

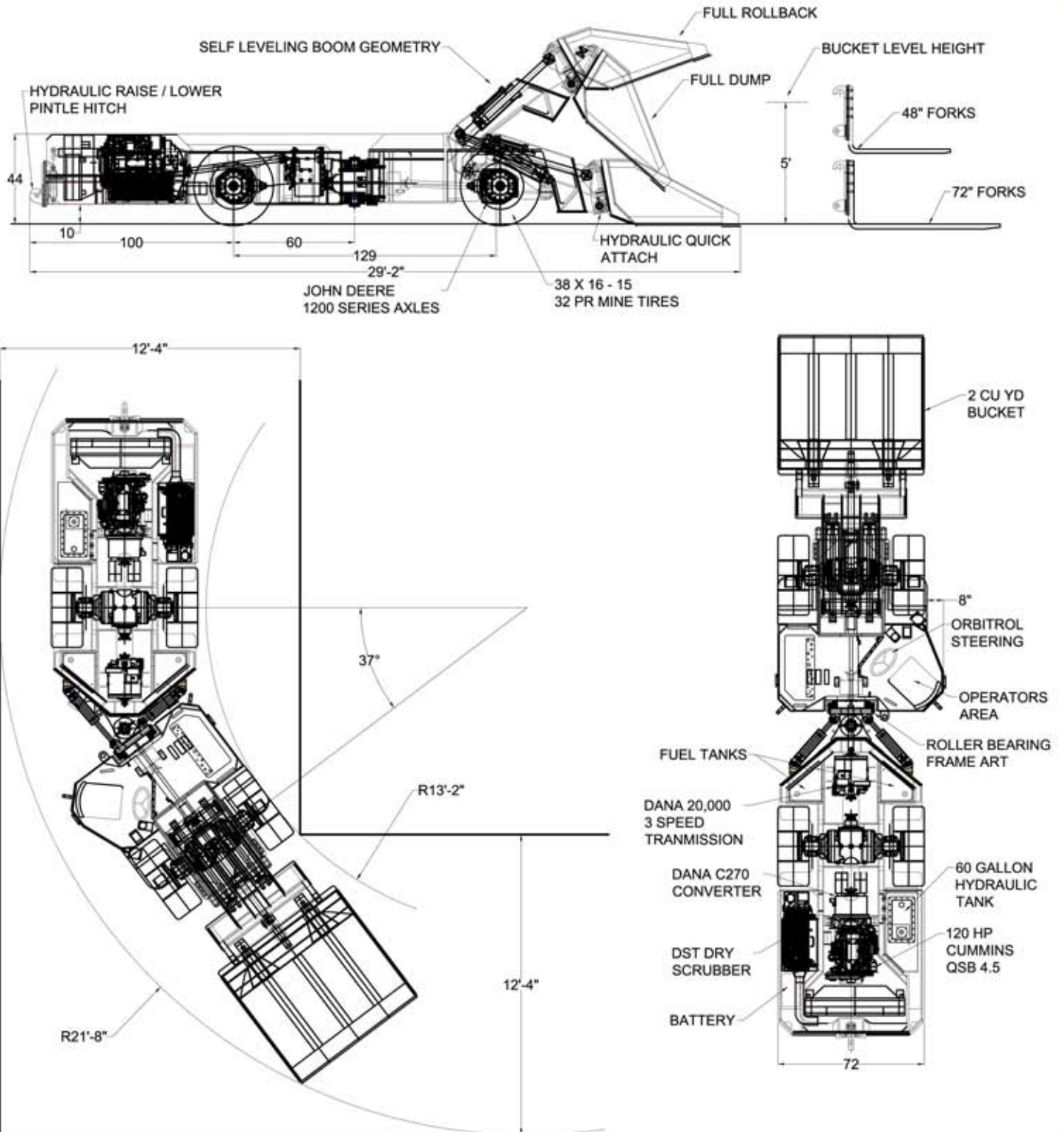


**Dry Systems  
Technologies**

Technical Specifications and Performance Data

7.5 Ton Capacity  
Non-permissible Diesel Scoop

# DST 7.5-TSV



## Basic Specifications:

The DST 7.5-TSV Diesel Scoop, developed and produced by Dry Systems Technologies, is designed to be a low-maintenance, productive machine for all mining operations.

### Main Dimensions

<b>Height w/o Canopy</b>	44"
<b>Width:</b>	80"
<b>Width w/EOD bucket</b>	72"
<b>Total Length:</b>	29'2" w/bucket
<b>Weight</b>	31,000 lbs w/bucket

### Turning Radius

<b>Inner</b>	13' 2"
<b>Outer</b>	21' 8"
<b>Turning angle</b>	37 degrees

### Weights

<b>Total operating weight</b>	31,000 lbs
<b>Total loaded weight</b>	46,000 lbs

### Capacities

<b>Tramming capacity</b>	15,000 lbs
<b>Break out force (lift)</b>	15,000 lbs
<b>Break out force (tilt)</b>	9,600 lbs
<b>Standard bucket</b>	2 cu yds

### Bucket Motion Times

<b>Raising time</b>	8.2 sec
<b>Lowering time</b>	6.8 sec
<b>Bucket dump time</b>	3.5 sec
<b>Bucket Rollback</b>	2.6 sec

### Driving Speeds Forward and Reverse (Loaded)

<b>1st gear</b>	4.1 mph
<b>2nd gear</b>	8.9 mph
<b>3rd gear</b>	13.1 mph


## Approvals and Ratings:

<b>MSHA NFLP Engine approval number</b>	ENAO70006
<b>MSHA FLP machine approval number</b>	Pending
<b>MSHA ventilation rate</b>	6,000 CFM

The DST 7.5-TSV Non-permissible Diesel Scoop meets MSHA standards for non-permissible heavy duty equipment. However, a permissible model of the scoop will soon be available upon request.

## Power Train:

### Engine

<b>Diesel Engine</b>	Cummins QSB4.5
<b>Output</b>	120 HP @ 2500 rpm
<b>Number of cylinders</b>	In line, 4
<b>Electric system</b>	12 VDC
<b>Exhaust system</b>	DST  dry scrubber
<b>Fuel tank capacity</b>	38 gal
<b>Starter</b>	Electric

### Converter

#### **Dana C270 Series**

### Transmission

<b>Dana 20,000 Series</b>	3-speeds, modulated forward and reverse with powershift
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### Axles

<b>Front axle</b>	John Deere TMII with Hyd Diff Lock
<b>Rear axle</b>	John Deere TMII with Hyd Diff lock 

### Standard Brakes

Fully-enclosed multiple wet disc, pressure-applied spring release service. Spring-applied pressure release wet disc, driveline mounted parking brake.

### Main Components

<b>Pressure accumulator</b>	Piston type with charging valve
<b>Brake pedal valve</b>	Pressure applied

### Tires

<b>Tire Size</b>	38 x 16-15 PLY
<b>Type</b>	Super Grip

# Systems:

## Hydraulic System

The center-articulated steering system of the 7.5-TSV is an open center system with a gear pump and two double acting steer cylinders actuated by a pilot operated control lever. The bucket/boom system is also open center with a gear pump, two lift cylinders and one dump cylinder actuated by pilot operated control levers.

### Main Components

**Main pump**

**Brake pump**

**Control valves**

**Steering cylinders**

**Lift cylinders**

**Dump cylinder**

**Hydraulic oil tank**

Gear pump (31 gpm @ 2000 rpm)

Gear pump (11 gpm @ 2000 rpm)

Pilot operated

4" bore x 2" rod

6" bore x 2.5" rod

6" bore x 3" rod

60 gal

## Electrical System

### Main Components

**Alternator**

95 amp

**Driving and working lights**

2 front, 2 rear,  
2 side, 50W



## In the Package:

### Additional Standard Equipment

- Height adjustable canopy
- Automatic (Checkfire II) fire suppression system, Ansul
- Hand held, 10-A: 120-B:C fire extinguisher – 20 lb.
- Hydraulic controlled height adjustable rear hitch

### Optional Add-ons

- Quick attach assembly for standard bucket
- Multiple bucket options available
- Quick change pallet fork assembly
- Spare tire and wheel assembly
- Hydraulic PTO
- Other hitch options available

## The DST® Difference:

The DST 7.5-TSV comes outfitted with the state-of-the-art dry scrubber system that gives Dry Systems Technologies its name. This patented technology, the most reliable on the market, provides for unsurpassed diesel pollution reduction, allowing this machine to meet MSHA standards while protecting the health and safety of all your mine employees.

### DST® Systems provide:

- » 99% Carbon soot reduction
- » 99% Sulfate reduction
- » 90% CO reduction
- » 85% HC reduction
- » 96+% overall DPM reduction



10420 Rising Court  
Woodridge, IL 60517  
(630) - 427 - 2051



**Dry Systems<sup>®</sup>  
Technologies**

technology for a cleaner environment.

10420 Rising Court  
Woodridge, IL 60517

**P** (630) 427-2051

**F** (630) 427-1036

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

Dry Systems Technologies (DST®) is a world leader in the design, manufacture and installation of diesel emissions control systems used for mining and construction equipment. Our products are the result of more than 20 years of progressive and innovative design, testing and improvement, allowing us to offer the most efficient and reliable system on the market for reducing diesel engine emissions.

DST® is a leading supplier of Diesel Power Packages and Emissions Control Solutions for both new (O.E.M.) and rebuilt machinery in the mining and construction Industries. Our products are available for both permissible (flame-proof) and non-permissible applications. Our systems can be used in a wide variety of machinery and are often custom-designed to meet the unique requirements of our valued customers.

Expanding on our extensive history and experience with diesel equipment, we are proud to introduce the DST® 7.5-TSV Non-permissible diesel scoop, another addition to our new line of Mining support and production equipment. We are confident that we have engineered a durable, innovative machine that will serve your mining operation well for years to come.