

# VALKYRIE™

Thoracic Fixation System

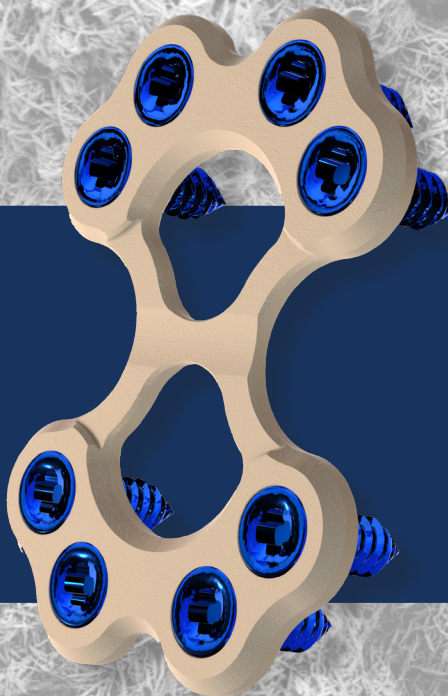
PRODUCT INTRODUCTION

# VALKYRIE™

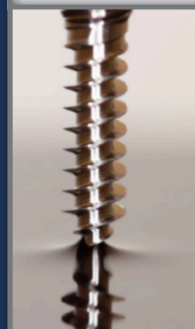
## Thoracic Fixation System

### SYSTEM BENEFITS

- Single Use System
- Clinically Proven
- Extremely Easy to Use
- Osteoporotic Indications\*



TRADITIONAL



VALKYRIE

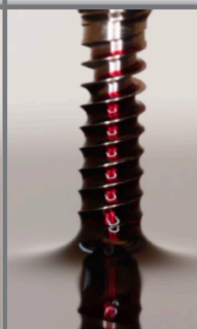


FIGURE A

**MORE BONE. FASTER.** Valkyrie's HAnano surface on the screws combine several properties known to improve osseointegration in one unique surface modification. The combination of high wettability and optimal surface chemistry with optimized nano-roughness, mediates bioactivity and specific protein adsorption to the implant (Figure A). These properties regulate cell behavior and influence tissue regeneration by increasing the osteoblast functions, thus building more bone faster.

### PEEK PLATES

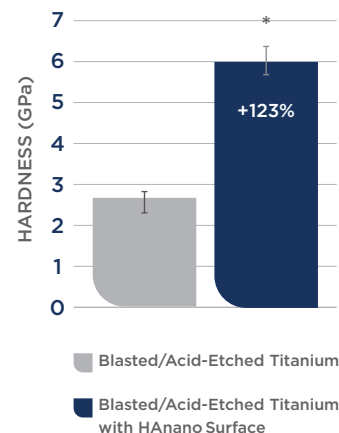
- Low profile radiolucent plate
- Patient specific contouring (without the need for plate bending tools)
- Easily cut for emergent re-entry (without heavy plate cutters)
- Similar stiffness to native bone prevents stress shielding
- Zero-chance cross threading design

### HAnano-MODIFIED TITANIUM SCREWS

- Double lead threads reduce insertion time (39% less time compared to standard screws)
- Stab-and-grab retention
- Surface-modified screws compared to traditional non-treated screws\*
  - Minimal fusion times (2 week osseointegration begins)
  - Increased screw retention (67%)
  - Increased bone strength (123%)
  - Clinical evidence (300,000+ implants, 30+ in vivo and in vitro studies)
  - Minimal concern of delamination (2000-4000 times thinner than traditional coatings)

### SINGLE USE INSTRUMENTATION

- Eliminates steps in the O.R.
- Power Driver option minimizes O.R. time
- Disposable instrument eliminate reprocessing and potential infection
- Driver also acts as screw measurement device guaranteeing optimal screw length every time and eliminating guesswork



Valkyrie's surface modification catalyzes the biological response and has proven to accelerate osseointegration of implants to enhance early bone growth in more than 30 pre-clinical studies. The nano-thin surface modification has been shown to increase the anchoring of titanium implants by 35% and increase tissue density by 123% at 3 weeks.

\* Complete labeling and technical data available at Able Medical.