## Cat D7E Dozer

****Компания **Caterpillar** 19 ноября 2009 г. запустила в продажу первый в мире бульдозер с электронным электроприводом. Новинка носит название **CAT D7E**.

Электронный электропривод позволят снизить потери мощности и обеспечить высокоэффективное потребление топлива (потребление горючего снижено на 20% по сравнению с более ранней версией бульдозера). Кроме того, электронный электропривод требует минимум обслуживания, отличается более высокими экологическими характеристиками и более длительным сроком службы.

Кабина нового бульдозера обеспечивает оператору лучший обзор и имеет крайне низкий уровень шума (уровень шума в кабине составляет 73 дБ). Помимо прочего, бульдозер отличается лучшей устойчивостью к износу.

**Engine**

|  |  |
| --- | --- |
| Engine Model | Cat® C9.3 ACERT™ |
| Flywheel Power | 178.0 kW |
| Bore | 115.0 mm |
| Stroke | 149.0 mm |
| Displacement | 9.3 l |
| Engine Power - Maximum - ISO 14396 | 198.0 kW |
| Engine Power - Maximum - ISO 14396 (DIN) | 198.0 kW |
| Engine Power - Maximum - SAE J1995 | 201.0 kW |
| Global Emissions | Tier 4 Final/Stage IV/Japan 2014 (Tier 4 Final) |
| Net Power - Maximum - ISO 9249/SAE J1349 | 187.0 kW |
| Net Power - Maximum - ISO 9249/SAE J1349 (DIN) | 187.0 kW |
| Net Power - Rated - ISO 9249/SAE J1349 | 178.0 kW |
| Net Power - Rated - ISO 9249/SAE J1349 (DIN) | 178.0 kW |
| Emissions | U.S. EPA Tier 4 Final/EU Stage IV/Japan 2014 (Tier 4 Final) |
| Net Power - Maximum - ISO 9249 | 187.0 kW |
| Net Power - Maximum - ISO 9249 (DIN) | 187.0 kW |

**Service Refill Capacities**

|  |  |
| --- | --- |
| Fuel Tank | 409.0 l |
| Cooling System | 87.0 l |
| Engine Crankcase | 30.0 l |
| Power Train | 60.0 l |
| Final Drive - Each | 28.0 l |
| Pivot Shaft Compartment | 7.0 l |
| Hydraulic Tank | 76.0 l |
| Final Drive - Each - LGP | 34.0 l |
| DEF Tank | 17.5 l |

**Weights**

|  |  |
| --- | --- |
| Operating Weight | 26055.0 kg |
| Shipping Weight | 21955.0 kg |
| Operating Weight - STD SU | 26055.0 kg |
| Shipping Weight - LGP | 24335.0 kg |
| Operating Weight - LGP S | 28525.0 kg |

**Hydraulic Controls - Pump**

|  |  |
| --- | --- |
| Lift Cylinder Flow | 200.0 l/min |
| Pump Output - Implement | 200.0 l/min |
| Pump Output - Steering | 312.0 l/min |
| Pump Type | Piston, Variable Displacement |
| Ripper Cylinder Flow | 200.0 l/min |
| Tilt Cylinder Flow - Head End Flow | 93.0 l/min |
| Tilt Cylinder Flow - Rod End Flow | 66.0 l/min |

**Hydraulic Controls - Main Relief Valve**

|  |  |
| --- | --- |
| Pressure Setting - Steering | 27600.0 kPa |

**Hydraulic Controls - Maximum Operating Pressure**

|  |  |
| --- | --- |
| Bulldozer | 27600.0 kPa |
| Ripper - Lift | 27600.0 kPa |
| Ripper - Pitch | 27600.0 kPa |
| Steering | 41000.0 kPa |
| Tilt Cylinder | 27600.0 kPa |

**Ripper**

|  |  |
| --- | --- |
| Beam Cross Section | 355.0 mm |
| Each Additional Shank | 150.0 kg |
| Maximum Clearance Raised - Under Tip, Pinned in Bottom Hole | 588.0 mm |
| Maximum Penetration Force | 87.4 kN |
| Pocket Spacing | 900.0 mm |
| Pry-Out Force | 234.4 kN |
| Ramp Angle | 26.0 ° |
| Shank Gauge | 1800.0 mm |
| Shank Section | 72 mm × 228 mm (2.8 in × 9.0 in) |
| Weight - With One Shank | 1650.0 kg |
| Type | Multi-Shank |
| Number of Pockets | 3 |
| Overall Beam Width | 2088.0 mm |
| Maximum Penetration | 650.0 mm |

**Winch**

|  |  |
| --- | --- |
| Cable Ferrule Size - O.D. × Length | 60 mm × 65 mm (2.38 in × 2.56 in) |
| Control | Electronic/Hydraulic |
| Installed Weight | 1520.0 kg |
| Maximum Bare Drum - Line Pull | 400.3 kN |
| Maximum Bare Drum - Line Speed | 21.0 m/min |
| Maximum Full Drum - Line Pull | 253.5 kN |
| Maximum Full Drum - Line Speed | 35.0 m/min |
| Overall Width | 1090.0 mm |
| Rope Diameter - Recommended | 25.0 mm |
| Throat Clearance | 218.0 mm |
| Weight | 1520.0 kg |
| Winch Case - Length | 1110.0 mm |
| Winch Case - Width | 826.0 mm |
| Winch Drive | Hydraulic |
| Winch Length | 1115.0 mm |
| Winch Model | PA90 |
| Oil Capacity | 12.0 l |
| Winch and Bracket Length | 1115.0 mm |
| Increased Tractor Length - STD | 1032.0 mm |
| Increased Tractor Length - LGP | 1032.0 mm |
| Drum Diameter | 318.0 mm |
| Drum Width | 226.0 mm |
| Flange Diameter | 610.0 mm |
| Drum Capacity - 24 mm (1 in) | 62.0 m |
| Drum Capacity - 29 mm (1.13 in) | 56.0 m |
| Ferrule Size (O.D. × Length) | 60 mm × 65 mm (2.38 in × 2.56 in) |

**Standards**

|  |  |
| --- | --- |
| FOPS | Falling Object Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 Level II |
| ROPS | Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008 |
| Cab | ANSI/SAE J1166 OCT98 |
| Brakes | Crawler Machine Brake Requirements meets the following criteria: ISO 10265:2008 |

**Drive Train**

|  |  |
| --- | --- |
| AC Compressor Maximum Input Current | 12.0 a |
| AC Compressor Nominal Input Voltage | 320.0 V |
| AC Generator and Propulsion Module Voltage | 480.0 V |
| Type | Electric Drive |

**Air Conditioning System**

|  |  |
| --- | --- |
| Air Conditioning | The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.2 kg of refrigerant which has a CO2 equivalent of 1.716 metric tonnes. |

## D7E Caterpillar - Технические данные

|  |  |
| --- | --- |
| Вес | 25.7 т |
| Транспортная длина | 7.1 м |
| Транспортная ширина | 2.88 м |
| высота в транспортном cостояние | 3.39 м |
| Вид отвала | SU |
| Ширина гусениц | 660 мм |
| Скорость | 10,5 км/ч |
| Ширина фронтального ножа-отвала  | 3.988 м |
| Производитель двигателя | Caterpillar |
| Модель двигателя | C9.3 Acert |
| Мощность двигателя | 187 кВт |
| Рабочий объем | 9.3 л |