



# Cat<sup>®</sup> SU488 D

## Scoop

### Specifications

#### Dimensions (approximate)

|                       |            |         |
|-----------------------|------------|---------|
| Overall Length        |            |         |
| With lifting forks    | 29 ft 5 in | 8970 mm |
| With contoured bucket | 32 ft 5 in | 9880 mm |

|                       |            |         |
|-----------------------|------------|---------|
| Overall Width         |            |         |
| With lifting forks    | 8 ft 11 in | 2720 mm |
| With contoured bucket | 9 ft 7 in  | 2920 mm |

|           |            |         |
|-----------|------------|---------|
| Wheelbase | 12 ft 8 in | 3860 mm |
|-----------|------------|---------|

|                             |           |           |
|-----------------------------|-----------|-----------|
| Scoop utility empty weights | 50,000 lb | 22 680 kg |
| with 3,000 lb Ballast       | 53,000 lb | 24 040 kg |

#### Ground Clearance (No Axles Spacers) (Please reference sales drawing for Ground Clearance profile)

|                |         |        |
|----------------|---------|--------|
| 35x15-15 Tires | 10.5 in | 267 mm |
| 38x16-15 Tires | 10.5 in | 267 mm |
| 44x18-20 Tires | 10.5 in | 267 mm |

|                                 |             |         |
|---------------------------------|-------------|---------|
| Adjustable Cab Height (minimum) |             |         |
| 35x15-15 Tires                  | 4 ft 1.5 in | 1257 mm |
| 38x16-15 Tires                  | 4 ft 3 in   | 1295 mm |
| 44x18-20 Tires                  | 4 ft 6 in   | 1372 mm |

|                   |             |         |
|-------------------|-------------|---------|
| Main Frame Height |             |         |
| 35X 15-15 Tires   | 3 ft 2.5 in | 978 mm  |
| 38X 16-15 Tires   | 3 ft 4 in   | 1016 mm |
| 44X 18-20 Tires   | 3 ft 7 in   | 1092 mm |

|                    |            |         |
|--------------------|------------|---------|
| Inside turn radius | 12 ft 0 in | 3660 mm |
|--------------------|------------|---------|

|                     |            |         |
|---------------------|------------|---------|
| Outside turn radius | 29 ft 4 in | 8940 mm |
|---------------------|------------|---------|

|                       |     |     |
|-----------------------|-----|-----|
| Steering articulation | 80° | 80° |
|-----------------------|-----|-----|

#### Lift and Carry Capacity

16 tons (14.5 tonnes) at 36 in (914 mm) from the face of lift plate

#### Engine (4 Cylinder)

|                       |                                    |       |
|-----------------------|------------------------------------|-------|
| Type                  | Diesel, Turbo Charged, and 4 Cycle |       |
| Cooling System        | water based radiator               |       |
| Cooling fan           | Hydraulic driven fan               |       |
| Engine make/model     | Caterpillar/Deutz 1013 FC          |       |
| Displacement          | 290.7 cu in                        | 4.8 L |
| Maximum power tested  | 150 hp (112 kW) @ 2,300 rpm        |       |
| Maximum torque tested | 480 lb-ft (651 Nm)                 |       |

#### Engine Speeds

|           |           |
|-----------|-----------|
| Low idle  | 1,000 rpm |
| High idle | 2,350 rpm |

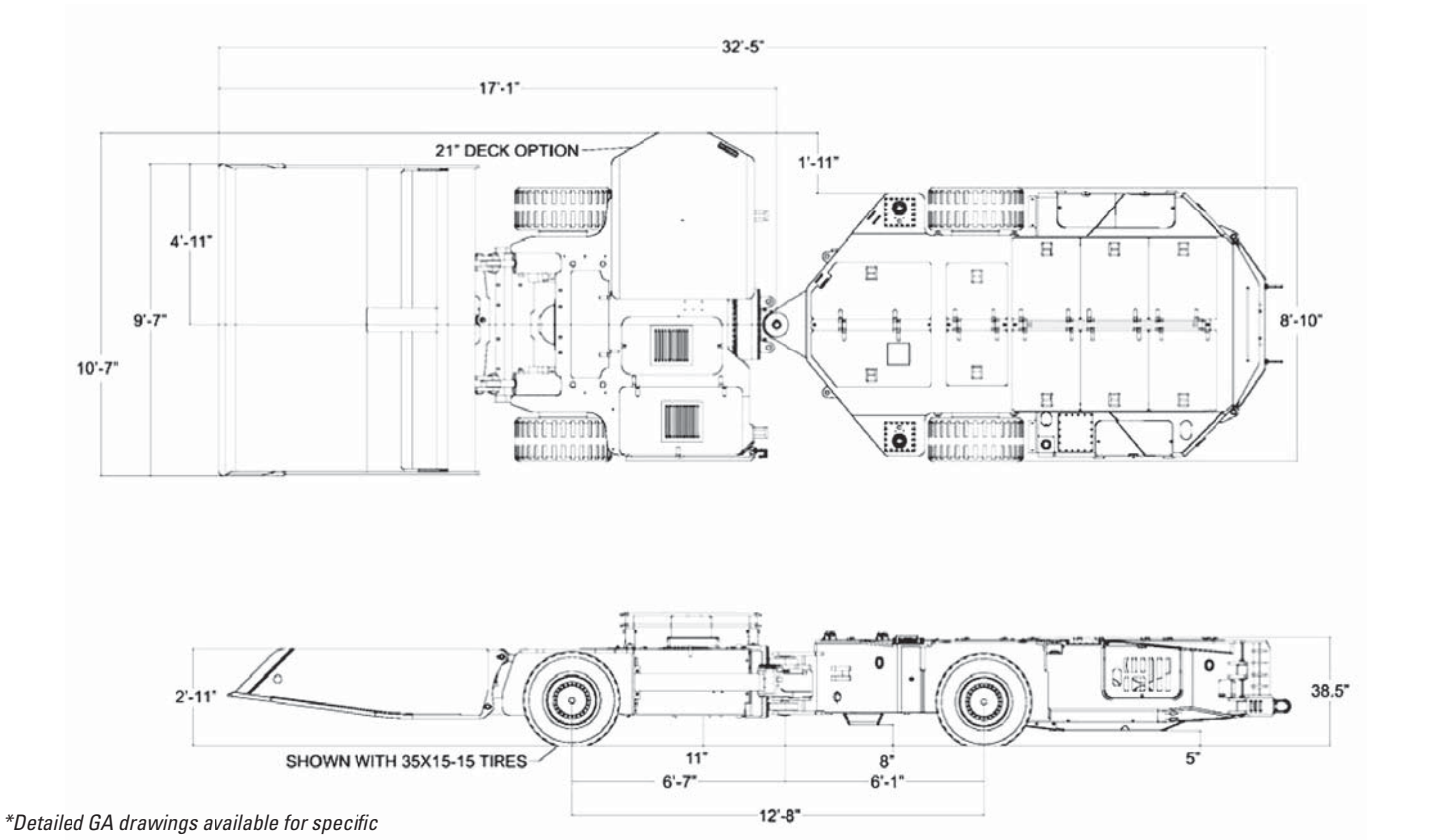
#### Start System

Pneumatic gear reduction

#### Intake Air Cleaner

|                          |                     |
|--------------------------|---------------------|
| Type                     | Dry                 |
| Intake dual element type | Primary & Secondary |

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*\*Detailed GA drawings available for specific dimensions and component locations*

| Exhaust System              |                                                                |
|-----------------------------|----------------------------------------------------------------|
| Type                        | Preliminary DOC                                                |
| Make                        | Evarpar/ECS                                                    |
| After Treatment             | Dry Scrubber                                                   |
| DPM Control                 | Disposable filter 97% eff                                      |
| Transmission                |                                                                |
| Type                        | Power shift with Fwd/Rev mod                                   |
| Make/Model                  | Dana 32000 series                                              |
| Speeds, forward and reverse | 4                                                              |
| Torque Converter            |                                                                |
| Type                        | Mounted on engine, single element                              |
| Make/Model                  | Dana integral                                                  |
| Axles (Front/Rear):         |                                                                |
| Type                        | Outboard Planetary/SAHR Brakes                                 |
| Make/Model                  | Kessler 72 Series                                              |
| Differential Type           | Hydraulic Actuated, Bevel Gear and Pinion Forced Brake Cooling |

| Wheels           |                                       |
|------------------|---------------------------------------|
| Make/Model       | 3 piece (Heavy Duty)                  |
| Tires – Standard |                                       |
| Size             | 35x15-15                              |
| Ply rating       | Bias                                  |
| Inflation media  | Urethane Fill                         |
| Size             | 38x16-15                              |
| Ply rating       | Bias                                  |
| Inflation media  | Urethane Fill                         |
| Size             | 44x18-20                              |
| Ply rating       | Bias                                  |
| Inflation media  | Urethane Fill                         |
| Load             | 20,100 lbs @ 5 mph<br>9120 kg @ 8 kph |



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## Hydraulic Filtration

|                    |                                               |
|--------------------|-----------------------------------------------|
| Steer/brake system | Pressure 10 micron                            |
| Bucket/PTO system  | Pressure 10 micron                            |
| Auxiliary system   | Pressure 10 micron<br>Tank mounted, 25 micron |
| Common Return      | replaceable bypass                            |

## Hydraulic Systems

|                    |                             |
|--------------------|-----------------------------|
| Steer/brake system | Open center,<br>HRO Control |
| Bucket/PTO system  | Open center/<br>Motor Spool |
| Auxiliary system   | Open center,<br>HRO Control |
| Tank type          | Sealed                      |

## Main Hydraulic Pump

|                             |        |         |
|-----------------------------|--------|---------|
| Type                        | Gear   |         |
| Std pump output @ 2,000 rpm | 28 gpm | 106 lpm |

## Cooling/Fan Pump

|                             |            |           |
|-----------------------------|------------|-----------|
| Type                        | Gear       |           |
| Std pump output @ 2,000 rpm | 4.5/12 gpm | 17/45 lpm |

## Cylinders

|                     |                                  |
|---------------------|----------------------------------|
| Type                | Double acting                    |
| Rods                | Hard chromed                     |
| Counterbalance load | Lock valves Lift<br>& Tilt (opt) |

## Steering System

|              |             |
|--------------|-------------|
| Control vale | Open center |
| Actuation    | HRO Control |

## Accumulator Brakes

|                      |                   |         |
|----------------------|-------------------|---------|
| Type                 | Piston            |         |
| Quantity x capacity  | 116 cu in         | 1.9 L   |
| Operation Pre charge | 900 psi           | 6.2 MPa |
|                      | Nitrogen pressure |         |

## Bucket System

|               |             |
|---------------|-------------|
| Control valve | Open center |
| Actuation     | HRO         |

## Articulation

|                             |                |
|-----------------------------|----------------|
| Bearing type and size       | Pin & bearing  |
| Bush material               | Hardened steel |
| Pin material                | Hardened steel |
| Degrees of turn either side | 45°            |

## Oscillation

|                                        |                              |
|----------------------------------------|------------------------------|
| Type                                   | Ball Bearing at Articulation |
| Degrees up and down<br>from horizontal | 15°                          |

## Seating (Driver)

|      |                         |
|------|-------------------------|
| Type | Adjustable Cross-seated |
|------|-------------------------|

## Canopy

|      |                                         |
|------|-----------------------------------------|
| Type | Adjustable CAB Certified<br>to MSHA req |
|------|-----------------------------------------|

## Electrical System

|          |                     |
|----------|---------------------|
| Type     | Approved flameproof |
| Voltage  | 12                  |
| Polarity | Floating            |

## Lights

|                 |                 |
|-----------------|-----------------|
| Number/location | 2 front, 2 rear |
| Type            | VICTOR          |

## Alternator

|       |                        |
|-------|------------------------|
| Drive | Hydraulic              |
| Type  | Caterpillar Flameproof |

## Pneumatic System

|                     |                              |          |
|---------------------|------------------------------|----------|
| Compressor type     | Piston engine<br>gear driven |          |
| Governed pressure   | 150 psi                      | 1.03 MPa |
| Relief pressure     | 210 psi                      | 1.45 MPa |
| Air receiver volume | 28 gallon                    | 106 L    |

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## Service Capacities

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|                |                          |       |
|----------------|--------------------------|-------|
| Hydraulic tank | 70 gal                   | 265 L |
| Fuel Tank      | 35 gal<br>(MSHA Limited) | 132 L |

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### With 35x15-15 Tires

|              |          |          |
|--------------|----------|----------|
| 1st gear max | 1.8 mph  | 2.9 kph  |
| 2nd gear max | 3.7 mph  | 6.0 kph  |
| 3rd gear max | 6.4 mph  | 10.3 kph |
| 4th gear max | 11.1 mph | 17.9 kph |

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## Maximum Tractive Effort

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Refer to engineering for information dependant on the applications

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## Grade-ability

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|               |           |
|---------------|-----------|
| Front to rear | Up to 30% |
|---------------|-----------|

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*All specifications are subject to change without notice.*

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