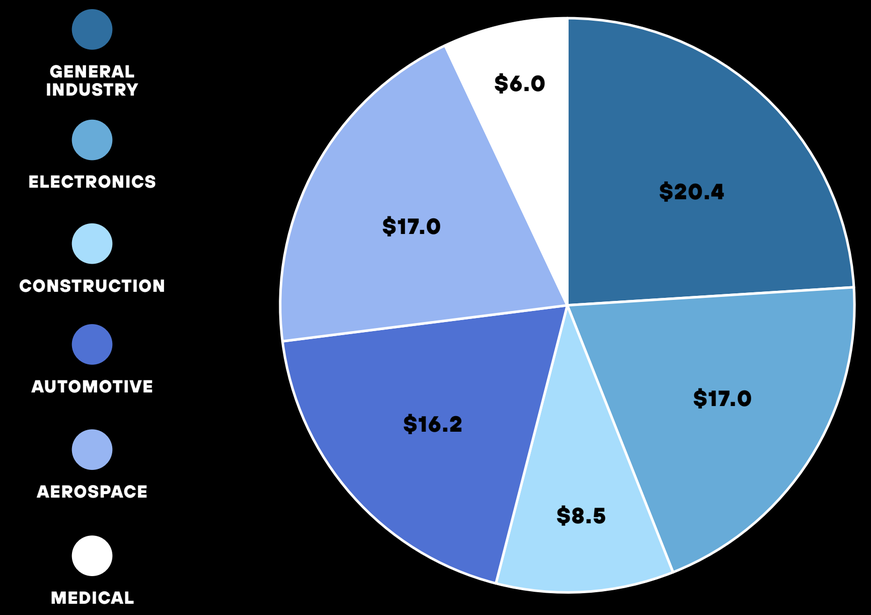
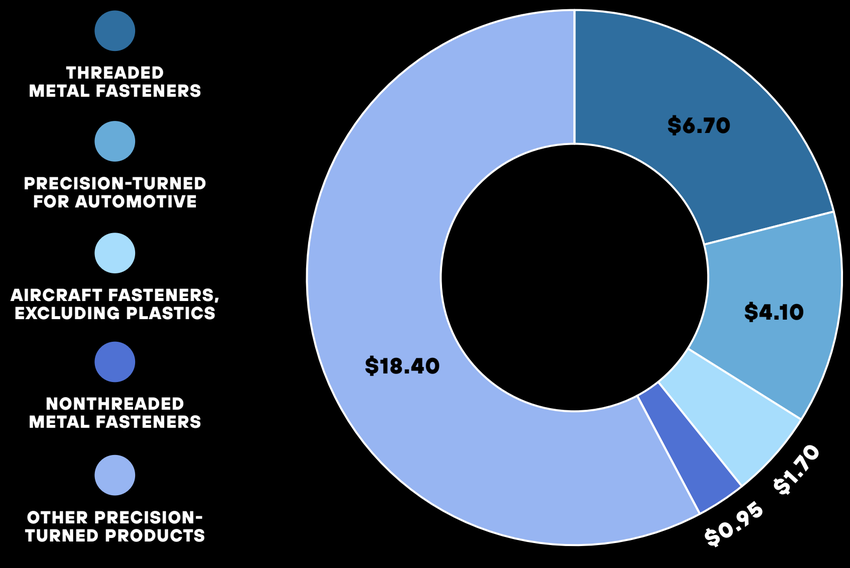

UnifiM.I.™
AGRICULTURE, LLC
A FASTENER TECHNOLOGY COMPANY

INDUSTRY BREAKDOWN FOR FASTENERS

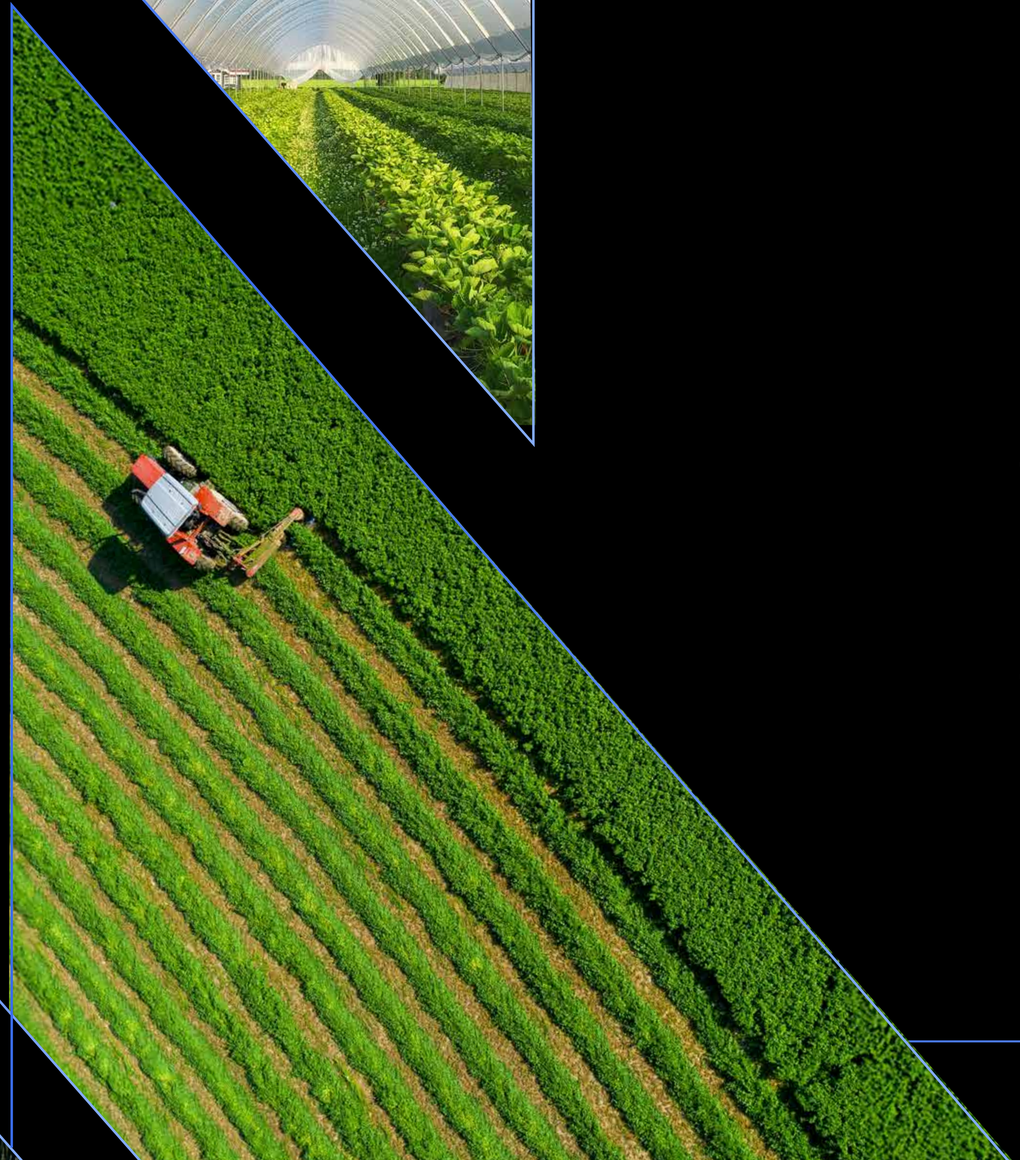
GLOBAL FASTENER SEGMENTS - $85B



2024 REVENUE ($B)



IBISWorld | Screw, Nut & Bolt Manufacturing in the US | May 2024
StanleyBlack&Decker| Investor Presentation| August 2024



EXPERIENCE MATTERS

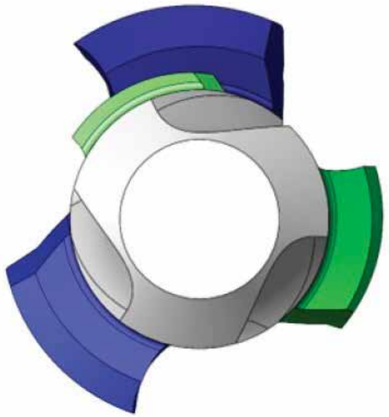
UNIFI*M.I.* FASTENER TECHNOLOGY TRANSFORMED THE MEDICAL DEVICE INDUSTRY.

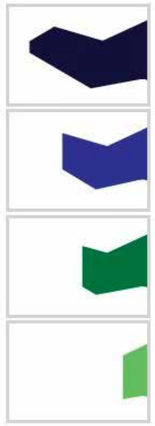
UTILIZED DAILY BY EXPERT SURGEONS 100 UNIVERSITY HOSPITALS TO MAINTAIN IMPLANT STABILITY.

UNIFI*M.I.* PERFORMANCE CAPABILITIES

- PRESERVE THE SUBSTRATE
- INSTANTLY INTERLOCK TO THE PRESERVED SUBSTRATE
- MAINTAIN STABILITY OVER TIME

SUBSTRATE PRESERVING TAP





EXPERIENCE THE DIFFERENCE

CONVENTIONAL 'BUTTRESS' THREADS VS. UNIFIM.I. THREADS

INSERTION TEST

CONVENTIONAL 'BUTTRESS' THREAD FORM

Conventional

- Crushes and plows during insertion
- Creates a damaged and unstable interface

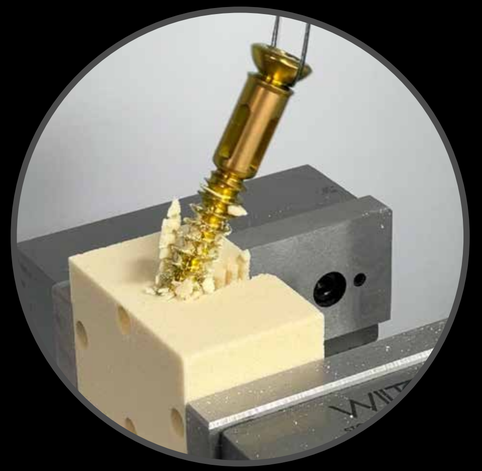
UNIFI*M.I.* THREAD FORM

Unifi*M.I.*

- Cleanly prepares and preserves during insertion
- Creates a stable and mechanically integrated interface

PULL TEST

CONVENTIONAL 'BUTTRESS' THREAD FORM



Conventional

- Non-integrated
- Interface crushed and fractured
- Limited load resistance on tension side

UNIFI*M.I.* THREAD FORM

Unifi*M.I.*

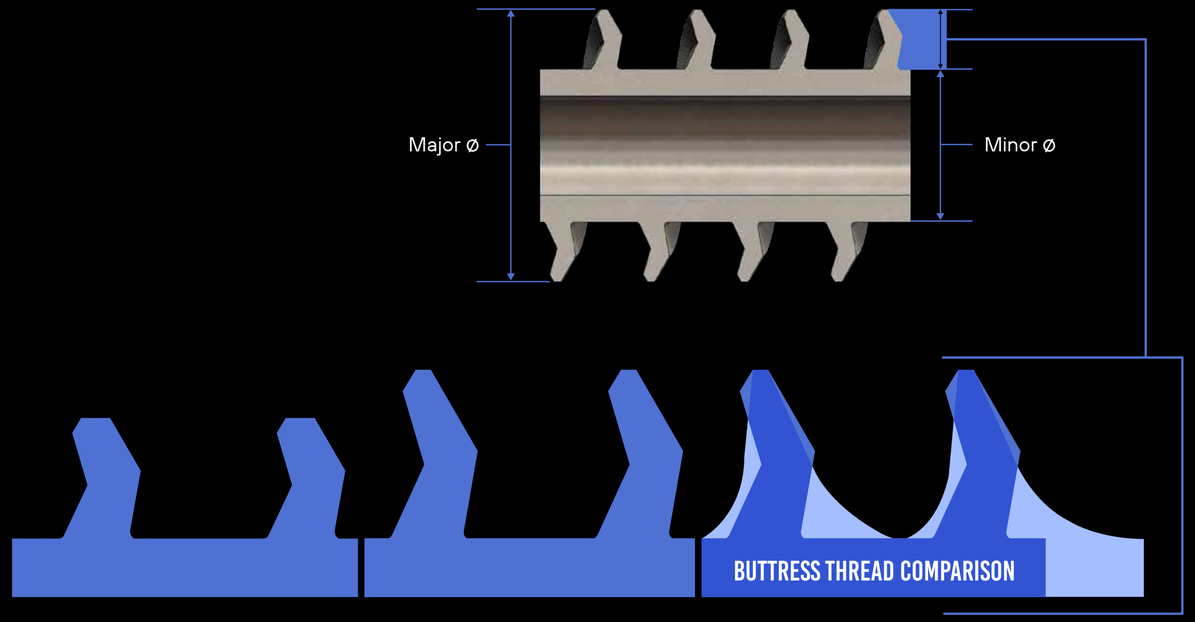
- Integrated circumferentially
- Interface preserved and maintained
- Full load resistance on tension side via MI

ADAPTABLE CHARACTERISTICS

BY SUBSTRATE APPLICATION

Ability to control interface depending upon:

- Material Demands
- Application Needs



PERFORMANCE DRIVEN DESIGN

UNIFI*M.I.* THREAD FORM

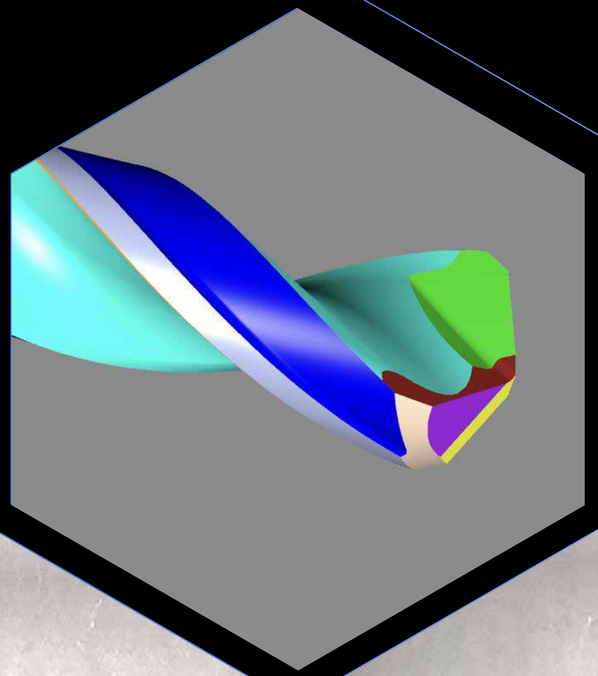
CONVENTIONAL ‘BUTTRESS’ THREAD FORM

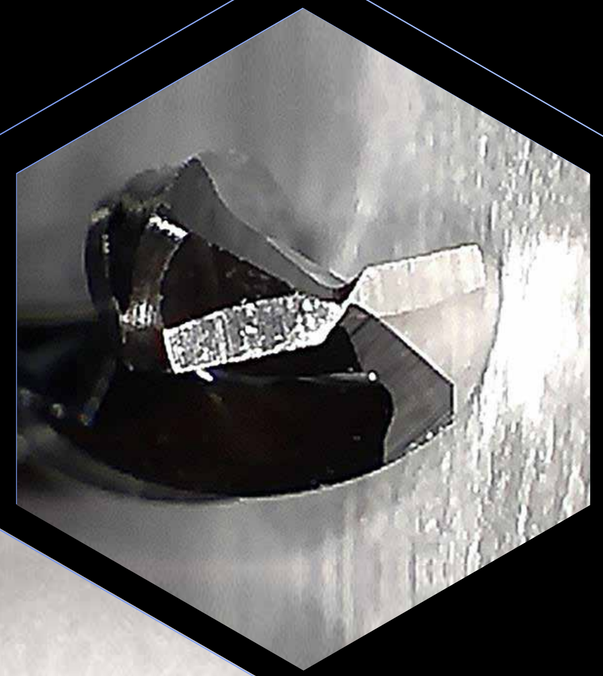
DRILL OPTIMIZATION

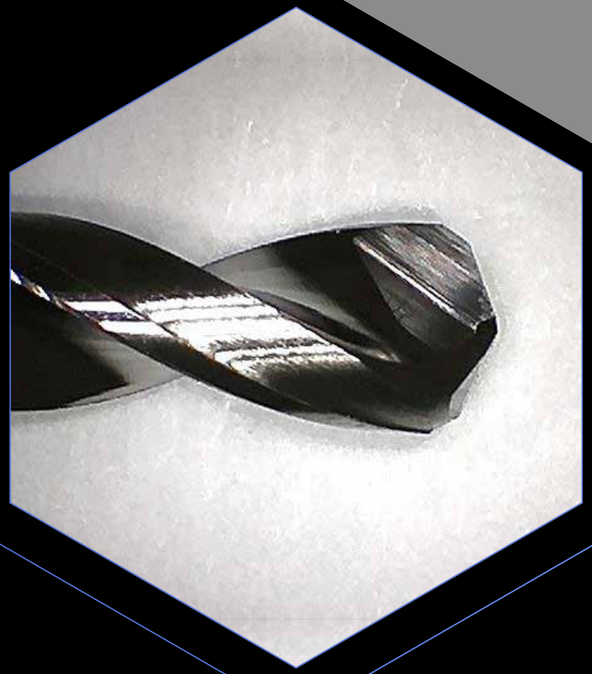
- TIP ANGLE
- SPLIT POINT
- PRIMARY & SECONDARY RELIEF
- CORNER CHAMFER
- FLUTE HELICAL ANGLE
- FLUTE EDGE BREAK
- FLUTE MARGIN

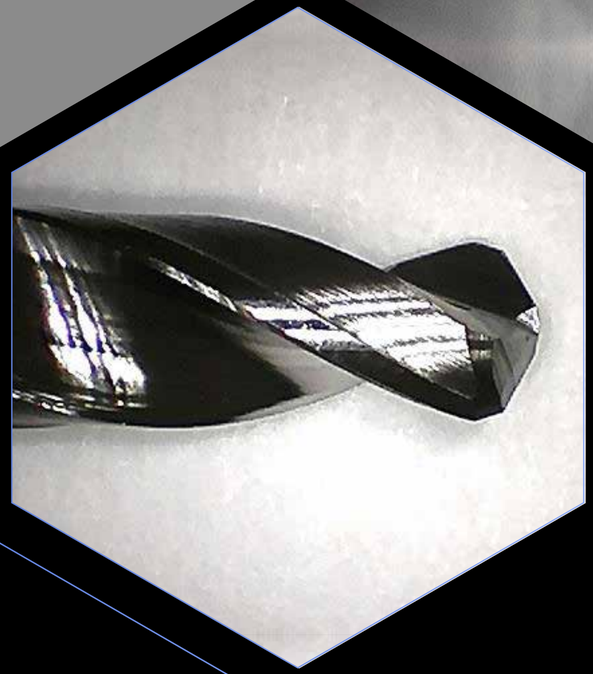
RESULTING IN

- MORE ACCURATE HOLE SIZE
- FASTER DRILLING SPEED
- LOWER HEAT GENERATION





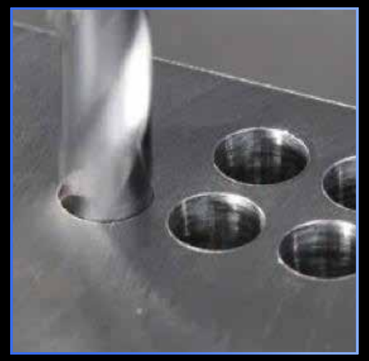




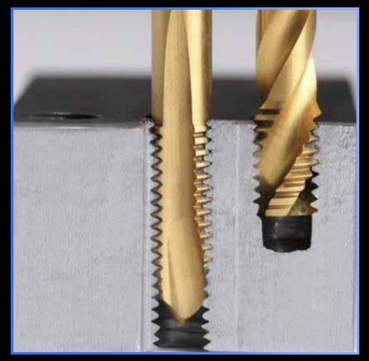
LEVERAGING KNOWLEDGE

APPLICATION OF INTELLECTUAL PROPERTY

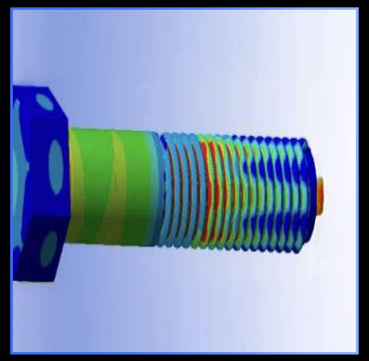
DRILLING



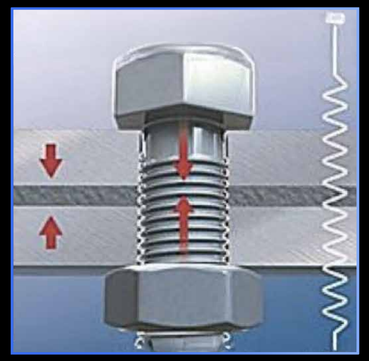
TAPPING

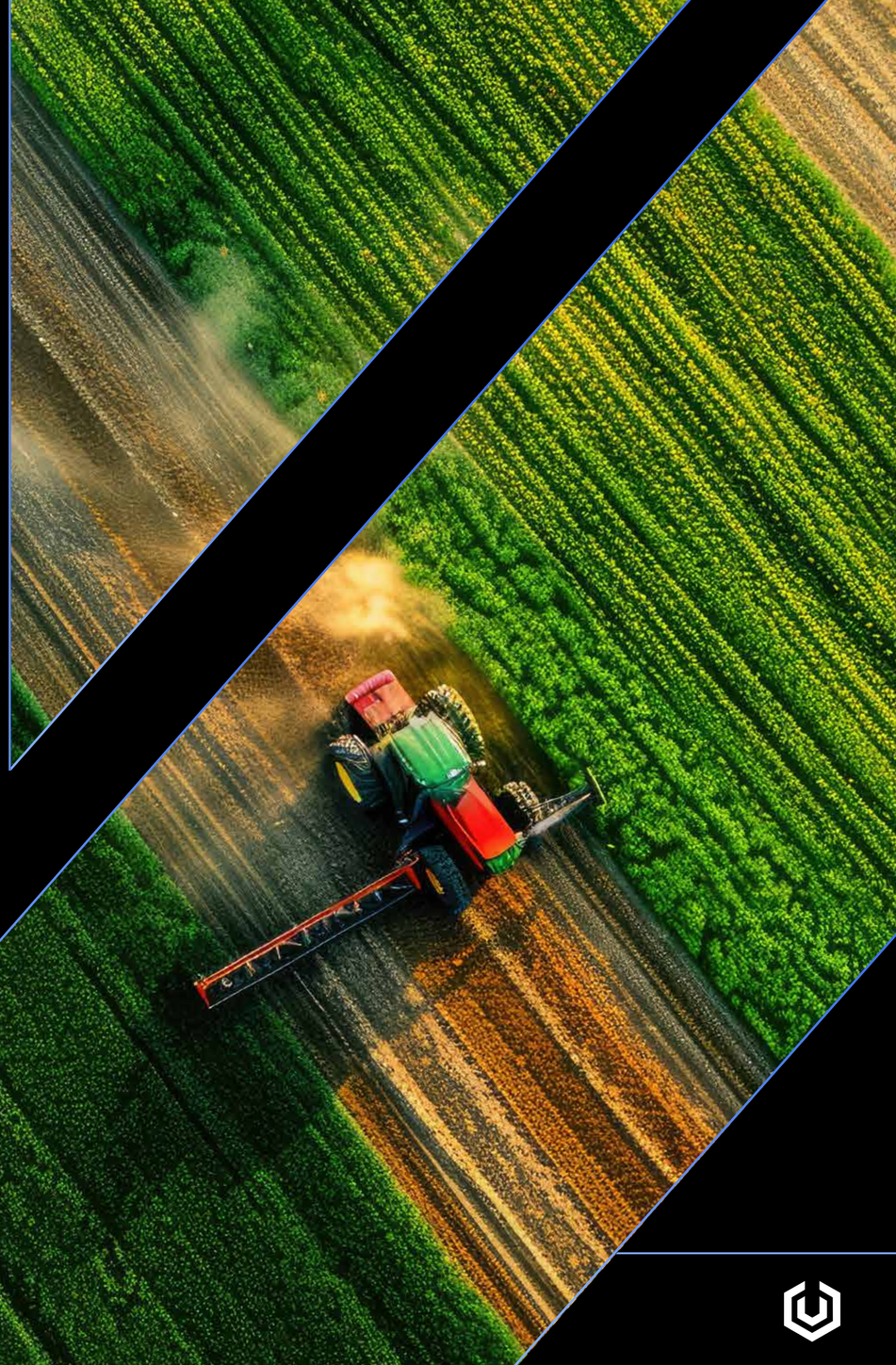


STRESS MANAGEMENT



STABILITY





AGRICULTURE APPLICATIONS

ADDRESSING KEY MARKET CHALLENGES

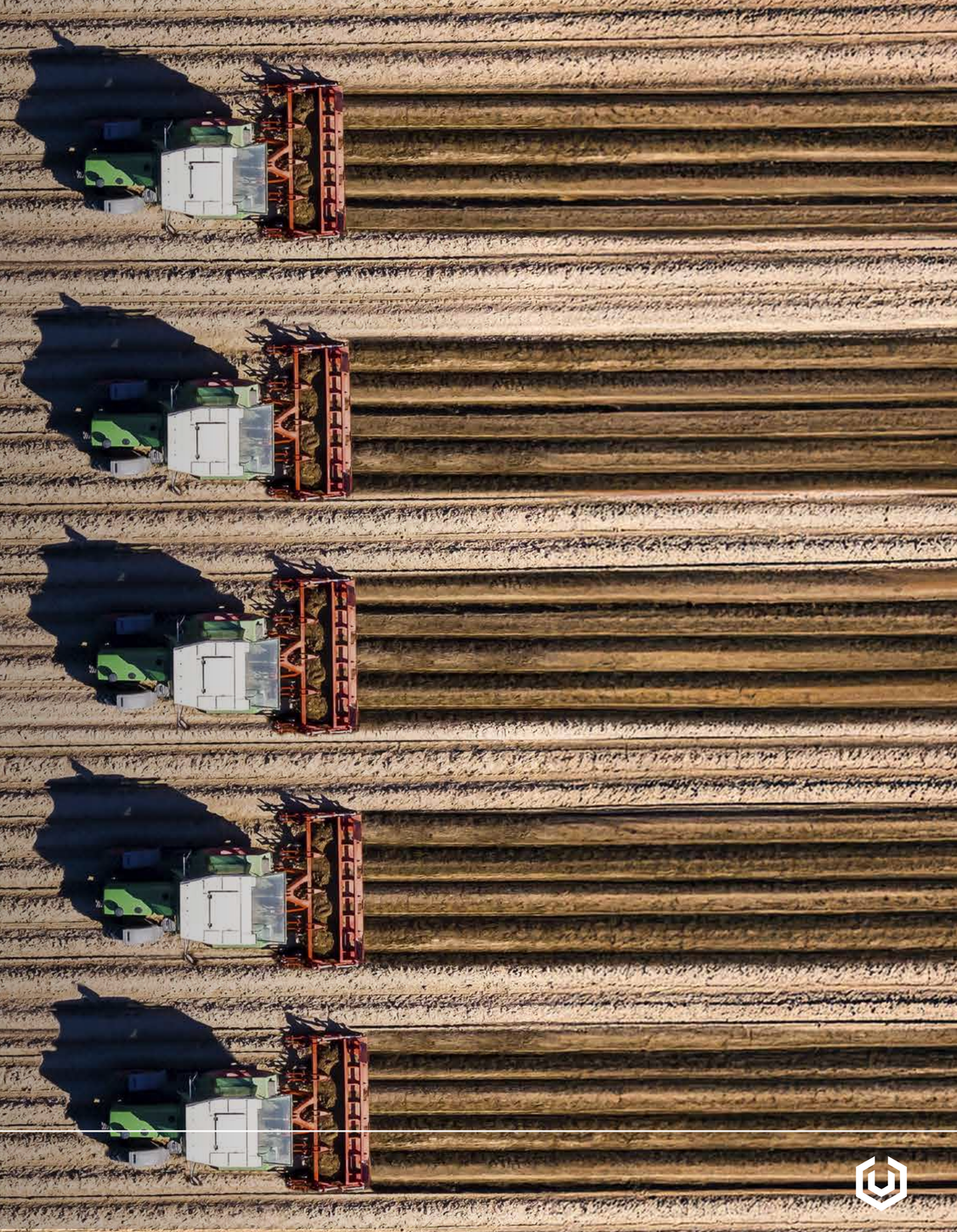
Unifi*M.I.*
FASTENER PLATFORM

ENGINEERED TO DISSIPATE VIBRATIONAL ENERGY & PROVIDE A LONG-TERM STABLE CONNECTION

OPTIMAL MECHANICAL, STRUCTURAL & FUNCTIONAL CONNECTION

REDUCE ASSEMBLY TIME, COST & WEIGHT

UTILIZE TRADITIONAL MANUFACTURING TECHNIQUES



TARGET PARTNERS

$3.2B SALES

ITW

BOLTS, SCREWS AND STUDS

COMPRESSION LIMITERS

NUTS AND RETAINERS

$2B SALES

STANLEY Engineered Fastening

STANLEY Engineered Fastening · NELSON · POP · TUCKER · CRIBMASTER · CAM

$723M SALES

SFS

POWERTRAIN

POWERTRAIN TECHNOLOGY

SEATS AND DOORS

SENSORS

$675M SALES

lisi AUTOMOTIVE

THREADED FASTENERS

CLIPPED SOLUTIONS

SAFETY MECHANICAL COMPONENTS

Unifi*M.I.* AGRICULTURE ACTION PLAN

1. **Demonstrate** technology capabilities
    a. Tool development of dies, taps and drills
    b. Drilling and tapping of aluminum, composite, and steel substrates
    c. Fastener axial and off-axis load testing

2. Top down **education** with bottom up preparation

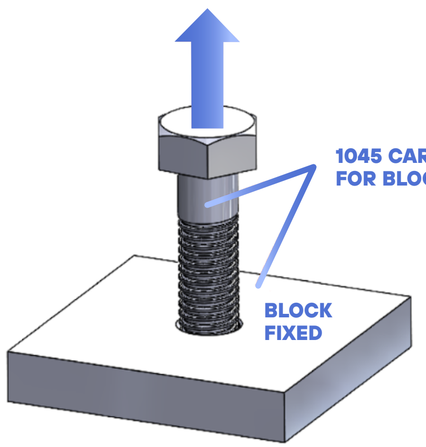
3. Execute **licensing** models

4. Bring **“killer app”** to market with partner

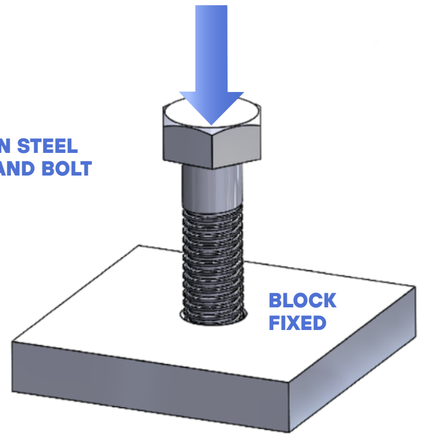
5. **Influence** design and specifications for next gen projects

Unifi*M.I.* AGRICULTURE VALIDATION POINTS

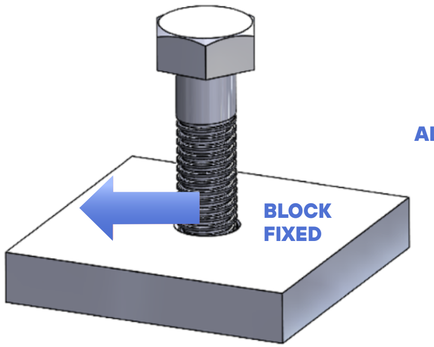
STRUCTURAL & DYNAMIC MECHANICAL TESTING

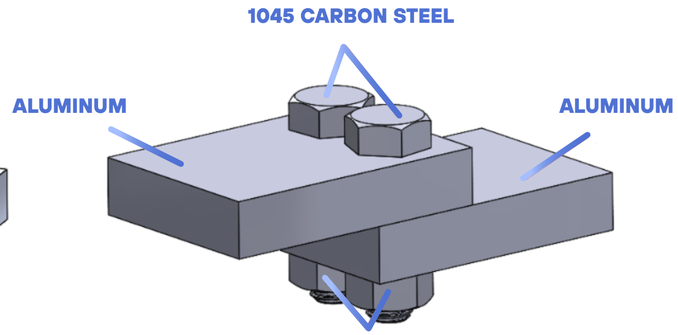


BOLT TENSION



BOLT COMPRESSION





1045 CARBON STEEL
VIBRATION CYCLING WITH CLAMP LOAD CHANGE OVER TIME


RESHAPING
THE FUTURE
UnifiM.I.™
AGRICULTURE, LLC