

# TAKE COMMAND OF YOUR ROAD.



# BUILT FROM THE ROAD UP.



# **Prepared for the Road Ahead.**

The road to responses is changing. New productivity demands, increased safety requirements, and changing landscapes are putting even more pressure on getting the rig right the first time. Spartan is meeting these challenges with a full line of agile pumper designs, enhanced safety features, and a focus on building custom pumpers faster and more reliably than ever before.

Spartan's legacy of cab and chassis expertise ensures that every apparatus we make starts with a strong, stable foundation that can take whatever the road ahead brings. We work with you from the start to translate your truck's specs into a design that gives you the right mix of safety, speed, agility, ergonomics, and serviceability that will last for the long haul.



# IT WORKS AS HARD AS YOU DO.







# **Spartan Advanced Protection System®**

If the crew doesn't arrive on the scene safely, even more lives hang in the balance. At Spartan, we face reality head on with cabs that feature the most advanced safety provisions available in the market today.

The Spartan Advanced Protection System® (APS) is the #1 safety system in the industry. Designed and purpose-built for firefighters, it combines forward-thinking apparatus safety, developed around the needs of the first responder. This market-leading system includes:

- Eight airbag positions, the most offered by any OEM, including knee and side curtain airbags. These give your apparatus the highest available impact and anti-ejection protection on the market.
- Innovative seat belt systems and outboard sensors that enable an intelligent restraint control, dramatically reducing restraint system injuries.
- Ergonomic driver controls that help ensure safe and easy operation of the vehicle, because the drive to a rescue should never require its own rescue.
- Third-party testing to ensure cab safety from every perspective. We test for roof crush, front impact, roll stability control, airbags, seat mounting, and seat belt restraint system validation.
- Added hip room and tunnel height provide more space for both driver and officer.

# Safe and Spacious Cabs.

At Spartan, we've designed with firefighters in mind by offering the most spacious and ergonomic cabs in the industry.

Flat floors, low step heights, and taller, wider cab doors allow firefighters to get in and out quickly at the scene. The Spartan raised roof extends over the driver and officer, making it easier to maneuver within the cab. We've even optimized the engine tunnel to increase leg and hip room for the front seats, while giving more floor space to the rear crew. Our cabs can comfortably seat up to 10 crew members.

Designed to be quieter and more comfortable, we've maximized every square inch of our cabs without increasing the 99" width.



# IT WORKS AS HARD AS YOU DO.

# **Cab Features**

- Higher Roof Lines
- Flat Floor Design
- Entry & Egress
- Advanced Climate Control





# **Independent Front Suspension**

Spartan's emergency response cab and chassis have a heightened level of control and maneuverability due to a wide range of leaf spring or air IFS suspension offerings. Both systems are ideal for carrying the heaviest of loads and help reduce steering effort while maneuvering safely through crowded intersections and tight corners.

# **Smart Access Pump Panels**

Makes routine maintenance easier by giving access to the full pump and plumbing configuration, in less than 30 seconds.

# **Quality Construction**

Quality, lean, and continuous improvement systems, plus foundational engineering, add up to the best pumpers in the industry. They're constructed with exclusive Tor-Max® and Tri-Max® body structure, and set on the industry's first Vibra-Torq® mounting system.



# **Smart Storage**

Custom designed to maximize storage space and meet equipment hauling needs. Make productive use of areas like the wheel wells to free up cab compartment space for the crew.

# Spartan Advanced Climate Control.

Spartan's well-designed cabs also offer the industry's best HVAC system—creating a safer and more comfortable environment for firefighters working in any kind of climate.

Enduring over 20,000 miles of performance and durability testing, Spartan's Advanced Climate Control System exceeds standard performance requirements and maintains a comfortable cab, no matter the condition. Its innovative design helps cool and heat the cab interior aggressively while distributing air volume evenly to all occupants. It also quickly and effectively evacuates condensate, defrosts/defogs and clears flash fogging. All of this keeps firefighters comfortable and safe to and from every response.





#### -40° in 30 Minutes

Spartan's Advanced Climate Control System reduces interior cabin air temperature from 122° F (+/-3° F) to 80° F in 30 minutes.\*



### +232% Air Velocity

Air velocity has been improved by an average of 232%, which distributes AC or heat throughout the cab and to all occupants more evenly and quickly than our previous roof-mounted HVAC system.



#### **No Condensation**

In testing, with AC on MAX for one hour with the doors open at 90 °F and 95% relative humidity, all condensate generated by the system had been drained outside of the vehicle.



### +80° in 30 Minutes

With the cabin air temperature at 0  $^{\circ}$  F, the foot-area average air temperature reaches 80  $^{\circ}$  F within 30 minutes.



# **30-Second Defogging**

When in defog mode, the system clears the windshield and the front side glass of any flash fogging in 30 seconds or less. The normal defrost mode pushes air to the windshield and side glass and defrosts in a matter of minutes, even in a fully frosted condition.



# Driven by Innovation to Meet Any Challenge.

Resting on our laurels is not an option at Spartan Motors. We've challenged ourselves to constantly imagine, innovate, and invent to create solutions that work in the streets, where the heat of the moment is the true test of an emergency response idea.

Our process of innovation is simple, yet sophisticated. We listen. We observe. And then we respond in a way that's both thoughtful and practical.

For instance, when we saw the number of leg injuries to firefighters while still in the cab, we added a row of airbags at knee level. When we studied how a crew moves in and out of a rig, we lowered steps, widened doorways, raised rooflines, and flattened out the floor—all resulting in a safer and faster way in and out of the cab. Logical. Yet brilliant. Like every improvement we've made with pride over the decades.

#### S-180

When your challenge is timing, Spartan's S-180 is road ready in half the time with the industry's fastest delivery of a customized fire apparatus. We start with 10 custombuilt models and configure them with features and options to meet your specific needs. So Spartan innovation creates faster delivery without compromising the strength, safety, storage, and comfort that your department demands.

# **Wildland Urban Interface Engine**

When your challenge is the environment, Spartan's Wildland Urban Interface Engine comes to the rescue with a hybrid of a traditional pumper and a wildland vehicle. The result is a two-in-one apparatus that gives you the versatility and flexibility you need to move from tight city streets to rugged woodland and rural terrain. Now, there's no need to purchase and train on two pieces of equipment because this unique apparatus serves both urban and rural communities in one innovative vehicle. (Pictured)





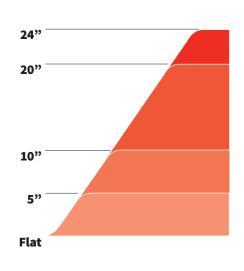
# **Roof & Seating Options.**

Spartan offers flat, 5", 10", 20", and 24" raised roof options as well as multiple seating configurations to provide your crew with extended legroom, improved visibility, and additional storage.

# **Seating Configurations.**

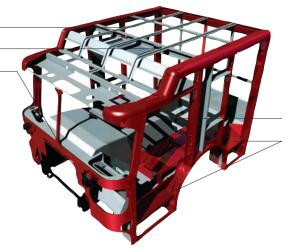
# ER LTD SMFD MFD 333" EMFD LFD ELFD 60" 67.5"

# **Roof Height Options.**



# **Cab Construction.**





Reinforced Engine Compartment
Reinforced Front and Rear Step Assemblies

# **Built to a Higher Standard.**

# **Quality Construction**

- Tor-Max® & Tri-Max® tubular body construction in both aluminum and stainless steel
  - Eliminates flex and twists in material
  - Less stress and fatigue
  - Delivers extra compartment space
- Material alloys and sizes are selected through engineering analysis (FEA) and testing. This results in:
- Optimum strength-to-weight ratio
  - Improved vehicle performance
  - Less cost in materials
  - 10 & 20 year warranties

# **Body Construction**

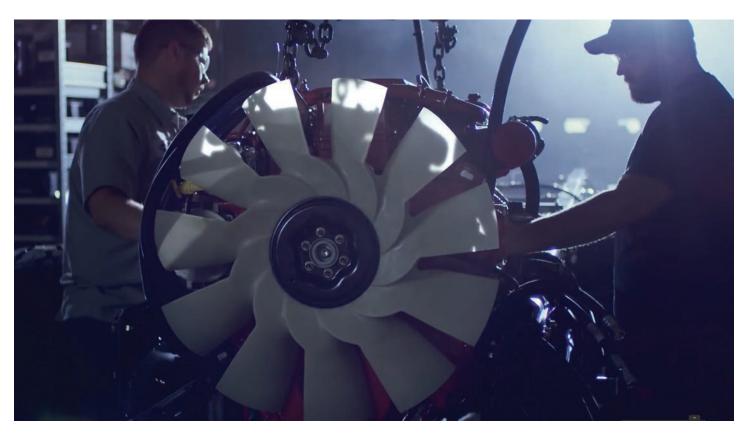
- Wire-run channel above doors
- Rear flange allows for conduit to be held in place by zip ties
- Filtered venting
- Recessed door jams

# **Pump House Construction**

- Stainless steel & aluminum construction
- Schedule 40 stainless steel manifolds
- Vibra-torg® mounted
- Engineered serviceability
- Removable or hinged pump panels
- Akron, Elkhart, Waterous, or Hale valves
- Secured and loomed wiring
- Heat shields and heaters are available

# **Compartment Storage**

- Smart Storage wheel well options
  - Roll-Out trays
  - SCBA storage
  - Floor dry hopper
  - Multiple and varying-size bottle and/ or extinguisher storage
  - Wheel chocks
  - Tool boxes
  - Custom configurations
- Custom compartment designs
  - Shelves, trays, tool boards, modules, and storage boxes





# A PUMPER FOR EVERY PURPOSE.



# **Traditional**

- Waterous, Darley, or Hale mid-ship pump (up to 2,250 GPM)
- Water tank capacity 500-1,500 gallons as standard with larger options available
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



#### **Transformer**

- Darley PTO (1,250-1,500 GPM)
- Water tank capacity 500-1,500 gallons as standard with larger options available
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



# **Rear Mount**

- Waterous, Darley, or Hale mid-ship pump (500-3,000 GPM); pump & roll with pumps up to 1,500 GPM
- Water tank capacity 500-1,500 gallons as standard with larger options available
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-Torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



# **Intelligent Pump Solution**

- Darley, Hale, or Waterous Darley (750-1,500 GPM)
- Water tank capacity 500-1,500 gallons
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-Torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



#### **Top Mount**

- Waterous, Darley, or Hale mid-ship pump (Up To 2,250 GPM)
- Pump & roll with pumps up to 1,500 GPM
- Water tank capacity 500-1,500 gallons
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



### **Wildland Urban Interface Engine**

- 1,500 GPM mid-ship pump; 250 GPM auxiliary pump (Diesel or PTO)
- Pump & roll capability
- Water tank capacity 500 gallons
- Class A and/or classB foam system
- Type 1 NFPA engine hose and ladder complement
- Vibra-torq® body mounting system to allow maximum body relief
- 44°/48° cramp angles
- Hinged tailboard for higher angle of departure
- 10-year structural warranty



# **Top Mount Enclosed**

- Climate control to protect the operator in extreme weather environments
- Waterous, Darley, or Hale mid-ship pump (up to 2,250 GPM)
- Water tank capacity 500-1,500 gallons as standard with larger options available
- Compartment depths (12.5" or 25.5" Upper/25.5" lower)
- Vibra-torq® body mounting system to allow maximum body relief
- Strongest body in the industry with 20-year body warranty\*
- Space-saving frame to provide greater storage capacity
- Stainless steel plumbing with superior flow capabilities
- Multiple locations for preconnects
- Tank configuration maximized to accommodate low hose beds



# S-180

- Delivers in half the time of any competitor
- Equipped with best-in-class Advanced Protection System on Spartan chassis
- Ten (10) body configurations available
- 1,500 GPM mid-ship pump
- Custom high-strength aluminum body, Vibra-torq® body mounting system to allow maximum body relief
- Full-height/split-depth and full-depth compartments available on certain models



