MONTANA
Department of Transportation

MDT-BRG-015 04/23

Montana Department of Transportation
Bridge Bureau
Approved Construction Equipment List

mdtacel@mt.gov

Make:	Caterpillar
Model:	AP1000 with SE60 V Screed and full hopper
Equipment Type:	paver
Contractor Modifications:	none

Interstate Approval Conditions

Approval Type	crossing only
Speed:	no restriction
Weight:	85,260 lb or less
Traffic:	approved with regular traffic
Location Restrictions:	no restriction

Non-Interstate Approval Conditions

Approval Type	denied
Speed:	denied
Weight:	denied
Traffic:	denied
Location Restrictions:	denied

Comments:

Equipment configuration weights, and specifications on following pages. Approval does not apply to load posted bridges. Other construction equipment is not allowed to operate on or cross bridge at the same time this equipment is on the bridge.



Cat® AP1000

Asphalt Paver

The Cat® AP1000 Asphalt Paver is a wheel paver that delivers a high-return on investment with it's fast-heating screed system, low fuel consumption, durable components, and easy to use technology. A variety of screed choices offer versatility and provide high-quality results on interstates, highways, airports, and parking lots.

High Return on Investment

- Exclusive 70 kW integrated generator delivers fast, reliable screed heating and is designed for long life by the same team that developed the D7E electric drive dozer
- Fast heating screed leads to more daily production, heating time in as little as 15 minutes
- Excellent turning capability, fast travel leads to increased production
- Exclusive air flow design improves operating conditions for the crew and keeps components cooler for lasting durability

Technology That Works For You

- Pave Start Assistant (option) saves set-up profiles for repeatable use on future job sites including: tow-point height, screed heat temperature, paving speed, paving width, paving depth, crown, extender slope and height, screed assist, and screed locking features
- A hopper level sensor (option) with temperature indication keeps the operator informed of material height and delivery temperatures, indicators are located in each tractor display
- Exclusive screed heating system monitors elements for failure conditions and helps eliminate unnecessary replacement
- Cat® Grade Control option is integrated into the tractor and screed displays for optimized operator efficiency
- Thermal mapping (option) utilizes an infra-red camera mounted on a fixed-position mast that captures the entire width of the asphalt surface behind the screed. An LCD display mounted near the screed console provides real-time visibility to the surface being paved

High Quality Results, Higher Earnings

- Versatile screed designs deliver excellent ride, density, and mat texture while providing superior adjustment; available with front-mount extenders, rear-mount extenders, or tamper-bar systems
- Tow-point utilizes exclusive linkage design for optimal screed flotation
- Exclusive 2-speed proportional control on the screed extenders
- Cat Grade Control is a factory-integrated guidance system that helps remove irregularities from the surface and control mat thickness for increased production, lower operating costs, and higher profitability

Low Owning and Operating Costs

- Exclusive Eco-mode and Automatic Engine Speed Control, reduce fuel consumption and lower sound levels for better comfort and communication
- 4-pump feeder system is designed for high production in Eco-mode, leads to lower fuel consumption
- Million cycle switches provide reliability
- Conveyor bed plates and chain guards designed to minimize labor requirements and provide lower cost replacement
- Heating elements slide-out for easy replacement
- Machined screed frames simplify screed plate replacement
- Enhanced hopper flashing with improved memory and temperature resiliency offers better performance during truck exchanges

Cat® AP1000 Asphalt Paver

Technical Specifications

PowerTrain		
Engine model	Cat C7.1	
Engine power @ 2200 rpm (ISO 14396-2002)	168 kW	225 hp
Meets U.S. EPA Tier 4 Final emission standards.		
Speed – paving	76 mpm	250 fpm
Speed – paving with tamper screed	25 mpm	82 fpm
Speed – travel	19.9 km/hr	12 mph

Machine Weight		
Paver only (shipping)	15 526 kg	34,228 lb
w/SE60 FM screed (operating)	19 332 kg	42,620 lb
w/SE60 V screed (operating)	19 214 kg	42,360 lb
w/SE60 V XW screed (operating)	19 889 kg	43,848 lb
w/SE60 VT XW screed (operating)	20 531 kg	45,263 lb
Operating Weights are approximate and include coolant, lubricants, full fuel tank, and 75 kg (165 lb) operator.		

Service Refill Capacities		
Maximum throughput capacity	1602 Tonnes	1766 Tons
Hopper capacity	8.1 m^3	286 ft^3
Cooling system	45 L	12 gal
Diesel Exhaust Fluid (DEF)	19.1 L	5 gal
Engine oil	16 L	4.2 gal
Fuel tank	348 L	92 gal
Hydraulic tank	219 L	58 gal
Washdown spray tank	30 L	7.9 gal

Paving Range With Extensions		
SE60 FM screed	3.05 m - 7.8 m	10' - 25' 6"
SE60 V screed*	3.0 m - 7.65 m	9' 10" - 25'
SE60 V XW screed	3.0 m - 7.5 m	10' - 24.5'
SE60 VT XW screed	3.0 m - 6.0 m	10' - 19.5'
Paving depth	305 mm	12"
** Paving range includes wide width endgate shoe*		

	Dimensions		
1	Operating length w/SE60 FM	6608 mm	21' 9"
	Shipping length w/SE60 FM	6375 mm	20' 11"
	Shipping width w/SE60 FM	3592 mm	11' 10"
1	Operating length w/SE60 V	6800 mm	22' 4"
	Shipping length w/SE60 V	6635 mm	21' 10"
	Shipping width w/end gates - SE60 V	3211 mm	10' 6"
	Shipping width w/end gates folded - SE60 V	3000 mm	9' 10"
1	Operating length w/SE60 V XW, VT XW	7034 mm	23' 1"
	Shipping length w/SE60 V XW, VT XW	6910 mm	22'8"
	Shipping width w/end gates - SE60 V XW, VT XW	3211 mm	10' 6"
	Shipping width w/end gates folded - SE60 V XW, VT XW	3000 mm	9' 10"
2	Operating width (standard entry hopper)	3306 mm	10' 10"
3	Operating height	3765 mm	12' 4"
4	Shipping height	3000 mm	9' 10"
5	Operating platform height	1849 mm	6' 1"
6	Truck entry height (standard entry hopper)	520 mm	21"
7	Truck entry width (standard entry hopper)	3224 mm	10' 7"
8	Hopper length w/push roller extended	2414 mm	7' 11"
9	Wheel base	2776 mm	9' 1"
	Auger diameter	406 mm	16"



