## PARALLEL SHAFT & RIGHT ANGLE REDUCERS

11 SIZES, RATIOS UP TO 500:1 AND

TORQUE RATINGS UP TO 40.000KG-M OUTPUT



## Features:

**GEARS AND PINIONS** - Helical gear teeth are cut on high quality, alloy steel material, then carburized, hardened, and precision ground. The resulting gears and pinions provide high durability ratings with decreased stress and dynamic loads, which provides longer life. Meets AGMA Level 12 specifications.



**SHAFTS** - Output shafts are made of heat treated, Maximum strength carbon steel, through hardened prior to turning and grinding. Close tolerance bearing shoulders facilitate the mounting of bearings. Highly polished surfaces are provided for oil seals to assure their long life. Large diameters are specified throughout for maximum strength and overhung load capacity.

**BEARINGS** - Husky roller bearings provide maximum longevity. Output shafts have high capacity roller bearings for heavy overhung and thrust loads.

**SEALS -** Dual lip type oil seals are standard. Grease purged and labyrinth seals are available options.

**HOUSINGS** - Rugged fabricated steel housings constructed to exacting specifications are standard. Special configurations and castings also available.

**LUBRICATION -** Continuous splash lubrication including troughs and feeds and drains to bearings is used on most ratios and speeds. Forced lubrication untilizing oil pumps, filters, heat exchangers, sight gauges and alarm systems is available. Lubrication systems are designed for floor mounting. Other mounting positions are permissible.

**EFFICIENCY -** Based on 100% load and 100% speed the approximate efficiency of parallel shaft units is 98% for double reduction. 97.5% for triple reduction, and 96.5% for quadruple reduction. For right angle units apporoximate efficiencies are 97.5% for double reduction, 97% for triple reduction, and 96% for quadruple reduction. Actual operating efficiencies may deviates slightly.

HICO also offers drop in replacements for a wide variety of competitor reducers, they can also design and manufacture custom gear reducers to accommodate customers specifications.

For more information please contact your Canadian Representative MEP with your requirements. Toll Free: 877-812-7778 or Email: information@mep.ca







## Service Factors Table

Application	Service			Service			Service	
	10 Hrs/ Day	24 Hrs/ Day	Application	10 Hrs/ Day	24 Hrs/ Day	Application	10 Hrs/ Day	24 Hrs/ Day
Agitators(Mixers)	1,00	1.25	Lumber Industry	4.65	1.50	Extruder	1.50	1,50
pure Liquids liguids and Solid	1.25 1.25	1.50 1.50	Barkers-Spindle Feed - Main Drive	1.25 1.75	1.50 1.75	Fourdrinier Rolls Jordan	1.25 1.50	1.25
Liquids-Variable Density	1.20	1.50	Conveyors-Burner	1.75	1.75	Sordan   Kiln Drive	1.50	1.50
Blowers		I I	- Main of Heavy Duty	1.50	1,50	Mt. Hope Rolls	1.25	1,25
Centrifugal	1.00	1.25	- Main Log	1.75	2.00	Paper Rolls	1.25	1.25
Lobe Vane	1.25	1.50 1.25	- Re-Saw Merry-Go-Round	1.25	1.50	Platter Presses-Felt & Suction	1.50 1.25	1.50
Brewing and Distilling	1.00	1.20	- Slab	1.75	2.00	Pulper	2.00	2.00
Bottling machinery	1.00	1.25	-Transfer	1.25	1,50	Pumps-Vaccum	1.50	1.50
Brew Kettles, Cont. Duty	1.00	1.25	Chains-Floor	1.50	1.50	Reel(Surface Type)	1.25 1.50	1.25
Cookers-Cont, Duty Mash Tubs-Cont, Duty	1,00	1.25 1.25	- Green Cut-Off Saws	1.50 1.50	1.75 1.75	Screens-Chip & Rotary - Vibrating	2.00	2.00
Scale Hopper, Freq. Starts	1.25	1.50	Debarking Drums	1.75	2.00	Size Press	1.25	1.25
Can Filling Machines	1.00	1.25	Feeds-Edger	1.25	1,50	Super Calender-(See Note 2)	1.25	1.25
Car Dumpers	1.75	2.00	- Gang	1.75	1.75	Thickener(AC Motor) - (DC Motor)	1.50 1.25	1.50
Car Pullers Clarifiers	1.25 1.00	1.50 1.25	- Trimmer Log Deck	1.25 1.75	1.50 1.75	Washer(AC Motor)	1.50	1.50
Classifiers	1.25	1.50	Log Hauls-Incline-Well Type	1.75	1.75	- (DC Motor)	1.25	1,25
Clay Working machinery			Log Turning Devices	1.75	1.75	Wind & Unwind Stand	1.00	1.25
Brick Press	1.75	2.00	Planer Feed	1.25	1.50	Winders(Surface Type)	1.25	1.25
Briquette Machine Pug Mill	1.75 1.25	2.00	Planer Tilting Hoists Rolls-Live-Off Brg-Roll-Casses	1.50 1.75	1.50 1.75	Plastic Industry		
Compactors	2.00	2.00	Sorting Table	1.25	1.50	Blow Molders	1.50	1.50
Compressors	2.00	1	Tripple Hoist	1.25	1,50	Coating	1.25	1.25
Centrifugal	1.00	1.25	Transfers-Chain or Craneway	1.50	1.75	Film Pipe	1.25 1.25	1.25
Lobe  Regionsociting Multi Cul	1.25 1.50	1.50   1.75	Tray Drives  Veneer Lathe Drives	1.25 1.25	1.50 1.50	Pre-plasticizers	1.50	1.50
Reciprocating Multi Cyl. Reciprocating Single-Cyl.	1.75	2.00	Metal Mills	1.20	1.50	Rods	1.25	1.25
Conveyors	1.70		Draw Bench Carriage and			Sheet	1.25	1.25
Uniformly Loaded or fed	1.00	1.25	Main Drive	1.25	1.50	Tubing	1.25	1.50
Not uniformly fed	1.25 1.75	1.50 2.00	Run Out Tables			Pumps		
Reciprocating or Shaker  Cranes	Δ	2.00 \( \( \D \)	Non-Reversing Group Drives	1.50	1.50	Centrifugal	1.00	1.25
Crusher			Individual Drives	2.00	2.00	Proportioning	1.25	1.50
_ Stone or Ore	1.75	2.00	Reversing	2.00	2,00	Reciprocating Single or Double Acting	1.25	1,50
Dredges	1 00	1.50	Slab Pushers	1.50	1.50	Rotary	1.00	1.25
Cable Reels Conveyors	1.25 1.25	1.50 1.50	Shears Wire Drawing	2.00 1.25	2.00			
Cutter Head Drives	2.00	2.00	Wire Winding Machine	1.50	1.50	Rubber Industry	$\triangle$	
Pumps	2.00	2.00	] 			Sand Muller	1.25	1,50
Screen Drives	1.75	2.00	Metals Strip Processing Machinery	4.05	1 1 50	Gaila Ividiici	1,20	1,00
Stackers Winches	1.25 1.25	1.50 1.50	Bridles Coilers & Unicoilers	1.25 1.00	1.50 1.25	Sewage Disposal Equipment		-
Elevators	1.20	1.00	Edge Trimmers	1.25	1.50	Bar Screens	1.25	1.25
Bucket	1.25	1.50	Flatteners	1.25	1.50	Chemical Feeders Dewatering Screens	1.25 1.50	1.25
Centrifugal Discharge	1,00	1.25	Loopers(Acuummulators)	1.00	1.25	Scum Breakers	1.50	1.50
Escalators Freight	1.00 1.25	1.25 1.50	Pinch Rolls Scrap Choppers	1.25 1.25	1.50 1.50	Slow or Rapid Mixers	1.50	1.50
Gravity Discharge	1.00	1.25	! Shears !	2.00	2.00	Sludge Collectors	1.25	1.25
Extruders	1 1100	1 1120	Slitters	1.25	1.50	Thickeners Vacuum Filters	1.50 1.50	1,50
General	1.50	1.50	Mills, Rotary Type		 	Screens	1.00	1.00
Plastics-Var, Speed Dr, Fixed Speed Drive	1.50 1.75	1.50 1.75	Ball & Rod Spur Ring Gear	2.00	2.00	Air Washing	1.00	1.25
Rubber-Cont, Screw	1.75	1.75	Helical Ring Gear	1.50	1.50	Rotary-Stone or Gravel Traveling Water Intake	1.25 1.00	1.50
Intermittent Screw	1.75	1.75	Direct Connected	2.00	2.00	Sugar Industry	1,00	1,20
Fans	4.00	1 05	Cement Kilns	1.50	1.50	Beet Slicer	2.00	2.00
Centrifugal Cooling Towers	1,00	1.25	Dryers & Coolers Mixer, Concrete	1,50 1,25	1,50 1,50	Cane Knives	1.50	1.50
Forced Draft	1.25	1.25	Paper Mills(See Note 1)	1.20	1,00	Crushers Mills(low speed end)	1.50 1.75	1.50
Induced Draft	1.50	1.50	Agitators(Mixer)	1.50	1.50	Textile Industry	1.75	1.75
_ Industrial & Mine	1.50	1.50	Agitator for Pure Liquors	1.25	1.25	Batchers	1.25	1.50
Feeders	1 05	1 50	Barking Drums Barkers-Mechanical	2.00	2.00	Calenders	1.25	1.50
Apron or Belt Disc	1.25	1.50 1.25	Beater	2.00 1.50	2.00 1.50	Cards Dry Cans	1.25 1.25	1.50
Reciprocating	1.75	2.00	Breaker Stack	1.25	1.25	Dry Cans Dryers	1.25	1.50
Screw	1.25	1.50	Calender	1.25	1.25	Dyeing machinery	1.25	1.50
Food industry	1 00	1 05	Chipper	2.00	2.00	Looms	1.25	1,50
Cereal Cooker Dough Mixer	1.00 1.25	¦ 1.25 ! 1.50	Chip Feeder Coating Rolls	1.50 1.25	¦ 1,50 ! 1,25	Mangles Nappore	1.25	1.50
Meat Grinders	1.25	1.50	Conveyors-Chip, Bark, Chemical	1.25	1.25	Nappers Pads	1.25 1.25	1.50
Slicers	1.25	1.50	-Log(including Slab)	2.00	2.00	Slashers	1.25	1.50
Generators & Exciters	1.00	1.25	Couch Rolls	1.25	1.25	Soapers	1.25	1.50
Hammer Mills Hoists	1.75 ⊢ △	2.00 	Cutter Cylinder Molds	2.00 1,25	2.00   1.25	Spinners Tenter Frames	1.25 1.25	1.50
Laundry tumblers	1.25	1.50	Dryers(Anti-Frcition, bearings)!	1.25	1.25	Washers	1.25	1.50
		2.00	Embosser	1.25	1.25	, , , , , , , , , , , , , , , , , , , ,	1,25	

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