



SUTPHEN

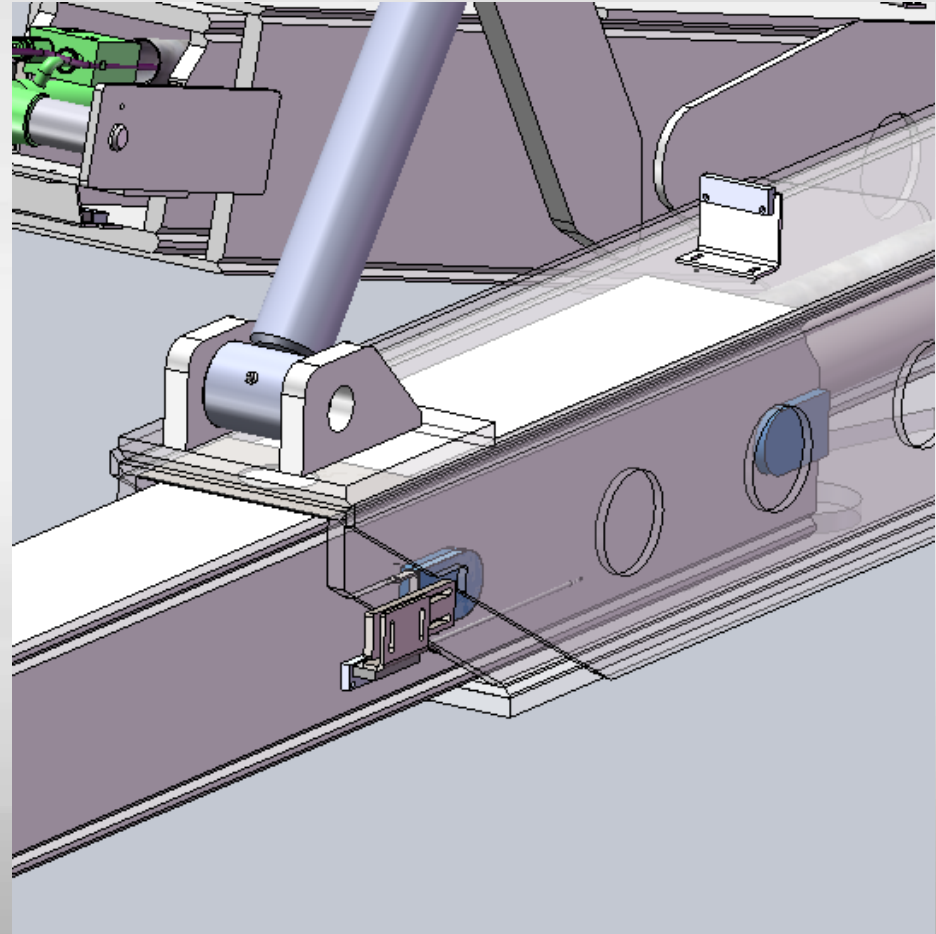
Family Owned and Operated since 1890!



12/08/2021
Jim Garver
Sutphen Hilliard

SLR 108 Improvements

- Outrigger design changes
 - All fabricated tubes for tighter tolerances
 - Functionality is the same, change made for manufacturability and reliability
 - Use same puck style poly wear pads as the SL 100
- Jack sensor mounting for improved reliability



SLR 108 Improvements

- Turntable deck made deeper
- 500-gallon tank on SLR 108 (standard construction), configuration allows aerial ladder compliment and 1000' of 5" hose



SP 70 Improvements

- Platform controls now include vinyl cover.
- Discontinued hydraulic systems from GS Global.
- Now offering advanced hydraulic features from Kraft. These options now available in SQS.
 - Short-jacking
 - Crush Avoidance
 - Hose Loading



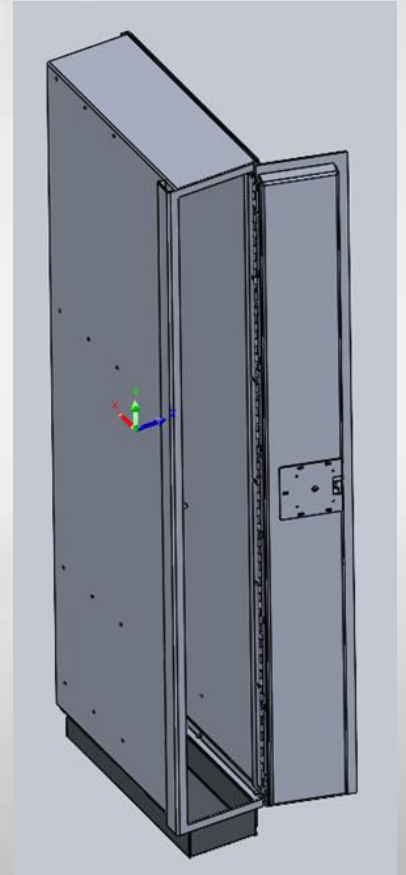
SL 100

- Improved turntable accessibility by using cables in lieu of man-savers



SLR 75

- Stokes boxes and sliding tool board.
Pan door with d-ring handle to match
other compartments



SL 75 Improvements

- New extended body design on SL75's
 - Increased compartment volume
 - Option for up to 650 gallons of water
 - Option for fully enclosed ladders
 - Option for full height compartments on officer side



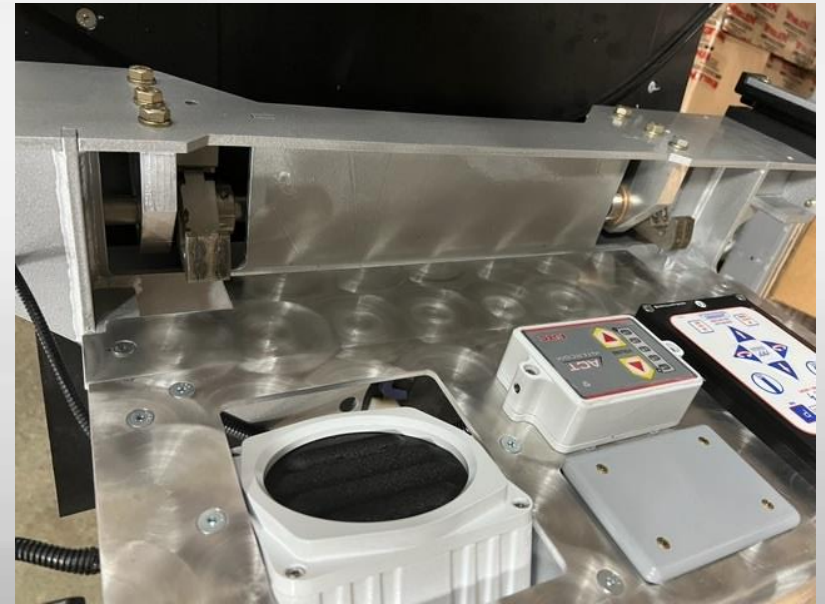
SL 75 Improvements

- Now offering advanced hydraulic features from Kraft. These options are now available in SQS.
 - Short jacking
 - Crush Avoidance
 - Hose Loading
 - Tip Controls
 - Remote Control



SL 75 and SL 100 Monitor Bracket Design

- Simplified, more reliable construction



Newly Designed Driver Side Service Panel on SL 75, SP 70 and SA 75

- Panel mounted hydraulic gauge
- Moved Jack controls and jack release out to pump panel area
- Nice location for camera monitor
- Panels easily removed for service



Cleaned Up Service Access on Officer Side Pump Panel

- Upper and lower panels completely removeable
- Eliminated welded angle improving accessibility to plumbing components



Innovative Controls rocker switch for Ziamatic ladder racks

- Innovative Controls rocker switch for Ziamatic ladder racks
- Matches switch cluster design for controls at panel.
- Reliable switching
- Uniform appearance



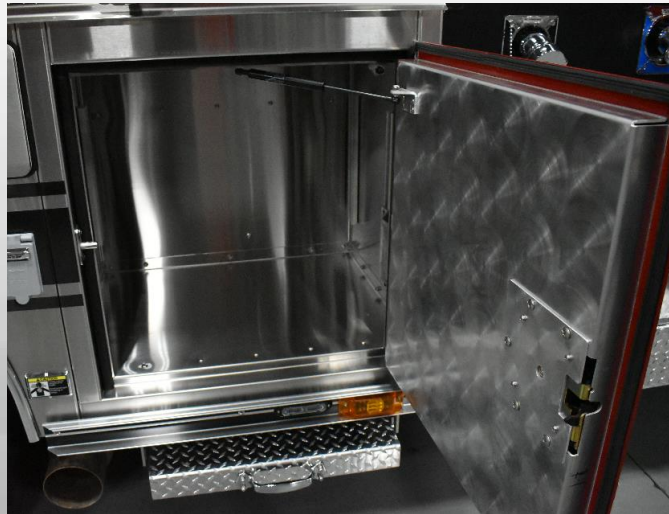
Custom Printable Pedestal Decals

- Customizable/printed in house
- Cleaner look with printed labels, no bezels



Aluminum doors now standard for weight reduction and consistency across products

- Stainless hinged/pan doors still available
- Also replaces carbon fiber drop-down, which is no longer available. We are searching for a new vendor.



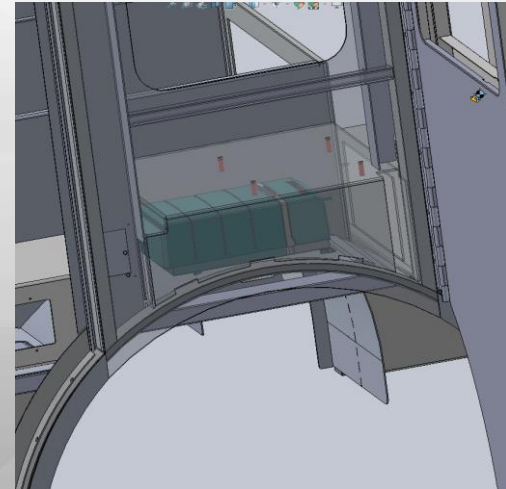
Other Improvements and Trial Runs

- Building a demo with Whelen M-series lights with DVI (Dynamic Variable Intensity) flash patterns, with rocker switch and photocell
- Updated plating specifications on certain ladder weldments for better corrosion resistance
 - Exploring eCoating on fabricated beams



Other Improvements and Trial Runs

- Exploring combination charger/inverter option from Blue Sea (CombiMaster).
 - Plan to install under driver's side rear facing crew seat.
 - Will be installed on an upcoming demo truck.



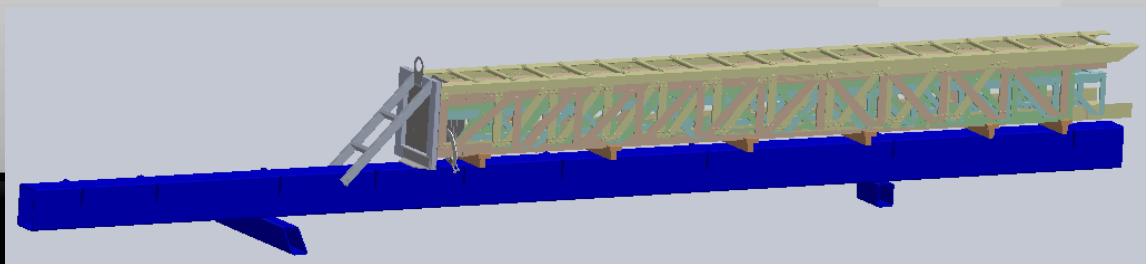
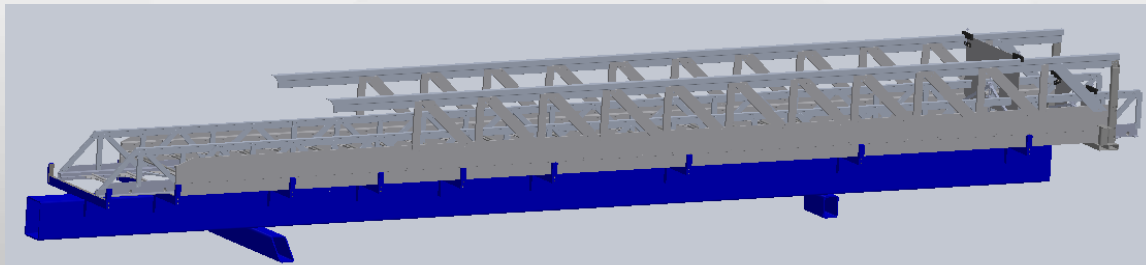
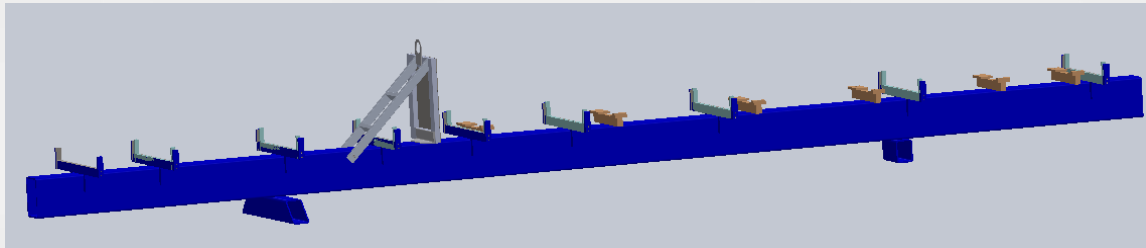
Other Improvements and Trial Runs

- VVEC box now being used in pedestals for cleaner wiring installation
- PMEC style enclosure in pump module for valve distribution (pump module electric).
 - Clear lid for inspection
 - Located for ease of inspection and service



Facility Improvements

- Replacing aerial fixture with one that can accommodate every model that is built in Hilliard.



Facility Improvements

- Improving flexibility in manufacturing of custom panels with installation of Waterjet.



Facility Improvements

- New file server
- Finally on the same version of Solidworks as all other facilities.



Tiller

- Completed Testing
 - Crash (roll over and roof crush)
 - Seatbelt pull (3000 lbf)
 - Latch pull tests complete (30G simulation)
- Test planning
 - Strain gauge
 - NFPA
 - Tip Load (1.5 times rating)
 - 360-degree sweep with load
 - 5-degree slope
- Steertech trailer steering axle
- Tractor chassis complete
- 5th wheel interface being assembled
- Tractor body being assembled
- 1st production cab recently out of paint



