Valgus Osteotomies

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws

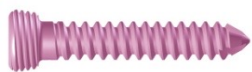


#### 5.0 mm Pediatric LCP Hip Plate, Angle 150°

| REF (S.S)    | REF (TIT)    | ANGLE | SHAFT HOLES | LENGTH |
|--------------|--------------|-------|-------------|--------|
| MOI 15734003 | MOI 35734003 | 150°  | 3           | 74 mm  |

Recommended Use: Valgus Osteotomies

Screws: 5.0 mm Locking Screws / 4.5 mm Cortex Screws



## 2.7 mm Locking Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 15224008 | MOI 35224008 | 8      |
| MOI 15224010 | MOI 35224010 | 10     |
| MOI 15224012 | MOI 35224012 | 12     |
| MOI 15224014 | MOI 35224014 | 14     |
| MOI 15224016 | MOI 35224016 | 16     |
| MOI 15224018 | MOI 35224018 | 18     |
| MOI 15224020 | MOI 35224020 | 20     |
| MOI 15224022 | MOI 35224022 | 22     |
| MOI 15224024 | MOI 35224024 | 24     |
| MOI 15224026 | MOI 35224026 | 26     |
| MOI 15224028 | MOI 35224028 | 28     |
| MOI 15224030 | MOI 35224030 | 30     |
| MOI 15224032 | MOI 35224032 | 32     |
| MOI 15224034 | MOI 35224034 | 34     |
| MOI 15224036 | MOI 35224036 | 36     |
| MOI 15224038 | MOI 35224038 | 38     |
| MOI 15224040 | MOI 35224040 | 40     |
| MOI 15224042 | MOI 35224042 | 42     |
| MOI 15224044 | MOI 35224044 | 44     |
| MOI 15224046 | MOI 35224046 | 46     |
| MOI 15224048 | MOI 35224048 | 48     |
| MOI 15224050 | MOI 35224050 | 50     |
| MOI 15224055 | MOI 35224055 | 55     |
| MOI 15224060 | MOI 35224060 | 60     |



## 2.7 mm Cortex Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 12056010 | MOI 32056010 | 10     |
| MOI 12056012 | MOI 32056012 | 12     |
| MOI 12056014 | MOI 32056014 | 14     |
| MOI 12056016 | MOI 32056016 | 16     |
| MOI 12056018 | MOI 32056018 | 18     |
| MOI 12056020 | MOI 32056020 | 20     |
| MOI 12056022 | MOI 32056022 | 22     |
| MOI 12056024 | MOI 32056024 | 24     |
| MOI 12056026 | MOI 32056026 | 26     |
| MOI 12056028 | MOI 32056028 | 28     |
| MOI 12056030 | MOI 32056030 | 30     |
| MOI 12056032 | MOI 32056032 | 32     |
| MOI 12056034 | MOI 32056034 | 34     |
| MOI 12056036 | MOI 32056036 | 36     |
| MOI 12056038 | MOI 32056038 | 38     |
| MOI 12056040 | MOI 32056040 | 40     |
| MOI 12056042 | MOI 32056042 | 42     |
| MOI 12056044 | MOI 32056044 | 44     |
| MOI 12056046 | MOI 32056046 | 46     |
| MOI 12056048 | MOI 32056048 | 48     |
| MOI 12056050 | MOI 32056050 | 50     |
| MOI 12056055 | MOI 32056055 | 55     |
| MOI 12056060 | MOI 32056060 | 60     |



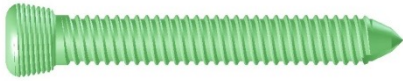
## 3.5 mm Locking Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 15228018 | MOI 35228018 | 18     |
| MOI 15228020 | MOI 35228020 | 20     |
| MOI 15228022 | MOI 35228022 | 22     |
| MOI 15228024 | MOI 35228024 | 24     |
| MOI 15228026 | MOI 35228026 | 26     |
| MOI 15228028 | MOI 35228028 | 28     |
| MOI 15228030 | MOI 35228030 | 30     |
| MOI 15228032 | MOI 35228032 | 32     |
| MOI 15228034 | MOI 35228034 | 34     |
| MOI 15228036 | MOI 35228036 | 36     |
| MOI 15228038 | MOI 35228038 | 38     |
| MOI 15228040 | MOI 35228040 | 40     |
| MOI 15228045 | MOI 35228045 | 45     |
| MOI 15228050 | MOI 35228050 | 50     |
| MOI 15228055 | MOI 35228055 | 55     |
| MOI 15228060 | MOI 35228060 | 60     |



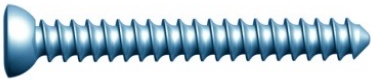
## 3.5 mm Cortex Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 13500018 | MOI 33500018 | 18     |
| MOI 13500020 | MOI 33500020 | 20     |
| MOI 13500022 | MOI 33500022 | 22     |
| MOI 13500024 | MOI 33500024 | 24     |
| MOI 13500026 | MOI 33500026 | 26     |
| MOI 13500028 | MOI 33500028 | 28     |
| MOI 13500030 | MOI 33500030 | 30     |
| MOI 13500032 | MOI 33500032 | 32     |
| MOI 13500034 | MOI 33500034 | 34     |
| MOI 13500036 | MOI 33500036 | 36     |
| MOI 13500038 | MOI 33500038 | 38     |
| MOI 13500040 | MOI 33500040 | 40     |



5.0 mm Locking Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 15227020 | MOI 35227020 | 20     |
| MOI 15227022 | MOI 35227022 | 22     |
| MOI 15227024 | MOI 35227024 | 24     |
| MOI 15227026 | MOI 35227026 | 26     |
| MOI 15227028 | MOI 35227028 | 28     |
| MOI 15227030 | MOI 35227030 | 30     |
| MOI 15227032 | MOI 35227032 | 32     |
| MOI 15227034 | MOI 35227034 | 34     |
| MOI 15227036 | MOI 35227036 | 36     |
| MOI 15227038 | MOI 35227038 | 38     |
| MOI 15227040 | MOI 35227040 | 40     |
| MOI 15227045 | MOI 35227045 | 45     |
| MOI 15227050 | MOI 35227050 | 50     |
| MOI 15227055 | MOI 35227055 | 55     |
| MOI 15227060 | MOI 35227060 | 60     |
| MOI 15227065 | MOI 35227065 | 65     |
| MOI 15227070 | MOI 35227070 | 70     |
| MOI 15227075 | MOI 35227075 | 75     |
| MOI 15227080 | MOI 35227080 | 80     |



4.5 mm Cortex Screws

| REF (S.S)    | REF (TIT)    | LENGTH |
|--------------|--------------|--------|
| MOI 14600020 | MOI 34600020 | 20     |
| MOI 14600022 | MOI 34600022 | 22     |
| MOI 14600024 | MOI 34600024 | 24     |
| MOI 14600026 | MOI 34600026 | 26     |
| MOI 14600028 | MOI 34600028 | 28     |
| MOI 14600030 | MOI 34600030 | 30     |
| MOI 14600032 | MOI 34600032 | 32     |
| MOI 14600034 | MOI 34600034 | 34     |
| MOI 14600036 | MOI 34600036 | 36     |
| MOI 14600038 | MOI 34600038 | 38     |
| MOI 14600040 | MOI 34600040 | 40     |
| MOI 14600042 | MOI 34600042 | 42     |
| MOI 14600044 | MOI 34600044 | 44     |
| MOI 14600046 | MOI 34600046 | 46     |
| MOI 14600048 | MOI 34600048 | 48     |
| MOI 14600050 | MOI 34600050 | 50     |



## USA OFFICE

2404 Hollywood Blvd.  
Hollywood, FL 33020

## PUERTO RICO OFFICE

1660 Santa Ana Street  
Esq. Fidalgo Diaz,  
San Juan, Puerto Rico 00909

E-mail: [info@madisonorthoinc.com](mailto:info@madisonorthoinc.com)  
Website: [www.madisonorthoinc.com](http://www.madisonorthoinc.com)

