


# Product Definitions Guide

## Product Descriptions by Segment and Application





Power Systems Research tracks some 250 products in 13 major industrial segments. This Guide defines each product that PSR lists in its proprietary databases. For more product information, visit us at [www.powersys.com](http://www.powersys.com)

### Segment: Agriculture

#### Application: 2-Wheel Tractors

Product	Definition	Image
2-Wheel Tractors	Also known as a walking tractor, which is a single-axle tractor. These are self-powered and self-propelled and are used to power and pull farm implements such as trailers, cultivators and plows. The operator usually walks behind this tractor.	


#### Application: Ag Tractors

Product	Definition	Image
2-Wheel Drive Tractors	Farm tractors that have a drive train that allows two wheels to receive power from the engine simultaneously. Normally, the rear axle is powered by the engine.	
4WD Articulated Ag Tractors	Farm tractors built with an articulated chassis very similar to the design used for articulated wheel loaders. Each 'element' of the articulated chassis has a rigid drive axle and the front and rear elements are connected by a pivoting/articulating joint. Note that this design uses rigid (i.e. non-steering) drive axles and is typically used for large, high-HP tractors.	
MFWD Tractors (Mechanical Front Wheel Drive)	Farm tractors which feature a rigid chassis with steerable front-drive axles. This designation applies to both full-time 4WD and front-assist-drive configuration tractors across a broad HP range. Both configurations are produced in significantly greater volume than the 4WD Articulated type tractors.	
Tracked Ag Tractors	Steerable multitrack tractors with powered rubber tracks instead of wheels to move the vehicle. The crawler-type tracks are flexible and reinforced with steel. They are usually powered by hydrostatic or completely hydraulic driving mechanisms. They can be articulated or nonarticulated.	


# Product Definitions Guide

## Segment: Agriculture (continued)






### Application: Balers

Product	Definition	Image
Balers	A piece of farm machinery used to compress a cut and raked crop, such as hay or straw, into compact bales that are easy to handle. There are different types of bales which include rectangular and cylindrical shapes of various sizes that can be bound with twine, netting or wire.	

### Application: Combines

Product	Definition	Image
Combines	A farm machine that harvests grain crops. Combines can reap, thresh and winnow crops into a single process. Crops include wheat, oats, rye, barley, corn, etc.	


### Application: Other Ag Equipment

Product	Definition	Image
Ag Mowers	An Ag Mower is a specific type of mower designed to cut grasses in difficult-to-reach off-road areas on farms and near highways and roads.	
CRVs (Chinese Rural Vehicles)	Categorized as 3-wheel and 4-wheel powered vehicles manufactured by domestic Chinese companies for use in small cities and rural areas. These vehicles are mostly used to transport goods. Officially, the Chinese government classifies CRVs as part of the Chinese farm machinery industry, not the automotive industry.	
Harvesters	The combine harvester, often simply called a combine, is a machine that harvests grain crops. The name derives from its combining three separate operations comprising harvesting—reaping, threshing, and winnowing—into a single process. The waste straw left behind on the field is the remaining dried stems and leaves of the crop with limited nutrients. This waste straw is either chopped and spread on the field or baled for feed and bedding for livestock.	
Other Ag Equipment (Self Propelled)	This is a specialized niche market that may include the production of tenders (fertilizers), tree shakers and carriers.	
Other Ag Equipment (Stationary)	This is a specialized niche market that includes items such as bedding choppers, bale wrappers and wind machines.	





# Product Definitions Guide

## Segment: Agriculture (continued)


### Application: Other Ag Equipment (continued)

Product	Definition	Image
Specialty Cultivating Equipment	This is a specialized niche market that may include the production of dredging equipment and pruning towers.	

### Application: Sprayers

Product	Definition	Image
Backpack Sprayers	An agricultural sprayer is a piece of equipment that uses spray nozzles to apply herbicides, pesticides, and fertilizers to agricultural crops. Backpack sprayers are portable units with an attached spray gun.	
Self Propelled Sprayers	An agricultural sprayer is a piece of equipment that uses spray nozzles to apply herbicides, pesticides, and fertilizers to agricultural crops. Sprayers can be self-propelled units similar to tractors with boom mounts of 60–151 feet in length.	
Skid Mounted Sprayers	An agricultural sprayer is a piece of equipment that uses spray nozzles to apply herbicides, pesticides, and fertilizers to agricultural crops. Sprayers that are skid mounted are usually connected to a base and are not considered to be a self-propelled unit.	
Towable/Tractor Mounted Sprayers	In agriculture, a sprayer is a piece of equipment that uses spray nozzles to apply herbicides, pesticides, and fertilizers to agricultural crops. Sprayers range in size from small portable units (typically backpacks with spray guns) to trailed sprayers that are connected to a tractor.	





### Application: Windrowers

Product	Definition	Image
Windrowers	Also known as a swather. It is a farm implement that cuts hay or small grain crops and forms them into a windrow. A windrower uses a sickle bar to cut the stems off the crop. A reel helps the cut crop fall neatly onto an auger conveyor which moves it and deposits it into a windrow, with all stems oriented in the same direction.	



# Product Definitions Guide

## Segment: Construction


### Application: Bore/Drill Rigs

Product	Definition	Image
Horizontal Boring Machines	A Horizontal Boring Machine or horizontal boring mill is a machine tool which bores holes in a horizontal direction. There are three main types — table, planer and floor. The table type is the most common, and, as it is the most versatile, it is also known as the universal type.	
Portable Drills	A Portable Drill is similar to a self-propelled drill, except that it is not self-propelled; it must be carried or pulled from place to place. One example of a portable drill is the portable water well drill.	
Self Propelled Drills	Self-Propelled Bore/Drilling Rigs typically are designed for drilling vertical and inclined holes at opencast mining sites.	
Truck Mounted/Towable Drills	Truck Mounted/Towable Drills typically are designed and fabricated for water well and geothermal drilling applications. Hydraulic pumps are used as prime movers with pumps powered with truck/deck engines.	

### Application: Crawlers

Product	Definition	Image
Crawler Dozers	Crawler Dozers are heavy, driver-operated machines used for clearing and grading land. Usually, they have continuous treads and a broad hydraulic blade in front. Large crawler dozers normally have a set of claws called a ripper that is installed at the machine's rear end and can crush hard rock.	
Crawler Loaders	A Crawler Loader is a piece of mobile construction equipment used to load materials; it's used primarily in tough, off-road terrain. It's similar to a wheel loader, except it has treads instead of wheels.	



### Application: Excavators

Product	Definition	Image
Crawler Excavators	A Crawler Excavator is a self-propelled crawler mounted on heavy equipment that is designed to dig or move large objects and is classified by its mode of locomotion. The main function of a Crawler Excavator is to dig holes or trenches for construction related activities.	






# Product Definitions Guide

## Segment: Construction (continued)


### Application: Excavators (continued)

Product	Definition	Image
Mini Excavators	Mini Excavators are compact machines that are tracked or wheeled vehicles with an approximate operating weight from 0.7 to 8.5 tons. A Mini Excavator generally includes a standard backfill blade and features an independent boom swing.	
Wheeled Excavators	Wheeled Excavators are self-propelled units that have buckets mounted on wheels and that are used for excavating. The term Wheeled Excavator also refers to any power-driven machine used in excavation that moves on wheels, rather than crawlers.	

### Application: Finishing Equipment

Product	Definition	Image
Concrete Finishers/Trowels	Concrete Finishers/Trowels are used to place, finish, level and smooth concrete for construction projects. Units can be ride-on or walk-behind.	
Concrete Vibrators	Concrete Vibrators consolidate freshly poured concrete so that trapped air and excess water are released and the concrete settles firmly in place in the formwork.	
Screeds	Screeds are designed and engineered to strike-off concrete in the leveling process using a blade to smooth the surface.	
Other Finishing Equipment (Self Propelled)	Other Finishing Equipment, Self-Propelled, includes versatile texturing and curing machines equipped with crawler tracks or flotation tires. These machines can increase efficiency on any project where the surface of the concrete requires texturing and application of curing compound.	
Other Finishing Equipment (Stationary)	Other Finishing Equipment Stationary includes road patching equipment for the repair of potholes and other road surface imperfections.	

### Application: Forestry Equipment








Product	Definition	Image
Feller Bunchers	A Feller Buncher is a special type of harvester used in logging. A Feller Buncher is a motorized vehicle with an attachment that can rapidly cut and gather several trees before felling them.	




# Product Definitions Guide

## Segment: Construction (continued)

### Application: Forestry Equipment (continued)

Product	Definition	Image
Forwarders	Forwarders are forestry vehicles that carry large felled logs from the stump to a roadside landing. Unlike a skidder, a forwarder carries logs clear of the ground, which can reduce soil damage, but the design tends to limit the size of the logs it can move.	
Log Loaders (Self Propelled)	Log Loaders, Self-Propelled, (also known as knuckle boom loaders) are mounted on a carrier and are used for grasping and lifting logs with various attachment configurations.	
Log Loaders (Trailer Mounted)	Log Loaders Trailer Mounted (also known as knuckle boom loaders) are mounted on a heavy-duty truck/trailer base and are designed to handle the toughest logging jobs.	
Other Forestry Equipment (Self Propelled)	Other Forestry Equipment Self Propelled are units used for forestry applications that may include industrial tractors/mulchers, brush cutters/shredders and tree trimmers.	
Other Forestry Equipment (Stationary)	Other Forestry Equipment Stationary are units used for forestry applications that may include a niche market of debarkers, tree chippers, delimbers, fire wood processors and flails.	
Skidders	Skidders are any type of heavy vehicle used in a logging operation for pulling cut trees out of a forest in a process called "skidding," in which the logs are transported from the cutting site to a landing.	
Tree Harvesters	A Tree Harvester is a type of heavy forestry vehicle used in cut-to-length logging operations for felling, delimbing and bucking trees. A forest harvester is typically employed with a forwarder that hauls the logs to a roadside landing.	



### Application: Graders

Product	Definition	Image
Graders	A Grader is a piece of heavy equipment used to level or smooth roads or other surfaces. Also referred to as a Road Grader or a Motor Grader.	


# Product Definitions Guide

## Segment: Construction (continued)



### Application: Mixers

Product	Definition	Image
Asphalt Mixers/ Agitators	Asphalt Mixers/Agitators are used to manufacture asphalt, macadam and other forms of coated road stone, often called “blacktop.”	
Cement/Mortar Mixers	A Cement/Mortar Mixer is a mechanical mixer that uses rotating paddles attached to a horizontal axle to blend the mix ingredients of mortar or concrete.	


### Application: Off-Highway Tractors

Product	Definition	Image
Off-Highway Tractors	Off-Highway Tractors feature oscillating yoke hitches that reduce frame stress, rugged turn stops to limit wagon rotation, and a rear platform that functions as a power train guard. Many Off-Highway Tractors are used in mines, construction and quarries.	

### Application: Off-Highway Trucks

Product	Definition	Image
Articulated Trucks	An Articulated Hauler is a specific type of dump truck used for transporting loose material for construction. A typical dump truck is equipped with an open box bed, which is hinged at the rear and equipped with hydraulic pistons to lift the front, allowing the material in the bed to be deposited on the ground behind the truck. An articulated hauler or articulated dump truck (ADT) is an all-wheel drive vehicle that features a front (tractor) unit followed by a separate, rear (trailer) unit. Differs from a single unit, rigid dump truck.	
Rigid Haul Trucks	Rigid Haul Trucks are off-highway, rigid dump trucks specifically engineered for use in high-production mining and heavy-duty construction environments.	





### Application: Other Construction Equipment

Product	Definition	Image
Other Construction Equipment (Self Propelled)	Other Construction Equipment Self Propelled is a niche market that includes specialty items for the construction market such as pipe layers.	




# Product Definitions Guide

## Segment: Construction (continued)

### Application: Other Construction Equipment (continued)

Product	Definition	Image
Other Construction Equipment (Stationary)	Other Construction Equipment Stationary is a niche market that includes specialty items for the construction market such as mud pumps.	
Pavement Planers/Profilers	A Pavement Planer/Profiler (also known as a cold planer, pavement recycler, asphalt milling machine or roto-mill) is a construction machine used to remove bituminous pavement or asphalt/concrete from roadways, resulting in a rough, but even surface that can be immediately opened to traffic.	
Placers/Spreaders	Placers/Spreaders place a metered supply of PCC in front of the paver using a series of conveyor belts, augers, plows and strike-off devices. Using a placer/spreader allows the contractor to receive material from transport vehicles and place a uniform amount of PCC in front of the entire paver width, while minimizing segregation.	
Tensioners	Tensioners or Pullers are designed to draw cables for heavy distribution or light transmission stringing and are ideal for reconductoring applications.	

### Application: Pavers


Product	Definition	Image
Asphalt Pavers	An Asphalt Paver is a piece of construction equipment used to lay asphalt on roads, bridges, parking lots and other similar large areas. It lays the asphalt flat and provides minor compaction before the asphalt is rolled by a roller.	
Concrete Pavers	A Concrete Paver is used to lay concrete, primarily for heavy roadway and bridge applications.	
Slip Form Pavers	Slip Form Pavers are used to consolidate, form into geometric shape and surface finish a PCC mass by pulling the forms continuously through and surrounding the plastic concrete mass.	






# Product Definitions Guide

## Segment: Construction (continued)




### Application: Plate Compactors

Product	Definition	Image
Plate Compactors	Plate Compactors, also known as plate vibrators, are used to compact soils, base materials, sand beddings and pavers, to promote interlocking.	

### Application: Rollers

Product	Definition	Image
Landfill Compactors	Landfill Compactors or Compactors are variations on the wheeled loader principle. They feature hydrostatic drives and enclosed frame structures. These units are used to distribute and compact refuse on landfill sites.	
Rollers (Static and Vibratory)	A Road Roller (sometimes called a roller-compactor, or just roller) is a compactor type vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations; similar rollers are used at landfills and in agriculture.	
Soil Compactors	Soil Compactors are heavy construction equipment designed to maximize soil density by compacting soil or other material so that the soil or other material will reach the determined density level that makes the soil structure tighter and more solid.	




### Application: Scrapers

Product	Definition	Image
Elevating Scrapers	An Elevating Scraper is a self-loading bowl scraper able to operate without the help of a pusher dozer except in very difficult conditions.	
Standard Scrapers	Standard Scrapers move earth over short distances (up to about two miles) over relatively smooth areas. Either self-propelled or towed, a Standard Scraper consists of a wagon with a gate having a bladed bottom. The blade scrapes up earth as the wagon pushes forward and forces the excavated material into the wagon. When the wagon is filled, the gate is closed, and the material is carried to the place of disposal. The scraper is the dominant tool in highway construction.	
Tandem Powered Scrapers	Tandem Powered Scrapers are designed and used for earth moving. Separate tractor and scraper engines provide better traction in steep or slippery areas.	


# Product Definitions Guide

## Segment: Construction (continued)



### Application: Skid Steer Loaders

Product	Definition	Image
Compact Tracked Loaders	Compact Tracked Loaders are vehicles consisting of a tracked chassis with a loader for digging and loading material.	
Compact Utility Loaders	Compact Utility Loaders are undersized loaders used for landscaping and light construction applications. Units can be tracked or wheeled.	
Skid Steer Loaders	Skid Steer Loaders aka skid loader, skid-steer loader, or skidsteer, is a small rigid frame, engine-powered machine with lift arms used to attach a wide variety of labor-saving tools or attachments.	

### Application: Tampers/Rammers

Product	Definition	Image
Tampers/Rammers	Tampers/Rammers are compacting machines that work by quickly applying consecutive impacts to the surface of soil. They are used to level an uneven soil surface and to compact the soil uniformly to minimize voids among soil particles and to reduce moisture.	



### Application: Tractor/Loader/Backhoes

Product	Definition	Image
Tractor/Loader/Backhoes	Tractor/Loader/Backhoes are full-size machines that are three pieces of construction equipment combined into one: the tractor, the loader and the backhoe. These units are designed to tackle an array of construction and agricultural related activities.	
Mini Tractor/Loader/Backhoes	Mini Tractor/Loader/Backhoes are compact machines that perform well for trenching, landscaping, and material handling. Units are configured with a front loader and rear backhoe attachment.	






# Product Definitions Guide

## Segment: Construction (continued)

### Application: Trenchers

Product	Definition	Image
Portable/ Walk-Behind Trenchers	A Portable/Walk-Behind Trencher is used to dig trenches, especially for laying pipes or cables, for installing drainage, or in preparation for trench warfare. Trenchers range in size from walk-behind models, to attachments for a skid loader or tractor, to very heavy tracked heavy equipment.	
Riding Trenchers	Riding Trenchers are used to dig trenches, especially for laying pipes or cables, for installing drainage, or in preparation for trench warfare.	



### Application: Underground Mining Equipment

Product	Definition	Image
Mining Loaders	Mining Loaders are exclusive to the mining industry and are used for scooping and hauling materials.	
Mining Locomotives	Mining Locomotives, operating on tracks, are used to haul mine cars containing coal and other material, and to move personnel in specially designed “mantrip” cars. Large locomotives can haul more than 20 tons at a speed of about 10 miles per hour.	
Mining Personnel Carriers	Mining Personnel Carriers are any heavy-duty vehicles designed specifically for the safe transport of personnel and their supplies into underground work areas. The most common underground applications are for the mining of precious metals or coal.	
Mining Utility Vehicles	Mining Utility Vehicles are designed for specialized roles in general maintenance, service, transport and construction, to improve productivity and efficiency. Utility vehicles are manufactured for many functions, including serving as personnel carriers and utility trucks; scissor lifts; fuel and lube vehicles; maintenance vehicles; skid steers, motor graders and mini excavators; tele-handlers, and multi-purpose vehicles.	
Ore Transporters	Ore Transporters is a niche market of underground mining equipment used to transport iron ore once excavated.	




# Product Definitions Guide

## Segment: Construction (continued)

### Application: Underground Mining Equipment (continued)

Product	Definition	Image
Other Underground Equipment (Self Propelled)	Self-Propelled Underground Equipment is a niche market of products that includes the fabrication of rock dusters, maintenance vehicles, ram cars and scalers.	
Other Underground Equipment (Stationary)	Other Underground Equipment Stationary is a niche market of products that includes the fabrication of slurry dusters that may have an auxiliary power unit.	

### Application: Wheel Loaders and Dozers




Product	Definition	Image
Mini Wheel Loaders	Mini Wheel Loaders are heavy equipment machines used mostly in construction to move or load materials such as asphalt, demolition debris, dirt, snow, feed, gravel, logs, raw minerals, recycled material, rock, sand, woodchips, etc., into or onto another type of machinery.	
Wheel Dozers	Wheel Dozers are essentially tractors outfitted with dozer blades or push blocks that are used for clearing and grading land. Wheel dozers frequently are used in mining applications and reclamation jobs.	
Wheel Loaders	A Wheel Loader is a piece of heavy equipment machine used to load materials such as asphalt, demolition debris, dirt, snow, feed, gravel, logs, raw minerals, recycled material, rock, sand, woodchips, etc. into or onto another type of machinery.	




# Product Definitions Guide

## Segment: Industrial



### Application: Aerial Lifts

Product	Definition	Image
Articulated Boom Lifts	An Articulated Boom Lift is an articulated boom lift or cherry picker that is a hydraulically powered lift used to get to high, hard to reach areas. It's controlled by the operator using a panel located in the bucket.	
Boom Lifts	Boom Lifts are a type of aerial work platform that consists of a platform or bucket at the end of a hydraulic lifting system.	
Scissor Lifts	A Scissor Lift is a type of aerial work platform that has a railed platform which can be raised straight up in order access areas that are difficult to reach.	

### Application: Air Compressors

Product	Definition	Image
Air Compressors	A product that converts power (usually from a diesel engine or a gasoline engine) into kinetic energy by compressing and pressurizing air, which, on command, can be released in quick bursts. There are many methods of air compression, divided into either positive-displacement or negative-displacement types. Air compressors can be used to power air tools.	



### Application: Aircraft Support Equipment

Product	Definition	Image
Aircraft Load Lifting Equipment	Catering vehicles, conveyor belt loaders and container loaders are all examples of aircraft load lifting equipment. These products all serve as ground support equipment when aircraft are not in the air.	
De-Icing Equipment/ Heat and Start Units	These special vehicles facilitate de-icing procedures which provide protection from fluids freezing up on aircraft. These vehicles have booms, like a cherry picker, to allow easy access to the entire aircraft. A hose sprays a special mixture that melts ice on the aircraft and prevents ice from building up while waiting on the ground.	




# Product Definitions Guide

## Segment: Industrial (continued)




### Application: Aircraft Support Equipment (continued)

Product	Definition	Image
Ground Power Units	A type of aircraft support equipment which can supply power to aircraft parked on the ground.	
Utility Service Equipment	Another type of ground support equipment for aircraft. Examples include cargo transporter platforms, air starters and passenger boarding stairs.	

### Application: Industrial Chippers/Grinders

Product	Definition	Image
Industrial Chippers	A machine used to chip large pieces of wood. A tree chipper or wood chipper is used for reducing wood (generally tree limbs or trunks) into smaller woodchips.	
Industrial Grinders	A machine used to grind wood and other raw materials into small particle sizes to create end materials. Grinders usually provide greater versatility, lower wear costs and more consistent uptime than chippers.	
Stump Grinders	Also known as a stump cutter, this is a power tool that removes tree stumps by means of a rotating cutting disk that chips away the wood. Stump grinders can be the size of a lawn mower or as large as a truck.	


### Application: Concrete and Industrial Saws

Product	Definition	Image
Concrete and Masonry Saws	Concrete and Masonry Saws are power tools used for cutting concrete, masonry, brick, asphalt, tile, and other solid materials.	
Cut-Off/Tile Saws	A Cut-Off/Tile Saw is an abrasive power tool which is typically used to cut hard materials such as metals and concrete. The cutting action is performed by an abrasive disc, similar to a thin grinding wheel.	
Portable Saw Mills	A Portable Saw Mill is a machine that consists of a blade, either circular or band, and a guide system that cuts logs into boards, square timbers, or cants. Portable sawmills are light and compact compared to stationary sawmills. They are transported either in the back of a pickup, on a trailer, or they may have their own trailer axle and hitch.	


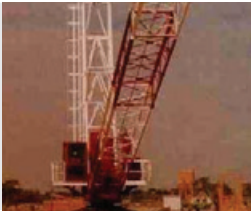


# Product Definitions Guide

## Segment: Industrial (continued)


### Application: Concrete and Industrial Saws (continued)

Product	Definition	Image
Roof Cutters/ Peelers	Roof Cutters/Peelers are similar to a saw and are used to remove roofing material.	

### Application: Cranes

Product	Definition	Image
Crane Chassis	The Chassis is the underpart of the crane and consists of the frame on which the body is mounted. The upper crane unit, which has its own engine, goes on top of the crane chassis. Cranes with two engines, one for the chassis and one for the upper unit/part make up this configuration. The chassis drives the crane and makes it move forward and backward.	
Pedestal Cranes	This equipment is used on projects that are stationary or where mobility needs are small; they offer the perfect combination of powerful performance, durability and cost effectiveness.	
Self-Propelled Cranes	This is a mobile crane which is a self-propelled vehicle, one that is designed for lifting objects using a boom with lifting gear. It only carries loads that are necessary for its own propulsion or equipment.	
Upper Crane Units	This is the part of the crane which sits on top of the crane chassis. Upper crane units have their own engines. Cranes with two engines, one for the chassis and one for the upper unit/part, make up this configuration. The upper unit operates and powers the lifting and loading capability of the crane.	




### Application: Crushing & Processing Equipment

Product	Definition	Image
Crushing and Processing Equipment	Machines used to reduce large rocks into smaller rocks, gravel or rock dust. They are used to reduce the size or change the form of waste material, so it can be more easily processed, recycled or disposed of.	


# Product Definitions Guide

## Segment: Industrial (continued)


### Application: Dumpers/Tenders

Product	Definition	Image
Concrete Buggies	A Concrete Buggy is a small, self-propelled vehicle designed to carry a small amount of concrete a short distance. It is different from a large concrete mixing truck, which mixes concrete while transporting it between sites.	
Crawler Dumpers/Tenders	Crawler Dumpers/Tenders are tracked equipment used for hauling and dumping applications.	
Dumpers/Tenders	Dumpers/Tenders are vehicles designed for carrying bulk material, often on building sites. Dumpers are distinguished from dump trucks by configuration: a dumper is usually an open 4-wheeled vehicle with the load skip in front of the driver, while a dump truck has its cab in front of the load.	


### Application: Forklifts

Product	Definition	Image
Forklifts	Forklifts are small industrial vehicles with a power-operated pronged platform that can be raised and lowered for insertion under a load to be lifted and moved.	

### Application: Gas Compressors

Product	Definition	Image
Gas Compressors	This is a mechanical product that increases the pressure of a gas by reducing its volume. Compressors can transport gas through a pipe. They are used in the pipeline transport of purified natural gas from production sites to consumers.	

### Application: Hydraulic Power Units


Product	Definition	Image
Hydraulic Power Units	A product with an engine, usually on a skid, and used to power hydraulic applications and tools. Hydraulic power is power derived from motion and pressure of a liquid such as water or oil.	





# Product Definitions Guide

## Segment: Industrial (continued)






### Application: Irrigation Sets

Product	Definition	Image
Irrigation Sets	A device used to power an irrigation system and pump water.	

### Application: Light Towers and Arrow/Message Boards

Product	Definition	Image
Light Towers	This is a piece of mobile equipment which has one or more high-intensity lamps mounted on a mast. The mast is attached to a trailer, with a generator to power the lamps. The generator is powered by a diesel engine. Light plants are mostly used for construction and mining projects.	
Arrow/Message Boards	Arrow/Message Boards are used to display electrically transmitted signals and to indicate their source.	









### Application: Oil Field Equipment

Product	Definition	Image
Fracturing Rigs	A drill that is used to extract natural gas (or oil) from deep underground. The process involves drilling a deep well a mile or more underground. After reaching a layer of rock that contains natural gas, the drill then turns horizontally to snake its way thousands of feet farther through that layer of rock.	
Mechanical Drilling Engines	Mechanical Drilling Engines are mechanical drive power sources designed and fabricated for land drilling rigs.	
Oil Field Pumps	A pump in an oil well. The unit pumps oil, mud and other fluids. It is the real workhorse behind a pump jack.	
Pump Jacks	Pump Jacks are the underground drive unit for a reciprocating piston pump in an oil well. They are used to mechanically lift liquid out of the well.	
Seismographic Rigs	Seismographic Rigs are machines used to detect and record the intensity, direction, and duration of a movement of the ground.	

# Product Definitions Guide

## Segment: Industrial (continued)



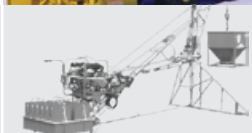
### Application: Other Industrial Equipment

Product	Definition	Image
Abrasive Blasting Equipment	This includes machinery used in surface preparation, cleaning or profiling. Machine size varies from small walk behind units used in the contracting business to large self-propelled units for road works or large construction sites.	
Blowers/ Vacuums/ Water Sprayers	Blower units are designed and used to blow a large amount of air. In aircraft industries, they are used to heat fleets during cold weather; in the Lawn and Garden segment to blow debris off fields and parks, and in the utility sector for pest control. Vacuum equipment is used for wet or dry excavation works or can be used for bulk or liquid material vacuuming. Water sprayers are used to spray clear water.	
Industrial Paint Sprayers	Powered paint sprayers are used in industrial, commercial or residential projects. These include walk behind products and self-propelled units used in road painting and similar applications.	
Industrial Spreaders	Powered spreaders are commercial vehicles, off road vehicles and municipal vehicles used to spread products such as salt or other grains. Spreaders are mostly used for ice control or seal coating.	
Mini Multi-Purpose Tool Carriers	These versatile self-propelled units can be used with many different attachments for different tasks. The units can be equipped with buckets, mowing attachments, drill units, blades, trenchers, forks etc.	
Multi-Purpose Tool Carriers	Similar to the mini Multi-Purpose Tool Carriers, these units differ only in size. They can be fitted with many different attachments for different tasks. These units can be equipped with buckets, mowing attachments, drill units, blades, trenchers, forks etc.	
Other Industrial (Self Propelled)	Specialty self-propelled machines are included in this category, usually operating in niche markets and applications. Included into this product are special canal maintenance machines, amphibious machines, All-Terrain Vibrators, etc.	
Other Industrial (Stationary)	Specialty stationary machines are included in this category, usually operating in niche markets and applications. A few examples are: powered jump starters, gold dredgers, sandbaggers, hole cutters etc.	



# Product Definitions Guide

## Segment: Industrial (continued)


### Application: Other Industrial Equipment (continued)

Product	Definition	Image
Sewer Cleaners (Stationary)	In OE Link, most of these models are trailer mounted. These units consist of pressure washers designed to clean and flush out sewers. They usually are mounted on a trailer, so they can be transported easily. These units use a small diesel or gasoline engine to power a pump that pushes pressurized water.	
Snowblower Attachments	These powered head units attached to Off-Road equipment or commercial vehicles to clean snow from roads, runways, and other open surfaces.	
Winches/ Hoists	Powered devices including a rope or chain curving around a drum.	


### Application: Other Material Handling Equipment

Product	Definition	Image
Conveyors	A conveyor is an engine-powered system of belts, pulleys and rollers used to move a variety of materials. It may be either portable or stationery.	
Other Material Handling Equipment	This niche equipment handling segment includes gantry cranes and boat hoists.	

### Application: Pressure Washers

Product	Definition	Image
Pressure Washers	Also known as a Power Washer, this unit sprays a water and cleaner mixture under high pressure. It's used to remove loose paint, mud, mold and similar materials from a variety of surfaces in preparation for cleaning and resurfacing.	




### Application: Pumps

Product	Definition	Image
Concrete Pumps	A machine used for transferring liquid concrete by pumping. Concrete pumps are usually truck-mounted or trailer-mounted.	





# Product Definitions Guide

## Segment: Industrial (continued)


### Application: Pumps

Product	Definition	Image
Fire Pumps	These pumps are part of a fire sprinkler system's water supply that can be powered by a diesel engine. The pump intake is connected either to the public underground water supply or to a static water source.	
General Industrial Pumps	This a device that moves fluids (usually liquids or gases) through mechanical action. Powered by a diesel or gasoline engine. Used for surface preparation and industrial cleaning.	
Industrial Sprayers	Pumps that are used for surface preparation. These units use high pressure water jetting to clean and prepare surfaces.	

### Application: Railway Maintenance Equipment

Product	Definition	Image
Ballast Handlers	A Ballast Handler is a piece of rail transport maintenance of way equipment used to shape and distribute the gravel track ballast that supports the ties in rail tracks. They often are used in conjunction with ballast tampers when maintaining track.	
Other Railway Maintenance (Self Propelled)	Other Railway Maintenance Self Propelled is a niche market that includes products for railway maintenance such as tampers, grinders and track stabilizers.	
Other Railway Maintenance (Stationary)	Other Railway Maintenance Stationary is a niche market that includes products for railway maintenance.	
Rail/Tie Handlers	Rail/Tie Handlers are machines used in the railroad industry for maintaining rail ties or spikes. Tie Exchanger efficiently facilitates tie removal/insertion on the track.	

### Application: Refrigeration/AC Equipment



Product	Definition	Image
Bus Air Conditioners	An air conditioner unit installed in a bus or a coach.	






# Product Definitions Guide

## Segment: Industrial (continued)



### Application: Refrigeration/AC Equipment (continued)

Product	Definition	Image
Container/ Marine Refrigeration Equipment	Refrigeration units used to cool shipping containers on board marine vessels.	
Truck/ Trailer Refrigeration Equipment	Refrigeration equipment used to cool refrigerated truck trailers, or so-called “refer” units.	

### Application: Rough Terrain Forklifts

Product	Definition	Image
Straight Mast Forklifts	Straight Mast Forklifts are ideal for lifting, carrying, and placing palletized materials and bulk items on any type of terrain.	
Telescopic Boom Forklifts	Telescopic Boom Forklifts, often called telehandlers, are machines that are widely used in agriculture and industry. They are similar in appearance and function to a forklift but are more a crane than a forklift, with the increased versatility of a single telescopic boom that can extend forwards and upwards from the vehicle.	
Truck Mounted Forklifts	Truck Mounted Forklifts are self-propelled units that are mounted on trucks during transport. They are used for the hauling and loading of items.	






### Application: Scrubbers and Sweepers

Product	Definition	Image
Industrial Scrubbers and Sweepers	Industrial Scrubbers and Sweepers are machines designed for commercial and industrial indoor floor cleaning in warehouses and similar structures.	
Municipal Sweepers	Municipal Sweepers are machines designed primarily for outdoor street cleaning applications.	

# Product Definitions Guide

## Segment: Industrial (continued)




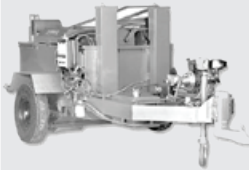


### Application: Specialty Vehicles and Carts

Product	Definition	Image
Ice Maintenance Equipment	An Ice Surfacers is a vehicle or hand-pushed device used to clean and smooth the surface of an ice sheet, usually in an ice rink. Ice resurfacers are generally composed of a snow container, hot water tanks, a wash water tank, the conditioner, and a board brush. The engine or motor of the vehicle is responsible for propelling the resurfacer and for powering the hydraulics that control the multiple functions, such as lowering the conditioner or raising the snow dump.	
Off-Highway Tracked Transporters	These machines are used for transportation of bulky cargo weighing up to 70 tons for maintenance of objects in wetlands and snow-covered areas. These units can be used as a base for the installation of cranes, excavators, drilling rigs and other technological equipment and construction machinery. The transporter consists of two independent crawler tracks and an interconnected loading platform. Located behind the cabin is the engine compartment, containing a diesel engine producing 526 kW and a winch.	
Off-Highway Wheeled Transporters	These vehicles are equipped with all-wheel drive and articulated steering and are designed for maximum mobility in marginal terrain conditions. The low-pressure tires evenly distribute the load over a greater area, thus improving vehicle traction, and increasing vehicle mobility and gradeability. Wheeled vehicles can be equipped with a wide variety of auxiliary equipment to meet specific job requirements. These units can transport loads weighing up to 30 tons across rough terrain.	
Other Specialty Vehicles	This product includes purpose-built specialty vehicles for applications such as public safety, education, blood collection and mobile healthcare, including mobile medical, mobile dental, and mobile mammography. Included in this category are specialty trolleys, trams, shuttles, buses and other people movers.	
Snow Groomers	A Snow Groomer is a tracked vehicle equipped in front with a shovel (or dozer blade) and behind with a cutter (or roller). It is usually driven by a diesel engine. When the machine drives over a snowfield, it pushes snow ahead of it and smooths out any surface unevenness.	

# Product Definitions Guide

## Segment: Industrial (continued)



### Application: Surfacing Equipment

Product	Definition	Image
Crack/ Joint Routers	Joint crack seals are usually associated with concrete pavement. This work consists of routing and cleaning existing cracks and joints and resealing to prevent water and non-compressible items from entering the pavement joints and subgrade materials. These routers feature a lightweight mobile design, unique center of axis and cutter head alignment which enable it to produce a crack that is enlarged along its exposed face to form a V-shaped groove up to a minimum width of 6 mm and a depth of 6 to 25 mm. The groove thus formed is filled and sealed.	
Other Surfacing Equipment (Self Propelled)	This product category includes self-propelled equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, airport runways and taxiways, as well as equipment used for tamping gravel, dirt, or other materials. It includes concrete and asphalt paving machines, form tampers, and stone spreaders. It also includes self-propelled ride on squeegee machines and self-propelled ride on dual squeegee and spray sealcoating equipment.	
Other Surfacing Equipment (Stationary)	This segment includes the pull-behind trailer that is used for laying down hot tack asphalt sealants. It also includes the self-propelled or pull-behind pot-hole patcher.	
Pumper Kettles/ Melters	The Pumper Kettle model is especially suited for use with cold asphalt kegs, heating a full vat to 400°F. A low profile makes loading asphalt and skimming operations easier, improving operator safety and control when working over hot asphalt. Most models have an electric start engine flange mounted pump and dual draincock ports. A hood funnels asphalt oils and vapors back into the kettle when the hood is closed and resists splashing during transport.	
Sealcoaters	Sealcoating is the process of applying a coal tar or asphalt-based emulsion directly to the surface of an asphalt pavement. A Seal coater is the equipment used to apply the required coating material evenly over the entire surface.	
Surface Grinders	Surface grinding is the most common of the grinding operations. It is a finishing process that uses a rotating abrasive wheel to smooth the flat surface of metallic or nonmetallic materials by removing the oxide layer and impurities on work piece surfaces. The surface grinder is composed of an abrasive wheel, a work holding device known as a chuck, and a reciprocating or rotary table.	




# Product Definitions Guide

## Segment: Industrial (continued)

### Application: Tactical Military Equipment

Product	Definition	Image
Tracked Military Vehicles	These self-propelled vehicles move on tracks and are frequently used by the military for tanks, troop carriers, self-propelled howitzers, and amphibious vehicles. Tracked vehicles are armed with powerful long-range cannons, machineguns and guided rockets.	
Wheeled Military Vehicles	This product is a military truck designed to transport troops, fuel and supplies to the battlefield, through paved roads and unpaved dirt roads. In general, these trucks are composed of a chassis, a motor, a transmission, a cabin, an area for the placement of the load, axles of transmission, suspensions, tires, electrical, pneumatic, hydraulic, engine cooling systems, and brakes. They can be operated with a gasoline engine or with a diesel engine; there are four-wheel drive (4x4) vehicles, six wheeled (6x6), eight wheeled (8x8), 10 wheeled (10x10) and even 12 wheeled vehicles (12x12).	

### Application: Terminal Tractors




Product	Definition	Image
Baggage/ Material Tractors	The tugs and tractors at an airport have several purposes and represent the essential part of ground support services. They are used to move all equipment that cannot move itself such as bag carts, air starters, and lavatory carts. They are available in different sizes and models with gas and diesel-power.	
Push-Back Tractors	Often called Pushback Tugs. They are mostly used to push an aircraft away from the gate when it is ready to depart, but they can also be used to pull aircraft. Different size tugs are required for different size aircraft. Some tugs use a tow bar as a connection between the tug and the aircraft, while other tugs lift the nose gear off the ground.	
Yard Spotters	This is a terminal tractor, known in the United States as a spotter truck, spotting tractor, yard truck, yard dog, yard goat, yard jockey or mule; it is a semi-tractor intended to move semi-trailers within a cargo yard, warehouse facility, or intermodal facility, much like a switcher locomotive is used to position railcars. A fifth-wheel coupling with an integrated lifting mechanism allows the semi-trailer's legs to remain in the lowered position during movement. 15 inches (380 mm) and 70,000 lb. (32,000 kg) of hydraulic lift is typical.	




# Product Definitions Guide

## Segment: Industrial (continued)

### Application: Utility Vehicles

Product	Definition	Image
Commercial Turf Utility Vehicles	Turf Utility Vehicles are specifically designed to meet the needs of sporting facilities such as golf courses and stadiums. They are commonly used for landscaping, heavy loading, dumping and transporting people or light material. Suppliers offer a wide variety of gas, electric or diesel utility vehicles. Vehicles can be customized with enclosed cabs, tool racks, dumpers and more for use on college campuses, parks, corporate campuses, apartment complexes.	
Industrial Utility Vehicles	These four-wheel gas, electric and diesel vehicles are used for a wide variety of applications such as moving people, equipment and supplies around a college campus, landscaping job or construction site. Most brands are zero-emission, high-performance, affordable, and low maintenance vehicles.	
Personnel Carriers	These low speed, low cost passenger carts are perfect for shuttling people and cargo. These vehicles can comfortably and smoothly transport up to six people and their belongings. Standard features include headlights, brake lights, and taillights. The carriers are used on golf courses, in neighborhoods, on campuses, at airports and in industrial parks.	


### Application: Welders

Product	Definition	Image
Welders	The basic spot Welder consists of a power supply, an energy storage unit (e.g., a capacitor bank), a switch, a welding transformer, and welding electrodes. The energy storage element allows the welder to deliver instantaneous high-power levels. An important feature of the transformer is that it reduces the current level that the switch must handle.	


# Product Definitions Guide

## Segment: Lawn and Garden





### Application: Chainsaws

Product	Definition	Image
Chainsaws	A Chainsaw is a portable, mechanical power driven cutting tool with teeth set on a chain that moves around the edge of a blade.	

### Application: Chippers

Product	Definition	Image
Chippers	A Chipper (or wood chipper) is a machine used for grinding wood (generally tree limbs or trunks) into smaller woodchips.	



### Application: Commercial Mowers

Product	Definition	Image
Commercial Walk-Behind Mowers	Commercial Walk-Behind Mowers are heavy-duty motor-driven machines designed for operation; the operator walks behind the mower and guides it by its handle controls.	
Riding Reel Mowers	Riding Reel Mowers have blades that spin vertically and use a scissoring action to cut the blades of grass. A reel mower will have between three and seven blades, depending on the model type.	
Riding Rotary Turf Mowers	Riding Rotary Turf Mowers have blades that spin horizontally and use a sucking and tearing action to cut the blades of grass. Rotary mowers usually have one blade which rotates rapidly.	
Walk Behind Greens Mowers	Walk Behind Greens Mowers are used mostly for golf course/turf management applications and have blades that spin horizontally.	




# Product Definitions Guide

## Segment: Lawn and Garden (continued)

### Application: Lawn and Garden Tractors

Product	Definition	Image
Garden Tractors	The Garden Tractor is designed for cutting grass, snow removal and small property cultivation. Garden tractors are similar in size to lawn tractors but are more heavy duty. They can be mounted with a wider array of attachments than lawn tractors. The maximum power is about 23 hp. Tractors above this level will be shown as 2-wheel drive tractors under the Ag Tractor Application.	
Lawn Tractors	These machines have a front-engine design and are used primarily for cutting grass and light towing. The distinction between a lawn tractor and a garden tractor is often hard to make. Generally, garden tractors are built more solidly, and have stronger frames, larger wheels and heavier transaxles. Garden tractors also can accommodate a wider range of front, belly and rear mounted attachments.	



### Application: Lawn Mowers

Product	Definition	Image
Robotic Mowers	Robotic Mowers autonomously mow an area.	
Walk Behind Reel Mowers	Reel lawn mowers use blades set on a revolving cylinder or reel to cut the grass. These mowers are powered either through human effort or engine power; when the reel mower is moved forward the reel moves, cutting the grass. The grass is neatly cut instead of being torn or ripped out, and this type of machine is quite popular on golf courses.	
Walk Behind Rotary Mowers	<p>Rotary Mowers come with high rear wheels and are very well suited for yards with lots of obstacles such as flower beds, trees and ponds. Rear wheel drive self-propelled models are good for rough, hilly terrain. Engines use either the overhead cam design, which provide cooler, more efficient and cleaner operation with longer valve life and fuel efficiency, or the side valve engine, which is the more tradition design that provides reliable power.</p> <p>Electric mowers come in many designs, and they are light weight and compact. The propulsion of the mower is the push type and you can comfortably mow a medium sized lawn. Some of the features that are included in these models are the ready start and reduced pull force. Electric mowers are considered more environmentally friendly.</p>	




# Product Definitions Guide

## Segment: Lawn and Garden (continued)

### Application: Leaf Blowers and Vacuums

Product	Definition	Image
Leaf Blowers	A Leaf Blower (often referred to as simply a blower) is a gardening tool that propels air out of a nozzle to move debris such as leaves and grass cuttings. Leaf blowers are powered by electric motors or gasoline engines. Gasoline models have traditionally been two-stroke engines, but four-stroke engines have recently been introduced to address air pollution concerns. Leaf blowers are typically self-contained handheld units or backpack mounted units with a handheld wand.	
Leaf Vacuums	A 'leaf mulcher' may also be called a 'leaf vacuum' or a 'leaf vacuum mulcher'. Gas leaf mulchers are the first generation of mulchers. A leaf mulcher is very similar to a vacuum cleaner and can be used to pick up leaves. The big difference lies within the leaf mulcher. A leaf mulcher has special blades that slice the leaves as they enter the mulcher, grinding them into fine pieces which can be collected in an attached container. Push-mower varieties are the most common type of lawn and garden vacuum, but they're also offered in small handheld versions, large rideable models, or as trailer attachments to small-scale tractors.	


### Application: Other Lawn and Garden Equipment

Product	Definition	Image
Augers	An Auger is a drilling device, or drill bit, that usually includes a rotating helical screw blade called a "flighting" to act as a screw conveyor to remove the drilled-out material. The rotation of the blade pulls the material out of the hole being drilled.	
Other Lawn and Garden Equipment	This segment contains power pruners that are used primarily to cut small tree branches.	
Sickle Bar Mowers	A Sickle Bar Mower operates much like a set of hair clippers. On the bottom is a set of finger bars that stay stationary during use and help to gather grass and brush. On the top of the attachment is a set of teeth that oscillate back and forth. As these attachments cross over the finger plates, they cut the growth. Sickle bar mowers leave the clippings in their full length on the ground which is perfect for hay operations where you want the entire hay crop left in full length for drying. Sickle mowers also are used by highway maintenance crews, since they keep debris from flying into the roadways.	


# Product Definitions Guide

## Segment: Lawn and Garden (continued)


### Application: Other Lawn and Garden Equipment (continued)

Product	Definition	Image
Wood Splitters	A Wood Splitter is used for splitting firewood from logs that have been pre-cut into sections (rounds). An engine, normally a small four-stroke gasoline engine, provides the power for the system. The engine is attached to a hydraulic oil pump. The hydraulic oil pump creates a stream of high-pressure oil, which runs to a valve. The valve lets the operator actuate the hydraulic cylinder to split a log.	


### Application: Rear Engine Rider Mowers

Product	Definition	Image
Rear Engine Riders	The rear mounted engine comes with rear wheel steering and front mounted cutting deck. This type of machine offers higher maneuverability around tight corners.	

### Application: Shredders

Product	Definition	Image
Shredders	A Chipper Shredder — also known as a wood chipper — reduces branches, twigs and leaves to mulch and composting material. Chipper shredders range from light-duty electric devices to heavy-duty gasoline-powered machines that chop branches several inches in diameter. A chipper shredder has a chute that accepts branches for chipping. A rotating blade or set of blades chops them into wood chips. The shredder mechanism handles light debris such as leaves and grass. As you feed the material into the shredder hopper, a separate set of hinged blades — also known as flails or hammers — shreds it.	

### Application: Snowblowers


Product	Definition	Image
Snowblowers	A Snow Blower or snow thrower is a machine for removing snow from an area such as a driveway, sidewalk, roadway, railroad track, ice rink, or runway. It can use either electric power (line power or battery), or a gasoline or diesel engine to throw snow to another location or into a truck to be hauled away. Snow blowers range from the very small, capable of removing only a few inches (a few more cm) of light snow in an 18 to 20 in (457 to 508 mm) path, to the very large units, mounted on heavy-duty winter service vehicles and capable of moving 20-foot (6.10 m) wide swaths of heavy snow up to 6 feet (1.83 m) deep.	






# Product Definitions Guide

## Segment: Lawn and Garden (continued)

### Application: Tillers

Product	Definition	Image
Tillers	Tillers are used to cultivate soil to prepare a smooth area for planting. These are self-propelled, walk-behind machines which are used for home gardens or small farm areas.	


### Application: Trimmer/Edger/Cutters

Product	Definition	Image
Brush Cutters/ Disc Mowers	<p>A Brush Cutter (also called a brush saw or clearing saw) is a power tool used to trim foliage not accessible by a mower. Brush cutters are built to endure rougher terrain and to cut thicker and denser material than finishing mowers. Various blades or trimmer heads can be attached to the machine for specific applications. There are three main types of power unit: Gas engines, either two or four-stroke, are used on the more powerful units; Electric motors connected to main power by a power cord, and Cordless electric motors powered by rechargeable batteries. Cutting heads include circular saw blades (chisel tooth or scratcher tooth), brush knives, grass blades, etc. Most brush cutters also allow other heads to be fitted, including bump feed and fixed line heads such as those used on line trimmers or modified saw blades such as a beaver blade which resembles a chainsaw.</p> <p>Brush cutters can also be tractor-mounted for clearing brush and small trees</p>	
Edgers	<p>An edge trimmer or lawn edger is a tool, either manual (spade, roller or hand shears) or motorized (adaptable string trimmer, single-wheeled purpose-driven or multi-wheeled purpose driven), used to trim distinct boundaries between a lawn and another ground surface feature such as a paved area or an unbounded garden.</p>	
Hedge Cutters	<p>A Hedge trimmer, shrub trimmer, or bush trimmer, is a gardening tool used for trimming (cutting, pruning) hedges or solitary shrubs (bushes). Manual and powered versions of hedge trimmers exist. Their cutting mechanism is similar to that of finger-bar mowers. Trimmers are powered either by gasoline or electricity (electrical cord or battery).</p>	







# Product Definitions Guide

## Segment: Lawn and Garden (continued)

### Application: Tillers

Product	Definition	Image
Trimmers	A string trimmer, also called a “weed-whip”, “whipper-snipper”, “weed-whacker”, or a “weed eater”, is a tool which uses a flexible monofilament line instead of a blade for cutting grass and other plants near objects, or on steep or irregular terrain. It consists of a cutting tip at the end of a long shaft with a handle. Gasoline-engine powered trimmers usually have a minimum of 21 cc displacement motors. Most trimmers use two stroke engines and require gasoline mixed with oil. Many commercial models now are powered by four-stroke engines.	



### Application: Turf Equipment

Product	Definition	Image
Aerators	Aerators are machines that have tines for soil penetration. The process involves perforating the soil with small holes to allow air, water and nutrients to penetrate the grass roots.	
Dethatchers	A Dethatcher or Lawn Scarifier is a device that removes thatch from lawns. Dethatchers include motorized dethatchers or non-motorized units that can be pulled behind a garden tractor.	
Hydro-seeders	A Hydro-Seeder (or hydraulic mulch seeding, hydro-mulching, hydra-seeding) is a machine that aids in the planting process by efficiently shooting seed and fertilizers over broad area.	
Other Turf Equipment	Other Turf Equipment forms a niche market that includes seeders, greens rollers and straw/bark blowers.	
Riding Bunker and Field Groomers	Riding Bunker and Field Groomers are professional machines for keeping sand traps expertly conditioned and ready for play. Groomers also are used for the grooming of baseball infields.	
Sod Cutters	Sod Cutters are machines that are designed to cut grass (sod) plus a thin layer of soil from the ground. The length and thickness of the cut sod can vary. The sod is used to plant new ground areas.	

# Product Definitions Guide


## Segment: Lawn and Garden (continued)

### Application: Zero-Turn Mowers


Product	Definition	Image
Commercial Zero-Turn Mowers	Zero-Turn Mowers are riding lawn mowers that have a turning radius that is effectively zero inches. Commercial zero-turn mowers are designed for mowing 2-20 times a day or running for 12 hours straight. They are faster than residential mowers with larger and higher horsepower engines.	
Residential Zero-Turn Mowers	Zero-Turn Mowers are riding lawn mowers that have a turning radius that is effectively zero inches. Residential zero-turn mowers are being designed for 1-2 mows per week and running 6 hours or less per mow. Smaller engines used than commercial zero-turn mowers.	

## Segment: Light Commercial Vehicles


### Application: Light Bus Chassis

Product	Definition	Image
Light Bus Chassis	A chassis built for small buses of less than 6 tons.	

### Application: Pickups and Light Commercial Vehicles

Product	Definition	Image
Pickups and Light Commercial Vehicles	This product category includes light motor vehicles, primarily intended for towing and/or transporting goods, either with an open, factory-built, integrated rear cargo area or an enclosed van body. This Segment includes Class 1 and 2 vehicles in North America; in other regions it includes commercial vehicles up to 3.5 tons gross vehicle weight. It specifically excludes vehicles that can be classified as Passenger Cars, Minivans or Sport Utility Vehicles.	



### Application: Trucks Class 3 (3.51 - 6 tonnes)

Product	Definition	Image
Trucks Class 3	Commercial truck on truck chassis with CVWR 3.51 – 6 tons. An example would be the Ford F-350; another example would be the Ram 3500.	

# Product Definitions Guide



## Segment: Marine Auxiliary

### Application: Marine Auxiliary


Product	Definition	Image
Marine Generators	This is an alternative power source that's used to power a boat when it is at shore or when its engines are shut off. This also may be a generator set installed on a boat that serves as a source of continuous power.	
Thrusters	A Marine Thruster is a configuration of ship propellers placed in pods that can be rotated in any horizontal direction, making a rudder unnecessary. They give a ship better maneuverability than a fixed propeller and rudder system.	

## Segment: Marine Propulsion

### Application: Commercial Vessel Engines

Product	Definition	Image
Heavy Duty Ship Engines	Heavy Duty Ship Engines are used to power boats or ships that engage in commercial trade or that carry passengers for hire.	
High Performance Ship Engines	High Performance Ship Engines are high powered, fuel-efficient power sources primarily for luxury yachts, ships and workboats.	



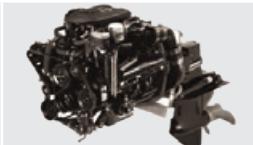
### Application: Outboard Engines

Product	Definition	Image
Outboard Engines	An Outboard Engine is a propulsion unit for boats consisting of a self-contained unit that includes engine, gearbox and propeller or jet drive, designed to be affixed to the outside of the transom.	

# Product Definitions Guide





## Segment: Marine Propulsion (continued)

### Application: Pleasure Craft Engines

Product	Definition	Image
Inboard Engines	Inboard Engines are marine propulsion systems that are enclosed within the hull of the boat, usually connected to a propulsion screw by a driveshaft.	
Sailboat Auxiliary Engines	Sailboat Auxiliary Engines are inboard power sources exclusively designed for supplemental power on a sailboat and are usually compact, lightweight and quiet.	
Stern Drive (I/O) Engines	Stern Drive (I/O) Engines are a form of marine propulsion which combines inboard power with outboard drive. The engine sits just forward of the transom while the drive unit (outdrive) lies outside the hull.	

## Segment: Medium and Heavy Vehicles

### Application: Bus Chassis

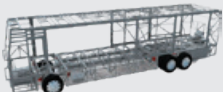
Product	Definition	Image
Motor Coach Bus Chassis	This is a chassis for a motor coach bus. A motor coach bus is a type of vehicle used for conveying passengers on long distance excursions. Coaches usually have a luggage area separate from the passenger cabin. Seats are comfortable, and a bathroom sometimes exists for longer trips.	
School Bus Chassis	This chassis is designed for a school bus. A school bus is a type of vehicle used to transport students to and from school, home and school events. School buses are painted yellow and are equipped with warning lights and other safety devices.	
Shuttle Bus Chassis	This is a chassis built for a shuttle bus. A shuttle bus is a type of bus designed to shuttle passengers between fixed points, usually short distances taking less than one hour. Some examples include airport shuttle buses, hotel shuttle buses and rental car shuttle buses.	
Transit Bus Chassis	This chassis is used for transit buses. A transit bus is a type of bus used on shorter-distance public transport services. Also, known as city, commuter or public buses.	




# Product Definitions Guide

## Segment: Medium and Heavy Vehicles (continued)


### Application: Motor Home Chassis

Product	Definition	Image
Motor Home Chassis	This chassis is used for motor homes. A motor home is a self-propelled recreational vehicle (RV) which has a living accommodation combined with a vehicle engine.	


### Application: Trucks Class 4 (6.1-10 tonnes)

Product	Definition	Image
Trucks Class 4	This is a commercial truck or truck chassis with GVWR 6.4 – 7.5 tons. Examples would be the Ford F-450 and Ram 4500.	



### Application: Trucks Class 5 (6.1-10 tonnes)

Product	Definition	Image
Trucks Class 5	This is a commercial truck or a truck chassis with GVWR 7.6 – 9.0 tons. Examples would be the Ford F-550 or Ram 5500.	

### Application: Trucks Class 6 (10.1 - 12 tonnes)

Product	Definition	Image
Trucks Class 6	This is a commercial truck or truck chassis with GVWR 9.1 – 12.0 tons. An example would be the Ford F-650.	







### Application: Trucks Class 7 (12.1 - 16 tonnes)

Product	Definition	Image
Trucks Class 7	This is a commercial truck or truck chassis with GVWR 12.1 – 16.0 tons. An example would be the Ford F-750	
Trucks Class 7 Refuse	A garbage truck or dustcart is a truck specially designed to collect municipal solid waste and haul the collected waste to a solid waste treatment facility.	

# Product Definitions Guide



## Segment: Medium and Heavy Vehicles (continued)

### Application: Trucks Class 8 (>16 tonnes)

Product	Definition	Image
Trucks Class 8	These are commercial trucks or truck chassis with GVWR > 16 tons which include semi-trucks, straight trucks or chassis for the class 8 applications listed below.	
Trucks Class 8 Cement Mixers	This is a heavy truck with an attached mixer or revolving drum used for mixing cement, sand, gravel and water to produce cement.	
Trucks Class 8 Dump	This is a truck designed to transport bulk material. It has a body which tilts to dump its contents	
Trucks Class 8 Fire/Crash	A fire engine (also known in some territories as a fire apparatus, fire truck, or fire appliance) is a vehicle designed primarily for firefighting operations. In addition, many fire departments/fire services often employ their vehicles for other uses including emergency medical services and rescue purposes.	
Trucks Class 8 Municipal Snowblowers	A Class 8 truck equipped with special equipment to blow snow (instead of merely plowing it). Used primarily to clear snow from airport runways.	
Trucks Class 8 Refuse	A garbage truck or dustcart is a truck specially designed to collect municipal solid waste and haul the collected waste to a solid waste treatment facility such as a landfill.	

## Segment: Minivans and SUVs


### Application: Minivans and SUVs

Product	Definition	Image
Minivans	A Minivan is a small, non-commercial van used primarily to transport people. Popular as family vehicles, minivans are also known in various parts of the world as multi-purpose vehicles, multi-utility vehicles, people-carriers and car-derived vans.	
Sport Utility Vehicles (SUVs)	An SUV is a motor vehicle, usually with a two-box shape, which typically combines the towing capacity of a pickup truck with the passenger-carrying space of a Minivan or large Passenger Car. They commonly feature four-wheel drive or all-wheel drive to enable on and off-road operation.	

# Product Definitions Guide







## Segment: Passenger Cars

### Application: Passenger Cars

Product	Definition	Image
Passenger Cars	These are motor vehicles, typically with four wheels, designed and constructed principally for the transport of people rather than goods. This range of automobiles includes sedans, wagons and hatchbacks that are designed to operate primarily on roads, and typically have seating for one to eight persons.	

## Segment: Power Generation



### Application: Generator Sets

Product	Definition	Image
APUs	APUs are devices on vehicles that provide energy/power for functions other than propulsion. They are commonly found on large aircraft and naval ships, as well as some large land vehicles.	
Industrial Generator Sets	Industrial Generator Sets provide standby power primarily for commercial/ industrial applications and are large permanent fixtures.	
Portable Generator Sets	Portable Generator Sets are transportable units used to generate electricity, usually in remote locations.	
Residential Generator Sets	Residential Generator Sets are used for homeowner applications to provide power, often in emergency situations such as power outages.	
RV Generator Sets	RV Generator Sets provide backup power for motorized and towable RV applications. They are designed for quiet operation, compact configuration and easy servicing.	
Trailer Mounted Generators	Trailer Mounted Generators are an effective and efficient means to provide power for a worksite. Trailer generators are designed to meet the demanding needs of rental, industrial and commercial applications.	


# Product Definitions Guide

## Segment: Railway

### Application: Locomotives




Product	Definition	Image
Industrial Locomotives	Industrial Locomotives are self-propelled vehicles, usually electric or diesel-powered, and are for pulling or pushing freight or passenger cars on railroad tracks.	
Main Line Locomotives	Main Line Locomotives are large, high-powered locomotives which haul lengthy strings (trains) of cars over the main haulage system.	

### Application: Self-Propelled Railcars

Product	Definition	Image
Self Propelled Railcars	Self-Propelled Railcars are railway vehicles designed to transport passengers.	


## Segment: Recreational Products

### Application: Go Karts







Product	Definition	Image
Concession Karts	Concession Karts are used as rental vehicles at amusement parks and fun centers.	
Fun Karts	Fun Karts are small vehicles that have one or two seats and an open top. They are used primarily for off-road recreational activities.	
Racing Karts	Racing Karts are small cars that have one or two seats and an open top; they are used mostly for racing applications.	

# Product Definitions Guide

## Application: Golf Cars

Product	Definition	Image
Golf Cars	Golf Cars are small motorized vehicles that transport golfers and their equipment around a golf course. They may also be used as a Neighborhood Electric Vehicle (NEV) to transport people within golfing communities or similar neighborhoods.	





## Application: Motorcycles and ATVs

Product	Definition	Image
3-Wheelers	3-Wheelers are vehicles with three wheels that may be classified as a motorcycle or an All Terrain Vehicle (ATV).	
4-Wheeled ATVs	4-Wheeled ATV is short term for All Terrain Vehicle. It commonly has 4 wheels and is designed to be driven off road. It seats one person, or sometimes two, one in front of the other.	
Off-Road Motorcycles	Off-Road Motorcycles are specifically designed for use on rough terrain such as unsurfaced roads or tracks, and commonly are referred to as dirt bikes for recreational, sport and racing applications. These are not street-legal machines because they do not meet Department of Transportation regulations for on-road vehicles.	
On-Road Motorcycles	On-Road Motorcycles or Street Bikes are motorized two-wheeled vehicles that are street legal for sport and leisure activities. They include features such as headlights, brake lights and turn signals.	
Other Recreational Products	Other Recreational Products is a niche market that includes the bumper cars/boats and miscellaneous recreational products. There may be seating for two more or even four more passengers.	
Scooters/Minibikes/Mopeds	Scooters/Minibikes/Mopeds are motorized 2-wheeled vehicles used primarily for recreational.	




# Product Definitions Guide

## Application: Personal Water Craft

Product	Definition	Image
Jet Drive Boats	Jet Drive Boats are boats propelled by a jet of water ejected from the back of the craft; they have no propeller and can maneuver in shallow water.	
PWC Sit-Downs 1-2 People	PWC Sit-Downs 1-2 People is defined as a type of vessel which is specifically designed to haul one or two riders in a sitting position, one in front of the other; commonly referred to as jet skis.	
PWC Sit-Downs 3 People	PWC Sit-Downs 3 People is defined as a type of vessel which is specifically designed to haul multiple passengers sitting on the vessel; commonly referred to as jet skis.	
PWC Stand-Ups	PWC Stand-Ups are a type of water scooter with the purpose of one rider standing or kneeling on the watercraft.	

## Application: Snowmobiles

Product	Definition	Image
Snowmobiles	Snowmobiles, often called sleds, are motor vehicles that have a revolving tread in the rear and steerable runners in the front, for traveling over snow off-road, often at speeds exceeding 100 mph.	



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