MatrixNEURO. The next generation cranial plating system.

Low plate/screw profile

Rapid screw insertion

Compact and flexible modules
**Introduction**
The aim of surgical fracture treatment is to reconstruct the bony anatomy and restore its function. According to the AO, internal fixation is distinguished by precise reduction, stable fixation, preservation of blood supply and early mobilization. Plate and screw osteosynthesis has been established and clinically recognized for some time. Keeping the AO philosophy at its core, Matrix is a plating platform for internal fixation of the craniomaxillofacial skeleton—addressing neuro, craniofacial, mandibular and orthognathic surgery. Matrix is a streamlined, comprehensive system that offers flexibility, ease of use, and the highest quality implants and instruments.

**Indications**
The MatrixNEURO Plate and Screw System is intended for use in selective trauma of the midface and craniofacial skeleton; craniofacial surgery; reconstructive procedures; and selective orthognathic surgery of the maxilla and chin.

**MR information**
The MatrixNEURO Cranial Plating System has not been evaluated for safety and compatibility in the MR environment. The MatrixNEURO Cranial Plating System has not been tested for heating or migration in the MR environment.
MatrixNEURO Cranial Plating System
- Low plate/screw profile of 0.5 mm for minimal implant palpability
- Self-drilling screws for fast closure of bone flaps and rapid fixation of cranial fractures
- Screwdriver blade provides secure, reliable screw/blade retention

MatrixNEURO Self-drilling Screws
- Unique thread design for rapid screw starting and low insertion torque
- Available in 3 mm through 5 mm lengths
- For use with all MatrixNEURO plates and mesh
MatrixNEURO Plates
- Plates are only 0.4 mm thick
- Full selection of titanium plates and burr hole covers

MatrixNEURO Ultra Low Profile Plates
- Plate profile 0.3 mm, overall plate/screw profile 0.4 mm
- Low profile preserves patient cosmesis
- Chamfered edges and wide plate profile for virtually no palpability
- Construct stiffness and strength comparable to MatrixNEURO plates
- Color coded (light green) for easy identification
- For use with MatrixNEURO self-drilling screws
MatrixNEURO Contourable Mesh
- Available in a variety of shapes and sizes
- Design allows screw placement through either side of mesh
- Color-coded based on strength characteristic:
  - Silver (0.4 mm thick, malleable)
  - Blue (0.4 mm thick, rigid)
  - Pink (0.6 mm thick, rigid)

Mesh strength gradient
## Module and Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>01.503.104</td>
<td>MatrixNEURO Implant and Instrument Set</td>
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<tr>
<td>304.103W</td>
<td>Screw Length Marker, for 3 mm self-drilling screws</td>
</tr>
<tr>
<td>304.104W</td>
<td>Screw Length Marker, for 4 mm self-drilling screws</td>
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<td>304.105W</td>
<td>Screw Length Marker, for 5 mm self-drilling screws</td>
</tr>
<tr>
<td>306.501</td>
<td>MatrixNEURO Compact Module</td>
</tr>
<tr>
<td>306.502</td>
<td>MatrixNEURO Instrument Module</td>
</tr>
<tr>
<td>306.507</td>
<td>Plate Insert, adjustable, for MatrixNEURO Implant Module</td>
</tr>
<tr>
<td>306.512</td>
<td>Screw Insert, for MatrixNEURO Implant Module</td>
</tr>
<tr>
<td>306.522</td>
<td>Label Sheet for MatrixNEURO Module</td>
</tr>
<tr>
<td>306.532</td>
<td>Neuro Insert Tray, for MatrixNEURO Instruments</td>
</tr>
<tr>
<td>306.533</td>
<td>Neuro Insert Tray, for MatrixNEURO Instruments and Battery Powered Driver</td>
</tr>
<tr>
<td>306.546</td>
<td>Ultra Low Profile Plate Insert, for MatrixNEURO Module</td>
</tr>
<tr>
<td>306.547</td>
<td>Ultra Low Profile Label Sheet, for MatrixNEURO Module</td>
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</table>

*For detailed cleaning and sterilization instructions, please refer to: [www.synthes.com/cleaning-sterilization](http://www.synthes.com/cleaning-sterilization).

In Canada, the cleaning and sterilization instructions will be provided with the Loaner shipments.
## Trays and Accessories

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<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>304.760</td>
<td>Universal Instrument Tray, large, deep</td>
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<tr>
<td>304.761*</td>
<td>Neuro Instrument Tray Lid, large</td>
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<td>306.512</td>
<td>Screw Insert, for MatrixNEURO Implant Module (shown installed in module 306.501)</td>
</tr>
<tr>
<td>306.532</td>
<td>Neuro Insert Tray, for MatrixNEURO Instruments</td>
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<table>
<thead>
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<tr>
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<tr>
<td>304.761*</td>
<td>Neuro Instrument Tray Lid, large</td>
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<tr>
<td>306.507</td>
<td>Plate Insert, adjustable, for MatrixNEURO Implant Module (shown installed in module 306.501)</td>
</tr>
<tr>
<td>306.533</td>
<td>Neuro Insert Tray, for MatrixNEURO Instruments and BPD</td>
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<table>
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<td>304.772*</td>
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<td>304.773</td>
<td>Neuro Insert Tray, for Cranial Clamps</td>
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<td>Neuro Insert Tray, for MatrixNEURO Instruments and BPD</td>
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* Lids not shown
## Titanium MatrixNEURO Screws

**Self-drilling**

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<th>Pack Size</th>
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<tbody>
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<td>04.503.105.05</td>
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<td>04.503.103.20</td>
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## Titanium MatrixNEURO Ultra Low Profile Plates

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<th>Description</th>
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<tbody>
<tr>
<td>04.502.061</td>
<td>Straight Plate, 2 holes, 9 mm</td>
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<tr>
<td>04.502.062</td>
<td>Straight Plate, 2 holes, 12 mm</td>
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<tr>
<td>04.502.063</td>
<td>Straight Plate, 4 holes</td>
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<tr>
<td>04.502.064</td>
<td>X-Plate</td>
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<tr>
<td>04.502.065</td>
<td>Box Plate, 14 mm x 14 mm</td>
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<tr>
<td>04.502.068</td>
<td>Double Y-Plate, 6 holes, 18 mm</td>
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<td>04.502.073</td>
<td>Box Plate, 10 mm x 16 mm</td>
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<tr>
<td>04.502.074</td>
<td>Strut Plate, 2 x 3 holes</td>
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## Titanium MatrixNEURO Plates

<table>
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<td>04.503.062</td>
<td>Straight Plate, 2 holes, 12 mm, blue</td>
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<td>Straight Plate, 4 holes, 24 mm, blue</td>
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<td>04.503.064</td>
<td>X-Plate, blue</td>
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<tr>
<td>04.503.065</td>
<td>Box Plate, 14 mm x 14 mm, blue</td>
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<tr>
<td>04.503.066</td>
<td>Box Plate, 16 mm x 16 mm, blue</td>
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<td>04.503.073</td>
<td>Box Plate, 10 mm x 16 mm, blue</td>
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<td>04.503.067</td>
<td>Y-Plate, 5 holes, blue</td>
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<td>04.503.068</td>
<td>Double Y-Plate, 6 holes, 18 mm, blue</td>
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<td>04.503.069</td>
<td>Double Y-Plate, 6 holes, 21 mm, blue</td>
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<td>Adaption Plate, 5 holes, blue</td>
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<td>Adaption Plate, 7 holes, blue</td>
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<td>Adaption Plate, 20 holes, blue</td>
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<td>04.503.074</td>
<td>Strut Plate, 2 x 3 holes, blue</td>
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<td>Strut Plate, 2 x 4 holes, blue</td>
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<td>04.503.077</td>
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## Titanium MatrixNEURO Ultra Low Profile Burr Hole Covers

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<td>04.502.022</td>
<td>Burr Hole Cover, 15 mm</td>
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<tr>
<td>04.502.023</td>
<td>Burr Hole Cover, 17 mm</td>
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<td>04.502.024</td>
<td>Burr Hole Cover, 24 mm</td>
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<tr>
<td>04.502.028</td>
<td>Burr Hole Cover, 17 mm, for shunt</td>
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## Titanium MatrixNEURO Burr Hole Covers

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>04.503.021</td>
<td>12 mm, blue</td>
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<tr>
<td>04.503.022</td>
<td>15 mm, blue</td>
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<tr>
<td>04.503.023</td>
<td>17 mm, blue</td>
<td></td>
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<tr>
<td>04.503.024</td>
<td>24 mm, blue</td>
<td></td>
</tr>
<tr>
<td>04.503.028</td>
<td>17 mm, for shunt, blue</td>
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## Titanium MatrixNEURO Contourable Mesh

<table>
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<tr>
<td>04.503.056</td>
<td>Strut Mesh, silver, malleable</td>
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<td>04.503.057</td>
<td>Temporal Mesh, medium, silver, malleable</td>
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<tr>
<td>04.503.096</td>
<td>Mastoid, small, silver, malleable</td>
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</tr>
<tr>
<td>04.503.097</td>
<td>Mastoid, medium, silver, malleable</td>
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<tr>
<td>04.503.098</td>
<td>Mastoid, large, silver, malleable</td>
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<tr>
<td>04.503.120</td>
<td>38 mm x 45 mm</td>
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</tr>
<tr>
<td>04.503.121</td>
<td>100 mm x 100 mm</td>
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</tr>
<tr>
<td>04.503.122</td>
<td>200 mm x 200 mm</td>
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</tr>
<tr>
<td>04.503.122S</td>
<td>200 mm x 200 mm, sterile</td>
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<tr>
<td>04.503.123</td>
<td>Small arc</td>
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<tr>
<td>04.503.124</td>
<td>Large arc</td>
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<tr>
<td>04.503.125</td>
<td>30 mm diameter</td>
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<tr>
<td>04.503.126</td>
<td>70 mm diameter</td>
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</tr>
<tr>
<td>04.503.127</td>
<td>100 mm diameter</td>
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## Titanium MatrixNEURO Contourable Mesh

<table>
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<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>04.503.082</td>
<td>0.4 mm Rigid Mesh, blue 38 mm x 45 mm</td>
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<tr>
<td>04.503.084</td>
<td>0.4 mm Rigid Mesh, blue 100 mm x 100 mm</td>
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<tr>
<td>04.503.085◊</td>
<td>0.4 mm Malleable Mesh, blue 200 mm x 200 mm</td>
</tr>
<tr>
<td>04.503.088</td>
<td>0.4 mm Malleable Mesh, blue Small arc</td>
</tr>
<tr>
<td>04.503.089</td>
<td>0.4 mm Malleable Mesh, blue Large arc</td>
</tr>
<tr>
<td>04.503.093</td>
<td>0.4 mm Malleable Mesh, blue 30 mm diameter</td>
</tr>
<tr>
<td>04.503.094</td>
<td>0.4 mm Malleable Mesh, blue 70 mm diameter</td>
</tr>
<tr>
<td>04.503.095</td>
<td>0.4 mm Malleable Mesh, blue 100 mm diameter</td>
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</tbody>
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◊ Available sterile or nonsterile. Add S to part number for sterile product.

## MatrixNEURO Instruments

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<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>03.503.016</td>
<td>MatrixNEURO Screwdriver Blade, hex coupling, self-retaining, short</td>
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<tr>
<td>03.503.017</td>
<td>MatrixNEURO Screwdriver Blade, hex coupling, self-retaining, medium</td>
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<tr>
<td>03.503.030</td>
<td>Mini Plate Bender, locking</td>
</tr>
<tr>
<td>03.503.031</td>
<td>Mini Plate Bender, nonlocking</td>
</tr>
<tr>
<td>03.503.032</td>
<td>Mini Plate Holder, short</td>
</tr>
<tr>
<td>03.503.033</td>
<td>Mesh Cutting Scissors, short nose</td>
</tr>
<tr>
<td>03.503.034</td>
<td>Mini Plate Holder, long</td>
</tr>
<tr>
<td>03.503.037</td>
<td>Mesh Cutting Scissors, long nose</td>
</tr>
<tr>
<td>311.005</td>
<td>Screwdriver Handle with hex coupling, small</td>
</tr>
<tr>
<td>311.006</td>
<td>Screwdriver Handle with hex coupling, medium</td>
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<tr>
<td>311.007</td>
<td>Screwdriver Handle with hex coupling, large</td>
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<tr>
<td>316.624</td>
<td>1.1 mm Drill Bit, hex coupling, 4 mm stop</td>
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<tr>
<td>317.14</td>
<td>1.1 mm Drill Bit, Stryker J-latch, 4 mm stop</td>
</tr>
</tbody>
</table>

*Some devices listed in this technique guide may not have been licensed in accordance with Canadian law and may not be for sale in Canada. Please contact your Sales Consultant for items approved for sale in Canada.*