

# Product Specifications For 310 - Tier 4 / Stage V



## Engine

|                                                           |                                                                                                                                   |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Net Power</b>                                          | 51.8 kW                                                                                                                           |
| <b>Stroke</b>                                             | 120 mm                                                                                                                            |
| <b>Note</b>                                               | Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, exhaust system and fan. |
| <b>Bore</b>                                               | 94 mm                                                                                                                             |
| <b>Displacement</b>                                       | 3.33 l                                                                                                                            |
| <b>Gross Power - SAE J1995:2014</b>                       | 55.4 kW                                                                                                                           |
| <b>Engine Model - U.S. EPA Tier 4 Final/EU Stage V</b>    | Cat® C3.3B                                                                                                                        |
| <b>Net Power - 2,200 rpm - ISO 9249:2007, 80/1269/EEC</b> | 51.8 kW                                                                                                                           |
| <b>Note 1</b>                                             | Advertised power is tested per the specified standard in effect at the time of manufacture.                                       |

## Weights

|                                            |                                                                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating Weight</b>                    | 10432 kg                                                                                                                              |
| <b>Minimum Operating Weight with Cab*</b>  | 9601 kg                                                                                                                               |
| <b>Maximum Operating Weight with Cab**</b> | 10432 kg                                                                                                                              |
| <b>Note (2)</b>                            | **Maximum Weight is based on steel tracks with rubber pads, counterweight, operator, full fuel tank, long stick, blade and no bucket. |
| <b>Note (1)</b>                            | *Minimum Weight is based on steel tracks, no counterweight, operator, full fuel tank, long stick, blade and no bucket.                |

## Dimensions

|           |         |
|-----------|---------|
| Dig Depth | 5211 mm |
|-----------|---------|

## Blade

|        |        |
|--------|--------|
| Height | 431 mm |
|--------|--------|

|                  |         |
|------------------|---------|
| Width - Standard | 2470 mm |
|------------------|---------|

|              |         |
|--------------|---------|
| Width - Wide | 2640 mm |
|--------------|---------|

## Weight Increase From Minimum Configuration

|               |        |
|---------------|--------|
| Counterweight | 250 kg |
|---------------|--------|

|                        |        |
|------------------------|--------|
| Steel Tracks with Pads | 330 kg |
|------------------------|--------|

|                     |        |
|---------------------|--------|
| Extra Counterweight | 500 kg |
|---------------------|--------|

## Travel System

|                                    |         |
|------------------------------------|---------|
| Maximum Traction Force - Low Speed | 84.8 kN |
|------------------------------------|---------|

|                                     |         |
|-------------------------------------|---------|
| Maximum Traction Force - High Speed | 28.9 kN |
|-------------------------------------|---------|

|                     |          |
|---------------------|----------|
| Travel Speed - High | 4.7 km/h |
|---------------------|----------|

|                    |          |
|--------------------|----------|
| Travel Speed - Low | 2.6 km/h |
|--------------------|----------|

|                                  |          |
|----------------------------------|----------|
| Ground Pressure - Maximum Weight | 40.5 kPa |
|----------------------------------|----------|

|                                  |          |
|----------------------------------|----------|
| Ground Pressure - Minimum Weight | 37.2 kPa |
|----------------------------------|----------|

|                        |            |
|------------------------|------------|
| Gradeability - Maximum | 30 degrees |
|------------------------|------------|

## Service Refill Capacities

|                |      |
|----------------|------|
| Hydraulic Tank | 53 l |
|----------------|------|

|                  |        |
|------------------|--------|
| Cooling System   | 10 l   |
| Engine Oil       | 11.2 l |
| Fuel Tank        | 145 l  |
| Hydraulic System | 140 l  |

# Hydraulic System

|                                                          |                                                                                     |
|----------------------------------------------------------|-------------------------------------------------------------------------------------|
| Operating Pressure - Swing                               | 230 bar                                                                             |
| Digging Force - Bucket                                   | 77.7 kN                                                                             |
| Operating Pressure - Travel                              | 285 bar                                                                             |
| Operating Pressure - Equipment                           | 285 bar                                                                             |
| Note                                                     | Flow and pressure are not combinable. Under load, as flow rises pressure goes down. |
| Digging Force - Stick                                    | 49.2 kN                                                                             |
| Type                                                     | Load Sensing Hydraulics with Variable Displacement Piston Pump                      |
| Pump Flow at 2,400 rpm                                   | 233 L/min                                                                           |
| Maximum Auxiliary Circuit - Secondary - Flow at Pump     | 33 L/min                                                                            |
| Maximum Auxiliary Circuit - Primary - Pressure at Pump   | 285 bar                                                                             |
| Maximum Auxiliary Circuit - Secondary - Pressure at Pump | 285 bar                                                                             |
| Maximum Auxiliary Circuit - Primary - Flow at Pump       | 131 L/min                                                                           |

# Swing System

|                     |            |
|---------------------|------------|
| Machine Swing Speed | 10.6 r/min |
|---------------------|------------|

## Certification - Cab

|           |                          |
|-----------|--------------------------|
| Top Guard | ISO 10262:1998 (Level I) |
|-----------|--------------------------|

|                                       |                  |
|---------------------------------------|------------------|
| Roll Over Protective Structure (ROPS) | ISO 12117-2:2008 |
|---------------------------------------|------------------|

## Sound

|                                                 |          |
|-------------------------------------------------|----------|
| Average Exterior Sound Pressure (ISO 6395:2008) | 99 dB(A) |
|-------------------------------------------------|----------|

|                                         |          |
|-----------------------------------------|----------|
| Operator Sound Pressure (ISO 6396:2008) | 72 dB(A) |
|-----------------------------------------|----------|

|      |                                       |
|------|---------------------------------------|
| Note | European Union Directive "2000/14/EC" |
|------|---------------------------------------|

## Dimensions - Standard Stick

|                                  |         |
|----------------------------------|---------|
| Tail Swing without Counterweight | 1800 mm |
|----------------------------------|---------|

|              |         |
|--------------|---------|
| Stick Length | 2500 mm |
|--------------|---------|

|               |         |
|---------------|---------|
| Boom In Reach | 2116 mm |
|---------------|---------|

|               |         |
|---------------|---------|
| Maximum Reach | 7695 mm |
|---------------|---------|

|           |         |
|-----------|---------|
| Dig Depth | 5211 mm |
|-----------|---------|

|                          |        |
|--------------------------|--------|
| Ground Clearance - Frame | 356 mm |
|--------------------------|--------|

|                 |         |
|-----------------|---------|
| O/A Track Width | 2470 mm |
|-----------------|---------|

|            |         |
|------------|---------|
| Cab Height | 2541 mm |
|------------|---------|

|                       |        |
|-----------------------|--------|
| Track Belt/Shoe Width | 450 mm |
|-----------------------|--------|

|                     |        |
|---------------------|--------|
| Maximum Blade Depth | 478 mm |
|---------------------|--------|

|                                                        |                                                                                             |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Maximum Dump Clearance</b>                          | 5829 mm                                                                                     |
| <b>Maximum Dig Height</b>                              | 7970 mm                                                                                     |
| <b>Maximum Blade Height</b>                            | 421 mm                                                                                      |
| <b>Tail Swing - Standard Counterweight</b>             | 1933 mm                                                                                     |
| <b>O/A Undercarriage Length</b>                        | 3200 mm                                                                                     |
| <b>Vertical Wall</b>                                   | 4385 mm                                                                                     |
| <b>Swing Bearing - Height</b>                          | 735 mm                                                                                      |
| <b>Maximum Reach - Ground Level</b>                    | 7570 mm                                                                                     |
| <b>Overall Shipping Length - with Counterweight</b>    | 6983 mm                                                                                     |
| <b>Note (2)</b>                                        | **Boom Height when stick is pinned in working position with attachments.                    |
| <b>Note (1)</b>                                        | *Boom Height when stick is pinned in transport position (if available) with no attachments. |
| <b>Overall Shipping Length - without Counterweight</b> | 6850 mm                                                                                     |
| <b>Height - Boom Transport - No Tools*</b>             | 2550 mm                                                                                     |
| <b>Height - Boom Working - With Tools**</b>            | 2700 mm                                                                                     |

## Air Conditioning System

|                         |                                                                                                                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Conditioning</b> | The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1 kg of refrigerant which has a CO2 equivalent of 1.430 metric tonnes. |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Sustainability

## 310 - Tier 4 / Stage V Standard Equipment

### ENGINE

Cat C3.3B Diesel Engine (U.S. EPA Tier 4 Final/EU Stage V) – Electronic Engine, Turbo, Diesel Particulate Filter (DPF)

Automatic Engine Idle

Automatic Engine Shutdown

Automatic Swing Brake

Automatic Two Speed Travel

Fuel Water Separator with Indicator

Radial Seal – Double Element Air Filter

Extended Life Coolant, -37° C ( -37° F)

### HYDRAULICS

Electronic Variable Displacement Piston Pump

Load Sensing/Flow Sharing Hydraulics

Power On Demand

Hydraulic Temperature Monitoring

Certified Accumulator

HYDO Advanced Hydraulic Oil

### OPERATOR ENVIRONMENT

TOPS – ISO 12117:1997

ROPS ISO 12117-2:2008

Stick Steer Mode

Travel Cruise Control

Control Pattern Changer

Adjustable Wrist Rests

Molded Footrests

Removable, Washable Floor Mat

Travel Pedals and Hand Levers

Cat Key with Passcode Option

HVAC with Automatic Temperature Control

Hydraulic Lockout Controls

Integrated Lower Front Window

Assisted Front Window Overhead Storage

Rear Window Emergency Exit

Fabric, High Back, Suspension Seat

Retractable Seat Belt (75 mm/3 in)

Coat Hook

Cup Holder

LED Interior Light

Literature Holder

Mounting Bosses for Top and Front Guards  
12V Power Socket  
Radio – Bluetooth, Auxiliary, Microphone, USB (charging only)  
Skylight  
Signaling/Warning Horn  
Cab and (left side) Boom Work Lights  
Utility Space for Mobile Phone  
Next Generation Color LCD Monitor (IP66)  
– Jog Dial Interface  
– Fuel Level and Coolant Temperature Gauges  
– Maintenance and Machine Monitoring  
– Performance and Machine Adjustments  
– Numeric Security Code  
– Multiple Languages  
– Camera Ready (IP68 & IP69K)  
– Hour Meter with Wake Up Switch

## **UNDERCARRIAGE**

Greased and Lubricated Track  
Tie Down Eyes on Track Frame  
Dozer Straight Blade  
Dozer Float  
Bolt-on, Reversible Wear Edge

## **BOOM, STICK AND LINKAGES**

One Piece Boom (4300 mm/169.3 in)  
Front Shovel Capable – Pin-on/Manual Coupler/Hydraulic Coupler for Cat Tools (not available in all regions)  
Thumb Ready (not available in all regions)

## **ELECTRICAL**

12 Volt Electrical System  
90 Ampere Alternator  
900 CCA Maintenance Free Battery  
Battery Disconnect  
Ignition Key Stop Switch  
Travel Alarm  
Rear Camera

## **OTHER**

Locks on External Enclosure Doors  
Lockable Fuel Cap  
Beacon Socket  
Rear Reflectors

## **GUARDING**

Roll Over Protective Structure (ROPS) ISO 12117-2:2008

Top Guard ISO 10262:1998 (Level I)

## **TECHNOLOGY**

Product Link Basic

### **310 - Tier 4 / Stage V Optional Equipment**

## **OPERATOR ENVIRONMENT**

Push to Start with Bluetooth® Key

Air Suspension Heated Seat

Rain Visor

Next Generation Advanced Monitor (below are all included with Next Generation Advanced Monitor option)

- Touch Screen
- Site Reference System
- High Definition Camera Capable (IP68 & IP69K)
- Numeric Security Code

Seat Belt Reminder System

## **UNDERCARRIAGE**

Wide Dozer Blade

Steel Tracks (450 mm/17.7 in wide)

Wide Steel Tracks (600 mm/23.6 in)

Steel Track with Rubber Pads

Track Guides

## **BOOM, STICK AND LINKAGES**

Long Stick (2500 mm/98.4 in)

Attachments including Buckets, Augers and Hammers

2nd Auxiliary Hydraulic Lines

Boom Lowering Check Valve

Stick Lowering Check Valve

Certified Lifting Eye

## **ELECTRICAL**

Rearview Camera

Rotating Beacon

## **GUARDING**

Top Guard ISO 10262:1998 (Level II)

Front Guard (Mesh) ISO 10262:1998 (Level I)

Front Guard (Heavy Duty) ISO 10262:1998 (Level II)

## **OTHER**



Water Jacket Heater

Refueling Pump

Counterweight (250 kg/551 lb)

Counterweight (500 kg/1103 lb)

## **TECHNOLOGY**

Ease of Use Indicate

Ease of Use E-Fence

Cat Grade Advanced 2D

Cat Grade 3D

Product Link Elite (regulations apply)