

IRON MAN®

2K TO 6K GPM (7571 TO 22713 LPM)

MOBILE FOAM DELIVERY DEVICE WITHOUT BALLAST TANK

NBF050

- Water And Foam Solution Stream Range In Excess Of 300 Ft.
- Compatible With Major Types Of Foam Concentrates
- Quality Foam Stream With Minimal Fallout
- No Ballast Required/Quick Set-Up
- Multiple Flow Rates Achievable With Simple Change of Monitor Tip



Description

The Iron Man is a trailer mounted, high capacity-flow device, utilizing a straight bore non-aspirating nozzle, capable of delivering incremental chosen flow rates of foam solution or water up to a nominal 6000 GPM (22713 LPM) maximum, depending on the Iron Man model selected. The Iron Man unit is available in either a 6" monitor model or an 8" monitor model depending on the required flow rate. Optional nozzle tips for both 6" & 8" monitor models are also available. All nozzles are designed to operate at a nominal nozzle inlet pressure of 115 PSI (8 BAR). Integral to the design is a stainless steel nozzle and waterway that incorporates specific technology to optimize range and foam quality for preventing and fighting fire. An Anti-Roll stability system protects users while shooting full capacity in all positions of 360 degrees of monitor rotation while other features such as independent suspension, anti-slip decks, electric break-away systems and DOT LED lighting make operation and maintenance safe and user friendly. National Foam completes each design by offering custom configurations to tailor the final product to meet each customer's specific needs by adding any customer specific hose connections and foam inlets needed up to and including completely custom waterways.

Features

- Selectable flow rates
- Optimized for maximum range
- Soft pattern for tank shell cooling

- Can be used with fresh or salt water
- Choice of any inlet hose adapters
- Stable through 360 degrees rotation
- DOT and NFPA 1901 Compliant
- Adjustable Height and Convertible Hitch Styles
- Independent Suspension

Applications

- Storage Tank Fire Fighting
- Storage Tank Cooling
- Wharf Protection
- Land Based Marine Fire Fighting
- Vessel Based Marine Fire Fighting
- Forestry Fire Fighting
- Industrial Process Unit Fire Fighting and Prevention
- Deep Seated Fire Deluge Extinguishment
- Strip Mine Coal Fire Extinguishment

Specification

Monitor/Nozzle:

Both 6" and 8" model Monitor bodies, rotating joints, and nozzle shall be Stainless Steel ANSI-316 with Viton gaskets. Depending on model selected, the Monitor shall have either a 6" or 8" waterway with an ANSI 150# raised face flange. Monitor/nozzle shall have a vertical elevation while flowing of between +15 to +90° above horizontal and shall be capable of 360° rotation. Hand wheels shall be provided for Monitor rotation and elevation/depression functions and the Monitor shall be incapable of changing positions on its own. The GS Series Nozzle shall be equipped with a hydraulically operated

pattern changer, infinitely adjustable from straight stream to semi-fog pattern, and interchangeable long range tips to change flow rates. The nozzle shall be capable of delivering, at its rated flow, an extremely tight foam solution stream with minimum fallout. A gauge shall be provided for monitoring nozzle discharge flows and pressures. Annular area at nozzle's discharge tips are sized to achieve 2000, 4000, 5000 and 6000 GPM (7571, 15142, 18927 AND 22713 LPM) nominal flow at 115 PSI (8 BAR).

Waterway:

12" schedule 10, 304-series stainless steel, flow-optimized main trunk with inlet connection(s) that may be adapted to the customers preferred hose coupling style. Hose connections are angled towards the ground to create an efficient, kinkless hose transitions from the trailer to the ground. All welding is in accordance with AWS B1.1 and completed by certified welding professionals.

Trailer Body:

The side closures of the trailer body shall be constructed using structural channels. The top surface and the tongue top plate are to be thick HRS. Reinforcing cross members are to be made of structural angles. The tongue frame is to be constructed using HRS structural channels. Bubble levels are to be mounted on each side and at the inlet end of the trailer to aid in trailer leveling prior to flow operations. All welding to be completed in accordance with AWS B1.1 by certified welding professionals.

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Running Gear:

The trailer shall be equipped with two (2) independent suspension axles, mounted in tandem, with electric brakes. Four (4) wide spoke painted wheels with radial load rated tires. Braking system shall be electric, complete with safety break-away engagement system.

Jack Stands:

Four (4) heavy capacity drop-leg type jack stands, each with 12,000 lbs. (5443 kg) lift capacity, shall be welded to the front and rear corners of the trailer for use during monitor/nozzle operation. A fifth jack, also with 12,000 lbs. (5443 kg) lift capacity, shall be mounted in the front area of the tongue to serve as a landing gear during hitching and unhitching operations. All jacks to be top-wind style. A barbed ground pad will be attached to the foot of each of the jacks used during monitor/nozzle operation to increase surface area contact.

Hitch:

The unit shall be equipped with an adjustable height DOT Approved ball hitch or optional 3" lunette ring. Two (2) safety chains and grab type hooks shall be provided. The chains and hooks are to be electro-galvanized zinc plated for corrosion resistance.

Paint:

Trailer's non-walking surfaces shall be painted red and walking surfaces are to be coated with black rubberized fuel proof anti-slip coating. For safety, white reflective striping is to be provided on the sides of the trailer and reflective yellow chevron on the rear.

Electrical:

Trailer shall be equipped with LED DOT lighting, and both vehicle end and trailer end 7-Pole towing connectors.

All wiring shall be DOT compliant and encased in protective conduits and terminated in DOT compliant weatherproof connectors. All Lights and other electrical components shall be able to be removed by disconnecting a DOT electrical connector.

Tool Boxes:

An in-tongue lockable toolbox is provided to house wheel chocks, road safety tools and include saddles to cradle nozzle tips when not in use.

Technical Data

Trailer:

Framing:.....Structural Steel
Decking:.....Steel Plate
Tongue Storage Box:.....Steel
Lockable Lid,

Steel Bottom with Drain Holes,
Tip Storage Rack

Running Gear:.....Independent
Torflex Suspension

Tires:.....Radial Load Rated
Wheels:.....Steel Painted
Brakes:.....Electric with
Safety Breakaway Feature

Hitch:.....Choice of 2-1/2" Ball or
3" Lunette Ring
both Adjustable Height

Jacks: ...Drop Leg Top Wind, Anti Slip,
Lateral Strength Style,
Lateral (Qty 5)

Finish:

- Body:.....Red Gloss Polyurethane Epoxy RAL3000
- Deck & Walking Surfaces: ...Black Rubberized Non Slip Coating

Markings:

- 4" White Reflective Side Wall Striping ASTM D4956
- 6" Yellow Reflective Rear Chevron Striping ASTM D4956 SEC 6.1.1,
- OSHA Safety Labelling & NFPA Data Plate, Lubrication and Safety Chain Labels

Conforms To:.....DOT Regulations &
NFPA 1901 Trailers,
Welding to AWS D1.1 and
Completed by Certified Welders

Main Waterway:

Piping:.....Sch 10 304 Stainless
Steel Butt Weld, Passivated

Inlet Connections:Heavy Wall,
12" Male BSPP Thread Adapter
c/w Gasket Landing

Monitor Connection:6" or 8"
RF CL150 ANSI B16.5 Flange
(see Ordering Information)

Inlet Adapters:Customer Specified
Low Point Drain:.....1" SS Ball Valve

Inlet Pressure Tap.....1/4" NPT with
Gauge Protector Ring

Conforms To:....Welding to AWS D1.1,
Completed by Certified Welders

Monitor:

Size:.....6" or 8"
(see Ordering Information)

Waterway:.....316 Stainless Steel

Swivel Joints:316 Stainless Steel

Inlet:.....RF CL150 ANSI B16.5 Flange

Discharge:.....RF CL150 ANSI B16.5
Flange

Finish:.....Red Polyurethane Epoxy
RAL3000

Pattern Controls:Hydraulic
Rotary Pump

Rotation Control:Manual
Handwheel Worm Drive

Elevation Control:Manual
Handwheel Worm Drive

Design Pressure:.....232 PSI (16 BAR)

Test Pressure:.....350 PSI (24 BAR)

Rotation:360 deg

Elevation:+90 deg
Depression:.....-90 deg (Monitor Only
without Nozzle)

Depression:.....+15 deg (Assembled
to Ironman with Nozzle
and Operating)

Depression:.....-55 deg (Assembled
to Ironman with Nozzle)

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Nozzle (GS Series):

Body:..... 316 Stainless Steel
Smooth Bore
Pattern Actuation: 316 Stainless Steel
Hydraulic Cylinder Double Acting
Inlet:..... 6" or 8" RF CL150 ANSI Flange
(see Ordering Information)
Finish:..... Body - White Gloss
Polyurethane Epoxy RAL3000
Markings:..... Logo - Red Reflective
Flow Control:.. Interchangeable Flow
Control Nozzle Tips,
Brass Threaded
Operating Pressure: ... 115 PSI (8 BAR)

Electrical:

Lighting:..... LED, DOT Compliant
Towing Connector:..... 7-Way RV style
Flat Blade SAE J2863 Supplied
with Tow Vehicle Receptacle
Break-Away Kit:..... Battery Powered
with Charge Level Indicator
Wiring: Conduit Protection and
Terminated with
Weatherproof DOT Connectors
Conforms To:..... DOT Regulations &
NFPA 1901 Trailers as Applicable

Instrumentation:

Nozzle Pressure Gauge: 0-400 psi
(0-2758 kPa) Liquid filled
Inlet Pressure Gauge: 0-200 psi
(0-1379 kPa) Liquid filled
Level Indicators: Horizontal Ball
Style, Dampened,
-45 / +45 deg (Qty 3)

Accessories:

Wheel Chocks: Recycled Rubber
Style (Qty 4)
Tool Kit:..... Lug Wrench and Simple
Mechanics Tools with Bag
Flow Tips: Available Tips,
Choices are Limited to
Ironman Model and are as Follows:
2K, 4K, 5K & 6K GPM
(7571, 15142, 18927 & 22713 LPM)
@ 115 PSI (8 BAR)

Options

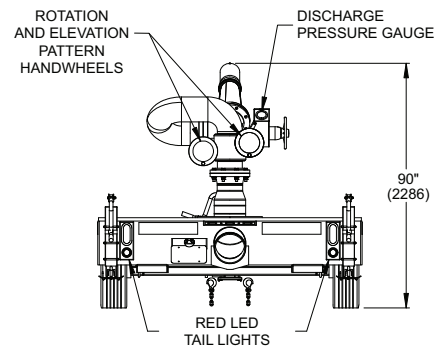
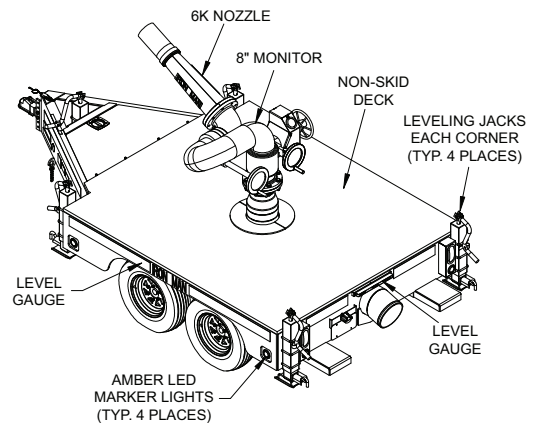
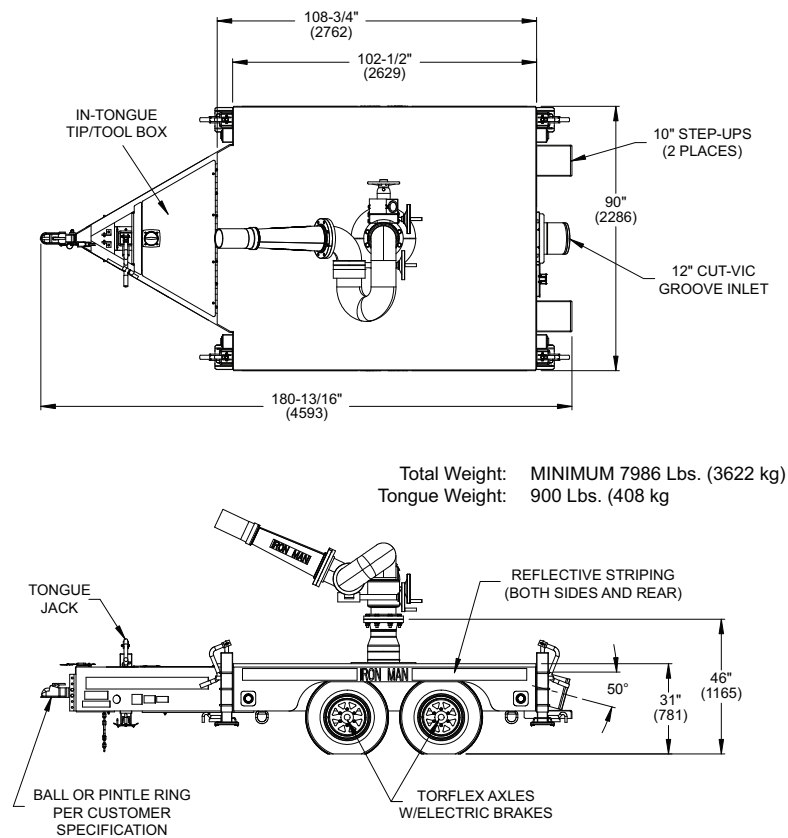
- Direct injection port for foam additives
- Hose Adapters: Customer Specified
- Alternate inlet manifold connections and configurations
- Alternate towing packages such as Gooseneck fifth wheel designs
- 316 Stainless Steel Waterway
- Alternate paint color schemes
- Corporate logos
- Towing connector plugs to suit customer tow vehicles
- Optical warning device system
- Alternate Nozzle Tip flows and pressure

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OUTLINE DRAWING - IRONMAN 2K, 4K & 6K

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Range 2K				
Nozzle Inlet Pressure (psi)	Flow Rate (gpm)	"Nozzle Angle (Degrees above Horizontal)"	Range (ft)	Height, approx. (ft)
125	2300	30	230	70
125	2300	45	220	115
115	2160	30	210	50
115	2160	45	200	100
105	1900	30	200	50
105	1900	45	190	100

Range 4K				
Nozzle Inlet Pressure (psi)	Flow Rate (gpm)	"Nozzle Angle (Degrees above Horizontal)"	Range (ft)	Height, approx. (ft)
125	4300	30	390	70
125	4300	45	350	120
115	4150	30	375	55
115	4150	45	340	115
105	4000	30	320	50
105	4000	45	330	100

Range 6K				
Nozzle Inlet Pressure (psi)	Flow Rate (gpm)	"Nozzle Angle (Degrees above Horizontal)"	Range (ft)	Height, approx. (ft)
125	6500	30	455	75
125	6500	45	425	135
115	6250	30	425	60
115	6250	45	395	115
105	5500	30	390	55
105	5500	45	380	100

MONITOR/NOZZLE RANGE DATA - IRONMAN 2K, 4K & 6K

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ORDERING INFORMATION

Part Number	Iron Man Model	Monitor Size in. (mm)	Standard Tip Supplied @ 115 PSI Nozzle Pressure GPM (LPM)	Flow Tips Compatible with Iron Man Model (Ordered Separately) GPM (LPM)
1252-0304-1	IM-5	6" (153)	5K (18927)	2K (7571), 4K (15142)
1252-0304-2	IM-6	8" (203)	6K (22713)	2K (7571), 4K (15142), 5K (18927)

TIP PART NUMBERS (ORDERED SEPERATELY)

Part Number	Description
1252-0372-2	Nozzle Tip, 2K GPM (7571 LPM) @ 115 PSI (8 BAR), Iron-Man
1252-0372-3	Nozzle Tip, 4K GPM (15142 LPM) @ 115 PSI (8 BAR), Iron-Man
1252-0372-8	Nozzle Tip, 5K GPM (18927 LPM) @ 115 PSI (8 BAR), Iron-Man
1252-0372-4	Nozzle Tip, 6K GPM (22713 LPM) @ 115 PSI (8 BAR), Iron-Man