

Drive Unit Service Factor SF

Service Factor SF

Driven Machine		Operating Hours (hours/day)				
		3 hrs	10 hrs	24 hrs		
CRANES						
Classification of Crane	Hoisting	Traverse Motion	Travel Motion	Slewing Motion	Boom Hoisting	The crane classification is based on JIS B8821-1976 "Calculation standard for the structure of crane."
Group I	1.00	1.50		1.25	1.00	
Group II	1.25		1.50		1.00	
Group III	1.50		1.75		1.25	
Group IV	1.75		2.00		1.50	
CONVEYORS (General purpose)						
Uniformly load or fed				1.00	1.00	1.25
Heavy load						
Not uniformly fed				1.00	1.25	1.50
Reciprocating or shaker				1.50	1.75	2.00
ELEVATORS						
Elevators				1.50	1.50	1.50
Escalators				1.25	1.25	1.25
METAL MILLS						
Draw bench carriage and main drive				1.50	1.50	1.50
Runout table						
Non reversing						
Group drives				1.50	1.50	1.50
Individual drivers				2.00	2.00	2.00
Reversing				2.00	2.00	2.00
Slab pushers				1.50	1.50	1.50
Shears				2.00	2.00	2.00
Wire drawing				1.25	1.25	1.25
Wire winding machine				1.25	1.50	1.50
METAL STRIP PROCESSING MACHINERY						
Bridles				1.50	1.50	1.50
Coilers & uncoilers				1.00	1.25	1.50
Edge trimmers				1.00	1.25	1.50
Flatteners				1.25	1.25	1.50
Loopers (Accumulators)				1.50	1.50	2.00
Pinch rolls				1.25	1.25	1.50
Scrap choppers				2.00	2.00	2.00
Shears				2.00	2.00	2.00
Slitters				1.00	1.25	1.50
MILL, ROTARY TYPE						
Ball and rod				2.00	2.00	2.00
Cement Kilns				2.00	2.00	2.00
Kilns (Except cement klins)				1.50	1.50	1.50
Dryers and coolers				1.50	1.50	1.50
SEWAGE DISPOSAL EQUIPMENT						
Aerators				2.00	2.00	2.00
Bar screens				1.25	1.25	1.25
Chemical feeders				1.25	1.25	1.25
Dewatering screens				1.50	1.50	1.50
Scum breakers				1.50	1.50	1.50
Slow or rapid mixers				1.50	1.50	1.50
Sludge collectors				1.25	1.25	1.25
Thickeners				1.50	1.50	1.50
Vacuum filters				1.50	1.50	1.50
EXTRUDERS						
Plastics				1.25	1.25	1.25
Rubber				1.50	1.50	1.50
FEEDERS						
Apron				1.00	1.25	1.50
Belt				1.00	1.25	1.50
Disk				1.00	1.00	1.25
Reciprocating				1.50	1.75	2.00
Screw				1.00	1.25	1.50

Driven Machine		Operating Hours (hours/day)		
		3 hrs	10 hrs	24 hrs
RUBBER INDUSTRY				
Mixers		1.75	1.75	2.00
Mixing mill -2 smooth rolls		1.50	1.50	1.75
Batch drop mill -2 smooth rolls		1.50	1.50	1.50
Cracker warmer				
-2 roll: 1 corrugated roll		1.75	1.75	1.75
Cracker -2 corrugated rolls		2.00	2.00	2.00
Holding, feed and blend mill				
-2 rolls		1.25	1.25	1.25
Refiner -2 rolls		1.50	1.50	1.50
Calenders		1.50	1.50	1.50
PAPER MILL				
All types incl. Paper making machine		2.00	2.00	2.00
AGITATORS AND MIXERS				
Pure liquids		1.00	1.00	1.25
Liquids and solids		1.00	1.25	1.50
Liquids variable density		1.00	1.25	1.50
MIXERS				
Concrete		1.25	1.25	1.50
CRUSHER				
Stone or ore		2.50	2.50	2.50
BLOWERS				
Centrifugal		1.00	1.00	1.25
Lobe		1.00	1.25	1.50
Vane		1.00	1.25	1.50
COMPRESSORS				
Centrifugal		1.00	1.00	1.25
Lobe		1.00	1.25	1.50
Reciprocating: multi cylinder		1.50	1.50	1.75
Reciprocating: single cylinder		1.75	1.75	2.00
FANS				
Centrifugal		1.00	1.00	1.25
Cooling towers		※	※	※
Forced draft		1.25	1.25	1.25
Suction draft		1.50	1.50	1.50
Industrial and mine		1.50	1.50	1.50
PUMPS				
Centrifugal		1.00	1.00	1.25
Screw pump		1.25	1.25	1.50
Gear pump		1.25	1.25	1.50
DREDGES				
Cable reels		1.25	1.25	1.50
Conveyors		1.25	1.25	1.50
Cutter head drive		2.00	2.00	2.00
Pumps		2.00	2.00	2.00
Screen drives		1.75	1.75	2.00
Stackers		1.25	1.25	1.50
Winches		1.25	1.25	1.50
GENERATORS AND EXCITERS				
		1.00	1.00	1.25
HAMMER MILLS				
		1.75	1.75	2.00
SUGAR INDUSTRY				
Beet slicer		2.00	2.00	2.00
Cane knives		1.50	1.50	1.50
Crushers		1.50	1.50	1.50
Mills (Slow speed end)		1.75	1.75	1.75

Notes:

- (1) Values in the above table are based on AGMA standards and SUMITOMO's experience.
- (2) Values in the above table apply for electric motors as prime movers - if prime mover is a multi cylinder combustion engine, 0.25 has to be added to the SF.
- (3) Consult us for special duty or when special safety specifications are needed.
- (4) ※ : For SF, consult us.