#### 2007

#### MA333D — CONSTRUCTION MACHINERY

#### **DEFINITIONS AND SPECIAL INSTRUCTIONS**

#### 1. Scope of survey

This survey covers all companies engaged in the domestic manufacture of selected types of construction and surface mining machinery and equipment.

#### 2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this survey are requested to complete a separate report form for each location. If you have not received a separate form for each of your establishments, please call the contact shown on the report form or write to the U.S. Census Bureau for additional forms. (We have begun to offer some flexibility in this requirement. Call the contact for details).

#### a. Quantity and value of shipments

The figures on quantity and value of shipments should include the physical shipments of all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers; i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in shipments.

Tandem dig, carrying and hauling scraper units should be reported as two separate units.

When reporting machinery for mounting on tractors, shovel loaders, or other prime movers, report only the value 9208). Report the prime mover separately in the appropriate item.

Leased machines — For construction machinery products which your company made for its own use (as for leasing or renting instead of for sale), report the number and estimated values, approximately the value of the products sold outright. If no such prices exist, base the value on the valuation placed on these items for tax, insurance, or similar purposes.

#### b. Columnar structure of report

When entering your figures on the report, please be sure to report the information in the correct columns. The columns are:

Column 1 — Quantity of total shipments

Column 2 — Value of total shipments

(Columns 3 through 6 are not used for this survey)

#### 3. Definitions

The product detail for this survey, as shown in the Reference List, is defined according to standard nomenclature for this industry.

Net engine horsepower (NEHP) — Net flywheel performance as measured by the manufacturer, with all standard accessories installed, operated, and corrected to 29.38 inches mercury (Hg) and temperature of 85 degrees Fahrenheit.

Crawler loader — Specially designed tracklaying tractor unit equipped at the factory with a shovel loader type mechanism. Report any standard crawler tractor as a tracklaying tractor if it is shipped with a shovel loader as a front-end attachment. Do so whether the loader is mounted and shipped with the tractor or is shipped separately. Report the shovel loader attachment mounted on a standard tractor separately in item code 9124.

Excavator — A commercial earth-moving machine equipped with a bucket-mounted front-end attachment. This attachment and its operating machinery are mounted on a 360 degree revolving superstructure.

Crane — A machine with front-end attachment functions performed by wire rope.

Cable operated — A machine with front-end attachment functions performed by wire rope.

*Hydraulic excavator* — A machine with front-end attachment functions performed hydraulically.

Hydraulic crane — A machine with 360-degree rotation on which the boom which is designed primarily for lifting the load by wire rope and can be extended, retracted, raised, and lowered hydraulically.

*Crawler-mounted* — A machine with two parallel continuous crawler or tread belts.

Truck-mounted (rubber) — A machine which generally has two engines, one to propel the carrier and another to power the work functions. A truck or carrier mounted machine will have two operator stations and is designed for on- and off-highway travel.

#### **MA333D**

#### **DEFINITIONS AND SPECIAL INSTRUCTIONS — Continued**

#### 3. Definitions — Continued

Pinned-on telescopic crane (item code 4209) — A hydraulically powered multi-purpose rotating crane with fixed or telescoping booms designed to lift and place materials by winch and load line and which is mounted on a commercially available vehicle having a platform or body.

Pinned-on articulated crane (item code 4209) — A stationary or vehicle mounted hydraulically powered multi-purpose knuckle boom crane consisting of an inner and outer boom that can fold to a stowable position. Excluded are those machines commonly known as knuckle boom loaders.

Unmounted cranes — These cranes are classified under "Construction machinery for mounting" (item code 9124 or 9208, depending on whether used for construction or materials-handling).

Attachments — Include only attachments for cranes, excavators, or draglines sold separately, not shipped with the original machine, in item codes 4284 to 4293. Include the value of any attachments sold with the machine, with the value, f.o.b. plant, of that machine.

#### 4. Comparability

Data reported in this survey should correspond to data reported in the Economic Census - Manufacturing Sector form. The sum of values for item codes shown in column (a) should correspond to dollar values reported under product codes indicated in column (b) below.

Current Industrial Reports (Form MA333D)	Economic Census - Manufacturing Sector
Item code (a)	Product codes (b)
1198	3331201550
3298	3331201220
4298	3331201110
7198	3331201440
8606	3331201330
8698	3331201660
9128	3331201770
9134	3339237110
9298	3339237230

## REFERENCE LIST

FORM MA333D		CONSTRUCTION MACHINERY
		CONSTRUCTION MACHINERY
		TOTAL SHIPMENTS (Domestic and export) (Report value in thousands of dollars)
Product code	Item code	Item description
Code	code	·
		CONSTRUCTION WHEEL AND CRAWLER TRACTORS, DOZERS, AND SELF- PROPELLED WHEELED LOG SKIDDERS
3331201577	1140	Wheeled log skidders, self-propelled
3331201599	1150	Crawler tractors (except crawler loaders) and tracklaying and other contractors' off-highway-type wheel tractors and dozers (see item code 7184 for crawler loaders)
3331201550	1198	Total crawler tractors, contractors' off-highway-type wheel tractors, dozers, and self-propelled wheeled log skidders (Sum of item codes 1140 and 1150)
		MIXERS, PAVERS, AND RELATED EQUIPMENT (EXCLUDING PARTS)
		For concrete, plaster, or mortar applications:
3331201222	3222	Concrete mixers (except plaster and mortar), portable, all sizes, either truck-mixer or agitator or otherwise
3331201231	3231	Plaster and mortar mixers, all sizes
3331201233	3233	Slipform concrete paving machines, including multipurpose, automated curb and gutter and concrete slipform pavers up to and including 34' wide
3331201239	3239	Concrete trowels
3331201241	3240	Concrete vibrators (electric motor, gasoline engine, structural high-cycle, pneumatic, etc.
3331201244	3242	Concrete screeds (hand-propelled or winch type)
3331201247	3243	Concrete batching plants, bin and batch (for concrete aggregate only and bulk cement
3331201251	3250	Concrete pumps, mobile
3331201256	3256	Other concrete, plaster, and mortar mixing and paving machinery
		For asphalt or bituminous applications:
3331201266	3266	Bituminous distributors
3331201271 3331201275	3271 3275	Bituminous pavers, self-propelled: 21,999 lbs. gross weight and under (basic unit) 22,000 lbs. gross weight and over (basic unit)
3331201282 3331201284	3282 3284	Asphalt plants (including cold mix central plants): Less than 7500 pounds (239 tons per hour) 7500 pounds and over (240 tph and over)
3331201286	3285	Bituminous stabilization mixing equipment, including central mixing plants and mix-in-place
3331201289	3289	Bituminous cold planers / milling machines (self-propelled)
3331201291	3291	Other asphalt and bituminous mixing and paving machinery
3331201295	3295	Other products, for use in either concrete or bituminous applications
3331201220	3298	Total mixers, pavers, and related equipment (EXCLUDING PARTS) (Sum of item codes 3222—3295)

## REFERENCE LIST — Continued

3331201111 44 3331201114 44 3331201117 44 3331201129 44 3331201130 4	4073 4074 4075 4093 4140	TOTAL SHIPMENTS (Domestic and export) (Report value in thousands of dollars)  Item description  POWER CRANES, DRAGLINES, AND EXCAVATORS, INCLUDING SURFACE MINING EQUIPMENT; AND ATTACHMENTS (EXCLUDING PARTS)  Excavators, hydraulic operated:  Crawler-mounted, rated size in metric tons: Not more than 24 metric tons (26.46 short tons) More than 24 metric but not more than 40 metric tons (44.09 short tons) More than 40 metric tons Wheel (rubber) mounted, all sizes
3331201111 44 3331201114 44 3331201117 44 3331201129 44 3331201130 4	4073 4074 4075 4093	POWER CRANES, DRAGLINES, AND EXCAVATORS, INCLUDING SURFACE MINING EQUIPMENT; AND ATTACHMENTS (EXCLUDING PARTS)  Excavators, hydraulic operated:  Crawler-mounted, rated size in metric tons: Not more than 24 metric tons (26.46 short tons) More than 24 metric but not more than 40 metric tons (44.09 short tons) More than 40 metric tons
3331201114 3331201117 4 3331201129 4 3331201130 4 3331201153 4 3331201156 4	4074 4075 4093	INCLUDING SURFACE MINING EQUIPMENT; AND ATTACHMENTS (EXCLUDING PARTS)  Excavators, hydraulic operated:  Crawler-mounted, rated size in metric tons: Not more than 24 metric tons (26.46 short tons) More than 24 metric but not more than 40 metric tons (44.09 short tons) More than 40 metric tons
3331201114 3331201117 4 3331201129 4 3331201130 4 3331201153 4 3331201156 4	4074 4075 4093	Crawler-mounted, rated size in metric tons:  Not more than 24 metric tons (26.46 short tons)  More than 24 metric but not more than 40 metric tons (44.09 short tons)  More than 40 metric tons
3331201114 3331201117 4 3331201129 4 3331201130 4 3331201153 4 3331201156 4	4074 4075 4093	Not more than 24 metric tons (26.46 short tons) More than 24 metric but not more than 40 metric tons (44.09 short tons) More than 40 metric tons
3331201130 4 3331201153 4 3331201156 4		Wheel (rubber) mounted, all sizes
3331201153 4: 3331201156 4:	4140	
3331201156 4		Cranes, lattice boom, including crawler and wheel (rubber) mounted
3331201156 4		Cranes, hydraulic-operated, telescopic boom:
	4202 4205 4207	Wheel cranes (integral), multiple control stations, rubber-mounted, maximum working load of: Not more than 27 metric tons (29.76 short tons) More than 27 but not more than 50 metric tons (55.12 short tons) More than 50 metric tons
3331201167 4	4209	Pinned-on type, telescopic and articulated
	210 217	Wheel cranes, one control station, self-propelled, rubber-mounted, maximum working load of: Not more than 16 metric tons (17.64 short tons) More than 16 metric tons (17.64 short tons)
3331201185 42	232	All-terrain cranes
		Other cranes and excavators:
3331201194 42	245	Pedestal or shipmounted marine cranes
3331201199 42	264	All other cranes, including locomotive wrecking, cable-operated excavators, and draglines
		Attachments (sold separately) for power cranes, draglines, and excavators:
33312011A4 42	284	Hoe
33312011A5 42	286	Dragline buckets, all sizes
33312011A7 42	291	Clamshell/grapple
33312011AA 42	293	All other attachments
3331201110 42	298	Total power cranes, draglines, and excavators, including surface mining equipment; and attachments (EXCLUDING PARTS) (Sum of item codes 4073—4293)

### **REFERENCE LIST** — Continued

FORM MA333D		REFERENCE LIST — Continued
TOTAL SHIPMENTS (Domestic and export) (Report value in thousands of dollars)		
Product code	Item code	Item description
		TRACTOR SHOVEL LOADERS
3331201460	7160	Skid steer loaders, 4-wheel drive skid steer, all sizes
3331201471 3331201475 3331201479 3331201483	7171 7172 7173 7174	Wheel loaders, rear engine mount, integral design, 4-wheel drive, non-skid steer: Under 79 net engine horsepower (NEHP) 80-149 NEHP 150-249 NEHP 250 NEHP and over
3331201495	7195	Integral-design tractor shovel loader/backhoes (wheel tractor-chassis shipped as part of front engine mount contractor tractor)
3331201440	7198	Total loaders (Sum of item codes 7160—7195)
		OFF-HIGHWAY TRUCKS, COAL HAULERS, TRUCK-TYPE TRACTOR CHASSIS, TRAILERS, AND WAGONS (EXCLUDING PARTS)
3331201371 3331201376	8602 8604	Off-highway rear dump haulers Off-highway trucks, coal haulers, truck-type tractor chassis, trailers, and wagons
3331201330	8606	Total off-highway trucks, coal haulers, truck-type tractor chassis, trailers, and wagons, (EXCLUDING PARTS) (Sum of item codes 8602 and 8604)
		MOTOR GRADERS AND LIGHT MAINTAINERS, INCLUDING ROLLERS AND COMPACTORS, ROUGH-TERRAIN FORKLIFTS, SCRAPER BOWLS, AND SELF-PROPELLED CONTINUOUS DITCHERS AND TRENCHERS (EXCLUDING PARTS)
3331201662	8607	Motor graders, and light maintainers
3331201672	8617	Rollers and compactors (static smooth steel wheel rollers, tandem)
3331201682	8624	Pneumatic tire rollers
3331201687 3331201689 3331201692	8626 8628 8630	Vibratory single drum with 1 or 2 drive wheels:  Under 5 metric tons (5.51 short tons)  At least 5 but less than 8 metric tons (8.82 short tons)  8 metric tons and over
3331201693	8633	Vibratory double drum, two drums vibrating

### **REFERENCE LIST— Continued**

FORM MA333D		
		TOTAL SHIPMENTS (Domestic and export) (Report value in thousands of dollars)
Product code	Item code	Item description
		MOTOR GRADERS AND LIGHT MAINTAINERS, INCLUDING ROLLERS AND COMPACTORS, ROUGH-TERRAIN FORKLIFTS, SCRAPER BOWLS, AND SELF-PROPELLED CONTINUOUS DITCHERS AND TRENCHERS (EXCEPT PARTS)—Continued
33312016A6	8639	All other compaction equipment, excluding hand-held; including embankment and landfill compactors, towed roller and double drum compactors with one drum vibrating
33312016D1 33312016D3 33312016D5	8641 8643 8645	Rough-terrain forklifts (integral units): Vertical mast, 2-wheel drive Vertical mast, 4-wheel drive Telescopic handlers, 2- and 4-wheel drive
33312016E5	8647	Scraper bowls
33312016J4 33312016J7	8654 8655	Ditchers and trenchers, self-propelled (integral units only):  Ladder-type digging element:  No more than 5,000 lbs. gross weight  More than 5,000 lbs. gross weight
33312016J9	8657	Wheel-type digging element
3331201660	8698	Total motor graders, light maintainers, rollers and compactors, rough-terrain forklifts, Including scraper bowls, ditchers and trenchers, (EXCLUDING PARTS) (Sum of item codes 8607—8657)
		CONSTRUCTION MACHINERY FOR MOUNTING ON TRACTORS AND OTHER PRIME MOVERS, (EXCLUDING PARTS) WINCHES AND MATERIALS-HANDLING EQUIPMENT
3331201782	9121	Backhoes (either shipped for mounting separately or already mounted on an integral unit)
3331201799	9124	Other construction machinery for mounting, including sidebooms, pipehandlers, dozers, front-end loaders, shovel loaders, logging arches, rippers, rooters, continuous ditching and trenching attachments, fork lift attachments, cranes, cable power control units, hydraulic power control units, etc.; excluding winches and materials-handling equipment
3331201770	9128	Total construction machinery for mounting on tractors and other prime movers, excluding winches and materials-handling equipment (Sum of item codes 9121 and 9124)

### REFERENCE LIST

TOTAL SHIPMENTS (Domestic and export) (Report value in thousands of dollars)		
Product code	Item code	Item description
3339237110	9134	PERSONNEL AERIAL WORK PLATFORMS (excluding parts)
		WINCHES FOR MOUNTING ON WHEEL AND CRAWLER TRACTORS AND OTHER PRIME MOVERS, (COMPLETE UNITS)
3339237231 3339237239	9206 9208	Machinery for mounting: Winches (towing, logging, and oil-field types) Other materials-handling machinery for mounting
3339237230	9298	Total winches for mounting on wheel and crawler tractors and other prime movers, complete units (Sum of item codes 9206–9208)

10/26/07