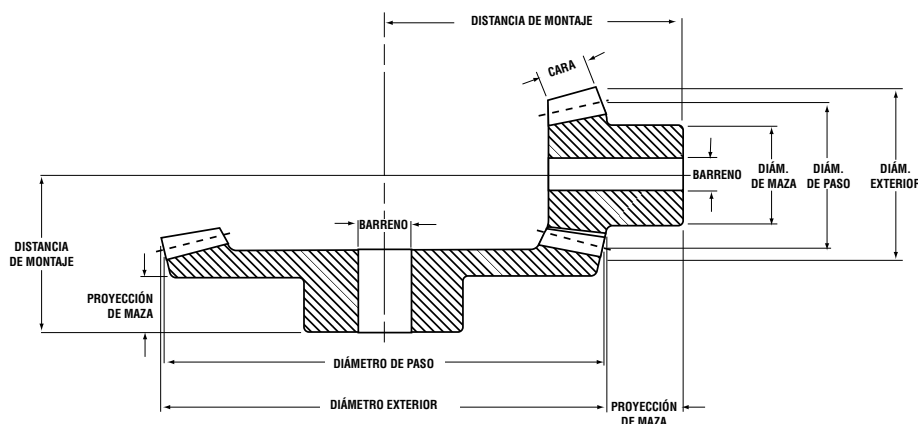


Engranes

Cónicos Rectos

Ángulo de Presión 20°

Martin



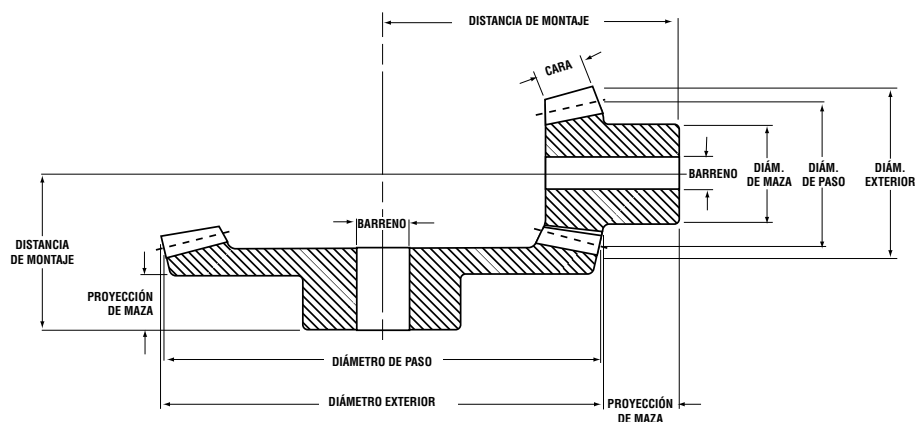
Los engranes cónicos rectos se utilizan como transmisiones en ángulo recto en donde se requiere una gran eficiencia. Se encuentran disponibles en existencia con relaciones de velocidad de 1:1 a 6:1. Los engranes cónicos rectos se cortan con el sistema de adendum largo y corto y con ángulo de presión de 20° para compensar el subcorte en engranes y piñones con número de dientes bajo. Todos los engranes cónicos Martin

se cortan con la forma de diente Coniflex, lo que permite un ligero desalineamiento durante la operación del ensamble. Estos engranes deben instalarse en la distancia correcta entre los centros del ápice utilizando rodamientos de empuje en la parte posterior de las mazas para absorber el empuje creado por este tipo de engrane.

Engranes de Hierro Fundido con Piñones de Acero

Paso	Número de Dientes	Número de Parte	Diámetro		Cara (pulg)	Barreno (Pulg.)		Montaje (pulg.)	Maza (Pulg.)		Peso Aprox. (lb)
			Paso	Exterior		Diámetro	Largo		Diámetro	Proy.	
Paso 3	30	B330-2	10.00	10.19	1.87	1-1/4	3-19/32	5-1/2	5	2	32.8
	15	B315-2	5.00	5.80	1.87	1-1/8	4-1/32	7-1/4	3-3/4	1-15/16	13.4
Paso 4	32	B432-2	8.00	8.10	1.40	1-1/8	2-11/16	4-1/4	3-3/4	1-9/16	14.7
	16	B416-2	4.00	4.60	1.40	1-1/8	3-11/32	6	3-1/4	1-13/16	7.5
	42	B442-3	10.50	10.59	1.42	1-1/8	2-11/16	4	3-3/4	1-1/2	20.5
	14	B414-3	3.50	4.17	1.42	1-1/8	3-27/64	7-1/4	3-1/4	1-15/16	6.8
	56	B456-4	14.00	14.07	1.69	1-1/4	2-7/8	4-1/4	4-1/4	1-5/8	37.8
	14	B414-4	3.50	4.20	1.69	1-1/8	3-45/64	9	3-1/4	1-15/16	7.6
Paso 5	30	B530-2	6.00	6.12	1.04	1-1/8	2-1/4	3-1/2	3-1/4	1-3/8	8.6
	15	B515-2	3.00	3.48	1.04	1	2-25/64	4-3/8	2-5/8	1-9/32	3.1
	45	B545-3	9.00	9.07	1.31	1-1/4	2-1/2	3-3/4	3-3/4	1-11/16	14.6
	15	B515-3	3.00	3.54	1.31	1	2-11/16	5-7/8	2-5/8	1-5/16	3.6
	60	B560-4	12.00	12.05	1.70	1-1/4	2-5/8	3-3/4	4	1-9/16	23.2
	15	B515-4	3.00	3.56	1.70	1	3-13/64	7-1/2	3	1-7/16	5.0
Paso 6	36	B636-2	6.00	6.10	1.06	1-1/8	2-1/4	3-1/2	3-1/4	1-1/2	7.5
	18	B618-2	3.00	3.42	1.06	1	2-49/64	4-3/4	2-1/2	1-19/32	3.3
	42	B642-2	7.00	7.10	1.05	1-1/8	2-19/64	3-3/4	3-1/2	1-1/2	9.5
	21	B621-2	3.50	3.90	1.05	1	2-33/64	5	2-1/2	1-1/4	3.8
	45	B645-3	7.50	7.56	1.07	1-1/8	2-1/8	3	3-1/4	1-1/4	8.9
	15	B615-3	2.50	2.94	1.07	7/8	2-9/16	5-1/4	2-1/8	1-7/16	2.2
	48	B648-2	8.00	8.10	1.17	1-1/8	1-57/64	3-7/16	3-1/4	1	11.6
	24	B624-2	4.00	4.40	1.17	1	2-35/64	5-7/16	2-5/8	1-1/4	4.9
	60	B660-4	10.00	10.04	1.21	1-1/8	2-1/4	3-1/4	3-1/4	1-3/8	14.3
	15	B615-4	2.50	2.97	1.21	1	2-31/32	6-3/4	2-1/2	1-3/4	3.2

Los engranes cónicos de acero pueden ser suministrados con dientes endurecidos con costo adicional.



Engranes de Hierro Fundido con Piñones de Acero

Paso	Número de Dientes	Número de Parte	Diámetro		Cara (pulg.)	Barreno (Pulg.)		Montaje (pulg.)	Maza (Pulg.)		Peso Aprox. (lb)
			Paso	Exterior		Diámetro	Largo		Diámetro	Proy.	
Paso 8	40	BS840-2	5.00	5.07	.82	1	1-27/32	2-7/8	3	1-1/4	4.9
	20	B820-2	2.50	2.80	.82	7/8	2-9/32	4	2-1/8	1-13/32	1.9
	48	B848-3	6.05	6.20	.84	7/8	1-5/8	2-3/8	2-3/4	1	4.5
	16	B816-3	2.00	2.33	.84	3/4	2-5/64	4-1/4	1-3/4	1-3/16	1.2
	64	B864-4	8.00	8.03	.84	1	1-7/8	2-3/4	2-3/4	1-1/4	9.0
	16	B816-4	2.00	2.35	.84	7/8	2-3/32	5-1/4	1-7/8	1-7/32	1.3
	72	B872-4	9.00	9.03	1.22	1-1/8	2-5/16	3-1/4	3	1-11/16	12.2
Paso 10	18	B818-4	2.25	2.60	1.22	7/8	2-15/32	5-3/4	2-1/8	1-7/32	1.9
	60	B1060-3	6.00	6.04	.78	7/8	1-29/32	2-3/4	3	1-3/8	5.1
	20	B1020-3	2.00	2.27	.78	3/4	2-5/32	4-3/8	1-3/4	1-5/16	1.3
	60	B1060-4	6.00	6.03	.72	7/8	1-5/8	2-1/4	2-1/2	1-1/8	4.5
	15	B1015-4	1.50	1.78	.72	5/8	1-39/64	3-7/8	1-7/16	27/32	.6
	90	B1090-6	9.00	9.03	.86	1	1-13/16	2-1/2	2-3/4	1-5/16	9.7
	15	B1015-6	1.50	1.79	.86	5/8	1-55/64	5-1/2	1-7/16	31/32	.7
Paso 12	36	B1236-2	3.00	3.05	.46	5/8	7/8	1-1/2	1-7/16	1/2	.8
	18	B1218-2	1.50	1.70	.46	1/2	1-13/64	2-1/4	1-1/4	11/16	.5
	72	B1272-4	6.00	6.02	.60	3/4	1-5/16	2	2	61/64	2.6
	18	B1218-4	1.50	1.73	.60	1/2	1-23/64	3-3/4	1-1/4	23/32	.4
	72	B1272-6	6.00	6.02	.74	3/4	1-5/16	1-3/4	2	61/64	2.6
	12	B1212-6	1.00	1.24	.74	1/2	1-31/64	3-3/4	15/16	23/32	.4

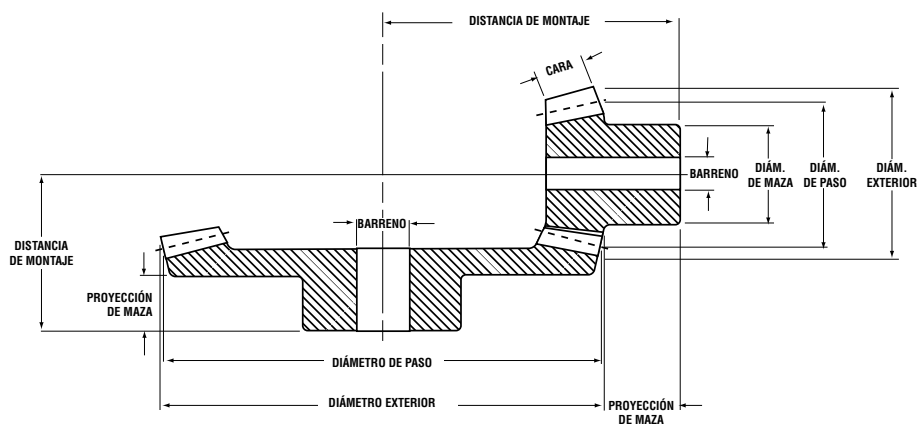
Los engranes cónicos de acero pueden ser suministrados con dientes endurecidos con costo adicional.

Engranes

Cónicos Rectos

Ángulo de Presión 20°

Martin



Engranes de Hierro Fundido con Piñones de Acero

Paso	Número de Dientes	Número de Parte	Diámetro		Cara (pulg)	Barreno (Pulg.)		Montaje (pulg.)	Maza (Pulg.)		Peso Aprox. (lb)
			Paso	Exterior		Diámetro	Largo		Diámetro	Proy.	
Paso 6	36	BS636-2	6.00	6.10	1.06	1-1/8	2-1/4	3-1/2	3-1/4	1-1/2	8.7
	18	BS618-2	3.00	3.42	1.06	1-1/8	2-49/64	4-3/4	2-1/2	1-19/32	3.2
Paso 8	40	BS840-2	5.00	5.07	.82	1	1-27/32	2-7/8	3	1-1/4	4.9
	20	BS820-2	2.50	2.80	.82	1	2-9/32	4	2-1/8	1-13/32	1.8
Paso 10	30	BS1030-15	3.00	3.08	.57	3/4	1-7/16	2-1/4	2-1/2	1	2.0
	20	BS1020-15	2.00	2.21	.57	3/4	1-33/64	2-1/2	1-3/4	29/32	.8
	40	BS1040-2	4.00	4.06	.71	7/8	1-11/16	2-1/2	3	1-3/16	3.7
	20	BS1020-2	2.00	2.24	.71	3/4	1-51/64	3-1/8	1-3/4	1-1/16	1.0
	50	BS1050-2	5.00	5.06	.70	3/4	1-19/32	2-5/8	2	1	4.0
	25	B1025-2	2.50	2.74	.70	3/4	1-35/64	3-3/8	2	3/4	1.5
	60	BS1060-3	6.00	6.04	.78	1	1-55/64	2-3/4	3	1-3/8	6.0
Paso 12	20	BS1020-3	2.00	2.27	.78	7/8	2-5/32	4-3/8	1-3/4	1-5/16	.9
	27	BS1227-15	2.25	2.32	.41	1/2	1-1/8	1-3/4	1-1/2	25/32	.6
	18	BS1218-15	1.50	1.67	.41	1/2	1-1/8	1-7/8	1-1/4	21/32	.3
	36	BS1236-2	3.00	3.05	.53	1	1-17/64	1-7/8	2-1/8	7/8	1.3
	18	BS1218-2	1.50	1.70	.53	3/4	1-3/8	2-3/8	1-5/16	13/16	.3
	36	BS1236-2A	3.00	3.05	.53	5/8	1-17/64	1-7/8	2-1/8	7/8	1.4
	18	BS1218-2A	1.50	1.70	.53	1/2	1-3/8	2-3/8	1-5/16	13/16	.4
	48	BS1248-2	4.00	4.05	.59	5/8	1-11/64	2	1-5/8	3/4	1.6
	24	B1224-2	2.00	2.20	.59	1/2	1-7/16	2-7/8	1-1/2	3/4	.8
	54	BS1254-3	4.50	4.53	.60	5/8	1-1/16	1-3/4	1-3/4	3/4	1.9
Paso 14	18	B1218-3	1.50	1.72	.60	1/2	1-11/32	3	1-1/4	11/16	.4
	28	BS1428-2	2.00	2.04	.35	1/2	15/16	1-3/8	1-5/8	21/32	.5
Pao 16	14	BS1414-2	1.00	1.17	.35	1/2	31/32	1-5/8	13/16	9/16	.1
	24	BS1624-2	1.50	1.54	.19	1/2	5/8	1	1	7/16	.15
	12	BS1612-2	.75	.91	.19	3/8	37/64	1-1/8	21/32	11/32	.08
	24	BS1624-15	1.50	1.55	.25	1/2	3/4	1-3/16	1-1/8	9/16	.40
	16	BS1616-15	1.00	1.13	.25	3/8	47/64	1-1/4	13/16	7/16	.09
	32	BS1632-2	2.00	2.04	.35	1/2	49/64	1-3/16	1-1/8	1/2	.30
	16	BS1616-2	1.00	1.15	.35	3/8	27/32	1-1/2	13/16	7/16	.04
	48	BS1648-3	3.00	3.02	.42	5/8	7/8	1-5/16	1-1/2	9/16	.74
	16	B1616-3	1.00	1.17	.42	7/16	59/64	2	7/8	15/32	.13
	64	BS1664-4	4.00	4.02	.48	5/8	57/64	1-3/8	2-1/4	9/16	1.7
Pao 16	16	B1616-4	1.00	1.17	.48	1/2	63/64	2-1/2	13/16	15/32	.12

Los engranes cónicos de acero pueden ser suministrados con dientes endurecidos con costo adicional.

Hierro Fundido

Número de Parte	Revoluciones por Minuto							
	50	100	200	300	600	900	1200	1800
B330-2	2.5	4.5	7.7	10.0	15.3			
B315-2	2.5	4.5	7.7	10.0	15.3			
B432-2	1.33	2.3	4.0	5.3	8.0	9.5		
B416-2	1.33	2.3	4.0	5.3	8.0	9.5		
B442-3	1.10	2.0	3.7	5.0	7.5	9.0		
B414-3	1.10	2.0	3.7	5.0	7.5	9.0		
B456-4	1.4	2.5	4.4	6.0	9.0	10.9		
B414-4	1.4	2.5	4.4	6.0	9.0	10.9		
B530-2	.5	1.0	1.9	2.5	3.9	4.8	5.5	
B515-2	.5	1.0	1.9	2.5	3.9	4.8	5.5	
B545-3	.7	1.4	2.4	3.3	5.2	6.4	7.2	
B515-3	.7	1.4	2.4	3.3	5.2	6.4	7.2	
B560-4	1.0	1.8	3.3	4.4	6.9	8.4	9.5	
B515-4	1.0	1.8	3.3	4.4	6.9	8.4	9.5	
B636-2	.5	1.0	1.7	2.3	3.7	4.4	5.0	
B618-2	.5	1.0	1.7	2.3	3.7	4.4	5.0	
B642-2	.6	1.1	2.0	2.7	4.0	5.0		
B621-2	.6	1.1	2.0	2.7	4.0	5.0		
B645-3	.4	.8	1.4	2.0	3.2	3.9	4.6	
B615-3	.4	.8	1.4	2.0	3.2	3.9	4.6	
B648-2	.8	1.5	2.5	3.4	5.1	6.1		
B624-2	.8	1.5	2.5	3.4	5.1	6.1		
B660-4	.5	.9	1.7	2.3	3.7	4.6	5.2	
B615-4	.5	.9	1.7	2.3	3.7	4.6	5.2	
B840-2	.4	.7	1.3	1.8	2.9	3.7	4.2	
B820-2	.4	.7	1.3	1.8	2.9	3.7	4.2	
B848-3	.2	.4	.7	1.0	1.7	2.2	2.5	2.9
B816-3	.2	.4	.7	1.0	1.7	2.2	2.5	2.9
B864-4	.2	.4	.7	1.0	1.7	2.2	2.5	
B816-4	.2	.4	.7	1.0	1.7	2.2	2.5	
B872-4	.4	.7	1.2	1.8	2.8	3.6	4.2	
B818-4	.4	.7	1.2	1.8	2.8	3.6	4.2	
B1060-3	.17	.3	.6	.8	1.3	1.7	1.9	2.3
B1020-3	.17	.3	.6	.8	1.3	1.7	1.9	2.3
B1060-4	.1	.2	.4	.5	.9	1.2	1.4	1.8
B1015-4	.1	.2	.4	.5	.9	1.2	1.4	1.8
B1090-6	.14	.25	.5	.7	1.2	1.7	1.9	2.3
B1015-6	.14	.25	.5	.7	1.2	1.7	1.9	2.3
B1236-2	.05	.11	.2	.3	.5	.6	.8	1.0
B1218-2	.05	.11	.2	.3	.5	.6	.8	1.0
B1254-3	.07	.15	.3	.4	.7	.9	1.0	1.3
B1218-3	.07	.15	.3	.4	.7	.9	1.0	1.3
B1272-4	.07	.15	.3	.4	.7	.9	1.1	1.4
B1218-4	.07	.15	.3	.4	.7	.9	1.1	1.4
B1272-6	.06	.11	.2	.3	.6	.8	1.0	1.2
B1212-6	.06	.11	.2	.3	.6	.8	1.0	1.2

Acero

Número de Parte	Revoluciones por Minuto							
	50	100	200	300	600	900	1200	1800
BS636-2	.9	1.7	3.0	4.1	6.4	8.0	9.0	
BS618-2	.9	1.7	3.0	4.1	6.4	8.0	9.0	
BS840-2	.5	.9	1.5	2.1	3.5	4.4	5.0	
BS820-2	.5	.9	1.5	2.1	3.5	4.4	5.0	
BS1030-15	.2	.4	.7	1.0	1.7	2.1	2.3	2.9
BS1020-15	.2	.4	.7	1.0	1.7	2.1	2.3	2.9
BS1040-2	.25	.5	.9	1.3	2.1	2.7	3.0	3.7
BS1020-2	.25	.5	.9	1.3	2.1	2.7	3.0	3.7
BS1050-2	.33	.64	1.2	1.6	2.5	3.2	3.7	
B1025-2	.33	.64	1.2	1.6	2.5	3.2	3.7	
BS1060-3	.3	.5	1.0	1.4	2.4	3.0	3.5	4.3
BS1020-3	.3	.5	1.0	1.4	2.4	3.0	3.5	4.3
BS1227-15	.09	.17	.33	.5	.8	1.0	1.2	1.6
BS1218-15	.09	.17	.33	.5	.8	1.0	1.2	1.6
BS1236-2	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1218-2	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1236-2A	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1218-2A	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1248-2	.18	.37	.7	.9	1.6	2.0	2.3	2.8
B1224-2	.18	.37	.7	.9	1.6	2.0	2.3	2.8
BS1254-3	.14	.28	.5	.7	1.2	1.6	1.9	2.3
B1218-3	.14	.28	.5	.7	1.2	1.6	1.9	2.3
BS1428-2	.05	.08	.16	.20	.40	.54	.7	.8
BS1414-2	.05	.08	.16	.20	.40	.54	.7	.8
BS1624-2	.02	.03	.05	.08	.14	.20	.25	.3
BS1612-2	.02	.03	.05	.08	.14	.20	.25	.3
BS1624-15	.03	.05	.09	.14	.25	.33	.4	.5
BS1612-15	.03	.05	.09	.14	.25	.33	.4	.5
BS1632-2	.03	.08	.14	.20	.37	.5	.6	.8
BS1616-2	.03	.08	.14	.20	.37	.5	.6	.8
BS1648-3	.05	.09	.17	.25	.50	.6	.8	1.0
BS1616-3	.05	.09	.17	.25	.50	.6	.8	1.0
BS1664-4	.05	.10	.20	.33	.50	.7	.9	1.1
BS1616-4	.05	.10	.20	.33	.50	.7	.9	1.1