

AGMA Load Classification Tables

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
AGITATORS (Mixers)			
Pure Liquids	I	I	II
Liquids and Solids	I	II	II
Liquids – Variable Density	I	II	II
BLOWERS			
Centrifugal	I	I	II
Lobe	I	II	II
Vane	I	II	II
BREWING AND DISTILLING			
Bottling Machinery	I	I	II
Brew Kettles – Continuous Duty	II	II	II
Cookers – Continuous Duty	II	II	II
Mash Tubs – Continuous Duty	II	II	II
Scale Hopper – Frequent Starts	II	II	II
CAN FILLING MACHINES	I	I	II
CAR DUMPERS	I	III	III
CAR PULLERS	I	II	II
CLARIFIERS	I	I	II
CLASSIFIERS	I	II	II
CLAY WORKING MACHINERY			
Brick Press	II	III	III
Briquette Machine	II	III	III
Pug Mill	I	II	II
COMPACTORS	III	III	III
COMPRESSORS			
Centrifugal	I	I	II
Lobe	I	II	II
Reciprocating, Multi-Cylinder	II	II	III
Reciprocating, Single-Cylinder	III	III	III
CONVEYORS –			
GENERAL PURPOSE			
Includes Apron, Assembly, Belt, Bucket, Chain, Flight, Oven and Screw			
Uniformly Loaded or Fed	I	I	II
Heavy Duty – Not Uniformly Fed	I	II	II
Severe Duty – Reciprocating or Shaker	II	III	III
CRANES ^[1]			
Dry Dock			
Main Hoist	2.50	2.50	2.50
Auxiliary Hoist	2.50	2.50	3.00
Boom Hoist	2.50	2.50	3.00
Slewing Drive	2.50	2.50	3.00
Traction Drive	3.00	3.00	3.00
Container			
Main Hoist	3.00	3.00	3.00
Boom Hoist	2.00	2.00	2.00
Trolley Drive			
Gantry Drive	3.00	3.00	3.00
Traction Drive	2.00	2.00	2.00
Mill Duty			
Main Hoist	3.50	3.50	3.50
Auxiliary	3.50	3.50	3.50
Bridge	2.50	3.00	3.00
Trolley Travel	2.50	3.00	3.00
Industrial Duty			
Main	2.50	2.50	3.00
Auxiliary	2.50	2.50	3.00
Bridge	2.50	3.00	3.00
Trolley Travel	2.50	3.00	3.00

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
CRUSHER			
Stone or Ore	III	III	III
DREDGES			
Cable Reels	II	II	II
Conveyors	II	II	II
Cutter Head Drives	III	III	III
Pumps	III	III	III
Screen Drives	III	III	III
Stackers	II	II	II
Winches	II	II	II
ELEVATORS			
Bucket	I	II	II
Centrifugal Discharge	I	I	II
Escalators	I	I	II
Freight	I	II	II
Gravity Discharge	I	I	II
EXTRUDERS			
General	II	II	II
Plastics			
Variable Speed Drive	III	III	III
Fixed Speed Drive	III	III	III
Rubber			
Continuous Screw Operation	III	III	III
Intermittent Screw Operation	III	III	III
FANS			
Centrifugal	I	I	II
Cooling Towers	III	III	III
Forced Draft	II	II	II
Induced Draft	II	II	II
Industrial & Mine	II	II	II
FEEDERS			
Apron	I	II	II
Belt	I	II	II
Disc	I	I	II
Reciprocating	II	III	III
Screw	I	II	II
FOOD INDUSTRY			
Cereal Cooker	I	I	II
Dough Mixer	II	II	II
Meat Grinders	II	II	II
Slicers	I	II	II
GENERATORS AND EXCITERS	II	II	II
HAMMER MILLS	III	III	III
HOISTS			
Heavy	III	III	III
Medium Duty	II	II	II
Skip Hoist	II	II	II
LAUNDRY TUMBLERS	II	II	II
LAUNDRY WASHERS	II	II	III

Note: [1] Because crane drive selections may require a service factor greater than 2.0, Class Numbers are not applicable. Crane drives are to be selected based upon the gear tooth bending strength using the numeric service factor shown in the table. In all cases, the pitting resistance service factor shall be a minimum of 1.0.

AGMA Load Classification Tables

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
LUMBER INDUSTRY			
Barkers			
Spindle Feed	II	II	II
Main Drive	III	III	III
Conveyors			
Burner	II	II	II
Main or Heavy Duty	II	II	II
Main Log	III	III	III
Re-saw, Merry-Go-Round	II	II	II
Slab	III	III	III
Transfer	II	II	II
Chains			
Floor	II	II	II
Green	II	II	III
Cut-Off Saws			
Chain	II	II	III
Drag	II	II	III
Debarking Drums			
Feeds	III	III	III
Edger	II	II	II
Gang	III	III	III
Trimmer	II	II	II
Log Deck	III	III	III
Log Hauls – Incline – Well Type	III	III	III
Log Turning Devices	III	III	III
Planer Feed	II	II	II
Planer Tilting Hoists	II	II	II
Rolls – Live-off brg. – Roll Cases	III	III	III
Sorting Table	II	II	II
Tipple Hoist	II	II	II
Transfers			
Chain	II	II	III
Craneway	II	II	III
Tray Drives	II	II	II
Veneer Lathe Drives	II	II	II
METAL MILLS			
Draw Bench Carriage and Main Drive			
Main Drive	II	II	II
Runout Table			
Non-reversing			
Group Drives	II	II	II
Individual Drives	III	III	III
Reversing	III	III	III
Slab Pushers	II	II	II
Shears	III	III	III
Wire Drawing	II	II	II
Wire Winding Machine	II	II	II
METAL STRIP PROCESSING MACHINERY			
Bridles	II	II	II
Coilers & Uncoilers	I	I	II
Edge Trimmers	I	II	II
Flatteners	II	II	II
Loopers (Accumulators)	I	I	I
Pinch Rolls	II	II	II
Scrap Choppers	II	II	II
Shears	III	III	III
Slitters	I	II	II

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
MILLS, ROTARY TYPE			
Ball & Rod			
Spur Ring Gear	III	III	III
Helical Ring Gear	II	II	II
Direct Connected	III	III	III
Cement Kilns	II	II	II
Dryers & Coolers	II	II	II
MIXERS, CEMENT			
	II	II	II
PAPER MILLS ^[1]			
Agitator (Mixer)	II	II	II
Agitator for Pure Liquors	II	II	II
Barking Drums	III	III	III
Barkers – Mechanical	III	III	III
Beater	II	II	II
Breaker Stack	II	II	II
Calender ^[1]	II	II	II
Chipper	III	III	III
Chip Feeder	II	II	II
Coating Rolls	II	II	II
Conveyors			
Chip, Bark, Chemical	II	II	II
Log (including Slab)	III	III	III
Couch Rolls	II	II	II
Cutter	III	III	III
Cylinder Molds	II	II	II
Dryers ^[1]			
Paper Machine	II	II	II
Conveyor Type	II	II	II
Embosses	II	II	II
Extruder	II	II	II
Fourdrinier Rolls			
(Includes Lump breaker, dandy roll, wire turning, and return rolls)	II	II	II
Jordan	II	II	II
Kiln Drive	II	II	II
Mt. Hope Roll	II	II	II
Paper Rolls	II	II	II
Platter	II	II	II
Presses – Felt & Suction	II	II	II
Pulper	III	III	III
Pumps – Vacuum	II	II	II
Reel (Surface Type)	II	II	II
Screens			
Chip	II	II	II
Rotary	II	II	II
Vibrating	III	III	III
Size Press	II	II	II
Supercalender ^[2]	II	II	II
Thickener (AC Motor)	II	II	II
(DC Motor)	II	II	II
Washer (AC Motor)	II	II	II
(DC Motor)	II	II	II
Wind and Unwind Stand	I	I	I
Winders (Surface Type)	II	II	II
Yankee Dryers ^[1]	II	II	II

Notes: [1] Anti-Friction Bearings only.

[2] A Class Number of I may be applied at base speed of a supercalender operating over a speed range of part-range constant horsepower and part-range constant torque where the constant horsepower speed range is greater than 1.5 to 1. A Class Number of II is applicable to supercalenders operating over the entire speed range at constant torque or where the constant horsepower speed range is less than 1.5 to 1.

AGMA Load Classification Tables

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
PLASTIC INDUSTRY – PRIMARY PROCESSING			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Batch Drop Mill – 2 smooth rolls	II	II	II
Continuous Feed, Holding & Blend Mill	II	II	II
Calenders	II	II	II
PLASTIC INDUSTRY – SECOND PROCESSING			
Blow Molders	II	II	II
Coating	II	II	II
Film	II	II	II
Pipe	II	II	II
Pre-Plasticizers	II	II	II
Rods	II	II	II
Sheet	II	II	II
Tubing	II	II	II
PULLERS – BARGE HAUL	II	II	II
PUMPS			
Centrifugal	I	I	II
Proportioning	II	II	II
Reciprocating			
Single Acting, 3 or more cylinders	II	II	II
Double Acting, 2 or more cylinders	II	II	II
Rotary			
Gear Type	I	I	II
Lobe	I	I	II
Vane	I	I	II
RUBBER INDUSTRY			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Mixing Mill			
2 smooth rolls	II	II	II
1 or 2 corrugated rolls	III	III	III
Batch Drop Mill – 2 smooth rolls	II	II	II
Cracker Warmer –			
2 roll; 1 corrugated roll	III	III	III
Cracker – 2 corrugated rolls	III	III	III
Holding, Feed & Blend Mill – 2 rolls	II	II	II
Refiner – 2 rolls	II	II	II
Calenders	II	II	II
SAND MULLER	II	II	II

APPLICATION	CLASS NUMBERS		
	Up to 3 Hrs per Day	3-10 Hrs per Day	Over 10 Hrs per Day
SEWAGE DISPOSAL EQUIPMENT			
Bar Screens	II	II	II
Chemical Feeders	II	II	II
Dewatering Screens	II	II	II
Scum Breakers	II	II	II
Slow or Rapid Mixers	II	II	II
Sludge Collectors	II	II	II
Thickener	II	II	II
Vacuum Filters	II	II	II
SCREENS			
Air Washing	I	I	II
Rotary – Stone or Gravel	II	II	II
Traveling Water Intake	I	I	I
SCREW CONVEYORS			
Uniformly Loaded or Fed	I	I	II
Heavy Duty	I	II	II
SUGAR INDUSTRY			
Beet Slicer	III	III	III
Cane Knives	II	II	II
Crushers	II	II	II
Mills (low speed end)	III	III	III
TEXTILE INDUSTRY			
Batchers	II	II	II
Calenders	II	II	II
Cards	II	II	II
Dry Cans	II	II	II
Dyeing Machinery	II	II	II
Looms	II	II	II
Mangles	II	II	II
Nappers	II	II	II
Pads	II	II	II
Slashers	II	II	II
Soapers	II	II	II
Spinners	II	II	II
Tenter Frames	II	II	II
Washers	II	II	II
Winders	II	II	II