

# SUPERIOR PERFORMANCE THROUGH SUPERIOR DESIGN



The Millennium's tubular truss design, combined with optimally placed & engineered welds, and proprietary single-piece top cap extrusions, results in what is, without question, the most durable and innovative line of aluminum spray booms on the market today, providing years of worry-free operation.



# MILLENNIUM ALUMINUM SPRAY BOOMS

## OUR COMPANY

- Largest manufacturer of aluminum spray booms in North America
- Serving OEM, dealer/distributor, and retail markets
- Comprehensive installation and field service
- Nearly 30 years of specialized welding experience and a decade of expertise designing and building aluminum boom systems with over 800 booms sold

## PARTS & SERVICE

- Fully stocked parts warehouse
- 24-hour emergency support



## MILLENNIUM ADVANTAGES

### LIGHT:

- 35%-50+% lighter than comparable steel booms
- Reduced wear and tear on sprayer
- Improved sprayer traction and steering

### DURABLE:

- Elasticity modulus of Aerospace aluminum 1/3 that of steel
- Forces spread throughout entire structure: "bend don't break"
- Reduced corrosion over steel
- Dampened breakaway reduces oscillations and fatigue, improving spray pattern
- Plumbing inside boom structure for protection
- Estimated 75% increase in longevity over competitor's products

### EFFICIENT:

- Wider booms cover more ground faster with less yield loss and less fuel
- Standard sizes available are 120' and 132'; custom sizes available
- Ability to fold boom without cradling
- Clean and open design reduces wind drag

## MILLENNIUM FINISH

- Standard aluminum finish
- Powder coated steel components
- Color match powder coat

## AVAILABLE ACCESSORIES

- Boom height control
- Boom Cradles and Adapters
- Swing Arms and Attachment Mounts
- Nitrogen Accumulator Kits
- Shut-off, Strainer & Sensor Bracketry
- Hydraulic Hose Kits
- Wet Plumbing Kits featuring Hypro, TeeJet and Wilger
- Touch Down Wheels
- Authorized Raven dealer

# RAVEN

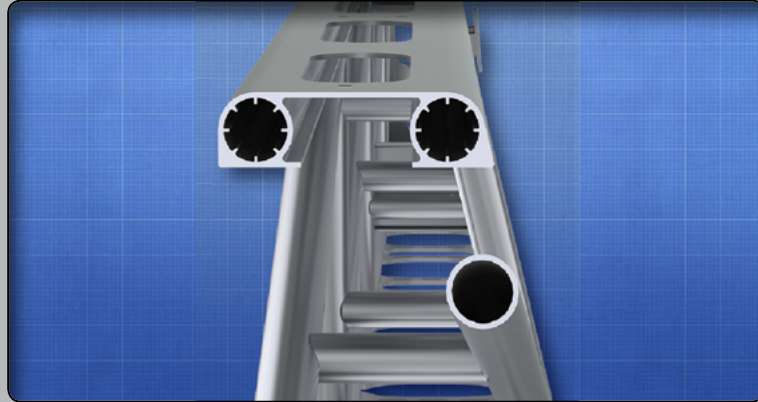
[www.spraybooms.com](http://www.spraybooms.com)



## LIGHT. DURABLE. EFFICIENT.

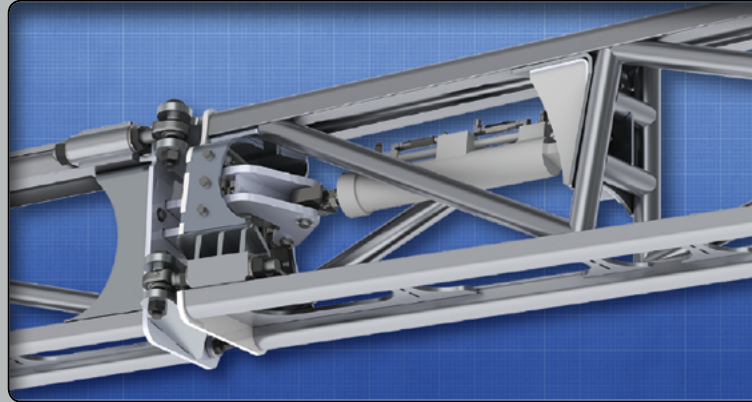
**Millennium**  
**BOOMS**  
A Product of Specialty Enterprises

### Patented Single Piece Top Cap



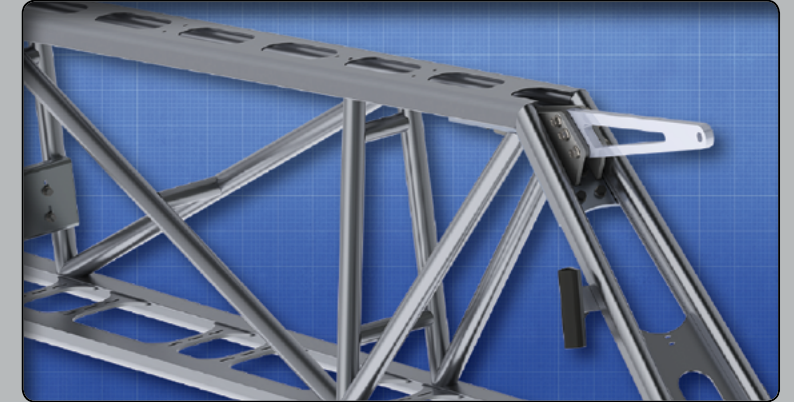
- Engineered for superior strength: entire top structure extruded as one single piece, then carefully designed ovals are machined out to reduce weight and maintain strength.
- Eliminates welds and heat affected zones in high stress areas.
- Webbed inner structure provides strength against multi-axial stresses.

### Folding Hinge & Cylinder

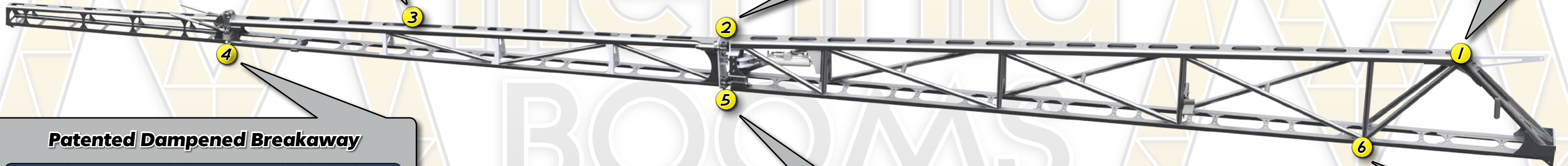


- Optimized hinge design fabricated from high-strength steel.
- Bolt-on design of folding hinge provides for simple replacement.
- Fold cylinders located within structure to protect them with built-in hydraulic pressure relief valves.

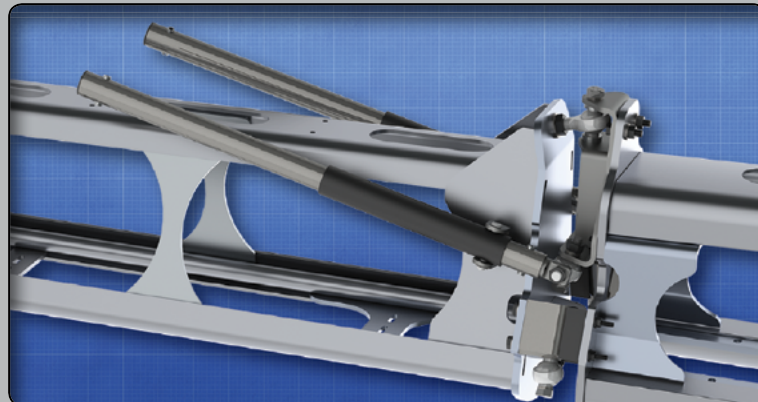
### Primary to Center Section Connection



- Bolt-on, hardened steel, lift cylinder lug plates as compared to the weaker aluminum plates currently found on competitive products.
- Adaptable to any sprayer.
- By mounting the bolt-on lift lug plates underneath the upper extrusion, the force is distributed over a larger area while eliminating the pulling on welds, thereby reducing the possibility of fatigue cracking.

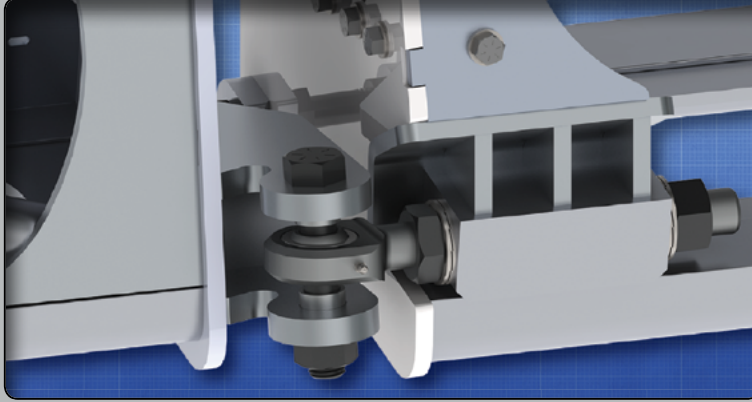


### Patented Dampened Breakaway



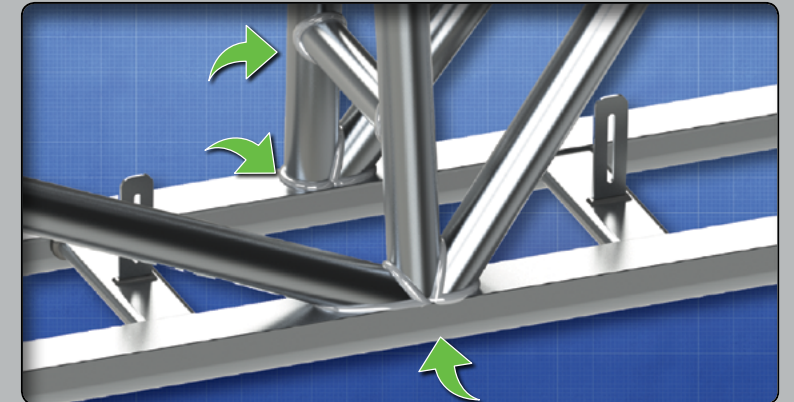
- Patent pending design dramatically increases boom/center rack operational life.
- Breaks forward, up and back.
- Patented hinge brings breakaway gently back to center, with less disruption in spray pattern and fatigue.

### Custom Engineered 4140 Rod Ends



- Custom designed and manufactured 4140 heat-treated rod ends are significantly stronger than those offered by the competition.
- Comes standard with corrosion resistant hardware.

### Precision Engineered Welds



- Engineered welds, optimally placed and designed to eliminate cracks and increase strength 100%.
- Use of aircraft grade 6061-T6 and 6005A-T6 aluminum alloys vs. weaker and less expensive 6063-T6 used by the competition.
- Wide lower structure for ease of spray bar adjustment, maintenance and nozzle body clearance.