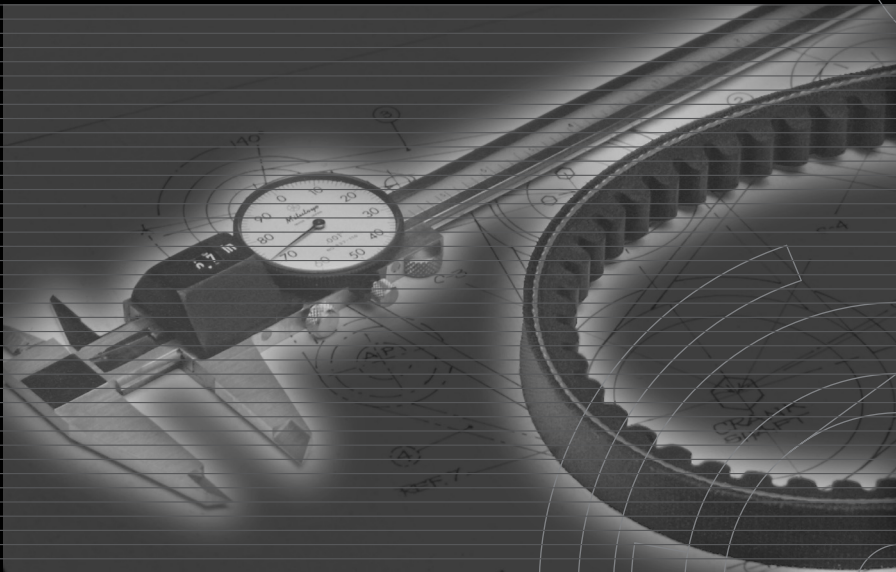


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# *V-Belt Design Manual*



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This manual is intended for standard two sheave applications. For non-standard applications, such as quarter turn drives, drives utilizing idlers, V-flat, etc., contact Bando.

# Useful Formulas

Required	Formula	Note
Design Power	$P_D = P_M \times F_S$	$P_D$ : Design horsepower (HP) $P_M$ : Motor or normal running power (HP) $F_S$ : Service Factor
Belt Pitch Length	$L = 2C + 1.57(D + d) + \frac{(D - d)^2}{4C}$	$L$ : Belt pitch length (inches) $C$ : Center distance (inches) $D$ : Large sheave pitch diameter (inches) $d$ : Small sheave pitch diameter (inches)
Center Distance	$C = \frac{b + \sqrt{b^2 - 8(D - d)^2}}{8}$ $b = 2L - \pi(D + d)$	$C$ : Center distance (inches) $D$ : Large sheave pitch diameter (inches) $d$ : Small sheave pitch diameter (inches) $L$ : Belt pitch length (inches)
Arc of Contact	$\theta = 180^\circ - \frac{57.3(D - d)}{C}$	$\theta$ : Arc of Contact ( $^\circ$ ) $D$ : Large sheave pitch diameter (inches) $d$ : Small sheave pitch diameter (inches) $C$ : Center distance (inches)
Belt Speed	$V = \frac{d \times n}{3.82}$	$V$ : Belt speed (feet per minute) $d$ : Small sheave pitch diameter (inches) $n$ : RPM of small sheave
Power	$HP = \frac{Tq \times n}{63,025}$	$HP$ : Horsepower (HP) $Tq$ : Torque (pounds-inches) $n$ : RPM of small sheave
Power	$HP = \frac{Pe \times V}{33,000}$	$HP$ : Horsepower (HP) $Pe$ : Effective pull (pounds) $V$ : Belt speed (feet per minute)
Torque	$Tq = Pe \times \frac{d}{2}$	$Tq$ : Torque (pounds-inches) $Pe$ : Effective pull (pounds) $d$ : Small sheave pitch diameter (inches)
Effective Pull	$Pe = \frac{Tq}{d/2}$	$Pe$ : Effective pull (pounds) $Tq$ : Torque (pounds-inches) $d$ : Small sheave pitch diameter (inches)
Effective Pull	$Pe = \frac{33,000 \times HP}{V} = T_1 - T_2$	$Pe$ : Effective pull (pounds) $HP$ : Horsepower (HP) $V$ : Belt speed (feet per minute) $T_1$ : Tight side tension (pounds) $T_2$ : Slack side tension (pounds)
Tension Ratio	$T_1 / T_2 = \frac{1}{1 - 0.8F_A} = e^{k\theta}$	$T_1$ : Tight side tension (pounds) $T_2$ : Slack side tension (pounds) $F_A$ : Arc of Contact correction factor $e$ : Base of natural logarithms (2.71828) $k$ : A constant for V-belt design (0.5123) $\theta$ : Arc of Contact ( $^\circ$ )
Tight Side Tension	$T_1 = \frac{41,250 \times HP}{F_A \times V}$	$T_1$ : Tight side tension (pounds) $HP$ : Horsepower (HP) $F_A$ : Arc of Contact correction factor $V$ : Belt speed (feet per minute)
Slack Side Tension	$T_2 = \frac{33,000(1.25 - F_A) \times HP}{F_A \times V}$	$T_2$ : Slack side tension (pounds) $F_A$ : Arc of Contact correction factor $HP$ : Horsepower (HP) $V$ : Belt speed (feet per minute)
Flywheel Effect (Torque)	$Tq = \frac{WR^2 \times (n_2 - n_1)}{25.59 \times t}$	$Tq$ : Torque (pounds-inches) $W$ : Weight of rim (pounds) $R$ : Mean radius of sheave (feet) $n_2$ : Final revolution (rpm) $n_1$ : Initial revolution (rpm) $t$ : Time required to effect speed change (seconds)

# POWER ACE DRIVE SELECTION

## Procedure 1: Calculation of Design Horsepower

Calculate the design horsepower from the following equation.

$$\text{Design Horsepower} = \text{Transmission Horsepower} \times \text{Service Factor}$$

Refer to the DriveN Machines listed in Table 1 and select the corresponding service factor.

### POWER ACE AND POWER KING TYPICAL SERVICE FACTORS

Table 1

DriveN Machine	DriveR					
	Intermittent Service 3-5 Hours Daily or Seasonal	Normal Service 8-10 Hours Daily	Continuous Service 16-24 Hours Daily	Intermittent Service 3-5 Hours Daily or Seasonal	Normal Service 8-10 Hours Daily	Continuous Service 16-24 Hours Daily
The machines listed below are representative samples only. Select the group listed below whose load characteristics most closely approximate those of the machine being considered.	<b>AC Motors:</b> Normal Torque, Squirrel Cage, Synchronous, Split Phase <b>DC Motors:</b> Shunt Wound <b>Engines:</b> Multiple Cylinder Internal Combustion			<b>AC Motors:</b> High Torque, High Slip, Repulsion-Induction, Single Phase, Series Wound, Slip Ring <b>DC Motors:</b> Series Wound, Compound Wound <b>Engines:</b> Single Cylinder Internal Combustion <b>Line Shafts:</b> Clutches		
Agitators for Liquids Blowers and Exhausters Centrifugal Pumps & Compressors Fans Up to 10 Horsepower Light Duty Conveyors	1.0	1.1	1.2	1.1	1.2	1.3
Belt Conveyors for Sand, Grain, Etc. Dough Mixers Fans-Over 10 Horsepower Generators Line Shafts Laundry Machinery Machine Tools Punches-Presses-Shears Printing Machinery Positive Displacement Rotary Pumps Revolving and Vibrating Screens	1.1	1.2	1.3	1.2	1.3	1.4
Brick Machinery Bucket Elevators Exciters Piston Compressors Pulverizers Saw Mill and Woodworking Machinery Textile Machinery Conveyors (Drag-Pan-Screw)	1.2	1.3	1.4	1.4	1.5	1.6
Crushers (Gyratory-Jaw-Roll) Mills (Ball-Rod-Tube) Hoists Rubber Calender-Extruders-Mills	1.3	1.4	1.5	1.5	1.6	1.8
Chokable Equipment	2.0	2.0	2.0	2.0	2.0	2.0

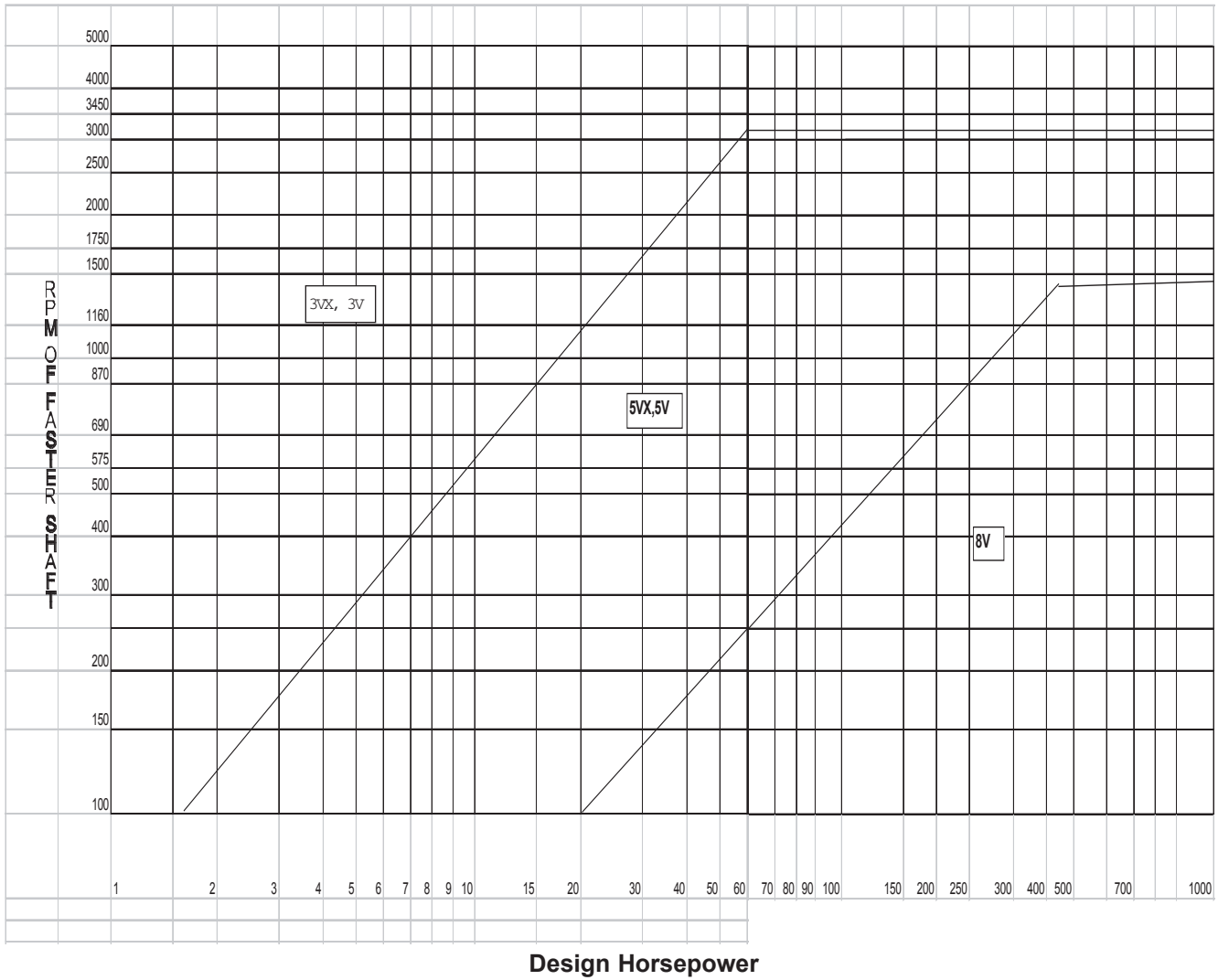
# POWER ACE DRIVE SELECTION

## Procedure 2: Selection of Belt Section

From Figure 1, select the belt section according to the design horsepower computed using Procedure 1 and the faster sheave's rpm.

**BELT SELECTION CHART**

**Fig. 1**



# POWER ACE DRIVE SELECTION

## Procedure 3: Calculation of Speed Ratio

Determine the speed ratio from either of the following equations.

$$\text{Speed Ratio} = \frac{\text{Faster Sheave's rpm}}{\text{Slower Sheave's rpm}}$$

or

$$\text{Speed Ratio} = \frac{\text{Large Sheave's Outer Diameter}}{\text{Small Sheave's Outer Diameter}}$$

## Procedure 4: Selection of Sheave Combination

Using table 2 below and the speed ratio, determine the sheave combination. Choose one of the sheaves, preferably the faster, from table 2 and calculate the outer diameter of the other sheave using the speed ratio. Belt speeds in excess of 6500 rpm require special sheaves. Consult the sheave manufacturer.

## Procedure 5: Selection of Belt Size

Using the given center distance and the size of the large and small sheaves selected, calculate the belt length. For this purpose the following equation is used.

$$\text{Belt Size} = 2C + 1.57(D+d) + \frac{(D-d)^2}{4C}$$

C = Center Distance

D = Outer Diameter of Large Sheave

d = Outer Diameter of Small Sheave

The following procedure applies to Power Ace, Power Ace Combo, Power Ace Cog and Power Ace Cog Combo.

**Example:** Customer needs a V-belt drive for an agitator that is in operation continuously.

Driving Motor: 5 Hp @ 900 RPM, Outer Datum Diameter 3.0"

DriveN Sheave: 250 RPM

Center Distance: 32"

Design HP = Transmission HP x Service Factor

Design HP = 5 X 1.2 (from Table 1) = 6

The belt section according to design horsepower and Fig. 1-> 3V

A 3.6:1 ratio is needed as per the formula below.

$$\text{Speed ratio} = \frac{900}{250} = 3.6:1 \text{ ratio}$$

Select a 3.0" drive sheave and a 10.6" driveN sheave, or any desired combination that achieves 3.6:1 ratio from Table 2.

If your center distance is known to be 32 inches then:

$$\text{Belt Size} = 2(32) + 1.57(10.6+3) + \frac{(10.6-3)^2}{4(32)} = 85.8"$$

Select nearest available belt size from the catalog. The 3V850 has the closest datum length and should be used in this circumstance.

STANDARD SHEAVE OUTER DIAMETERS

Table 2

3V/3V COMBO	3VX/3VX COMBO	5V/5V COMBO	5VX/5VX COMBO	8V/8V COMBO
2.65	2.20	7.1	4.4	12.5
2.80	2.35	7.5	4.6	13.2
3.00	2.50	8.0	4.9	14.0
3.15	2.65	8.5	5.2	15.0
3.35	2.80	9.0	5.5	16.0
3.65	3.00	9.25	5.9	17.0
4.12	3.15	9.75	6.3	18.0
4.50	3.35	10.3	6.7	19.0
4.75	3.65	10.9	7.1	20.0
5.0	4.12	11.8	7.5	21.2
5.3	4.50	12.5	8.0	22.4
5.6	4.75	13.2	8.5	30.0
6.0	5.0	14.0	9.0	35.5
6.5	5.3	15.0	9.25	40.0
6.9	5.6	16.0	9.75	44.5
8.0	6.0	18.7	10.3	53.0
10.6	6.5	21.2	10.9	71.0
14.0	6.9	23.6	11.8	
19.0	8.0	28.0	12.5	
25.0	10.6	31.5	13.2	
33.5	14.0	37.5	14.0	
	19.0	50.0	15.0	
	25.0	67.0	16.0	
	33.5		18.7	
			21.2	
			23.6	
			28.0	
			31.5	
			37.5	
			50.0	

# POWER ACE DRIVE SELECTION

## Procedure 6: Calculation of Standard Transmission HP

**Standard Transmission = Base HP ratings + Speed Ratio Adder**

Refer to Table 3 to determine the appropriate page # to determine Base HP Ratings and Speed Ratio Adder.

**Table 3**

	Page	Table
3V HP Ratings	8	7
3V Speed Ratio Adder	9	8
5V HP Ratings	10	9
5V Speed Ratio Adder	11	10
8V HP Ratings	12	11
8V Speed Ratio Adder	13	12
3VX HP Ratings	14	13
3VX Speed Ratio Adder	15	14
5VX HP Ratings	16	15
5VX Speed Ratio Adder	17	16

## Procedure 7: Determine the Coefficient of Arc of Contact

To determine the coefficient of Arc of Contact, use the formula (D-d)/C and find the corresponding correction factor from Table 4 below.

## Procedure 8: Calculation of the Number of Belts

Calculate the number of belts from the next equation.

$$\text{Number of Belts} = \frac{\text{Design HP}}{\text{Standard Transmission HP} \times \text{Coefficient of Arc of Contact} \times \frac{\text{Coefficient of Belt Length}}{\text{Belt Length}}}$$

(see Table 4) (see Table 5)

**COEFFICIENT OF ARC OF CONTACT**

**Table 4**

(D-d)/C	Arc of Contact on Small Sheave (Degrees)	Correction Factor
0.00	180	1.00
0.10	174	0.99
0.20	169	0.97
0.30	163	0.96
0.40	157	0.94
0.50	151	0.93
0.60	145	0.91
0.70	139	0.89
0.80	133	0.87
0.90	127	0.85
1.00	120	0.82
1.10	113	0.80
1.20	106	0.77
1.30	99	0.73
1.40	91	0.70
1.50	83	0.65

C = Center Distance  
D = Outer Diameter of Large Sheave  
d = Outer Diameter of Small Sheave

**COEFFICIENT OF BELT LENGTH**

**Table 5**

3V,3VX			5V,5VX			8V	
V-Belt Number	V-Belt Number	Correction Factor	V-Belt Number	V-Belt Number	Correction Factor	V-Belt Number	Correction Factor
3V250	3VX250	0.83	5V500	5VX500	0.86	8V1000	0.87
3V265	3VX265	0.84	5V530	5VX530	0.86	8V1060	0.88
3V280	3VX280	0.85	5V560	5VX560	0.87	8V1120	0.88
3V300	3VX300	0.86	5V600	5VX600	0.88	8V1180	0.89
3V315	3VX315	0.87	5V630	5VX630	0.89	8V1250	0.90
3V335	3VX335	0.88	5V670	5VX670	0.90	8V1320	0.91
3V355	3VX355	0.89	5V710	5VX710	0.91	8V1400	0.92
3V375	3VX375	0.90	5V750	5VX750	0.92	8V1500	0.93
3V400	3VX400	0.92	5V800	5VX800	0.93	8V1600	0.94
3V425	3VX425	0.93	5V850	5VX850	0.94	8V1700	0.94
3V450	3VX450	0.94	5V900	5VX900	0.95	8V1800	0.95
3V475	3VX475	0.95	5V950	5VX950	0.96	8V1900	0.96
3V500	3VX500	0.96	5V1000	5VX1000	0.96	8V2000	0.97
3V530	3VX530	0.97	5V1060	5VX1060	0.97	8V2120	0.98
3V560	3VX560	0.98	5V1120	5VX1120	0.98	8V2240	0.98
3V600	3VX600	0.99	5V1180	5VX1180	0.99	8V2360	0.99
3V630	3VX630	1.00	5V1250	5VX1250	1.00	8V2500	1.00
3V670	3VX670	1.01	5V1320	5VX1320	1.01	8V2650	1.01
3V710	3VX710	1.02	5V1400	5VX1400	1.02	8V2800	1.02
3V750	3VX750	1.03	5V1500	5VX1500	1.03	8V3000	1.03
3V800	3VX800	1.04	5V1600	5VX1600	1.04	8V3150	1.03
3V850	3VX850	1.06	5V1700	5VX1700	1.05	8V3350	1.04
3V900	3VX900	1.07	5V1800	5VX1800	1.06	8V3550	1.05
3V950	3VX950	1.08	5V1900	5VX1900	1.07	8V3750	1.06
3V1000	3VX1000	1.09	5V2000	5VX2000	1.08	8V4000	1.07
3V1060	3VX1060	1.10	5V2120	5VX2120	1.09	8V4250	1.08
3V1120	3VX1120	1.11	5V2240	5VX2240	1.09	8V4500	1.09
3V1180	3VX1180	1.12	5V2360	5VX2360	1.10	8V4750	1.09
3V1250	3VX1250	1.13	5V2500	5VX2500	1.11	8V5000	1.10
3V1320	3VX1320	1.14	5V2650	5VX2650	1.12	8V5600	1.12
3V1400	3VX1400	1.15	5V2800	5VX2800	1.13		
			5V3000	5VX3000	1.14		
			5V3150	5VX3150	1.15		
			5V3350	5VX3350	1.16		
			5V3550	5VX3550	1.17		

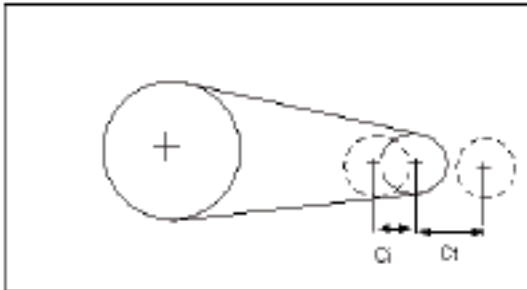


# POWER ACE DRIVE SELECTION

## Procedure 8: Check the Center Distance Adjustment

Determine the minimum center distance allowance for installation and tensioning from Table 6.

Fig. 2



### Example cont.

Determine the Base HP rating and speed ratio adder from the HP ratings charts. Table 3 provides the appropriate page # and table # for the HP ratings charts.

For a 3V belt running on 3.0" diameter sheave @ 900 RPM.

Standard Transmission HP = Base HP ratings + Speed Ratio Adder  
 Standard Transmission = 1.34 (Table 7) + .20 (Table 8) = 1.54

$$\# \text{ of Belts} = \frac{\text{Design HP}}{\text{Standard Transmission HP} \times \text{Coefficient of Arc of Contact} \times \text{Coefficient of Belt Length}} = \frac{6}{(1.54 \times 0.97 \times 1.06)} = 3.8 \sim 4$$

(see Table 4)                      (see Table 5)

Therefore, 4-3V850 belts are to be used in this drive.

**MINIMUM CENTER DISTANCE ALLOWANCES FOR BELT INSTALLATION AND TAKE-UP Table 6**

V-Belt Length	-Ci- Minimum Center Distance Allowance For Installation (Inches)						-Ct- Minimum Center Distance Allowance for Initial Tensioning and Subsequent Take-Up (Inches)
	3V, 3VX		5V,5VX		8V		All Cross Sections
	Power Ace/Cog	Power Ace/Cog Combo	Power Ace/Cog	Power Ace/Cog Combo	Power Ace	Power Ace Combo	All Types
250 Thru 475	0.5	1.2	-	-	-	-	1.0
500 Thru 710	0.8	1.4	1.0	2.1	-	-	1.2
750 Thru 1060	0.8	1.4	1.0	2.1	1.5	3.4	1.5
1120 Thru 1250	0.8	1.4	1.0	2.1	1.5	3.4	1.8
1320 Thru 1700	0.8	1.4	1.0	2.1	1.5	3.4	2.2
1800 Thru 2000	-	-	1.0	2.1	1.8	3.6	2.5
2120 Thru 2240	-	-	1.2	2.4	1.8	3.6	2.8
2360	-	-	1.2	2.4	1.8	3.6	3.0
2500 Thru 2650	-	-	1.2	2.4	1.8	3.6	3.2
2800 Thru 3000	-	-	1.2	2.4	1.8	3.6	3.5
3150	-	-	1.2	2.4	1.8	3.6	3.5
3350 Thru 3550	-	-	1.2	2.4	2.0	3.9	4.0
3750	-	-	-	-	2.0	3.9	4.5
4000 Thru 5000	-	-	-	-	2.0	3.9	5.5
5600	-	-	-	-	2.0	3.9	6.0

# STANDARD 3V TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 7

RPM	2.65	2.80	3.00	3.15	3.35	3.65	4.12	4.50	4.75	5.00	5.30	5.60	6.00	6.50	6.90	8.00	10.60	14.00	19.00
485	0.63	0.72	0.82	0.92	1.03	1.19	1.43	1.67	1.76	1.95	2.06	2.28	2.49	2.75	2.92	3.57	4.90	6.60	8.96
575	0.73	0.83	0.94	1.07	1.21	1.37	1.67	1.94	2.05	2.26	2.40	2.66	2.90	3.21	3.41	4.16	5.70	7.69	10.43
690	0.81	0.94	1.07	1.22	1.37	1.58	1.92	2.24	2.37	2.63	2.79	3.08	3.38	3.73	3.96	4.86	6.67	8.99	12.20
725	0.85	0.98	1.11	1.27	1.43	1.64	2.00	2.34	2.47	2.75	2.92	3.23	3.54	3.91	4.15	5.08	6.97	9.40	12.76
870	0.98	1.13	1.30	1.47	1.68	1.92	2.34	2.75	2.90	3.23	3.42	3.79	4.15	4.59	4.87	5.97	8.19	11.00	14.93
950	1.05	1.22	1.39	1.60	1.80	2.07	2.52	2.97	3.13	3.49	3.70	4.09	4.49	4.97	5.27	6.45	8.82	11.85	16.08
1160	1.22	1.43	1.65	1.88	2.13	2.45	3.00	3.53	3.73	4.15	4.40	4.88	5.35	5.91	6.27	7.67	10.47	13.95	18.94
1425	1.44	1.69	1.94	2.23	2.53	2.92	3.57	4.21	4.45	4.95	5.24	5.82	6.38	7.05	7.49	9.13	12.39	16.36	22.20
1750	1.70	1.97	2.28	2.63	2.99	3.46	4.25	5.01	5.28	5.89	6.24	6.91	7.58	8.37	8.88	10.78	14.50	18.84	25.57
2850	2.40	2.84	3.31	3.83	4.38	5.07	6.27	7.37	7.78	8.65	9.17	10.10	11.01	12.10	12.85	15.11	17.79		
3450	2.70	3.23	3.78	4.40	5.03	5.83	7.18	8.44	8.91	9.86	10.45	11.46	12.42	13.58	14.42	16.49			
100	0.16	0.17	0.20	0.23	0.25	0.29	0.34	0.40	0.42	0.46	0.49	0.53	0.59	0.65	0.69	0.83	1.14		
200	0.28	0.32	0.36	0.42	0.47	0.53	0.64	0.74	0.78	0.87	0.92	1.01	1.10	1.22	1.29	1.58	2.17	1.54	2.10
300	0.40	0.47	0.53	0.59	0.67	0.76	0.93	1.07	1.13	1.25	1.33	1.46	1.59	1.77	1.88	2.29	3.15	2.94	3.98
400	0.51	0.59	0.67	0.76	0.86	0.98	1.19	1.38	1.46	1.62	1.72	1.89	2.07	2.30	2.44	2.97	4.09	4.25	5.77
500	0.62	0.71	0.81	0.92	1.03	1.19	1.44	1.68	1.78	1.98	2.09	2.32	2.53	2.81	2.98	3.64	5.00	5.52	7.50
600	0.73	0.83	0.94	1.07	1.22	1.40	1.70	1.98	2.09	2.33	2.47	2.72	2.98	3.31	3.51	4.29	5.89	6.75	9.16
700	0.82	0.94	1.08	1.23	1.38	1.59	1.93	2.27	2.40	2.67	2.83	3.12	3.43	3.79	4.02	4.92	6.76	7.95	10.78
800	0.91	1.06	1.20	1.38	1.55	1.78	2.17	2.56	2.70	3.00	3.18	3.51	3.85	4.26	4.52	5.55	7.60	9.11	12.36
900	1.01	1.17	1.34	1.51	1.72	1.98	2.41	2.83	2.99	3.32	3.52	3.90	4.27	4.73	5.02	6.15	8.42	10.23	13.88
1000	1.09	1.26	1.46	1.66	1.88	2.16	2.65	3.10	3.28	3.65	3.87	4.28	4.70	5.19	5.51	6.74	9.23	11.32	15.36
1100	1.18	1.37	1.57	1.80	2.04	2.35	2.87	3.36	3.55	3.96	4.20	4.66	5.10	5.64	5.99	7.33	10.01	12.36	16.78
1200	1.26	1.46	1.69	1.93	2.20	2.53	3.10	3.64	3.84	4.28	4.53	5.01	5.50	6.09	6.46	7.89	10.77	13.38	18.16
1300	1.35	1.57	1.79	2.06	2.35	2.70	3.31	3.88	4.10	4.58	4.85	5.38	5.89	6.51	6.91	8.45	11.51	14.35	19.47
1400	1.43	1.66	1.92	2.20	2.49	2.87	3.52	4.14	4.37	4.88	5.17	5.74	6.29	6.94	7.37	8.99	12.22	15.27	20.72
1500	1.51	1.76	2.02	2.32	2.64	3.04	3.74	4.39	4.63	5.18	5.49	6.06	6.65	7.36	7.81	9.52	12.90	16.15	21.92
1600	1.57	1.85	2.13	2.45	2.79	3.21	3.94	4.64	4.89	5.46	5.79	6.42	7.04	7.77	8.25	10.03	13.56	16.98	23.05
1700	1.66	1.93	2.24	2.57	2.92	3.37	4.15	4.88	5.15	5.75	6.09	6.74	7.39	8.17	8.68	10.53	14.19	17.77	24.11
1800	1.72	2.02	2.33	2.69	3.07	3.54	4.35	5.12	5.40	6.02	6.38	7.07	7.76	8.56	9.09	11.02	14.80	18.49	25.10
1900	1.79	2.10	2.44	2.82	3.20	3.70	4.54	5.35	5.65	6.31	6.69	7.40	8.10	8.95	9.50	11.49	15.38	19.18	26.02
2000	1.87	2.18	2.54	2.94	3.34	3.86	4.74	5.58	5.89	6.57	6.96	7.71	8.44	9.32	9.90	11.95	15.93	19.80	26.87
2100	1.94	2.28	2.63	3.04	3.47	4.01	4.93	5.81	6.14	6.84	7.25	8.02	8.78	9.68	10.28	12.39	16.45	20.36	27.63
2200	2.00	2.36	2.73	3.15	3.59	4.16	5.12	6.03	6.37	7.10	7.52	8.32	9.10	10.04	10.66	12.81	16.94	20.86	28.30
2300	2.06	2.43	2.82	3.27	3.73	4.31	5.30	6.25	6.60	7.34	7.78	8.61	9.42	10.39	11.03	13.22	17.39	21.29	28.90
2400	2.13	2.51	2.91	3.38	3.85	4.45	5.48	6.46	6.81	7.60	8.06	8.90	9.73	10.72	11.38	13.60	17.80	21.67	29.41
2500	2.19	2.59	3.01	3.49	3.97	4.60	5.66	6.68	7.05	7.85	8.32	9.18	10.03	11.04	11.72	13.97	18.19	21.98	29.82
2600	2.25	2.65	3.09	3.59	4.09	4.74	5.83	6.88	7.26	8.08	8.56	9.45	10.32	11.35	12.05	14.32	18.54		
2700	2.31	2.73	3.18	3.69	4.21	4.88	6.01	7.07	7.46	8.31	8.81	9.71	10.60	11.66	12.38	14.65	18.84		
2800	2.37	2.80	3.27	3.79	2.99	5.02	6.18	7.28	7.68	8.54	9.05	9.97	10.89	11.95	12.68	14.96	19.12		
2900	2.42	2.87	3.35	3.89	4.44	5.14	6.34	7.47	7.88	8.76	9.29	10.22	11.15	12.24	12.99	15.26	19.35		
3000	2.48	2.94	3.43	3.98	4.56	5.28	6.50	7.65	8.07	8.98	9.52	10.46	11.40	12.50	13.27	15.53	19.54		
3100	2.53	3.00	3.51	4.08	4.66	5.40	6.66	7.84	8.27	9.18	9.73	10.69	11.65	12.77	13.55	15.78			
3200	2.58	3.07	3.59	4.17	4.77	5.53	6.81	8.02	8.46	9.39	9.95	10.93	11.88	13.01	13.82	16.01			
3300	2.64	3.14	3.67	4.26	4.88	5.65	6.97	8.18	8.63	9.59	10.17	11.14	12.11	13.25	14.06	16.22			
3400	2.69	3.20	3.74	4.36	4.97	5.76	7.11	8.36	8.82	9.78	10.37	11.35	12.33	13.47	14.30	16.41			
3500	2.73	3.26	3.81	4.44	5.08	5.89	7.25	8.52	9.00	9.96	10.56	11.55	12.53	13.68	14.52	16.56			
3600	2.79	3.31	3.89	4.52	5.17	6.00	7.39	8.67	9.15	10.14	10.74	11.74	12.72	13.89	14.74	16.69			
3700	2.83	3.38	3.95	4.60	5.27	6.11	7.53	8.84	9.33	10.31	10.93	11.93	12.91	14.07	14.93	16.80			
3800	2.87	3.43	4.02	4.68	5.36	6.22	7.65	8.99	9.49	10.48	11.10	12.10	13.08	14.23	15.11	16.90			
3900	2.91	3.49	4.09	4.76	5.46	6.32	7.78	9.12	9.63	10.63	11.26	12.26	13.24	14.40	15.28				
4000	2.95	3.54	4.14	4.84	5.54	6.43	7.91	9.26	9.77	10.78	11.42	12.42	13.39	14.54	15.43				
4100	2.99	3.58	4.21	4.91	5.63	6.52	8.03	9.40	9.92	10.93	11.58	12.56	13.53	14.66	15.56				
4200	3.03	3.63	4.26	4.99	5.71	6.62	8.14	9.52	10.05	11.06	11.73	12.70	13.66	14.78	15.69				
4300	3.07	3.69	4.33	5.05	5.79	6.70	8.26	9.64	10.18	11.18	11.86	12.82	13.77	14.87	15.78				
4400	3.11	3.73	4.39	5.12	5.87	6.80	8.35	9.77	10.31	11.31	11.99	12.94	13.87	14.95	15.87				
4500	3.14	3.77	4.44	5.19	5.94	6.88	8.47	9.88	10.42	11.43	12.12	13.04	13.96	15.02	15.94				
4600	3.16	3.81	4.48	5.24	6.01	6.97	8.56	9.99	10.54	11.52	12.22	13.13	14.03	15.08	16.00				
4700	3.20	3.85	4.53	5.31	6.09	7.05	8.65	10.08	10.64	11.62	12.32	13.22	14.10	15.10	16.03				
4800	3.23	3.89	4.59	5.36	6.15	7.12	8.75	10.18	10.74	11.72	12.42	13.28	14.15	15.12	16.05				
4900	3.26	3.93	4.63	5.42	6.21	7.20	8.83	10.26	10.83	11.80	12.51	13.34	14.18						
5000	3.28	3.97	4.67	5.47	6.27	7.27	8.91	10.34	10.92	11.87	12.58	13.39	14.21						

# STANDARD 3V TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 8

RPM	1.00~1.01	1.02~1.05	1.06~1.11	1.12~1.18	1.19~1.26	1.27~1.38	1.39~1.57	1.58~1.94	1.95~3.38	3.39+
485	0.00	0.01	0.03	0.04	0.07	0.08	0.08	0.09	0.11	0.11
575	0.00	0.01	0.03	0.05	0.07	0.09	0.11	0.12	0.12	0.13
690	0.00	0.01	0.04	0.07	0.09	0.11	0.12	0.13	0.15	0.16
725	0.00	0.01	0.04	0.07	0.09	0.11	0.13	0.15	0.16	0.17
870	0.00	0.01	0.04	0.08	0.11	0.13	0.16	0.17	0.19	0.20
950	0.00	0.01	0.05	0.09	0.12	0.15	0.17	0.19	0.21	0.23
1160	0.00	0.03	0.07	0.11	0.15	0.17	0.21	0.23	0.25	0.27
1425	0.00	0.03	0.08	0.13	0.17	0.21	0.25	0.28	0.31	0.34
1750	0.00	0.04	0.09	0.16	0.21	0.27	0.31	0.35	0.39	0.40
2850	0.00	0.05	0.15	0.27	0.36	0.44	0.51	0.58	0.63	0.67
3450	0.00	0.07	0.19	0.32	0.44	0.52	0.62	0.70	0.76	0.80
100	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.03	0.03	0.03
200	0.00	0.00	0.01	0.01	0.03	0.03	0.04	0.04	0.04	0.04
300	0.00	0.00	0.01	0.03	0.04	0.04	0.05	0.07	0.07	0.07
400	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.09	0.09
500	0.00	0.01	0.03	0.04	0.07	0.08	0.09	0.11	0.11	0.12
600	0.00	0.01	0.03	0.05	0.08	0.09	0.11	0.12	0.13	0.13
700	0.00	0.01	0.04	0.07	0.09	0.11	0.12	0.15	0.15	0.16
800	0.00	0.01	0.04	0.08	0.11	0.12	0.15	0.16	0.17	0.19
900	0.00	0.01	0.05	0.08	0.11	0.13	0.16	0.19	0.20	0.21
1000	0.00	0.01	0.05	0.09	0.12	0.15	0.17	0.20	0.21	0.23
1100	0.00	0.03	0.05	0.11	0.13	0.17	0.20	0.23	0.24	0.25
1200	0.00	0.03	0.07	0.11	0.15	0.19	0.21	0.24	0.27	0.28
1300	0.00	0.03	0.07	0.12	0.16	0.20	0.23	0.27	0.28	0.31
1400	0.00	0.03	0.07	0.13	0.16	0.21	0.25	0.28	0.31	0.32
1500	0.00	0.03	0.08	0.13	0.19	0.23	0.27	0.31	0.34	0.35
1600	0.00	0.03	0.08	0.15	0.20	0.24	0.28	0.32	0.35	0.38
1700	0.00	0.03	0.09	0.16	0.21	0.25	0.31	0.35	0.38	0.40
1800	0.00	0.04	0.09	0.16	0.23	0.28	0.32	0.36	0.40	0.42
1900	0.00	0.04	0.11	0.17	0.24	0.29	0.34	0.39	0.42	0.44
2000	0.00	0.04	0.11	0.19	0.25	0.31	0.36	0.40	0.44	0.47
2100	0.00	0.04	0.11	0.20	0.27	0.32	0.38	0.43	0.46	0.48
2200	0.00	0.04	0.12	0.20	0.28	0.34	0.39	0.44	0.48	0.51
2300	0.00	0.04	0.12	0.21	0.29	0.35	0.42	0.47	0.51	0.54
2400	0.00	0.04	0.13	0.23	0.31	0.36	0.43	0.48	0.52	0.56
2500	0.00	0.05	0.13	0.23	0.32	0.39	0.44	0.51	0.55	0.58
2600	0.00	0.05	0.13	0.24	0.34	0.40	0.47	0.52	0.58	0.60
2700	0.00	0.05	0.15	0.25	0.34	0.42	0.48	0.55	0.59	0.63
2800	0.00	0.05	0.15	0.25	0.35	0.43	0.50	0.56	0.62	0.66
2900	0.00	0.05	0.16	0.27	0.36	0.44	0.52	0.59	0.64	0.67
3000	0.00	0.05	0.16	0.28	0.38	0.46	0.54	0.60	0.66	0.70
3100	0.00	0.07	0.16	0.28	0.39	0.47	0.55	0.63	0.68	0.72
3200	0.00	0.07	0.17	0.29	0.40	0.50	0.58	0.64	0.70	0.75
3300	0.00	0.07	0.17	0.31	0.42	0.51	0.59	0.67	0.72	0.76
3400	0.00	0.07	0.19	0.32	0.43	0.52	0.60	0.68	0.75	0.79
3500	0.00	0.07	0.19	0.32	0.44	0.54	0.63	0.71	0.76	0.82
3600	0.00	0.07	0.19	0.34	0.46	0.55	0.64	0.72	0.79	0.84
3700	0.00	0.07	0.20	0.35	0.47	0.56	0.66	0.75	0.82	0.86
3800	0.00	0.08	0.20	0.35	0.48	0.58	0.68	0.76	0.83	0.88
3900	0.00	0.08	0.20	0.36	0.50	0.60	0.70	0.79	0.86	0.91
4000	0.00	0.08	0.21	0.38	0.51	0.62	0.72	0.80	0.88	0.92
4100	0.00	0.08	0.21	0.38	0.52	0.63	0.74	0.83	0.90	0.95
4200	0.00	0.08	0.23	0.39	0.54	0.64	0.75	0.84	0.92	0.98
4300	0.00	0.08	0.23	0.40	0.55	0.66	0.78	0.87	0.95	1.01
4400	0.00	0.08	0.23	0.40	0.55	0.67	0.79	0.88	0.97	1.02
4500	0.00	0.09	0.24	0.42	0.56	0.68	0.80	0.91	0.99	1.05
4600	0.00	0.09	0.24	0.43	0.58	0.71	0.83	0.92	1.01	1.07
4700	0.00	0.09	0.25	0.44	0.59	0.72	0.84	0.95	1.03	1.10
4800	0.00	0.09	0.25	0.44	0.60	0.74	0.86	0.97	1.06	1.11
4900	0.00	0.09	0.25	0.46	0.62	0.75	0.88	0.99	1.07	1.14
5000	0.00	0.09	0.27	0.47	0.63	0.76	0.90	1.01	1.10	1.17

# STANDARD 5V TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 9

RPM	7.1	7.5	8.0	8.5	9.0	9.25	9.75	10.3	10.9	11.8	12.5	13.2	14.0	15.0	16.0
485	6.38	7.00	7.72	8.49	9.25	9.76	10.54	11.30	12.29	13.52	14.61	15.73	16.85	18.31	19.71
575	7.20	7.93	8.77	9.67	10.55	11.14	12.06	12.95	14.10	15.51	16.79	18.10	19.39	21.06	22.68
690	8.41	9.27	10.26	11.32	12.35	13.05	14.13	15.17	16.52	18.17	19.66	21.18	22.68	24.62	26.49
725	8.77	9.68	10.70	11.79	12.90	13.61	14.74	15.84	17.23	18.95	20.51	22.09	23.65	25.67	27.61
870	10.22	11.28	12.49	13.77	15.06	15.89	17.21	18.48	20.11	22.12	23.90	25.71	27.51	29.81	32.03
950	11.00	12.14	13.44	14.83	16.21	17.11	18.52	19.90	21.63	23.79	25.68	27.61	29.53	31.97	34.31
1160	12.93	14.29	15.83	17.46	19.08	20.14	21.79	23.39	25.40	27.94	30.06	32.21	34.39	37.11	39.71
1425	15.19	16.79	18.59	20.50	22.39	23.62	25.51	27.35	29.62	32.59	34.87	37.22	39.57	42.44	45.18
1750	17.66	19.52	21.60	23.79	25.95	27.32	29.43	31.48	33.94	37.34	39.55	41.81	44.22	46.93	49.49
2850	23.25	25.54	28.06	30.58	32.91	34.14	36.05	37.96							
3450	24.11	26.29	28.63	30.80											
50	0.83	0.90	0.99	1.08	1.18	1.24	1.33	1.43	1.55	1.71	1.84	1.97	2.11	2.28	2.47
60	0.98	1.06	1.17	1.28	1.40	1.45	1.58	1.69	1.83	2.01	2.16	2.33	2.50	2.71	2.91
70	1.11	1.22	1.35	1.47	1.60	1.68	1.81	1.94	2.11	2.32	2.50	2.68	2.87	3.12	3.36
80	1.26	1.38	1.51	1.67	1.81	1.90	2.04	2.20	2.39	2.62	2.82	3.04	3.25	3.53	3.80
90	1.41	1.53	1.69	1.84	2.01	2.11	2.28	2.44	2.65	2.92	3.15	3.38	3.63	3.94	4.24
100	1.54	1.69	1.85	2.03	2.22	2.32	2.51	2.68	2.92	3.21	3.46	3.73	3.99	4.34	4.67
150	2.22	2.43	2.67	2.94	3.19	3.36	3.63	3.88	4.23	4.65	5.01	5.41	5.79	6.29	6.78
200	2.86	3.13	3.46	3.80	4.13	4.35	4.70	5.04	5.49	6.04	6.53	7.02	7.53	8.19	8.81
250	3.48	3.82	4.21	4.63	5.05	5.32	5.75	6.16	6.71	7.38	7.99	8.61	9.22	10.03	10.80
300	4.10	4.49	4.96	5.45	5.94	6.26	6.77	7.27	7.91	8.70	9.42	10.14	10.88	11.83	12.73
350	4.69	5.15	5.68	6.25	6.81	7.19	7.77	8.35	9.08	9.99	10.81	11.66	12.49	13.59	14.64
400	5.26	5.78	6.39	7.03	7.67	8.09	8.75	9.40	10.23	11.26	12.19	13.13	14.07	15.31	16.49
450	5.83	6.41	7.08	7.79	8.51	8.98	9.72	10.44	11.36	12.50	13.52	14.58	15.63	16.99	18.30
500	6.38	7.03	7.76	8.56	9.34	9.85	10.66	11.45	12.47	13.72	14.85	16.01	17.15	18.64	20.09
550	6.93	7.63	8.43	9.30	10.15	10.72	11.59	12.46	13.56	14.92	16.15	17.41	18.65	20.27	21.82
600	7.47	8.23	9.10	10.02	10.94	11.56	12.51	13.45	14.63	16.10	17.43	18.77	20.11	21.85	23.52
650	7.99	8.82	9.75	10.74	11.74	12.40	13.41	14.41	15.69	17.26	18.67	20.12	21.55	23.41	25.20
700	8.51	9.38	10.38	11.45	12.52	13.21	14.30	15.36	16.73	18.40	19.90	21.44	22.96	24.92	26.82
750	9.03	9.96	11.02	12.15	13.27	14.01	15.18	16.29	17.75	19.52	21.10	22.72	24.33	26.41	28.40
800	9.54	10.51	11.63	12.83	14.02	14.81	16.03	17.22	18.74	20.62	22.29	23.99	25.67	27.85	29.94
850	10.03	11.06	12.24	13.51	14.76	15.59	16.88	18.13	19.72	21.69	23.44	25.22	26.99	29.26	31.43
900	10.52	11.60	12.84	14.17	15.49	16.36	17.71	19.02	20.69	22.76	24.58	26.42	28.28	30.63	32.89
950	11.00	12.14	13.44	14.83	16.21	17.11	18.52	19.90	21.63	23.79	25.68	27.61	29.53	31.97	34.31
1000	11.47	12.66	14.01	15.47	16.91	17.86	19.32	20.75	22.56	24.82	26.78	28.75	30.74	33.26	35.67
1100	12.40	13.68	15.16	16.72	18.28	19.30	20.89	22.42	24.36	26.80	28.86	30.96	33.06	35.72	38.26
1200	13.30	14.68	16.26	17.94	19.60	20.69	22.37	24.01	26.07	28.68	30.85	33.03	35.25	38.01	40.64
1300	14.16	15.63	17.31	19.11	20.88	22.02	23.81	25.55	27.70	30.47	32.71	34.96	37.26	40.11	42.79
1400	14.99	16.56	18.33	20.23	22.09	23.30	25.18	27.00	29.25	32.18	34.45	36.76	39.13	42.00	44.73
1500	15.79	17.45	19.33	21.31	23.27	24.53	26.48	28.38	30.71	33.78	36.07	38.40	40.82	43.69	46.41
1600	16.56	18.31	20.27	22.35	24.38	25.69	27.71	29.69	32.08	35.28	37.56	39.89	42.32	45.17	47.86
1700	17.31	19.11	21.16	23.33	25.45	26.78	28.88	30.90	33.35	36.68	38.93	41.22	43.64	46.41	49.02
1800	18.01	19.89	22.02	24.26	26.44	27.82	29.96	32.03	34.51	37.97	40.13	42.35	44.75	47.40	49.89
1900	18.69	20.64	22.83	25.13	27.39	28.79	30.97	33.09	35.56	39.12	41.18	43.32	45.67	48.16	50.47
2000	19.33	21.34	23.60	25.97	28.26	29.68	31.90	34.04	36.52	40.17	42.09	44.08	46.35	48.63	
2100	19.93	22.00	24.32	26.74	29.08	30.51	32.75	34.91	37.35	41.09	42.83	44.67	46.81		
2200	20.51	22.62	24.99	27.45	29.82	31.27	33.49	35.66	38.07	41.87	43.40	45.02			
2300	21.03	23.20	25.60	28.11	30.51	31.94	34.15	36.32	38.65	42.52	43.79				
2400	21.53	23.72	26.18	28.71	31.12	32.52	34.72	36.88	39.11	43.03	43.99				
2500	21.99	24.22	26.69	29.24	31.66	33.04	35.20	37.32	39.43	43.38					
2600	22.40	24.65	27.16	29.71	32.12	33.47	35.57	37.66	39.63	43.59					
2700	22.76	25.04	27.57	30.12	32.50	33.80	35.85	37.88	39.67	43.64					
2800	23.10	25.39	27.91	30.44	32.80	34.04	36.01	37.96							
2900	23.38	25.67	28.19	30.70	33.02	34.20	36.07	37.93							
3000	23.62	25.91	28.42	30.89	33.16	34.26	36.01								
3100	23.81	26.10	28.59	31.02	33.20	34.22									
3200	23.96	26.22	28.68	31.06	33.16	34.07									
3300	24.05	26.29	28.71	31.02	33.02										
3400	24.11	26.32	28.67	30.89	32.79										
3500	24.11	26.26	28.57	30.69											
3600	24.05	26.15	28.38	30.40											
3700	23.95	25.99	28.14												
3800	23.77	25.75	27.81												

# STANDARD 5V TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 10

RPM	1.00~1.01	1.02~1.05	1.06~1.11	1.12~1.18	1.19~1.26	1.27~1.38	1.39~1.57	1.58~1.94	1.95~3.38	3.39+
485	0.00	0.05	0.15	0.25	0.35	0.42	0.50	0.55	0.60	0.64
575	0.00	0.07	0.17	0.31	0.42	0.50	0.59	0.66	0.71	0.76
690	0.00	0.08	0.21	0.36	0.50	0.60	0.70	0.79	0.86	0.91
725	0.00	0.08	0.21	0.38	0.52	0.63	0.74	0.83	0.90	0.95
870	0.00	0.09	0.27	0.46	0.62	0.75	0.88	0.99	1.09	1.15
950	0.00	0.11	0.28	0.50	0.68	0.82	0.97	1.09	1.18	1.25
1160	0.00	0.13	0.35	0.60	0.83	1.01	1.18	1.33	1.45	1.53
1425	0.00	0.16	0.43	0.75	1.02	1.23	1.45	1.62	1.77	1.88
1750	0.00	0.19	0.52	0.92	1.25	1.51	1.78	2.00	2.17	2.31
2850	0.00	0.32	0.86	1.50	2.04	2.47	2.90	3.26	3.55	3.75
3450	0.00	0.38	1.05	1.81	2.47	2.99	3.50	3.94	4.29	4.54
50	0.00	0.00	0.01	0.03	0.04	0.04	0.05	0.05	0.07	0.07
60	0.00	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.08
70	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.08	0.09
80	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.09	0.11
90	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.11	0.11	0.12
100	0.00	0.01	0.03	0.05	0.07	0.08	0.11	0.12	0.12	0.13
150	0.00	0.01	0.04	0.08	0.11	0.13	0.15	0.17	0.19	0.20
200	0.00	0.03	0.05	0.11	0.15	0.17	0.20	0.23	0.25	0.27
250	0.00	0.03	0.08	0.13	0.17	0.21	0.25	0.28	0.31	0.34
300	0.00	0.03	0.09	0.16	0.21	0.25	0.31	0.35	0.38	0.40
350	0.00	0.04	0.11	0.19	0.25	0.31	0.36	0.40	0.43	0.46
400	0.00	0.04	0.12	0.21	0.28	0.35	0.40	0.46	0.50	0.52
450	0.00	0.05	0.13	0.24	0.32	0.39	0.46	0.51	0.56	0.59
500	0.00	0.05	0.15	0.27	0.36	0.43	0.51	0.58	0.62	0.66
550	0.00	0.07	0.16	0.29	0.39	0.48	0.56	0.63	0.68	0.72
600	0.00	0.07	0.17	0.32	0.43	0.52	0.60	0.68	0.75	0.79
650	0.00	0.07	0.20	0.34	0.47	0.56	0.66	0.74	0.80	0.86
700	0.00	0.08	0.21	0.36	0.50	0.60	0.71	0.80	0.87	0.92
750	0.00	0.08	0.23	0.39	0.54	0.64	0.76	0.86	0.94	0.99
800	0.00	0.09	0.24	0.42	0.58	0.70	0.82	0.91	0.99	1.06
850	0.00	0.09	0.25	0.44	0.60	0.74	0.86	0.97	1.06	1.13
900	0.00	0.09	0.27	0.47	0.64	0.78	0.91	1.03	1.13	1.19
950	0.00	0.11	0.28	0.50	0.68	0.82	0.97	1.09	1.18	1.25
1000	0.00	0.11	0.29	0.52	0.71	0.87	1.02	1.14	1.25	1.31
1100	0.00	0.12	0.34	0.58	0.79	0.95	1.11	1.26	1.37	1.45
1200	0.00	0.13	0.36	0.63	0.86	1.05	1.22	1.37	1.49	1.58
1300	0.00	0.15	0.39	0.68	0.92	1.13	1.31	1.49	1.62	1.72
1400	0.00	0.16	0.42	0.74	1.01	1.22	1.42	1.60	1.74	1.85
1500	0.00	0.16	0.46	0.79	1.07	1.30	1.53	1.72	1.86	1.98
1600	0.00	0.17	0.48	0.84	1.14	1.38	1.62	1.82	2.00	2.10
1700	0.00	0.19	0.51	0.90	1.22	1.47	1.73	1.94	2.12	2.24
1800	0.00	0.20	0.54	0.95	1.29	1.55	1.82	2.05	2.24	2.37
1900	0.00	0.21	0.58	0.99	1.35	1.65	1.93	2.17	2.36	2.51
2000	0.00	0.23	0.60	1.05	1.43	1.73	2.02	2.28	2.49	2.64
2100	0.00	0.23	0.63	1.10	1.50	1.82	2.13	2.40	2.61	2.77
2200	0.00	0.24	0.66	1.15	1.57	1.90	2.24	2.52	2.73	2.90
2300	0.00	0.25	0.70	1.21	1.65	2.00	2.33	2.63	2.87	3.03
2400	0.00	0.27	0.72	1.26	1.72	2.08	2.44	2.75	2.99	3.16
2500	0.00	0.28	0.75	1.31	1.78	2.17	2.53	2.86	3.11	3.30
2600	0.00	0.28	0.78	1.37	1.86	2.25	2.64	2.98	3.23	3.43
2700	0.00	0.29	0.82	1.42	1.93	2.35	2.73	3.08	3.36	3.57
2800	0.00	0.31	0.84	1.47	2.00	2.43	2.84	3.20	3.49	3.69
2900	0.00	0.32	0.87	1.53	2.08	2.52	2.95	3.31	3.61	3.82
3000	0.00	0.34	0.90	1.58	2.14	2.60	3.04	3.43	3.74	3.95
3100	0.00	0.35	0.94	1.64	2.21	2.68	3.15	3.54	3.86	4.09
3200	0.00	0.35	0.97	1.68	2.29	2.77	3.24	3.66	3.98	4.22
3300	0.00	0.36	0.99	1.73	2.36	2.86	3.35	3.77	4.10	4.36
3400	0.00	0.38	1.02	1.78	2.43	2.95	3.44	3.89	4.24	4.48
3500	0.00	0.39	1.06	1.84	2.51	3.03	3.55	3.99	4.36	4.61
3600	0.00	0.40	1.09	1.89	2.57	3.12	3.66	4.12	4.48	4.75
3700	0.00	0.42	1.11	1.94	2.64	3.20	3.75	4.22	4.61	4.88
3800	0.00	0.42	1.14	2.00	2.72	3.30	3.86	4.34	4.73	5.01

# STANDARD 8V TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 11

RPM	12.5	13.2	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.2	22.4	24.8	30.0	35.5	40.0	44.5	53.0	63.0	71.0
485	26.03	29.06	32.28	35.99	39.97	43.94	47.85	51.76	55.58	59.78	64.66	73.78	91.21	107.93	121.61	135.29	161.13	191.53	215.85
575	29.93	33.46	37.20	41.47	46.07	50.64	55.13	59.60	63.97	68.76	74.28	84.53	104.07	123.15	138.76	154.37	183.85	218.54	246.30
690	34.65	38.76	43.10	48.06	53.38	58.65	63.81	68.90	73.88	79.34	85.52	96.84	118.41	140.12	157.88	175.65	209.20	248.67	280.24
725	36.03	40.30	44.81	49.97	55.49	60.95	66.30	71.57	76.71	82.34	88.68	100.24	122.27	144.69	163.03	181.37	216.01	256.77	289.37
870	41.36	46.31	51.48	57.39	63.68	69.85	75.84	81.72	87.39	93.63	100.40	112.47	135.46	160.30	180.62	200.94	239.32	284.47	320.60
950	44.09	49.35	54.86	61.13	67.76	74.26	80.54	86.66	92.53	99.00	105.84	117.82	140.64	166.43	187.52	208.62	248.47	295.35	332.85
1160	50.39	56.38	62.60	69.63	76.95	84.03	90.73	97.15	103.18	109.87	116.21	126.49							
1425	56.46	63.05	69.79	77.32	84.95	92.09	98.61	104.59	109.89	115.92									
1750	60.63	67.38	74.10	81.42	88.34	94.35													
10	0.84	0.91	1.01	1.10	1.21	1.32	1.43	1.54	1.65	1.76	1.91	2.17	2.68	3.17	3.57	3.97	4.73	5.62	6.33
20	1.57	1.72	1.89	2.08	2.29	2.51	2.71	2.91	3.12	3.35	3.62	4.13	5.11	6.04	6.81	7.58	9.02	10.73	12.09
30	2.26	2.48	2.73	3.01	3.32	3.62	3.94	4.24	4.53	4.87	5.26	6.01	7.45	8.82	9.94	11.06	13.17	15.65	17.64
40	2.92	3.22	3.54	3.92	4.32	4.73	5.12	5.52	5.91	6.34	6.86	7.83	9.71	11.49	12.95	14.41	17.16	20.40	22.98
50	3.57	3.94	4.34	4.80	5.30	5.79	6.28	6.77	7.26	7.80	8.43	9.62	11.94	14.13	15.92	17.71	21.10	25.08	28.26
60	4.20	4.64	5.11	5.65	6.25	6.84	7.42	7.99	8.58	9.22	9.95	11.38	14.13	16.72	18.84	20.96	24.96	29.67	33.44
70	4.82	5.33	5.87	6.51	7.18	7.86	8.54	9.21	9.87	10.61	11.47	13.11	16.29	19.27	21.72	24.16	28.77	34.20	38.55
80	5.43	6.01	6.62	7.34	8.10	8.87	9.64	10.39	11.15	11.99	12.96	14.83	18.42	21.79	24.56	27.32	32.54	38.67	43.59
90	6.03	6.67	7.36	8.16	9.01	9.88	10.72	11.58	12.42	13.36	14.43	16.51	20.52	24.28	27.36	30.43	36.25	43.09	48.56
100	6.62	7.32	8.08	8.96	9.91	10.86	11.79	12.73	13.67	14.69	15.89	18.19	22.60	26.75	30.14	33.53	39.93	47.47	53.50
110	7.20	7.98	8.81	9.77	10.80	11.84	12.87	13.89	14.91	16.02	17.34	19.84	24.66	29.18	32.88	36.58	43.57	51.79	58.36
120	7.78	8.63	9.52	10.56	11.68	12.80	13.92	15.02	16.13	17.34	18.77	21.47	26.70	31.60	35.61	39.61	47.18	56.08	63.20
130	8.35	9.26	10.23	11.35	12.56	13.76	14.96	16.15	17.35	18.66	20.18	23.11	28.73	34.00	38.31	42.62	50.76	60.34	68.00
140	8.92	9.89	10.93	12.12	13.41	14.71	16.00	17.28	18.54	19.95	21.60	24.72	30.73	36.37	40.98	45.59	54.29	64.54	72.73
150	9.47	10.50	11.61	12.90	14.27	15.65	17.02	18.39	19.74	21.24	22.99	26.31	32.72	38.72	43.62	48.53	57.80	68.71	77.43
160	10.03	11.12	12.30	13.66	15.13	16.59	18.04	19.49	20.93	22.52	24.38	27.91	34.70	41.07	46.27	51.48	61.31	72.88	82.13
170	10.57	11.74	12.98	14.41	15.96	17.52	19.05	20.58	22.11	23.78	25.75	29.48	36.59	43.30	48.78	54.27	64.64	76.84	86.59
180	11.11	12.34	13.65	15.18	16.80	18.44	20.06	21.67	23.27	25.03	27.11	31.05	38.60	45.68	51.47	57.26	68.20	81.07	91.36
190	11.65	12.95	14.32	15.91	17.63	19.36	21.05	22.75	24.43	26.28	28.46	32.59	40.53	47.96	54.04	60.12	71.60	85.12	95.92
200	12.19	13.54	14.98	16.66	18.45	20.25	22.03	23.82	25.58	27.53	29.81	34.13	42.44	50.23	56.59	62.96	74.99	89.13	100.45
250	14.80	16.46	18.23	20.28	22.50	24.71	26.89	29.08	31.23	33.61	36.40	41.68	51.81	61.31	69.08	76.85	91.53	108.80	122.62
300	17.32	19.29	21.38	23.81	26.42	29.01	31.59	34.17	36.71	39.50	42.79	48.97	60.83	71.99	81.11	90.23	107.47	127.75	143.97
350	19.77	22.03	24.45	27.22	30.22	33.21	36.17	39.12	42.02	45.22	48.97	56.02	69.52	82.27	92.70	103.13	122.82	146.00	164.54
400	22.13	24.70	27.41	30.54	33.92	37.28	40.60	43.91	47.18	50.76	54.95	62.82	77.87	92.14	103.82	115.50	137.57	163.52	184.29
450	24.44	27.29	30.31	33.78	37.52	41.24	44.91	48.57	52.18	56.13	60.73	69.36	85.84	101.58	114.45	127.33	151.65	180.26	203.15
500	26.69	29.81	33.12	36.92	41.02	45.09	49.10	53.09	57.02	61.32	66.32	75.64	93.44	110.57	124.58	138.60	165.07	196.22	221.13
550	28.86	32.26	35.86	39.98	44.41	48.82	53.15	57.46	61.69	66.33	71.68	81.64	100.63	119.08	134.17	149.27	177.78	211.32	238.16
600	30.99	34.64	38.51	42.95	47.70	52.44	57.08	61.68	66.20	71.15	76.83	87.35	107.39	127.08	143.19	159.30	189.73	225.52	254.16
650	33.05	36.96	41.09	45.83	50.90	55.94	60.87	65.76	70.54	75.79	81.75	92.75	113.71	134.55	151.61	168.67	200.88	238.79	269.11
700	35.04	39.20	43.59	48.62	53.99	59.32	64.52	69.67	74.70	80.20	86.43	97.83	119.54	141.45	159.38	177.31	211.18	251.02	282.90
750	36.98	41.37	46.02	51.32	56.98	62.58	68.03	73.42	78.67	84.42	90.86	102.57	124.87	147.77	166.50	185.23	220.61	262.23	295.53
800	38.85	43.48	48.35	53.92	59.85	65.69	71.39	77.01	82.44	88.42	95.02	106.96	129.68	153.45	172.91	192.36	229.10	272.33	306.91
850	40.66	45.52	50.61	56.43	62.60	68.69	74.61	80.41	86.03	92.20	98.92	110.97	133.92	158.48	178.56	198.65	236.60	281.24	316.95
900	42.40	47.46	52.78	58.82	65.24	71.55	77.66	83.63	89.39	95.72	102.53	114.60	137.59	162.82	183.46	204.10	243.08	288.94	325.64
950	44.09	49.35	54.86	61.13	67.76	74.26	80.54	86.66	92.53	99.00	105.84	117.82	140.64	166.43	187.52	208.62	248.47	295.35	332.85
1000	45.70	51.15	56.85	63.33	70.17	76.84	83.25	89.50	95.45	102.04	108.85	120.62	143.06	169.29	190.75	212.21	252.74	300.43	338.58
1050	47.24	52.87	58.76	65.42	72.43	79.26	85.80	92.12	98.14	104.79	111.51	122.96	144.79	171.33	193.05	214.77	255.79	304.05	342.66
1100	48.71	54.52	60.57	67.41	74.57	81.52	88.15	94.55	100.58	107.27	113.86	124.85							
1150	50.12	56.07	62.27	69.27	76.57	83.63	90.32	96.74	102.77	109.47	115.86	126.26							
1200	51.44	57.55	63.88	71.02	78.44	85.57	92.29	98.72	104.71	111.37	117.49	127.17							
1250	52.70	58.93	65.39	72.64	80.15	87.34	94.08	100.46	106.35	112.95	118.75								
1300	53.88	60.22	66.78	74.14	81.72	88.92	95.64	101.96	107.74	114.23	119.62								
1350	54.97	61.43	68.07	75.51	83.12	90.34	96.99	103.20	108.82	115.16	120.09								
1400	55.98	62.53	69.25	76.75	84.37	91.55	98.12	104.19	109.61	116.17									
1450	56.92	63.53	70.31	77.85	85.48	92.57	99.03	104.91	110.10	116.01									
1500	57.75	64.45	71.25	78.82	86.39	93.40	99.70	105.36	110.26										
1550	58.51	65.25	72.09	79.64	87.15	94.03	100.12	105.53											
1600	59.19	65.95	72.78	80.32	87.72	94.44	100.30	105.40											
1650	59.77	66.54	73.36	80.84	88.12	94.63	100.23												
1700	60.24	67.02	73.79	81.21	88.32	94.60	99.89												
1750	60.63	67.38	74.10	81.42	88.34	94.35													
1800	60.93	67.64	74.28	81.46	88.16	93.86													
1850	61.12	67.77	74.32	81.34	87.78														
1900	61.20	67.79	74.19	81.06	87.19														
1950	61.19	67.67	73.94	80.59															
2000	61.05	67.42	73.52	79.95															

# STANDARD 8V TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 12

RPM	1.00~1.01	1.02~1.05	1.06~1.11	1.12~1.18	1.19~1.26	1.27~1.38	1.39~1.57	1.58~1.94	1.95~3.38	3.39+
485	0.00	0.27	0.74	1.30	1.77	2.13	2.51	2.82	3.07	3.26
575	0.00	0.32	0.88	1.54	2.09	2.53	2.96	3.34	3.63	3.86
690	0.00	0.39	1.06	1.85	2.51	3.04	3.57	4.01	4.37	4.62
725	0.00	0.40	1.11	1.93	2.64	3.19	3.74	4.21	4.58	4.87
870	0.00	0.50	1.33	2.32	3.16	3.83	4.49	5.05	5.51	5.83
950	0.00	0.54	1.46	2.53	3.46	4.18	4.91	5.52	6.02	6.37
1160	0.00	0.66	1.78	3.10	4.22	5.11	5.99	6.74	7.35	7.77
1425	0.00	0.80	2.18	3.81	5.19	6.27	7.36	8.28	9.02	9.56
1750	0.00	0.98	2.68	4.68	6.37	7.71	9.03	10.16	11.07	11.73
10	0.00	0.00	0.01	0.03	0.04	0.04	0.05	0.05	0.07	0.07
20	0.00	0.01	0.03	0.05	0.07	0.09	0.11	0.12	0.12	0.13
30	0.00	0.01	0.04	0.08	0.11	0.13	0.16	0.17	0.19	0.20
40	0.00	0.03	0.07	0.11	0.15	0.17	0.20	0.23	0.25	0.27
50	0.00	0.03	0.08	0.13	0.19	0.21	0.25	0.29	0.32	0.34
60	0.00	0.04	0.09	0.16	0.21	0.27	0.31	0.35	0.38	0.40
70	0.00	0.04	0.11	0.19	0.25	0.31	0.36	0.40	0.44	0.47
80	0.00	0.04	0.12	0.21	0.29	0.35	0.42	0.47	0.51	0.54
90	0.00	0.05	0.13	0.24	0.32	0.40	0.47	0.52	0.56	0.60
100	0.00	0.05	0.15	0.27	0.36	0.44	0.52	0.58	0.63	0.67
110	0.00	0.07	0.17	0.29	0.40	0.48	0.56	0.64	0.70	0.74
120	0.00	0.07	0.19	0.32	0.44	0.52	0.62	0.70	0.76	0.80
130	0.00	0.07	0.20	0.35	0.47	0.58	0.67	0.75	0.82	0.87
140	0.00	0.08	0.21	0.38	0.51	0.62	0.72	0.82	0.88	0.94
150	0.00	0.08	0.23	0.40	0.55	0.66	0.78	0.87	0.95	1.01
160	0.00	0.09	0.24	0.43	0.58	0.71	0.83	0.92	1.02	1.07
170	0.00	0.09	0.25	0.46	0.62	0.75	0.87	0.99	1.07	1.14
180	0.00	0.11	0.28	0.48	0.66	0.79	0.92	1.05	1.14	1.21
190	0.00	0.11	0.29	0.51	0.70	0.83	0.98	1.10	1.21	1.27
200	0.00	0.11	0.31	0.54	0.72	0.88	1.03	1.17	1.26	1.34
250	0.00	0.13	0.39	0.67	0.91	1.10	1.29	1.45	1.58	1.68
300	0.00	0.17	0.46	0.80	1.09	1.33	1.55	1.74	1.90	2.01
350	0.00	0.20	0.54	0.94	1.27	1.54	1.81	2.04	2.21	2.35
400	0.00	0.23	0.62	1.07	1.46	1.77	2.06	2.32	2.53	2.68
450	0.00	0.25	0.68	1.21	1.64	1.98	2.32	2.61	2.84	3.02
500	0.00	0.28	0.76	1.34	1.82	2.20	2.59	2.91	3.16	3.35
550	0.00	0.31	0.84	1.47	2.00	2.43	2.84	3.19	3.49	3.69
600	0.00	0.34	0.92	1.61	2.18	2.64	3.10	3.49	3.79	4.02
650	0.00	0.36	0.99	1.74	2.36	2.87	3.35	3.78	4.12	4.36
700	0.00	0.39	1.07	1.88	2.55	3.08	3.62	4.06	4.42	4.69
750	0.00	0.42	1.15	2.00	2.72	3.31	3.87	4.36	4.75	5.03
800	0.00	0.46	1.22	2.13	2.91	3.53	4.13	4.65	5.07	5.36
850	0.00	0.48	1.30	2.27	3.10	3.74	4.38	4.93	5.38	5.70
900	0.00	0.51	1.38	2.40	3.27	3.97	4.65	5.23	5.70	6.03
950	0.00	0.54	1.46	2.53	3.46	4.18	4.91	5.52	6.02	6.37
1000	0.00	0.56	1.53	2.67	3.63	4.41	5.16	5.80	6.33	6.70
1050	0.00	0.59	1.61	2.80	3.82	4.62	5.42	6.10	6.65	7.04
1100	0.00	0.62	1.69	2.94	3.99	4.85	5.68	6.39	6.96	7.37
1150	0.00	0.64	1.76	3.07	4.18	5.07	5.94	6.68	7.28	7.71
1200	0.00	0.67	1.84	3.20	4.37	5.29	6.19	6.97	7.60	8.04
1250	0.00	0.70	1.92	3.34	4.54	5.51	6.45	7.27	7.91	8.38
1300	0.00	0.74	2.00	3.47	4.73	5.72	6.72	7.55	8.23	8.71
1350	0.00	0.76	2.06	3.61	4.91	5.95	6.97	7.84	8.54	9.05
1400	0.00	0.79	2.14	3.74	5.09	6.17	7.23	8.14	8.86	9.38
1450	0.00	0.82	2.23	3.87	5.27	6.39	7.48	8.42	9.18	9.72
1500	0.00	0.84	2.31	4.01	5.46	6.61	7.75	8.71	9.49	10.05
1550	0.00	0.87	2.37	4.14	5.63	6.84	8.00	9.01	9.81	10.39
1600	0.00	0.90	2.45	4.28	5.82	7.05	8.26	9.29	10.12	10.72
1650	0.00	0.92	2.53	4.41	6.01	7.27	8.51	9.58	10.44	11.06
1700	0.00	0.95	2.60	4.54	6.18	7.49	8.78	9.88	10.76	11.39
1750	0.00	0.98	2.68	4.68	6.37	7.71	9.03	10.16	11.07	11.73
1800	0.00	1.02	2.76	4.81	6.54	7.94	9.29	10.46	11.39	12.06
1850	0.00	1.05	2.84	4.95	6.73	8.15	9.54	10.75	11.70	12.40
1900	0.00	1.07	2.91	5.08	6.90	8.38	9.81	11.03	12.02	12.73
1950	0.00	1.10	2.99	5.21	7.09	8.59	10.07	11.33	12.35	13.07
2000	0.00	1.13	3.07	5.35	7.28	8.82	10.32	11.62	12.65	13.40

# STANDARD 3VX TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 13

RPM	2.2	2.35	2.5	2.65	2.8	3.00	3.15	3.35	3.65	4.12	4.5	5.00	5.6	6.00	6.5	6.9	8.00	10.6	14.00
575	0.56	0.66	0.74	0.83	0.93	1.04	1.14	1.26	1.40	1.70	1.94	2.23	2.59	2.63	3.10	3.37	3.95	5.37	7.20
690	0.66	0.77	0.86	0.97	1.09	1.23	1.34	1.49	1.65	1.99	2.28	2.64	3.05	3.10	3.65	3.97	4.67	6.34	8.49
725	0.69	0.81	0.91	1.02	1.14	1.27	1.41	1.56	1.73	2.08	2.38	2.75	3.19	3.24	3.82	4.15	4.88	6.63	8.87
870	0.79	0.94	1.05	1.19	1.33	1.50	1.65	1.82	2.03	2.45	2.80	3.25	3.76	3.83	4.51	4.89	5.75	7.80	10.43
950	0.86	1.01	1.13	1.29	1.44	1.61	1.78	1.97	2.19	2.65	3.04	3.51	4.07	4.14	4.88	5.30	6.22	8.43	11.26
1160	1.01	1.20	1.34	1.52	1.71	1.92	2.12	2.35	2.61	3.17	3.64	4.21	4.86	4.96	5.84	6.33	7.42	10.03	13.36
1425	1.20	1.43	1.59	1.82	2.04	2.29	2.53	2.82	3.12	3.77	4.34	5.03	5.82	5.92	6.97	7.56	8.88	11.98	15.81
1750	1.40	1.67	1.88	2.14	2.42	2.72	3.00	3.34	3.73	4.52	5.20	6.01	6.96	7.08	8.33	9.01	10.58	14.18	18.52
2850	2.03	2.47	2.78	3.19	3.60	4.07	4.52	5.03	5.62	6.82	7.84	9.04	10.43	10.58	12.39	13.30	15.44	19.98	
3450	2.34	2.84	3.23	3.72	4.19	4.74	5.27	5.86	6.55	7.95	9.11	10.49	12.05	12.18	14.23	15.14	17.42		
200	0.23	0.27	0.30	0.32	0.36	0.41	0.44	0.48	0.54	0.65	0.74	0.86	0.98	1.00	1.18	1.28	1.50	2.04	2.74
400	0.42	0.49	0.54	0.61	0.67	0.75	0.83	0.91	1.01	1.22	1.40	1.61	1.85	1.88	2.23	2.41	2.85	3.85	5.18
600	0.58	0.69	0.76	0.86	0.97	1.08	1.18	1.31	1.46	1.75	2.01	2.32	2.68	2.73	3.21	3.48	4.11	5.59	7.49
800	0.74	0.88	0.97	1.10	1.24	1.39	1.53	1.69	1.88	2.27	2.60	3.01	3.47	3.53	4.16	4.53	5.34	7.23	9.68
1000	0.89	1.05	1.18	1.33	1.49	1.68	1.85	2.05	2.26	2.76	3.17	3.66	4.25	4.32	5.09	5.53	6.51	8.82	11.77
1200	1.03	1.23	1.38	1.56	1.75	1.96	2.17	2.42	2.68	3.25	3.73	4.32	5.00	5.08	5.99	6.50	7.65	10.35	13.74
1400	1.17	1.39	1.57	1.78	2.00	2.25	2.48	2.75	3.06	3.72	4.27	4.94	5.73	5.82	6.86	7.44	8.76	11.81	15.60
1600	1.29	1.55	1.74	1.99	2.23	2.52	2.79	3.10	3.45	4.18	4.80	5.56	6.44	6.55	7.70	8.35	9.81	13.19	17.33
1800	1.42	1.71	1.93	2.19	2.47	2.78	3.08	3.42	3.81	4.63	5.32	6.16	7.12	7.25	8.52	9.23	10.83	14.49	18.90
2000	1.54	1.86	2.09	2.40	2.70	3.04	3.36	3.74	4.18	5.06	5.83	6.74	7.80	7.93	9.32	10.08	11.81	15.73	20.34
2200	1.67	2.01	2.27	2.60	2.91	3.30	3.65	4.07	4.53	5.50	6.32	7.30	8.44	8.58	10.08	10.88	12.75	16.88	21.61
2400	1.79	2.16	2.43	2.79	3.13	3.54	3.93	4.36	4.88	5.92	6.80	7.86	9.08	9.22	10.83	11.67	13.63	17.94	22.70
2600	1.89	2.29	2.59	2.98	3.34	3.79	4.20	4.67	5.22	6.33	7.26	8.39	9.70	9.84	11.54	12.41	14.46	18.91	
2800	2.00	2.43	2.74	3.15	3.56	4.02	4.46	4.96	5.54	6.72	7.73	8.92	10.28	10.42	12.23	13.12	15.25	19.78	
3000	2.11	2.56	2.90	3.33	3.76	4.25	4.72	5.25	5.86	7.11	8.17	9.42	10.85	10.99	12.88	13.79	15.97	20.53	
3200	2.20	2.68	3.05	3.50	3.95	4.47	4.96	5.53	6.17	7.49	8.59	9.90	11.40	11.54	13.50	14.42	16.66		
3400	2.31	2.82	3.19	3.68	4.15	4.70	5.21	5.80	6.48	7.86	9.01	10.38	11.93	12.05	14.08	15.00	17.27		
3600	2.40	2.94	3.34	3.84	4.34	4.90	5.46	6.07	6.77	8.22	9.41	10.83	12.43	12.55	14.63	15.54	17.83		
3800	2.50	3.06	3.47	4.00	4.51	5.12	5.68	6.33	7.07	8.56	9.81	11.26	12.91	13.02	15.16	16.03	18.30		
4000	2.59	3.17	3.61	4.15	4.70	5.31	5.91	6.57	7.34	8.89	10.18	11.68	13.36	13.57	15.63	16.48			
4200	2.67	3.27	3.73	4.31	4.87	5.52	6.13	6.83	7.61	9.23	10.55	12.08	13.78	13.85	16.07	16.87			
4400	2.75	3.38	3.86	4.46	5.03	5.71	6.34	7.06	7.89	9.54	10.89	12.45	14.18	14.11	15.23				
4600	2.83	3.49	3.99	4.59	5.20	5.90	6.56	7.29	8.13	9.83	11.22	12.81	14.82	14.57	16.83				
4800	2.91	3.60	4.09	4.74	5.36	6.07	6.76	7.51	8.38	10.13	11.53	13.14	14.88	14.87	17.15				
5000	3.00	3.69	4.22	4.87	5.52	6.25	6.94	7.73	8.62	10.41	11.83	13.46	15.20	15.02					
5200	3.06	3.79	4.32	5.00	5.67	6.41	7.13	7.93	8.84	10.66	12.11	13.74	15.47						
5400	3.13	3.88	4.43	5.13	5.80	6.58	7.32	8.13	9.06	10.91	12.39	14.01	15.72						
5600	3.20	3.96	4.56	5.25	5.95	6.74	7.48	8.32	9.27	11.15	12.63	14.26							
5800	3.26	4.04	4.63	5.36	6.08	6.89	7.65	8.51	9.46	11.38	12.84	14.48							
6000	3.30	4.12	4.73	5.47	6.20	7.03	7.82	8.68	9.66	11.59	13.05	14.67							
6200	3.39	4.20	4.81	5.57	6.32	7.18	7.96	8.84	9.83	11.78	13.24								
6400	3.44	4.27	4.90	5.68	6.44	7.30	8.11	9.00	10.00	12.11	13.42								
6600	3.49	4.35	4.99	5.78	6.55	7.42	8.24	9.14	10.16	12.13	13.57								
6800	3.53	4.41	5.07	5.87	6.66	7.54	8.37	9.29	10.30	12.27	13.69								
7000	3.59	4.47	5.13	5.95	6.75	7.65	8.49	9.41	10.43	12.41									

# STANDARD 3VX TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 14

RPM	1.00-1.01	1.02-1.03	1.04-1.06	1.07-1.09	1.10-1.13	1.14-1.18	1.19-1.25	1.26-1.35	1.36-1.57	1.58+
575	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.08	0.09	0.09
690	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.11	0.11	0.12
725	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.11	0.12	0.12
870	0.00	0.01	0.04	0.05	0.08	0.09	0.12	0.13	0.15	0.15
950	0.00	0.01	0.04	0.07	0.09	0.11	0.12	0.15	0.16	0.16
1160	0.00	0.01	0.04	0.08	0.11	0.13	0.15	0.17	0.19	0.20
1425	0.00	0.03	0.05	0.09	0.13	0.16	0.19	0.21	0.23	0.24
1750	0.00	0.03	0.07	0.12	0.16	0.20	0.23	0.27	0.28	0.31
2850	0.00	0.04	0.11	0.20	0.27	0.32	0.38	0.43	0.47	0.50
3450	0.00	0.05	0.13	0.24	0.32	0.39	0.46	0.51	0.56	0.59
200	0.00	0.00	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.04
400	0.00	0.00	0.01	0.03	0.04	0.04	0.05	0.05	0.07	0.07
600	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.09	0.11
800	0.00	0.01	0.03	0.05	0.08	0.09	0.11	0.12	0.13	0.13
1000	0.00	0.01	0.04	0.07	0.09	0.11	0.13	0.15	0.16	0.17
1200	0.00	0.01	0.05	0.08	0.11	0.13	0.16	0.17	0.20	0.20
1400	0.00	0.03	0.05	0.09	0.13	0.16	0.19	0.21	0.23	0.24
1600	0.00	0.03	0.07	0.11	0.15	0.19	0.21	0.24	0.25	0.28
1800	0.00	0.03	0.07	0.12	0.17	0.20	0.24	0.27	0.29	0.31
2000	0.00	0.03	0.08	0.13	0.19	0.23	0.27	0.29	0.32	0.35
2200	0.00	0.03	0.08	0.15	0.20	0.25	0.29	0.34	0.36	0.38
2400	0.00	0.04	0.09	0.16	0.23	0.27	0.32	0.36	0.39	0.42
2600	0.00	0.04	0.11	0.17	0.24	0.29	0.35	0.39	0.43	0.44
2800	0.00	0.04	0.11	0.19	0.27	0.32	0.38	0.42	0.46	0.48
3000	0.00	0.04	0.12	0.20	0.28	0.34	0.40	0.44	0.48	0.52
3200	0.00	0.04	0.12	0.21	0.29	0.36	0.43	0.48	0.52	0.55
3400	0.00	0.05	0.13	0.23	0.32	0.39	0.46	0.51	0.55	0.59
3600	0.00	0.05	0.15	0.24	0.34	0.40	0.48	0.54	0.59	0.62
3800	0.00	0.05	0.15	0.25	0.36	0.43	0.51	0.56	0.62	0.66
4000	0.00	0.05	0.16	0.28	0.38	0.46	0.54	0.60	0.66	0.68
4200	0.00	0.07	0.16	0.29	0.39	0.48	0.56	0.63	0.68	0.72
4400	0.00	0.07	0.17	0.31	0.42	0.50	0.59	0.66	0.71	0.76
4600	0.00	0.07	0.19	0.32	0.43	0.52	0.62	0.68	0.75	0.79
4800	0.00	0.07	0.19	0.34	0.44	0.55	0.64	0.72	0.75	0.83
5000	0.00	0.07	0.20	0.35	0.47	0.56	0.67	0.75	0.82	0.86
5200	0.00	0.08	0.20	0.36	0.48	0.59	0.68	0.78	0.84	0.90
5400	0.00	0.08	0.21	0.38	0.51	0.62	0.71	0.80	0.88	0.92
5600	0.00	0.08	0.21	0.39	0.52	0.63	0.74	0.83	0.91	0.97
5800	0.00	0.08	0.23	0.40	0.54	0.66	0.76	0.87	0.94	1.01
6000	0.00	0.08	0.24	0.42	0.56	0.68	0.79	0.90	0.98	1.03
6200	0.00	0.09	0.24	0.43	0.58	0.70	0.82	0.92	1.01	1.07
6400	0.00	0.09	0.25	0.44	0.60	0.72	0.84	0.95	1.05	1.10
6600	0.00	0.09	0.25	0.46	0.62	0.75	0.87	0.99	1.07	1.14
6800	0.00	0.09	0.27	0.47	0.63	0.76	0.90	1.02	1.11	1.17
7000	0.00	0.11	0.28	0.48	0.66	0.79	0.92	1.05	1.14	1.21

# STANDARD 5VX TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 15

RPM	4.4	4.65	4.9	5.2	5.5	5.9	6.3	6.7	7.1	7.5	8.0	8.5	9.0	9.25	9.75	10.3	10.9	11.8	12.5	13.2
436	2.57	2.88	3.23	3.59	4.00	4.50	5.01	5.52	6.02	6.52	7.11	7.73	8.34	8.73	9.35	9.99	10.76	11.84	12.66	13.55
485	2.82	3.18	3.55	3.96	4.40	4.97	5.52	6.08	6.63	7.19	7.84	8.53	9.21	9.63	10.33	11.03	11.89	13.08	13.98	14.96
575	3.26	3.68	4.12	4.60	5.11	5.77	6.44	7.09	7.74	8.39	9.15	9.95	10.75	11.24	12.04	12.87	13.88	15.26	16.31	17.46
690	3.83	4.31	4.83	5.41	6.01	6.79	7.56	8.33	9.11	9.88	10.77	11.73	12.67	13.24	14.19	15.16	16.34	17.98	19.21	20.55
725	3.96	4.49	5.02	5.63	6.27	7.08	7.91	8.71	9.52	10.32	11.26	12.26	13.24	13.84	14.85	15.85	17.08	18.79	20.08	21.48
870	4.64	5.25	5.90	6.61	7.36	8.33	9.29	10.24	11.20	12.14	13.25	14.42	15.57	16.28	17.46	18.64	20.09	22.10	23.59	25.22
950	5.00	5.66	6.37	7.12	7.95	8.99	10.03	11.07	12.10	13.12	14.33	15.58	16.83	17.60	18.87	20.15	21.71	23.88	25.47	27.22
1160	5.91	6.70	7.54	8.46	9.43	10.69	11.93	13.18	14.41	15.63	17.05	18.55	20.04	20.95	22.45	23.95	25.79	28.37	30.21	32.23
1425	6.99	7.94	8.96	10.07	11.24	12.75	14.24	15.73	17.19	18.66	20.35	22.13	23.88	24.95	26.72	28.50	30.63	33.69	35.75	38.03
1750	8.25	9.39	10.61	11.94	13.34	15.13	16.92	18.68	20.41	22.14	24.15	26.22	28.28	29.51	31.55	33.61	36.02	39.63	41.81	44.27
2850	11.88	13.61	15.44	17.41	19.48	22.10	24.67	27.16	29.60	31.97	34.71	37.47	40.12	41.54	43.96	46.47				
3450	13.44	15.46	17.56	19.80	22.15	25.10	27.94	30.70	33.32	35.85	38.73	41.55	44.19							
100	0.71	0.79	0.87	0.97	1.07	1.19	1.33	1.45	1.57	1.71	1.85	2.01	2.16	2.26	2.42	2.58	2.78	3.06	3.26	3.49
200	1.31	1.46	1.63	1.80	1.99	2.24	2.48	2.72	2.97	3.21	3.50	3.79	4.10	4.28	4.59	4.90	5.28	5.80	6.20	6.64
300	1.86	2.09	2.32	2.59	2.86	3.23	3.59	3.95	4.30	4.65	5.07	5.51	5.95	6.22	6.67	7.11	7.66	8.43	9.01	9.65
400	2.39	2.68	3.00	3.34	3.71	4.18	4.65	5.11	5.59	6.05	6.59	7.17	7.73	8.09	8.67	9.25	9.98	10.98	11.73	12.56
500	2.90	3.26	3.64	4.08	4.52	5.10	5.67	6.25	6.82	7.53	8.06	8.76	9.47	9.90	10.62	11.34	12.22	13.44	14.37	15.39
600	3.38	3.81	4.27	4.78	5.31	6.00	6.68	7.37	8.04	8.71	9.51	10.33	11.16	11.68	12.52	13.37	14.42	15.86	16.94	18.14
700	3.87	4.36	4.88	5.47	6.09	6.87	7.67	8.45	9.23	10.01	10.92	11.88	12.80	13.41	14.38	15.36	16.55	18.21	19.45	20.82
800	4.33	4.88	5.49	6.14	6.84	7.73	8.62	9.51	10.39	11.28	12.30	13.38	14.45	15.11	16.21	17.30	18.65	20.51	21.91	23.44
900	4.77	5.41	6.07	6.80	7.58	8.57	9.57	10.55	11.54	12.51	13.66	14.85	16.05	16.77	17.99	19.21	20.70	22.77	24.30	28.43
1000	5.22	5.90	6.65	7.44	8.31	9.40	10.50	11.58	12.65	13.72	14.98	16.30	17.61	18.40	19.73	21.07	22.69	24.96	26.63	30.82
1100	5.66	6.40	7.21	8.09	9.02	10.20	11.40	12.59	13.75	14.92	16.29	17.72	19.14	20.00	21.44	22.89	24.64	27.10	28.88	33.14
1200	6.07	6.88	7.75	8.71	9.71	11.01	12.29	13.57	14.84	16.10	17.57	19.10	20.63	21.56	23.12	24.67	26.55	29.20	31.07	35.37
1300	6.49	7.37	8.30	9.32	10.41	11.79	13.17	14.53	15.90	17.24	18.82	20.46	22.09	23.09	24.74	26.40	28.39	31.23	33.19	37.49
1400	6.89	7.82	8.84	9.91	11.08	12.56	14.02	15.49	16.94	18.37	20.05	21.80	23.53	24.58	26.33	28.08	30.18	33.20	35.25	39.56
1500	7.29	8.28	9.36	10.50	11.73	13.31	14.87	16.42	17.96	19.48	21.25	23.10	24.94	26.04	27.87	29.73	31.93	35.12	37.22	41.52
1600	7.68	8.73	9.86	11.09	12.39	14.05	15.70	17.34	18.95	20.56	22.43	24.37	26.29	27.45	29.37	31.32	33.61	36.97	39.13	43.38
1700	8.06	9.16	10.36	11.66	13.03	14.77	16.52	18.24	19.93	21.61	23.57	25.62	27.63	28.84	30.83	32.86	35.23	38.75	40.94	45.14
1800	8.43	9.59	10.85	12.21	13.64	15.49	17.31	19.11	20.90	22.66	24.70	26.82	28.93	30.17	32.25	34.35	36.79	40.47	42.67	46.78
1900	8.80	10.02	11.33	12.76	14.26	16.19	18.09	19.97	21.82	23.67	25.79	28.01	30.19	31.48	33.62	35.78	38.29	42.12	44.30	48.33
2000	9.15	10.44	11.81	13.29	14.86	16.87	18.85	20.81	22.75	24.65	26.87	29.16	31.41	32.73	34.94	37.17	39.72	43.69	45.85	51.05
2200	9.84	11.24	12.73	14.34	16.04	18.20	20.34	22.44	24.51	26.56	28.91	31.36	33.73	35.11	37.39	39.76	42.39	46.62	48.66	
2400	10.50	12.01	13.60	15.33	17.15	19.47	21.75	23.99	26.19	28.35	30.85	33.40	35.90	37.31	39.70	43.47	44.76	49.23	51.06	
2600	11.13	12.73	14.44	16.28	18.22	20.68	23.09	25.46	27.77	30.04	32.64	35.31	37.89	39.33	41.75	44.23	46.83			
2800	11.73	13.44	15.24	17.18	19.23	21.83	24.36	26.84	29.25	31.60	34.32	37.08	39.70	41.11	43.55	46.05				
3000	12.29	14.10	16.00	18.05	20.20	22.90	25.55	28.13	30.35	33.05	35.84	38.65	41.31	42.70	45.12					
3200	12.83	14.73	16.72	18.86	21.09	23.92	26.67	29.32	31.90	34.38	37.22	40.05	42.72	44.05						
3400	13.32	15.32	17.40	19.62	21.95	24.87	27.70	30.42	33.05	35.56	38.45	41.28	43.93							
3600	13.78	15.87	18.03	20.33	22.74	25.74	28.64	31.41	34.09	36.61	39.51	42.29								
3800	14.20	16.38	18.62	20.99	23.46	26.54	29.49	32.31	34.99	37.53	40.39									
4000	14.59	16.85	19.15	21.59	24.12	27.25	30.26	33.09	35.76	38.28										
4200	14.95	17.28	19.65	22.13	24.72	27.90	30.92	33.76	36.41											
4400	15.26	17.66	20.07	22.63	25.24	28.46	31.48	34.30												
4600	15.53	18.01	20.46	23.04	25.70	28.93	31.93													
4800	15.77	18.29	20.90	23.41	26.07	29.30	32.30													
5000	15.96	18.54	21.07	23.71	26.38	29.58														

# STANDARD 5VX TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE OD (IN)

Table 16

RPM	1.00~1.01	1.02~1.05	1.06~1.11	1.12~1.18	1.19~1.26	1.27~1.38	1.39~1.57	1.58~1.94	1.95~3.38	3.39+
485	0.00	0.05	0.15	0.25	0.35	0.42	0.50	0.55	0.60	0.64
575	0.00	0.07	0.17	0.31	0.42	0.50	0.59	0.66	0.71	0.76
690	0.00	0.08	0.21	0.36	0.50	0.60	0.70	0.79	0.86	0.91
725	0.00	0.08	0.21	0.38	0.52	0.63	0.74	0.83	0.90	0.95
870	0.00	0.09	0.27	0.46	0.62	0.75	0.88	0.99	1.09	1.15
950	0.00	0.11	0.28	0.50	0.68	0.82	0.97	1.09	1.18	1.25
1160	0.00	0.13	0.35	0.60	0.83	1.01	1.18	1.33	1.45	1.53
1425	0.00	0.16	0.43	0.75	1.02	1.23	1.45	1.62	1.77	1.88
1750	0.00	0.19	0.52	0.92	1.25	1.51	1.78	2.00	2.17	2.31
2850	0.00	0.32	0.86	1.50	2.04	2.47	2.90	3.26	3.55	3.75
3450	0.00	0.38	1.05	1.81	2.47	2.99	3.50	3.94	4.29	4.54
50	0.00	0.00	0.01	0.03	0.04	0.04	0.05	0.05	0.07	0.07
60	0.00	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.08
70	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.08	0.09
80	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.09	0.11
90	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.11	0.11	0.12
100	0.00	0.01	0.03	0.05	0.07	0.08	0.11	0.12	0.12	0.13
150	0.00	0.01	0.04	0.08	0.11	0.13	0.15	0.17	0.19	0.20
200	0.00	0.03	0.05	0.11	0.15	0.17	0.20	0.23	0.25	0.27
250	0.00	0.03	0.08	0.13	0.17	0.21	0.25	0.28	0.31	0.34
300	0.00	0.03	0.09	0.16	0.21	0.25	0.31	0.35	0.38	0.40
350	0.00	0.04	0.11	0.19	0.25	0.31	0.36	0.40	0.43	0.46
400	0.00	0.04	0.12	0.21	0.28	0.35	0.40	0.46	0.50	0.52
450	0.00	0.05	0.13	0.24	0.32	0.39	0.46	0.51	0.56	0.59
500	0.00	0.05	0.15	0.27	0.36	0.43	0.51	0.58	0.62	0.66
550	0.00	0.07	0.16	0.29	0.39	0.48	0.56	0.63	0.68	0.72
600	0.00	0.07	0.17	0.32	0.43	0.52	0.60	0.68	0.75	0.79
650	0.00	0.07	0.20	0.34	0.47	0.56	0.66	0.74	0.80	0.86
700	0.00	0.08	0.21	0.36	0.50	0.60	0.71	0.80	0.87	0.92
750	0.00	0.08	0.23	0.39	0.54	0.64	0.76	0.86	0.94	0.99
800	0.00	0.09	0.24	0.42	0.58	0.70	0.82	0.91	0.99	1.06
850	0.00	0.09	0.25	0.44	0.60	0.74	0.86	0.97	1.06	1.13
900	0.00	0.09	0.27	0.47	0.64	0.78	0.91	1.03	1.13	1.19
950	0.00	0.11	0.28	0.50	0.68	0.82	0.97	1.09	1.18	1.25
1000	0.00	0.11	0.29	0.52	0.71	0.87	1.02	1.14	1.25	1.31
1100	0.00	0.12	0.34	0.58	0.79	0.95	1.11	1.26	1.37	1.45
1200	0.00	0.13	0.36	0.63	0.86	1.05	1.22	1.37	1.49	1.58
1300	0.00	0.15	0.39	0.68	0.92	1.13	1.31	1.49	1.62	1.72
1400	0.00	0.16	0.42	0.74	1.01	1.22	1.42	1.60	1.74	1.85
1500	0.00	0.16	0.46	0.79	1.07	1.30	1.53	1.72	1.86	1.98
1600	0.00	0.17	0.48	0.84	1.14	1.38	1.62	1.82	2.00	2.10
1700	0.00	0.19	0.51	0.90	1.22	1.47	1.73	1.94	2.12	2.24
1800	0.00	0.20	0.54	0.95	1.29	1.55	1.82	2.05	2.24	2.37
1900	0.00	0.21	0.58	0.99	1.35	1.65	1.93	2.17	2.36	2.51
2000	0.00	0.23	0.60	1.05	1.43	1.73	2.02	2.28	2.49	2.64
2100	0.00	0.23	0.63	1.10	1.50	1.82	2.13	2.40	2.61	2.77
2200	0.00	0.24	0.66	1.15	1.57	1.90	2.24	2.52	2.73	2.90
2300	0.00	0.25	0.70	1.21	1.65	2.00	2.33	2.63	2.87	3.03
2400	0.00	0.27	0.72	1.26	1.72	2.08	2.44	2.75	2.99	3.16
2500	0.00	0.28	0.75	1.31	1.78	2.17	2.53	2.86	3.11	3.30
2600	0.00	0.28	0.78	1.37	1.86	2.25	2.64	2.98	3.23	3.43
2700	0.00	0.29	0.82	1.42	1.93	2.35	2.73	3.08	3.36	3.57
2800	0.00	0.31	0.84	1.47	2.00	2.43	2.84	3.20	3.49	3.69
2900	0.00	0.32	0.87	1.53	2.08	2.52	2.95	3.31	3.61	3.82
3000	0.00	0.34	0.90	1.58	2.14	2.60	3.04	3.43	3.74	3.95
3100	0.00	0.35	0.94	1.64	2.21	2.68	3.15	3.54	3.86	4.09
3200	0.00	0.35	0.97	1.68	2.29	2.77	3.24	3.66	3.98	4.22
3300	0.00	0.36	0.99	1.73	2.36	2.86	3.35	3.77	4.10	4.36
3400	0.00	0.38	1.02	1.78	2.43	2.95	3.44	3.89	4.24	4.48
3500	0.00	0.39	1.06	1.84	2.51	3.03	3.55	3.99	4.36	4.61
3600	0.00	0.40	1.09	1.89	2.57	3.12	3.66	4.12	4.48	4.75
3700	0.00	0.42	1.11	1.94	2.64	3.20	3.75	4.22	4.61	4.88
3800	0.00	0.42	1.14	2.00	2.72	3.30	3.86	4.34	4.73	5.01

# POWER KING DRIVE SELECTION

## Procedure 1: Calculation of Design Horsepower

Calculate the design horsepower from the following equation.

$$\text{Design Horsepower} = \text{Transmission Horsepower} \times \text{Service Factor}$$

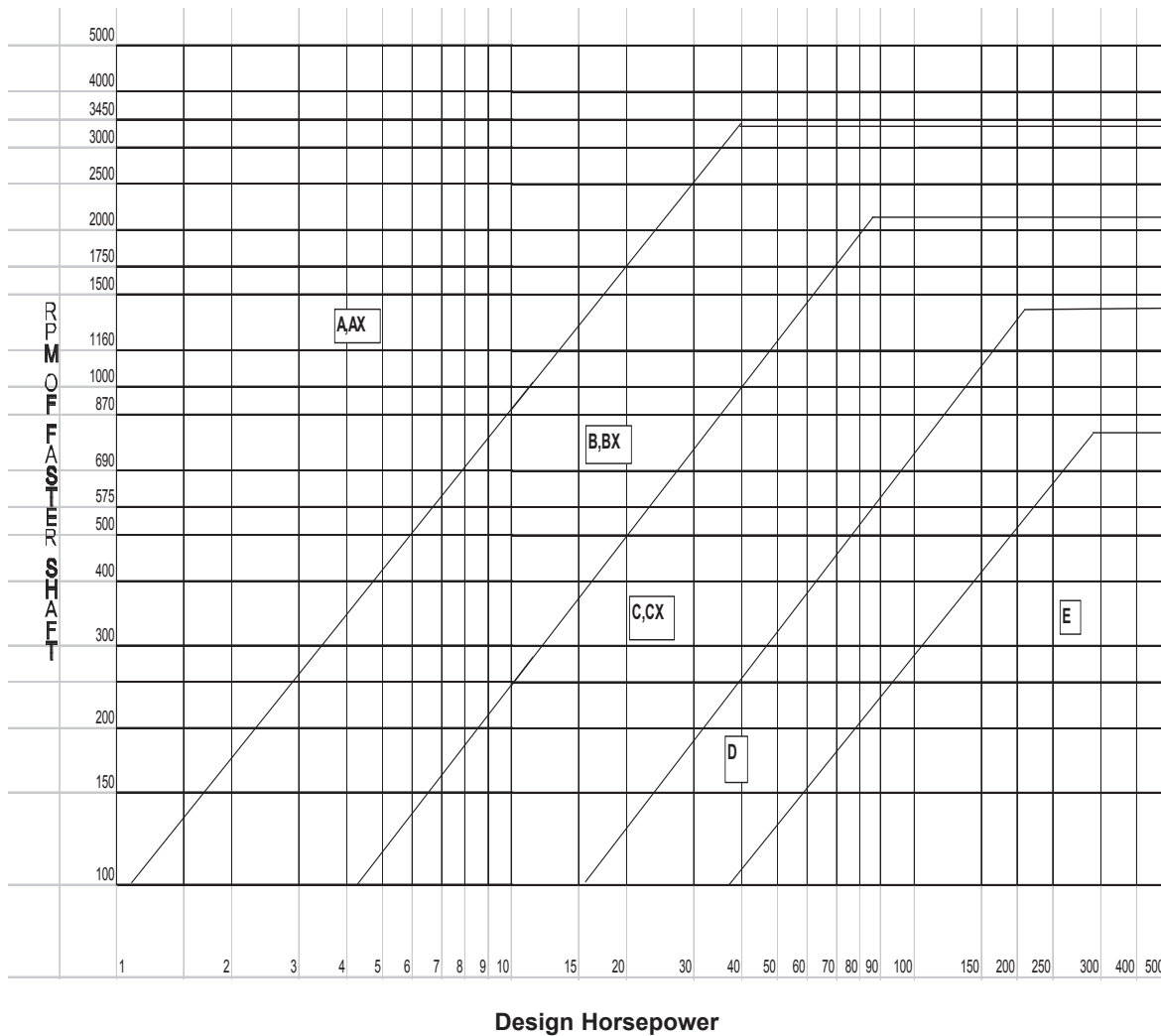
Refer to the driveN machines listed in Table 1 on page 3 and select the corresponding service factor.

## Procedure 2. Selection of Belt Section

From Figure 3, select the belt section according to the transmission horsepower computed using Procedure 1 and the faster sheave's rpm.

BELT SELECTION CHART

Figure 3



# POWER KING DRIVE SELECTION

## Procedure 3: Calculation of Speed Ratio

Determine the speed ratio from either of the following equations.

$$\text{Speed Ratio} = \frac{\text{Faster Sheave's rpm}}{\text{Slower Sheave's rpm}}$$

or

$$\text{Speed Ratio} = \frac{\text{Large Sheave's Datum Diameter}}{\text{Small Sheave's Datum Diameter}}$$

## Procedure 4. Selection of Sheave Combination

Using Table 17 below and the speed ratio, determine the pulley combination. Choose one of the sheaves, preferably the faster, from Table 17 and calculate the outer diameter of the other sheave using the speed ratio.

## Procedure 5. Selection of Belt Size

Using the given center distance and the size of the large and small sheaves selected, calculate the belt length. For this purpose the following equation is used.

$$\text{Belt size} = 2C + 1.57(D+d) + \frac{(D-d)^2}{4C}$$

C = Center Distance

D = Datum Diameter of Large Sheave

d = Datum Diameter of Small Sheave

The following procedure applies to Power King, Power King Combo, Power King Cog and Power King Cog Combo.

**Example:** Customer needs a V-belt drive for a crusher that is in operation continuously.

Driving motor: 15 Hp @ 400 RPM

Driven pulley: 300 RPM, Datum Diameter 12.4"

Center Distance: 45.8

Design HP = Transmission HP x Service Factor

Design HP = 15 x 1.8 (from Table 1) = 27

The belt section according to design horsepower and Fig. 3-> B

A 1.33:1 ratio is needed as per the formula below.

$$\text{Speed ratio} = \frac{400}{300} = 1.33:1 \text{ ratio}$$

Select a 9.4" drive sheave and a 12.4" driven sheave, or any desired combination that achieves 1.33:1 ratio from Table 17.

If your center distance is known to be 45.8 inches then:

$$\text{Belt size} = 2(45.8) + 1.57(12.4+9.4) + \frac{(12.4-9.4)^2}{4(45.8)} = 125.8"$$

Select nearest available belt size from the catalog. The B124 has the closest datum length and should be used in this circumstance.

## STANDARD SHEAVE DATUM DIAMETERS

Table 17

A & AX	B/B COMBO & BX	C/C COMBO & CX	D/D COMBO	E
2.20*	4.0*	7.0*	13.0	21.0*
2.40*	4.2*	7.5*	13.5	21.6
2.60*	4.4*	8.0*	14.0	22.0
2.80*	4.6*	8.5*	14.5	22.4
3.0	4.8*	9.0	15.0	22.8
3.2	5.0*	9.5	15.5	23.2
3.4	5.2*	10.0	16.0	23.6
3.6	5.4	10.5	17.0	24.0
3.8	5.6	11.0	18.0	27.0
4.0	5.8	12.0	20.0	31.0
4.2	6.0	13.0	22.0	35.0
4.6	6.4	14.0	24.0	40.0
4.8	6.8	16.0	27.0	46.0
5.0	7.0	18.0	33.0	52.0
5.2	7.4	20.0	40.0	58.0
5.6	8.0	24.0	48.0	66.0
5.8	8.6	27.0	58.0	74.0
6.0	9.4	30.0		84.0
6.2	11.0	36.0		96.0
6.4	12.4	44.0		
6.6	13.6	50.0		
7.0	15.4			
8.2	16.0			
9.0	18.4			
10.6	20.0			
12.0	25.0			
15.0	30.0			
15.6	38.0			
18.0				
19.6				

\*Sub-minimum sheave diameter for Power King belts. Use only Power King Cog belts.

# POWER KING DRIVE SELECTION

## Procedure 6: Calculation of Standard Transmission Horsepower

Standard Transmission = transmission horsepower + speed ratio adder

Refer to Table 18 to determine the appropriate page # to determine base horsepower and speed ratio adder.

Table 18

	Page	Table
A HP Ratings	22	22
A Speed Ratio Adder	23	23
B HP Ratings	24	24
B Speed Ratio Adder	25	25
C HP Ratings	26	26
C Speed Ratio Adder	27	27
D HP Ratings	28	28
D Speed Ratio Adder	29	29
E HP Ratings	30	30
E Speed Ratio Adder	31	31
AX HP Ratings	32	32
AX Speed Ratio Adder	33	33
BX HP Ratings	34	34
BX Speed Ratio Adder	35	35
CX HP Ratings	36	36
CX Speed Ratio Adder	37	37

COEFFICIENT OF ARC OF CONTACT Table 19

(D-d)/c	Arc of Contact on Small Sheave (Degrees)	Correction Factor
0.00	180	1.00
0.10	174	0.99
0.20	169	0.97
0.30	163	0.96
0.40	157	0.94
0.50	151	0.93
0.60	145	0.91
0.70	139	0.89
0.80	133	0.87
0.90	127	0.85
1.00	120	0.82
1.10	113	0.80
1.20	106	0.77
1.30	99	0.73
1.40	91	0.70
1.50	83	0.65

## Procedure 7. Calculation of Number of Belts

Calculate the number of belts from the next equation.

$$\text{Number of Belts} = \frac{\text{Design HP}}{\text{Standard Transmission HP} \times \text{Coefficient of Arc of Contact (see Table 19)} \times \text{Coefficient of Belt Length (see Table 20)}}$$

Coefficient of Belt Length

Table 20

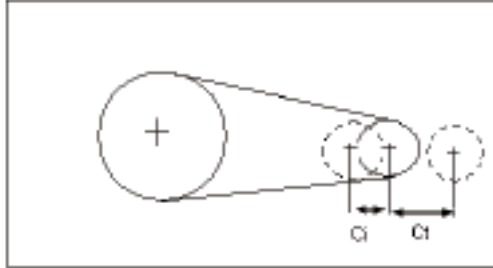
A,AX Section			B,BX Section			C,CX Section			D Section		E Section	
V-Belt Number	V-Belt Number	Belt Length Correction Factor	V-Belt Number	V-Belt Number	Belt Length Correction Factor	V-Belt Number	V-Belt Number	Belt Length Correction Factor	V-Belt Number	Belt Length Correction Factor	V-Belt Number	Belt Length Correction Factor
A-26	AX26	.75	B-35	BX35	0.77	CX51	C-51	0.77	D-120	0.86	E-180	0.92
A-31	AX31	.79	B-38	BX38	0.79	CX60	C-60	0.81	D-128	0.88	E-195	0.93
A-35	AX35	.82	B-42	BX42	0.81	CX68	C-68	0.83	D-144	0.90	E-210	0.95
A-38	AX38	.85	B-46	BX46	0.83	CX75	C-75	0.86	D-158	0.92	E-240	0.97
A-42	AX42	.87	B-51	BX51	0.86	CX81	C-81	0.87	D-173	0.94	E-270	0.99
A-46	AX46	.90	B-55	BX55	0.88	CX85	C-85	0.88	D-180	0.94	E-300	1.01
A-51	AX51	.92	B-60	BX60	0.90	CX90	C-90	0.90	D-195	0.96	E-330	1.03
A-56	AX56	.94	B-68	BX68	0.93	CX96	C-96	0.91	D-210	0.98	E-360	1.04
A-60	AX60	.97	B-75	BX75	0.95	CX105	C-105	0.93	D-240	1.00	E-390	1.06
A-68	AX68	1.00	B-81	BX81	0.97	CX112	C-112	0.94	D-270	1.02	E-420	1.07
A-75	AX75	1.03	B-85	BX85	0.99	CX120	C-120	0.96	D-300	1.05	E-480	1.09
A-80	AX80	1.04	B-90	BX90	1.00	CX128	C-128	0.97	D-330	1.06	E-540	1.11
A-85	AX85	1.06	B-97	BX97	1.02	CX144	C-144	1.00	D-360	1.08	E-600	1.13
A-90	AX90	1.08	B-105	BX105	1.04	CX158	C-158	1.02	D-390	1.10	E-660	1.15
A-95	AX95	1.09	B-112	BX112	1.05	CX173	C-173	1.04	D-420	1.11		
A-105	AX105	1.12	B-120	BX120	1.07	CX180	C-180	1.05	D-480	1.14		
A-112	AX112	1.13	B-128	BX128	1.09	CX195	C-195	1.07	D-540	1.16		
A-120	AX120	1.15	B-144	BX144	1.12	CX210	C-210	1.08	D-600	1.19		
A-128	AX128	1.17	B-158	BX158	1.14	CX240	C-240	1.11	D-660	1.21		
			B-173	BX173	1.16	CX270	C-270	1.14				
			B-180	BX180	1.17	CX300	C-300	1.16				
			B-195	BX195	1.19	CX330	C-330	1.18				
			B-210	BX210	1.21	CX360	C-360	1.20				
			B-240	BX240	1.24	CX390	C-390	1.22				
			B-270	BX270	1.27	CX420	C-420	1.24				
			B-300	BX300	1.30							

# POWER KING DRIVE SELECTION

## Procedure 8: Check the Center Distance Adjustment

Determine the minimum center distance allowance for installation & tensioning from Table 20.

Fig. 4



### Example cont.

Determine the Base HP rating and speed ratio adder from the HP ratings charts. Table 18 provides the appropriate page # and table # for the HP ratings charts.

For B belt running on 9.4" diameter sheave @ 400 RPM

Standard Transmission HP = Base HP ratings + Speed Ratio Adder

Standard Transmission = 5.03 (Table 24) + .20 (Table 25) = 5.23

$$\# \text{ of Belts} = \frac{\text{Design HP}}{\text{Standard Transmission HP} \times \text{Coefficient of Arc of Contact} \times \text{Coefficient of Belt Length}} = \frac{27}{(5.23 \times 0.99 \times 1.09)} = 4.78 \sim 5$$

(see Table 19)                      (see Table 20)

Therefore, 5- B124 belts are to be used in this drive.

MINIMUM CENTER DISTANCE ALLOWANCES FOR BELT INSTALLATION AND TAKE-UP Table 21

V-Belt Length	-Ci- Minimum Center Distance Allowance For Installation (Inches)					-Ct- Minimum Center Distance Allowance for Initial Tensioning and Subsequent Take-Up (Inches)
	A,AX	B,BX	C,CX	D	E	All Cross Sections
	Power King/ Cog	Power King/Cog Combo	Power King/Cog Combo	Power King	Power King	All Types
26 Thru 35	0.75	1.00				1.00
38 Thru 55	0.75	1.00	1.50			1.50
60 Thru 85	0.75	1.25	1.50			2.00
90 Thru 112	1.00	1.25	1.50			2.50
120 Thru 144	1.00	1.25	1.50	2.00		3.00
158 Thru 180		1.25	2.00	2.00	2.50	3.50
195 and 210		1.50	2.00	2.00	2.50	4.00
240		1.50	2.00	2.50	2.50	4.50
270 and 300		1.50	2.00	2.50	3.00	5.00
300 Thru 390			2.00	2.50	3.00	6.00
420 and Over			2.25	3.00	3.50	1.5% of Belt Length

# STANDARD A TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 22

RPM	3.00	3.20	3.40	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.40	7.00
485	0.68	0.79	0.91	1.04	1.14	1.27	1.39	1.51	1.63	1.70	1.84	1.97	2.10	2.18	2.34	2.43	2.59	2.83
575	0.76	0.91	1.05	1.18	1.32	1.46	1.61	1.74	1.88	1.97	2.12	2.27	2.43	2.52	2.71	2.81	2.99	3.28
690	0.87	1.04	1.20	1.36	1.53	1.69	1.86	2.02	2.19	2.29	2.47	2.64	2.82	2.93	3.15	3.28	3.50	3.83
725	0.91	1.08	1.25	1.42	1.58	1.76	1.93	2.11	2.28	2.38	2.57	2.75	2.94	3.05	3.28	3.41	3.64	3.98
870	1.04	1.23	1.43	1.63	1.82	2.03	2.24	2.45	2.65	2.77	2.98	3.21	3.43	3.55	3.82	3.98	4.25	4.64
950	1.09	1.31	1.53	1.74	1.96	2.17	2.40	2.62	2.84	2.96	3.20	3.43	3.68	3.81	4.10	4.27	4.55	4.98
1160	1.25	1.51	1.77	2.03	2.27	2.53	2.81	3.06	3.33	3.48	3.76	4.04	4.32	4.48	4.81	5.02	5.36	5.86
1425	1.43	1.74	2.04	2.34	2.66	2.96	3.28	3.60	3.90	4.07	4.41	4.73	5.07	5.26	5.65	5.89	6.28	6.87
1750	1.61	1.97	2.34	2.71	3.06	3.42	3.80	4.19	4.55	4.75	5.15	5.53	5.92	6.14	6.60	6.87	7.32	8.01
2850	2.03	2.57	3.11	3.64	4.15	4.66	5.21	5.74	6.25	6.52	7.05	7.56	8.08	8.38	9.00	9.28	9.90	10.83
3450	2.12	2.74	3.35	3.95	4.54	5.09	5.71	6.29	6.84	7.13	7.69	8.22	8.73	9.06	9.73	9.91	10.57	11.56
200	0.34	0.39	0.45	0.50	0.56	0.60	0.66	0.72	0.77	0.80	0.86	0.93	0.98	1.02	1.10	1.13	1.21	1.32
400	0.59	0.68	0.79	0.89	0.98	1.08	1.19	1.28	1.39	1.45	1.57	1.68	1.79	1.85	1.99	2.06	2.19	2.40
600	0.79	0.94	1.08	1.23	1.36	1.50	1.66	1.81	1.95	2.04	2.19	2.35	2.51	2.60	2.79	2.91	3.11	3.40
800	0.97	1.16	1.35	1.53	1.72	1.89	2.09	2.29	2.48	2.59	2.79	2.99	3.19	3.31	3.55	3.70	3.95	4.32
1000	1.13	1.36	1.59	1.81	2.03	2.26	2.50	2.73	2.96	3.09	3.34	3.58	3.83	3.98	4.27	4.45	4.75	5.20
1200	1.28	1.55	1.81	2.07	2.33	2.60	2.87	3.16	3.42	3.57	3.87	4.14	4.44	4.60	4.94	5.15	5.50	6.01
1400	1.42	1.72	2.02	2.32	2.61	2.91	3.24	3.54	3.85	4.02	4.36	4.68	5.00	5.19	5.57	5.81	6.20	6.78
1600	1.53	1.87	2.21	2.55	2.89	3.21	3.58	3.92	4.26	4.45	4.82	5.18	5.54	5.75	6.17	6.43	6.86	7.50
1800	1.63	2.02	2.38	2.76	3.13	3.49	3.89	4.27	4.65	4.85	5.26	5.65	6.04	6.26	6.73	7.01	7.48	8.18
2000	1.73	2.15	2.56	2.96	3.36	3.76	4.18	4.60	5.00	5.22	5.65	6.08	6.50	6.74	7.24	7.54	8.04	8.80
2200	1.82	2.26	2.71	3.15	3.57	3.99	4.45	4.91	5.34	5.57	6.03	6.48	6.93	7.19	7.72	8.03	8.56	9.36
2400	1.89	2.37	2.85	3.31	3.77	4.22	4.71	5.19	5.65	5.90	6.39	6.85	7.33	7.60	8.16	8.46	9.03	9.87
2600	1.96	2.47	2.97	3.46	3.95	4.43	4.95	5.44	5.93	6.19	6.70	7.19	7.68	7.97	8.56	8.86	9.45	10.33
2800	2.02	2.55	3.08	3.61	4.11	4.62	5.15	5.68	6.19	6.45	6.99	7.50	8.00	8.29	8.91	9.20	9.81	10.73
3000	2.06	2.63	3.19	3.73	4.26	4.78	5.36	5.90	6.42	6.70	7.25	7.77	8.27	8.58	9.22	9.48	10.11	11.06
3200	2.10	2.68	3.27	3.84	4.40	4.94	5.52	6.09	6.62	6.91	7.46	7.99	8.50	8.81	9.46	9.71	10.36	11.33
3400	2.11	2.74	3.34	3.92	4.51	5.07	5.67	6.25	6.80	7.09	7.65	8.18	8.69	9.02	9.68	9.88	10.54	11.53
3600	2.12	2.76	3.39	4.00	4.60	5.18	5.80	6.38	6.94	7.24	7.80	8.33	8.83	9.15	9.83	9.99	10.66	11.66
3800	2.14	2.79	3.45	4.07	4.69	5.27	5.90	6.49	7.05	7.35	7.93	8.44	8.92	9.25	9.93			
4000	2.12	2.81	3.47	4.11	4.74	5.34	5.98	6.57	7.13	7.44	7.99	8.50	8.97	9.30	9.99			
4200	2.11	2.81	3.49	4.14	4.78	5.38	6.03	6.62	7.18	7.49	8.04	8.52						
4400	2.08	2.79	3.49	4.15	4.79	5.41	6.04	6.65	7.19	7.51	8.04							
4600	2.04	2.76	3.47	4.15	4.79	5.41	6.04	6.63	7.17	7.48								
4800	1.99	2.72	3.45	4.13	4.77	5.38	6.02	6.59	7.10	7.41								
5000	1.92	2.67	3.39	4.09	4.73	5.34	5.96	6.51										
5200	1.85	2.61	3.34	4.02	4.66	5.27	5.87											
5400	1.76	2.53	3.26	3.94	4.58	5.16	5.76											
5600	1.66	2.42	3.16	3.84	4.47	5.04												
5800	1.54	2.32	3.04	3.72	4.33													
6000	1.42	2.19	2.91	3.57	4.17													
6200	1.28	2.04	2.75	3.40														
6400	1.13	1.89	2.59															
6600	0.97	1.72	2.40															
6800	0.78	1.53																
7000	0.59	1.31																

# STANDARD A TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 23

RPM	1.00-1.01	1.02-1.03	1.04-1.06	1.07-1.08	1.09-1.12	1.13-1.18	1.17-1.22	1.23-1.32	1.33-1.50	1.51+
485	0.00	0.01	0.03	0.04	0.05	0.07	0.07	0.08	0.09	0.11
575	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.12	0.13
690	0.00	0.01	0.04	0.05	0.07	0.08	0.11	0.12	0.13	0.16
725	0.00	0.01	0.04	0.05	0.07	0.09	0.11	0.12	0.15	0.16
870	0.00	0.03	0.04	0.07	0.08	0.11	0.13	0.15	0.17	0.20
950	0.00	0.03	0.05	0.07	0.09	0.12	0.15	0.16	0.19	0.21
1160	0.00	0.03	0.05	0.08	0.12	0.15	0.17	0.20	0.23	0.25
1425	0.00	0.04	0.07	0.11	0.15	0.17	0.21	0.25	0.28	0.32
1750	0.00	0.04	0.09	0.13	0.17	0.21	0.27	0.31	0.35	0.39
2850	0.00	0.07	0.15	0.21	0.28	0.35	0.43	0.50	0.56	0.64
3450	0.00	0.08	0.17	0.25	0.35	0.43	0.51	0.60	0.68	0.78
200	0.00	0.00	0.01	0.01	0.01	0.03	0.03	0.04	0.04	0.04
400	0.00	0.01	0.01	0.03	0.04	0.05	0.05	0.07	0.08	0.09
600	0.00	0.01	0.03	0.04	0.05	0.08	0.09	0.11	0.12	0.13
800	0.00	0.01	0.04	0.05	0.08	0.09	0.12	0.13	0.16	0.17
1000	0.00	0.03	0.05	0.08	0.09	0.12	0.15	0.17	0.20	0.23
1200	0.00	0.03	0.05	0.09	0.12	0.15	0.17	0.21	0.24	0.27
1400	0.00	0.04	0.07	0.11	0.13	0.17	0.21	0.24	0.28	0.31
1600	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36
1800	0.00	0.04	0.09	0.13	0.17	0.23	0.27	0.31	0.36	0.40
2000	0.00	0.05	0.09	0.15	0.20	0.25	0.29	0.35	0.40	0.44
2200	0.00	0.05	0.11	0.16	0.21	0.27	0.34	0.39	0.44	0.50
2400	0.00	0.05	0.12	0.17	0.24	0.29	0.36	0.42	0.48	0.54
2600	0.00	0.07	0.13	0.20	0.25	0.32	0.39	0.46	0.52	0.58
2800	0.00	0.07	0.13	0.21	0.28	0.35	0.42	0.48	0.56	0.63
3000	0.00	0.08	0.15	0.23	0.29	0.38	0.44	0.52	0.60	0.67
3200	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.71
3400	0.00	0.08	0.17	0.25	0.34	0.43	0.51	0.59	0.68	0.76
3600	0.00	0.09	0.17	0.27	0.36	0.44	0.54	0.63	0.72	0.80
3800	0.00	0.09	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.86
4000	0.00	0.09	0.20	0.29	0.40	0.50	0.60	0.70	0.79	0.90
4200	0.00	0.11	0.21	0.31	0.42	0.52	0.63	0.74	0.83	0.94
4400	0.00	0.11	0.21	0.34	0.44	0.55	0.66	0.76	0.87	0.99
4600	0.00	0.12	0.23	0.35	0.46	0.58	0.68	0.80	0.91	1.03
4800	0.00	0.12	0.24	0.36	0.48	0.60	0.72	0.83	0.95	1.07
5000	0.00	0.12	0.25	0.38	0.50	0.62	0.75	0.87	0.99	1.13
5200	0.00	0.13	0.25	0.39	0.52	0.64	0.78	0.91	1.03	1.17
5400	0.00	0.13	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
5600	0.00	0.13	0.28	0.42	0.56	0.70	0.83	0.98	1.11	1.26
5800	0.00	0.15	0.29	0.43	0.58	0.72	0.87	1.01	1.15	1.30
6000	0.00	0.15	0.29	0.44	0.60	0.75	0.90	1.05	1.19	1.34
6200	0.00	0.16	0.31	0.47	0.62	0.78	0.92	1.09	1.23	1.39
6400	0.00	0.16	0.32	0.48	0.64	0.79	0.95	1.11	1.27	1.43
6600	0.00	0.16	0.34	0.50	0.66	0.82	0.99	1.15	1.31	1.47
6800	0.00	0.17	0.34	0.51	0.67	0.84	1.02	1.18	1.35	1.53
7000	0.00	0.17	0.35	0.52	0.70	0.87	1.05	1.22	1.39	1.57

# STANDARD B TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 24

RPM	4.6*	4.8*	5.0*	5.2*	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0	7.4	8.0	8.6	9.4	11.0
485	1.79	2.01	2.23	2.45	2.55	2.64	2.97	3.07	3.25	3.35	3.60	3.70	3.54	4.28	4.74	5.22	5.94	7.41
575	2.04	2.30	2.55	2.81	2.92	3.02	3.41	3.53	3.73	3.85	4.14	4.26	4.08	4.93	5.46	6.02	6.85	8.56
690	2.35	2.64	2.94	3.24	3.36	3.49	3.95	4.09	4.31	4.45	4.80	4.94	4.74	5.73	6.35	7.00	7.96	9.94
725	2.43	2.75	3.04	3.36	3.49	3.62	4.10	4.24	4.50	4.64	4.98	5.13	4.94	5.97	6.60	7.29	8.29	10.35
870	2.77	3.14	3.51	3.88	4.03	4.18	4.74	4.90	5.18	5.35	5.76	5.94	5.70	6.90	7.65	8.44	9.60	11.97
950	2.96	3.35	3.74	4.15	4.31	4.47	5.07	5.25	5.55	5.73	6.17	6.36	6.12	7.40	8.20	9.05	10.28	12.83
1160	3.38	3.86	4.32	4.81	4.99	5.18	5.90	6.10	6.46	6.67	7.19	7.41	7.12	8.62	9.55	10.54	11.96	14.87
1425	3.88	4.43	4.98	5.55	5.76	5.98	6.83	7.06	7.49	7.74	8.34	8.59	8.27	10.00	11.07	12.20	13.81	17.09
1750	4.37	5.03	5.67	6.34	6.58	6.82	7.82	8.09	8.59	8.87	9.56	9.85	9.46	11.43	12.65	13.89	15.65	19.18
1850	5.27	6.17	7.03	7.92	8.22	8.53	9.78	10.12	10.71	11.06	11.84	12.20	11.63	13.88	15.14			
3450	5.20	6.17	7.07	7.97	8.27	8.58	9.80	10.13	10.69	11.03								
100	0.50	0.55	0.61	0.66	0.68	0.71	0.78	0.80	0.84	0.96	0.94	0.97	0.92	1.10	1.21	1.33	1.51	1.87
200	0.89	0.99	1.08	1.18	1.22	1.27	1.41	1.46	1.54	1.59	1.71	1.76	1.67	2.02	2.22	2.44	2.77	3.44
300	1.23	1.37	1.51	1.66	1.72	1.78	1.99	2.06	2.18	2.25	2.41	2.48	2.36	2.85	3.15	3.47	3.93	4.91
400	1.55	1.73	1.91	2.10	2.18	2.26	2.54	2.62	2.77	2.86	3.05	3.15	3.02	3.63	4.03	4.43	5.03	6.28
500	1.84	2.07	2.28	2.52	2.61	2.71	3.04	3.15	3.32	3.43	3.69	3.80	3.64	4.39	4.86	5.36	6.09	7.61
600	2.11	2.38	2.63	2.91	3.02	3.13	3.53	3.65	3.87	3.99	4.28	4.41	4.22	5.11	5.65	6.24	7.09	8.87
700	2.38	2.67	2.97	3.28	3.40	3.53	3.99	4.13	4.37	4.51	4.85	5.00	4.80	5.80	6.43	7.09	8.06	10.06
800	2.61	2.95	3.29	3.64	3.78	3.92	4.43	4.59	4.85	5.01	5.39	5.56	5.34	6.46	7.15	7.89	8.98	11.21
900	2.84	3.23	3.59	3.98	4.14	4.29	4.87	5.03	5.33	5.50	5.53	5.69	5.86	7.08	7.86	8.67	9.86	12.31
1000	3.07	3.48	3.88	4.31	4.48	4.64	5.27	5.46	5.78	5.96	6.42	6.62	6.36	7.69	8.54	9.41	10.70	13.34
1100	3.27	3.73	4.17	4.62	4.79	4.97	5.67	5.86	6.21	6.41	6.91	7.12	6.85	8.27	9.18	10.12	11.50	14.32
1200	3.46	3.95	4.42	4.92	5.11	5.30	6.04	6.25	6.62	6.84	7.38	7.60	7.30	8.83	9.79	10.80	12.26	15.24
1300	3.65	4.17	4.68	5.21	5.41	5.61	6.45	6.67	7.02	7.25	7.81	8.05	7.74	9.36	10.38	11.45	12.98	16.10
1400	3.84	4.38	4.91	5.49	5.70	5.91	6.75	6.98	7.40	7.64	8.23	8.48	8.16	9.87	10.94	12.06	13.64	16.90
1500	4.00	4.58	5.15	5.74	5.96	6.18	7.07	7.31	7.76	8.01	8.64	8.91	8.56	10.36	11.47	12.62	14.28	17.64
1600	4.15	4.77	5.37	5.99	6.22	6.46	7.39	7.64	8.10	8.36	9.03	9.30	8.93	10.81	11.97	13.16	14.86	18.32
1700	4.30	4.94	5.57	6.22	6.46	6.70	7.68	7.95	8.43	8.70	9.38	9.67	9.29	11.23	12.43	13.66	15.39	18.91
1800	4.43	5.11	5.76	6.45	6.70	6.95	7.96	8.24	8.73	9.02	9.72	10.01	9.63	11.63	12.86	14.13	15.88	19.44
1900	4.57	5.27	5.95	6.65	6.91	7.16	8.22	8.50	9.02	9.32	10.03	10.34	9.94	11.99	13.25	14.54	16.31	19.89
2000	4.69	5.41	6.11	6.85	7.12	7.38	8.46	8.75	9.29	9.59	10.34	10.65	10.22	12.33	13.62	14.93	16.69	20.25
2100	4.79	5.54	6.27	7.03	7.30	7.57	8.69	8.99	9.54	9.85	10.60	10.92	10.48	12.64	13.95	15.28	17.02	20.55
220	4.88	5.66	6.41	7.20	7.47	7.75	8.89	9.20	9.76	10.08	10.85	11.18	10.72	12.92	14.24	15.57	17.29	
2300	4.98	5.78	6.55	7.35	7.63	7.91	9.08	9.40	9.97	10.30	11.08	11.41	10.94	13.15	14.49	15.81	17.49	
2400	5.04	5.87	6.67	7.49	7.77	8.06	9.26	9.58	10.16	10.49	11.27	11.62	11.13	13.37	14.71	16.02	17.64	
2500	5.11	5.96	6.77	7.61	7.91	8.20	9.40	9.73	10.32	10.65	11.45	11.79	11.28	13.55	14.87	16.17		
2600	5.18	6.04	6.86	7.71	8.01	8.31	9.54	9.87	10.46	10.80	11.59	11.94	11.42	13.69	15.01	16.28		
2700	5.22	6.11	6.94	7.80	8.10	8.40	9.64	9.98	10.58	10.92	11.72	12.08	11.52	13.79	15.10	16.34		
2800	5.26	6.16	7.00	7.88	8.18	8.48	9.75	10.08	10.67	11.02	11.82	12.17	11.59	13.86	15.14			
2900	5.28	6.20	7.05	7.94	8.25	8.55	9.81	10.15	10.74	11.09	11.88	12.24	11.64	13.90				
3000	5.28	6.22	7.09	7.99	8.30	8.61	9.86	10.20	10.79	11.14	11.91	12.27	11.67	13.88				
3100	5.30	6.24	7.12	8.02	8.33	8.63	9.89	10.23	10.82	11.17	11.92	12.28	11.65					
3200	5.28	6.24	7.12	8.02	8.33	8.63	9.89	10.23	10.80	11.15	11.90	12.26						
3300	5.26	6.22	7.12	8.02	8.33	8.63	9.86	10.20	10.78	11.13	11.84	12.20						
3400	5.23	6.20	7.09	7.99	8.30	8.61	9.82	10.16	10.73	11.07								
3500	5.18	6.15	7.05	7.94	8.25	8.55	9.76	10.10	10.65	10.99								
3600	5.12	6.09	6.99	7.88	8.18	8.48	9.66	9.99										
3700	5.04	6.03	6.93	7.80	8.10	8.40												
3800	4.96	5.94	6.84	7.70	8.00	8.29												
3900	4.87	5.84	6.72	7.59	7.88	8.17												
4000	4.75	5.73	6.60	7.44	7.72	8.01												

\* Belt life may be reduced due to sub-minimum sheave diameter.

# STANDARD B TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 25

RPM	1.00-1.01	1.02-1.03	1.04-1.06	1.07-1.08	1.09-1.12	1.13-1.16	1.17-1.22	1.23-1.32	1.33-1.50	1.51+
485	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.24
575	0.00	0.03	0.07	0.09	0.13	0.16	0.19	0.23	0.25	0.28
69	0.00	0.04	0.08	0.12	0.15	0.19	0.23	0.27	0.31	0.35
725	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36
870	0.00	0.05	0.09	0.15	0.19	0.24	0.29	0.34	0.39	0.43
950	0.00	0.05	0.11	0.16	0.21	0.27	0.32	0.38	0.43	0.47
1160	0.00	0.07	0.13	0.19	0.25	0.32	0.39	0.46	0.51	0.58
1425	0.00	0.08	0.16	0.24	0.32	0.40	0.47	0.55	0.63	0.71
1750	0.00	0.09	0.20	0.29	0.39	0.48	0.59	0.68	0.78	0.87
1850	0.00	0.16	0.32	0.48	0.63	0.79	0.95	1.11	1.27	1.42
3450	0.00	0.19	0.39	0.58	0.76	0.97	1.15	1.34	1.53	1.73
100	0.00	0.00	0.01	0.01	0.03	0.03	0.03	0.04	0.04	0.05
200	0.00	0.01	0.03	0.03	0.04	0.05	0.07	0.08	0.09	0.09
300	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.12	0.13	0.15
400	0.00	0.03	0.04	0.07	0.09	0.11	0.13	0.16	0.17	0.20
500	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.23	0.25
600	0.00	0.03	0.07	0.09	0.13	0.16	0.20	0.23	0.27	0.29
700	0.00	0.04	0.08	0.12	0.16	0.20	0.23	0.27	0.31	0.35
800	0.00	0.04	0.09	0.13	0.17	0.23	0.27	0.31	0.36	0.40
900	0.00	0.05	0.09	0.15	0.20	0.25	0.29	0.35	0.40	0.46
1000	0.00	0.05	0.11	0.16	0.23	0.28	0.34	0.39	0.44	0.50
1100	0.00	0.07	0.12	0.19	0.24	0.31	0.36	0.43	0.48	0.55
1200	0.00	0.07	0.13	0.20	0.27	0.34	0.40	0.47	0.54	0.60
1300	0.00	0.07	0.15	0.21	0.29	0.36	0.43	0.51	0.58	0.64
1400	0.00	0.08	0.16	0.23	0.31	0.39	0.47	0.55	0.62	0.70
1500	0.00	0.08	0.16	0.25	0.34	0.42	0.50	0.58	0.67	0.75
1600	0.00	0.09	0.17	0.27	0.36	0.44	0.54	0.62	0.71	0.80
1700	0.00	0.09	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.84
1800	0.00	0.09	0.20	0.29	0.40	0.50	0.60	0.70	0.80	0.90
1900	0.00	0.11	0.21	0.32	0.42	0.52	0.63	0.74	0.84	0.95
2000	0.00	0.11	0.23	0.34	0.44	0.55	0.67	0.78	0.88	1.01
2100	0.00	0.12	0.23	0.35	0.47	0.59	0.70	0.82	0.94	1.05
220	0.00	0.12	0.24	0.36	0.48	0.62	0.74	0.86	0.98	1.10
2300	0.00	0.13	0.25	0.39	0.51	0.64	0.76	0.90	1.02	1.15
2400	0.00	0.13	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
2500	0.00	0.13	0.28	0.42	0.55	0.70	0.83	0.97	1.11	1.25
2600	0.00	0.15	0.29	0.43	0.58	0.72	0.87	1.01	1.15	1.30
2700	0.00	0.15	0.29	0.46	0.60	0.75	0.90	1.05	1.21	1.35
2800	0.00	0.16	0.31	0.47	0.62	0.78	0.94	1.09	1.25	1.39
2900	0.00	0.16	0.32	0.48	0.64	0.80	0.97	1.13	1.29	1.45
3000	0.00	0.16	0.34	0.50	0.67	0.83	1.01	1.17	1.34	1.50
3100	0.00	0.17	0.35	0.52	0.68	0.86	1.03	1.21	1.38	1.55
3200	0.00	0.17	0.36	0.54	0.71	0.88	1.07	1.25	1.42	1.60
3300	0.00	0.19	0.36	0.55	0.74	0.91	1.10	1.29	1.46	1.65
3400	0.00	0.19	0.38	0.56	0.75	0.94	1.14	1.33	1.51	1.70
3500	0.00	0.20	0.39	0.59	0.78	0.98	1.17	1.35	1.55	1.76
3600	0.00	0.20	0.40	0.60	0.80	1.01	1.21	1.39	1.60	1.80
3700	0.00	0.20	0.42	0.62	0.82	1.03	1.23	1.43	1.65	1.85
3800	0.00	0.21	0.43	0.63	0.84	1.06	1.27	1.47	1.69	1.90
3900	0.00	0.21	0.43	0.66	0.87	1.09	1.30	1.51	1.73	1.94
4000	0.00	0.23	0.44	0.67	0.88	1.11	1.34	1.55	1.78	2.00

# STANDARD C TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 26

RPM	8.5	9.0	9.5	10.0	10.5	11.0	12.0	13.00	14.0	16.0
485	6.61	7.30	8.00	8.73	9.47	10.21	11.48	13.19	14.43	16.74
575	7.58	8.37	9.18	10.02	10.89	11.72	13.18	15.15	16.56	19.22
690	8.72	9.67	10.61	11.59	12.59	13.55	15.25	17.50	19.12	22.16
725	9.06	10.04	11.02	12.04	13.07	14.08	15.85	18.18	19.85	22.99
870	10.39	11.52	12.65	13.84	15.01	16.18	18.19	20.80	22.68	26.20
950	11.07	12.28	13.49	14.75	16.01	17.25	19.39	22.12	24.07	27.78
1160	12.70	14.10	15.49	16.94	18.37	19.77	22.17	25.07	27.19	31.19
1425	14.40	16.00	17.57	19.19	20.77	22.28	24.88	27.67	29.78	33.80
1750	15.93	17.69	19.38	21.10	22.73	24.26	26.84			
50	0.97	1.05	1.15	1.24	1.34	1.43	1.59	1.81	1.98	2.29
100	1.76	1.93	2.10	2.27	2.46	2.63	2.94	3.37	3.67	4.26
150	2.50	2.74	2.99	3.24	3.49	3.75	4.21	4.81	5.25	6.10
200	3.18	3.50	3.81	4.14	4.48	4.82	5.41	6.18	6.76	7.86
250	3.84	4.23	4.60	5.01	5.42	5.83	6.55	7.52	8.21	9.53
300	4.46	4.92	5.37	5.86	6.34	6.82	7.65	8.79	9.61	11.17
350	5.08	5.59	6.11	6.66	7.22	7.77	8.73	10.02	10.97	12.73
400	5.65	6.25	6.83	7.45	8.08	8.69	9.78	11.23	12.28	14.26
450	6.22	6.88	7.52	8.21	8.90	9.59	10.79	12.39	13.55	15.74
500	6.77	7.50	8.20	8.95	9.71	10.46	11.77	13.53	14.78	17.16
550	7.30	8.08	8.85	9.67	10.50	11.30	12.72	14.61	15.98	18.55
600	7.84	8.66	9.50	10.38	11.26	12.13	13.65	15.68	17.13	19.87
650	8.33	9.23	10.11	11.06	12.01	12.93	14.54	16.71	18.25	21.16
700	8.82	9.78	10.72	11.71	12.72	13.71	15.42	17.69	19.33	22.39
750	9.30	10.31	11.31	12.37	13.42	14.46	16.27	18.65	20.36	23.57
800	9.76	10.82	11.88	12.99	14.10	15.19	17.09	19.57	21.35	24.70
850	10.21	11.33	12.43	13.59	14.76	15.90	17.88	20.46	22.31	25.79
900	10.65	11.82	12.96	14.18	15.41	16.59	18.64	21.31	23.21	26.81
950	11.07	12.28	13.49	14.75	16.01	17.25	19.39	22.12	24.07	27.78
1000	11.48	12.75	13.99	15.31	16.62	17.90	20.10	22.88	24.90	28.69
1100	12.26	13.61	14.95	16.34	17.74	19.10	21.42	24.30	26.39	30.33
1200	12.98	14.42	15.83	17.31	18.78	20.20	22.63	25.55	27.67	31.70
1300	13.65	15.17	16.65	18.19	19.72	21.20	23.71	26.61	28.75	32.82
1400	14.26	15.84	17.39	19.00	20.57	22.08	24.66	27.48	29.60	33.64
1500	14.81	16.46	18.06	19.71	21.33	22.86	25.48	28.15	30.21	
1600	15.32	17.00	18.65	20.33	21.98	23.51	26.13	28.63		
1700	15.74	17.48	19.16	20.86	22.51	24.04	26.65			
1800	16.11	17.88	19.58	21.30	22.93	24.44	27.01			
1900	16.42	18.21	19.91	21.63	23.24	24.70	27.18			
2000	16.65	18.45	20.16	21.86	23.43	24.84				
2100	16.82	18.62	20.31	21.97	23.49					
2200	16.91	18.70	20.37	21.98						
2300	16.93	18.69	20.32							
2400	16.87	18.59	20.17							
2500	16.72	18.40								
2600	16.50									
2700	16.20									

# STANDARD C TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 27

RPM	1.00-1.01	1.02-1.03	1.04-1.06	1.07-1.08	1.09-1.12	1.13-1.16	1.17-1.22	1.23-1.32	1.33-1.50	1.51+
485	0.00	0.07	0.12	0.19	0.25	0.32	0.38	0.44	0.51	0.56
575	0.00	0.08	0.15	0.23	0.29	0.38	0.46	0.52	0.60	0.67
690	0.00	0.09	0.17	0.27	0.36	0.46	0.54	0.63	0.72	0.80
725	0.00	0.09	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.84
870	0.00	0.11	0.23	0.34	0.46	0.56	0.68	0.79	0.91	1.02
950	0.00	0.12	0.24	0.38	0.50	0.62	0.74	0.87	0.99	1.11
1160	0.00	0.15	0.31	0.46	0.60	0.75	0.91	1.06	1.21	1.35
1425	0.00	0.19	0.38	0.56	0.74	0.92	1.11	1.30	1.49	1.68
1750	0.00	0.23	0.46	0.68	0.91	1.14	1.37	1.60	1.82	2.05
50	0.00	0.00	0.01	0.01	0.03	0.03	0.04	0.04	0.05	0.05
100	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12
150	0.00	0.01	0.04	0.05	0.08	0.09	0.12	0.13	0.16	0.17
200	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.23
250	0.00	0.03	0.07	0.09	0.13	0.16	0.20	0.23	0.25	0.29
300	0.00	0.04	0.08	0.12	0.16	0.20	0.23	0.27	0.31	0.35
350	0.00	0.04	0.09	0.13	0.19	0.23	0.27	0.32	0.36	0.42
400	0.00	0.05	0.11	0.16	0.21	0.25	0.31	0.36	0.42	0.47
450	0.00	0.05	0.12	0.17	0.23	0.29	0.35	0.42	0.47	0.52
500	0.00	0.07	0.13	0.20	0.25	0.32	0.39	0.46	0.52	0.59
550	0.00	0.07	0.15	0.21	0.28	0.36	0.43	0.50	0.58	0.64
600	0.00	0.08	0.16	0.24	0.31	0.39	0.47	0.55	0.63	0.70
650	0.00	0.08	0.17	0.25	0.34	0.43	0.51	0.59	0.68	0.76
700	0.00	0.09	0.19	0.27	0.36	0.46	0.55	0.64	0.72	0.82
750	0.00	0.09	0.20	0.29	0.39	0.48	0.59	0.68	0.78	0.88
800	0.00	0.11	0.21	0.31	0.42	0.52	0.63	0.72	0.83	0.94
850	0.00	0.11	0.23	0.34	0.44	0.55	0.67	0.78	0.88	0.99
900	0.00	0.12	0.24	0.35	0.47	0.59	0.70	0.82	0.94	1.06
950	0.00	0.12	0.24	0.38	0.50	0.62	0.74	0.87	0.99	1.11
1000	0.00	0.13	0.25	0.39	0.52	0.66	0.78	0.91	1.05	1.17
1100	0.00	0.15	0.28	0.43	0.58	0.71	0.86	1.01	1.15	1.29
1200	0.00	0.16	0.31	0.47	0.63	0.78	0.94	1.14	1.25	1.41
1300	0.00	0.17	0.34	0.51	0.68	0.84	1.02	1.18	1.35	1.53
1400	0.00	0.19	0.36	0.55	0.72	0.92	1.10	1.27	1.46	1.64
1500	0.00	0.20	0.39	0.59	0.78	0.98	1.17	1.37	1.57	1.76
1600	0.00	0.21	0.42	0.63	0.83	1.05	1.25	1.46	1.66	1.88
1700	0.00	0.23	0.44	0.67	0.88	1.11	1.33	1.55	1.77	2.00
1800	0.00	0.24	0.47	0.71	0.94	1.17	1.41	1.64	1.88	2.10
1900	0.00	0.24	0.50	0.74	0.99	1.23	1.49	1.73	1.98	2.23
2000	0.00	0.25	0.52	0.78	1.05	1.30	1.57	1.82	2.09	2.35
2100	0.00	0.27	0.55	0.82	1.10	1.37	1.64	1.92	2.18	2.47
2200	0.00	0.28	0.58	0.86	1.14	1.43	1.72	2.01	2.29	2.57
2300	0.00	0.29	0.60	0.90	1.19	1.50	1.76	2.09	2.40	2.69
2400	0.00	0.31	0.63	0.94	1.25	1.57	1.88	2.18	2.51	2.81
2500	0.00	0.32	0.66	0.98	1.30	1.62	1.96	2.28	2.60	2.94
2600	0.00	0.34	0.68	1.02	1.35	1.69	2.04	2.37	2.71	3.04
2700	0.00	0.35	0.71	1.06	1.41	1.76	2.10	2.45	2.81	3.16
2800	0.00	0.36	0.72	1.10	1.46	1.82	2.18	2.55	2.92	3.28
2900	0.00	0.38	0.75	1.14	1.51	1.89	2.27	2.64	3.02	3.40
3000	0.00	0.39	0.78	1.18	1.57	1.96	2.35	2.73	3.12	3.51

# STANDARD D SECTION TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 28

RPM	12.0	13.0	13.5	14.0	14.5	15.0	15.5	16.0	18.0	20.0	22.0
485	14.57	16.59	18.21	19.74	20.44	22.00	22.73	24.42	29.15	33.75	38.48
575	16.51	18.84	20.71	22.46	23.26	25.05	25.89	27.80	33.16	38.34	43.59
690	18.79	21.45	23.61	25.61	26.52	28.58	29.53	31.69	37.74	43.50	49.19
725	19.41	22.18	24.41	26.49	27.44	29.56	30.54	32.78	39.01	44.89	50.68
870	21.80	24.92	27.45	29.79	30.85	33.21	34.31	36.79	43.55	49.79	55.62
950	22.91	26.23	28.89	31.33	32.45	34.91	36.07	38.61	45.55	51.83	57.47
1160	25.20	28.85	31.77	34.38	35.61	38.20	39.48	42.04	48.92		
20	1.01	1.12	1.21	1.30	1.35	1.43	1.48	1.57	1.84	2.11	2.40
40	1.84	2.06	2.24	2.39	2.47	2.64	2.73	2.90	3.42	3.93	4.46
60	2.61	2.94	3.18	3.40	3.53	3.77	3.90	4.14	4.90	5.64	6.42
80	3.35	3.76	4.07	4.37	4.52	4.85	5.01	5.34	6.32	7.28	8.29
100	4.04	4.55	4.94	5.31	5.50	5.88	6.08	6.48	7.68	8.86	10.12
150	5.68	6.42	6.98	7.52	7.79	8.33	8.61	9.20	10.93	12.65	14.45
200	7.20	8.15	8.89	9.58	9.92	10.65	11.00	11.78	14.01	16.23	18.55
250	8.65	9.80	10.70	11.55	11.96	12.85	13.28	14.23	16.95	19.63	22.45
300	10.02	11.36	12.43	13.44	13.92	14.95	15.45	16.57	19.75	22.90	26.18
350	11.33	12.87	14.09	15.24	15.78	16.96	17.53	18.82	22.45	26.02	29.73
400	12.57	14.30	15.66	16.96	17.57	18.90	19.53	20.97	25.02	29.00	33.12
450	13.76	15.66	17.19	18.61	19.28	20.76	21.45	23.04	27.50	31.84	36.34
500	14.91	16.98	18.64	20.21	20.93	22.53	23.28	25.01	29.84	34.55	39.38
550	16.00	18.23	20.04	21.72	22.50	24.23	25.04	26.89	32.09	37.11	42.24
600	17.03	19.43	21.37	23.17	24.00	25.85	26.72	28.69	34.21	39.54	44.90
650	18.03	20.58	22.63	24.56	25.44	27.39	28.31	30.40	36.23	41.80	47.37
700	18.96	21.66	23.84	25.86	26.79	28.86	29.82	32.02	38.11	43.91	49.63
750	19.86	22.69	24.98	27.11	28.08	30.24	31.25	33.53	39.88	45.84	51.67
800	20.69	23.67	26.06	28.27	29.28	31.54	32.60	34.96	41.50	47.61	53.48
850	21.48	24.58	27.06	29.37	30.42	32.76	33.85	36.28	42.99	49.20	55.06
900	22.23	25.42	28.01	30.39	31.48	33.87	35.00	37.51	44.34	50.60	56.40
950	22.91	26.23	28.89	31.33	32.45	34.91	36.07	38.61	45.55	51.83	57.47
1000	23.54	26.96	29.68	32.20	33.35	35.85	37.04	39.62	46.62	52.84	58.28
1050	24.12	27.62	30.42	32.98	34.16	36.69	37.91	40.50	47.51	53.64	
1100	24.64	28.22	31.08	33.67	34.88	37.44	38.69	41.28	48.25	54.24	
1150	25.10	28.75	31.66	34.28	35.50	38.08	39.35	41.93	48.82		
1200	25.51	29.22	32.16	34.80	36.04	38.62	39.91	42.45	49.23		
1250	25.85	29.61	32.58	35.23	36.49	39.05	40.35	42.84	49.45		
1300	26.14	29.93	32.92	35.55	36.82	39.37	40.69	43.10			
1350	26.36	30.19	33.17	35.79	37.07	39.56	40.88	43.24			
1400	26.52	30.35	33.33	35.93	37.21	39.66	40.98	43.21			
1450	26.60	30.45	33.41	35.95	37.24	39.62	40.94				
1500	26.63	30.47	33.38	35.89	37.17	39.45	40.77				
1550	26.59	30.40	33.28	35.70	36.97						
1600	26.47	30.26	33.07	35.40	36.67						
1650	26.28	30.02	32.77								
1700	26.00	29.69	32.36								
1750	25.66	29.27									
1800	25.24	28.77									

# STANDARD D SECTION TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 29

RPM	1.00~1.01	1.02~1.03	1.04~1.06	1.07~1.08	1.09~1.12	1.13~1.16	1.17~1.22	1.23~1.32	1.33~1.50	1.51+
485	0.00	0.19	0.36	0.55	0.72	0.91	1.09	1.27	1.45	1.63
575	0.00	0.21	0.43	0.64	0.86	1.07	1.29	1.50	1.72	1.93
690	0.00	0.25	0.52	0.78	1.03	1.29	1.55	1.81	2.06	2.32
725	0.00	0.27	0.55	0.82	1.09	1.35	1.62	1.89	2.17	2.44
870	0.00	0.32	0.66	0.98	1.30	1.62	1.96	2.28	2.60	2.92
950	0.00	0.36	0.71	1.07	1.42	1.78	2.13	2.48	2.84	3.19
1160	0.00	0.43	0.87	1.30	1.73	2.17	2.60	3.03	3.47	3.90
20	0.00	0.01	0.01	0.03	0.03	0.04	0.04	0.05	0.05	0.07
40	0.00	0.01	0.03	0.04	0.05	0.08	0.09	0.11	0.12	0.13
60	0.00	0.03	0.04	0.07	0.09	0.11	0.13	0.16	0.17	0.20
80	0.00	0.03	0.05	0.09	0.12	0.15	0.17	0.21	0.24	0.27
100	0.00	0.04	0.08	0.11	0.15	0.19	0.23	0.27	0.29	0.34
150	0.00	0.05	0.11	0.17	0.23	0.28	0.34	0.39	0.44	0.51
200	0.00	0.08	0.15	0.23	0.29	0.38	0.44	0.52	0.60	0.67
250	0.00	0.09	0.19	0.28	0.38	0.47	0.56	0.66	0.75	0.84
300	0.00	0.11	0.23	0.34	0.44	0.56	0.67	0.79	0.90	1.01
350	0.00	0.13	0.27	0.39	0.52	0.66	0.79	0.91	1.05	1.18
400	0.00	0.15	0.29	0.46	0.60	0.75	0.90	1.05	1.19	1.34
450	0.00	0.17	0.34	0.51	0.67	0.84	1.01	1.18	1.34	1.51
500	0.00	0.19	0.38	0.56	0.75	0.94	1.13	1.31	1.50	1.69
550	0.00	0.20	0.42	0.62	0.82	1.03	1.23	1.43	1.65	1.85
600	0.00	0.23	0.46	0.67	0.90	1.13	1.34	1.57	1.80	2.02
650	0.00	0.24	0.48	0.72	0.98	1.22	1.46	1.70	1.94	2.18
700	0.00	0.27	0.52	0.79	1.05	1.31	1.57	1.84	2.09	2.36
750	0.00	0.28	0.56	0.84	1.13	1.41	1.69	1.96	2.24	2.52
800	0.00	0.29	0.60	0.90	1.19	1.50	1.80	2.09	2.40	2.69
850	0.00	0.32	0.63	0.95	1.27	1.59	1.90	2.22	2.55	2.85
900	0.00	0.34	0.67	1.01	1.34	1.69	2.02	2.36	2.69	3.03
950	0.00	0.36	0.71	1.07	1.42	1.78	2.13	2.48	2.84	3.19
1000	0.00	0.38	0.75	1.13	1.50	1.88	2.24	2.61	2.99	3.36
1050	0.00	0.39	0.79	1.18	1.57	1.97	2.36	2.75	3.14	3.54
1100	0.00	0.42	0.82	1.23	1.65	2.05	2.47	2.88	3.30	3.70
1150	0.00	0.43	0.86	1.29	1.72	2.14	2.59	3.00	3.44	3.87
1200	0.00	0.44	0.90	1.35	1.80	2.24	2.69	3.14	3.59	4.03
1250	0.00	0.47	0.94	1.41	1.86	2.33	2.80	3.27	3.74	4.21
1300	0.00	0.48	0.98	1.46	1.94	2.43	2.92	3.40	3.89	4.37
1350	0.00	0.51	1.01	1.51	2.02	2.52	3.03	3.52	4.03	4.54
1400	0.00	0.52	1.05	1.57	2.09	2.61	3.14	3.66	4.19	4.70
1450	0.00	0.54	1.09	1.63	2.17	2.71	3.26	3.79	4.34	4.84
1500	0.00	0.56	1.13	1.69	2.24	2.80	3.36	3.93	4.49	5.05
1550	0.00	0.58	1.17	1.74	2.32	2.89	3.48	4.05	4.64	5.21
1600	0.00	0.60	1.19	1.80	2.39	2.99	3.59	4.18	4.78	5.39
1650	0.00	0.62	1.23	1.85	2.47	3.08	3.70	4.31	4.93	5.55
1700	0.00	0.63	1.27	1.92	2.55	3.18	3.82	4.45	5.08	5.72
1750	0.00	0.66	1.31	1.97	2.61	3.27	3.93	4.57	5.24	5.88
1800	0.00	0.67	1.35	2.02	2.69	3.36	4.03	4.70	5.39	6.06

# STANDARD E SECTION TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 30

RPM	21.6	22.0	22.4	22.8	23.2	23.6	24.0
485	44.36	46.43	47.28	48.12	48.96	51.12	51.99
575	49.99	52.27	53.22	54.17	55.12	57.42	58.39
690	56.03	58.44	59.50	60.56	61.62	63.93	65.01
725	57.59	60.02	61.11	62.20	63.29	65.55	66.66
870	62.59	64.87	66.05	67.23	68.41	70.26	71.45
950	64.24	66.30	67.51	68.71	69.92	71.34	72.55
20	2.89	3.00	3.06	3.11	3.17	3.28	3.34
40	5.34	5.57	5.68	5.78	5.88	6.12	6.23
60	7.66	7.99	8.13	8.28	8.42	8.78	8.93
80	9.85	10.29	10.48	10.67	10.85	11.32	11.51
100	11.97	12.52	12.74	12.97	13.20	13.78	14.01
120	14.04	14.67	14.94	15.21	15.47	16.16	16.43
140	16.04	16.78	17.08	17.39	17.69	18.48	18.79
160	17.98	18.83	19.17	19.51	19.85	20.74	21.09
180	19.89	20.82	21.20	21.58	21.96	22.95	23.34
200	21.75	22.78	23.19	23.61	24.02	25.11	25.54
220	23.57	24.68	25.13	25.58	26.03	27.23	27.69
240	25.36	26.56	27.04	27.52	28.01	29.29	29.79
260	27.10	28.39	28.91	29.43	29.94	31.32	31.85
280	28.81	30.19	30.74	31.29	31.84	33.30	33.86
300	30.49	31.95	32.53	33.11	33.69	35.24	35.84
320	32.14	33.67	34.29	34.90	35.51	37.13	37.76
340	33.73	35.35	35.99	36.63	37.28	38.99	39.65
360	35.32	37.00	37.67	38.34	39.02	40.80	41.49
380	36.86	38.61	39.31	40.01	40.71	42.57	43.29
400	38.35	40.19	40.92	41.65	42.38	44.29	45.04
420	39.82	41.71	42.47	43.23	43.99	45.98	46.75
440	41.25	43.22	44.00	44.79	45.57	47.61	48.42
460	42.65	44.68	45.49	46.30	47.11	49.19	50.03
480	44.01	46.08	46.92	47.76	48.60	50.73	51.59
500	45.35	47.46	48.33	49.19	50.05	52.23	53.12
520	46.64	48.80	49.69	50.58	51.46	53.68	54.59
540	47.88	50.10	51.01	51.92	52.84	55.09	56.02
560	49.10	51.35	52.28	53.22	54.15	56.44	57.40
580	50.28	52.57	53.52	54.48	55.44	57.74	58.72
600	51.42	52.57	53.52	54.48	55.44	58.99	59.99
620	52.52	53.73	54.71	55.69	56.66	60.18	61.20
640	53.57	54.86	55.86	56.85	57.85	61.32	62.36
660	54.58	55.95	56.96	57.98	59.00	62.40	63.46
680	55.55	56.98	58.01	59.05	60.08	63.40	64.47
700	56.50	57.97	59.02	60.08	61.13	64.41	65.51
720	57.39	59.79	60.88	61.97	63.05	65.34	66.45
740	58.23	60.64	61.74	62.84	63.94	66.20	67.32
760	59.02	61.44	62.56	63.67	64.79	66.99	68.12
780	59.79	62.18	63.31	64.44	65.57	67.72	68.87
800	60.49	62.87	64.02	65.16	66.30	68.41	69.57
820	61.14	63.50	64.66	65.81	66.97	69.01	70.18
840	61.77	64.09	65.26	66.42	67.59	69.56	70.74
860	62.32	64.61	65.79	66.96	68.14	70.04	71.23
880	62.84	65.10	66.28	67.46	68.65	70.44	71.64
900	63.31	65.51	66.70	67.89	69.09	70.79	71.99

# STANDARD E SECTION TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 31

RPM	1.00~1.01	1.02~1.03	1.04~1.06	1.07~1.08	1.09~1.12	1.13~1.16	1.17~1.22	1.23~1.32	1.33~1.50	1.51+
485	0.00	0.31	0.62	0.94	1.25	1.55	1.86	2.17	2.49	2.80
575	0.00	0.38	0.74	1.11	1.47	1.85	2.21	2.57	2.95	3.31
690	0.00	0.44	0.88	1.33	1.77	2.21	2.65	3.10	3.54	3.98
725	0.00	0.47	0.92	1.39	1.86	2.32	2.79	3.26	3.71	4.18
870	0.00	0.56	1.11	1.68	2.22	2.79	3.35	3.90	4.46	5.01
950	0.00	0.60	1.22	1.84	2.44	3.04	3.66	4.26	4.88	5.48
1160	0.00	0.75	1.49	2.24	2.97	3.71	4.46	5.20	5.95	6.69
20	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12
40	0.00	0.03	0.05	0.08	0.11	0.13	0.15	0.17	0.20	0.23
60	0.00	0.04	0.08	0.12	0.15	0.19	0.23	0.27	0.31	0.35
80	0.00	0.05	0.11	0.15	0.20	0.25	0.31	0.36	0.42	0.46
100	0.00	0.07	0.13	0.19	0.25	0.32	0.39	0.44	0.51	0.58
120	0.00	0.08	0.15	0.23	0.31	0.39	0.46	0.54	0.62	0.70
140	0.00	0.09	0.17	0.27	0.36	0.44	0.54	0.63	0.72	0.80
160	0.00	0.11	0.20	0.31	0.42	0.51	0.62	0.72	0.82	0.92
180	0.00	0.12	0.23	0.35	0.46	0.58	0.70	0.80	0.92	1.03
200	0.00	0.13	0.25	0.39	0.51	0.64	0.76	0.90	1.03	1.15
220	0.00	0.15	0.28	0.43	0.56	0.71	0.84	0.99	1.13	1.27
240	0.00	0.15	0.31	0.46	0.62	0.76	0.92	1.07	1.23	1.38
260	0.00	0.16	0.34	0.50	0.67	0.83	1.01	1.17	1.34	1.50
280	0.00	0.17	0.36	0.54	0.72	0.90	1.07	1.26	1.43	1.61
300	0.00	0.19	0.39	0.58	0.76	0.96	1.15	1.34	1.54	1.73
320	0.00	0.20	0.42	0.62	0.82	1.03	1.23	1.43	1.63	1.85
340	0.00	0.21	0.44	0.66	0.87	1.09	1.31	1.53	1.74	1.96
360	0.00	0.23	0.47	0.70	0.92	1.15	1.38	1.61	1.85	2.08
380	0.00	0.24	0.48	0.74	0.98	1.22	1.46	1.70	1.94	2.20
400	0.00	0.25	0.51	0.76	1.02	1.29	1.54	1.80	2.05	2.30
420	0.00	0.27	0.54	0.80	1.07	1.34	1.62	1.89	2.16	2.43
440	0.00	0.28	0.56	0.84	1.13	1.41	1.69	1.97	2.25	2.53
460	0.00	0.29	0.59	0.88	1.18	1.47	1.77	2.06	2.36	2.65
480	0.00	0.31	0.62	0.92	1.23	1.54	1.85	2.16	2.47	2.77
500	0.00	0.32	0.64	0.96	1.29	1.61	1.93	2.24	2.56	2.88
520	0.00	0.34	0.67	1.01	1.33	1.66	2.00	2.33	2.67	3.00
540	0.00	0.35	0.70	1.05	1.38	1.73	2.08	2.43	2.77	3.11
560	0.00	0.36	0.72	1.07	1.43	1.80	2.16	2.51	2.87	3.23
580	0.00	0.38	0.75	1.11	1.49	1.86	2.24	2.60	2.97	3.35
600	0.00	0.39	0.76	1.15	1.54	1.93	2.30	2.69	3.08	3.46
620	0.00	0.40	0.79	1.19	1.59	1.98	2.39	2.77	3.18	3.58
640	0.00	0.42	0.82	1.23	1.63	2.05	2.47	2.87	3.28	3.69
660	0.00	0.43	0.84	1.27	1.69	2.12	2.55	2.96	3.39	3.81
680	0.00	0.44	0.87	1.31	1.74	2.18	2.61	3.04	3.48	3.93
700	0.00	0.44	0.90	1.35	1.80	2.24	2.69	3.14	3.59	4.03
720	0.00	0.46	0.92	1.38	1.85	2.30	2.77	3.23	3.70	4.15
740	0.00	0.47	0.95	1.42	1.90	2.37	2.84	3.32	3.79	4.26
760	0.00	0.48	0.98	1.46	1.94	2.44	2.92	3.40	3.90	4.38
780	0.00	0.50	1.01	1.50	2.00	2.51	3.00	3.50	4.01	4.50
800	0.00	0.51	1.03	1.54	2.05	2.56	3.08	3.59	4.10	4.61
820	0.00	0.52	1.06	1.58	2.10	2.63	3.15	3.67	4.21	4.73
840	0.00	0.54	1.07	1.62	2.16	2.69	3.23	3.77	4.30	4.84
860	0.00	0.55	1.10	1.66	2.20	2.76	3.31	3.86	4.41	4.96
880	0.00	0.56	1.13	1.69	2.25	2.83	3.39	3.94	4.52	5.08
900	0.00	0.58	1.15	1.73	2.30	2.88	3.46	4.03	4.61	5.19

# STANDARD AX SECTION TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 32

RPM	2.20	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8
485	0.66	0.75	0.86	0.95	1.06	1.21	1.32	1.43	1.55	1.66	1.77	1.89	2.01	2.08	2.19	2.29	2.42	2.51	2.62
575	0.72	0.84	0.96	1.08	1.21	1.38	1.51	1.63	1.77	1.89	2.02	2.16	2.29	2.37	2.51	2.63	2.76	2.86	3.01
690	0.82	0.97	1.10	1.24	1.38	1.58	1.73	1.88	1.91	2.18	2.32	2.48	2.65	2.74	2.89	3.03	3.19	3.31	3.46
725	0.84	0.99	1.12	1.28	1.42	1.63	1.80	1.95	2.11	2.26	2.41	2.57	2.75	2.84	3.00	3.15	3.31	3.43	3.60
870	0.95	1.12	1.28	1.45	1.63	1.87	2.06	2.23	2.41	2.59	2.76	2.96	3.16	3.27	3.44	3.62	3.81	3.95	4.14
950	1.01	1.18	1.35	1.54	1.73	1.99	2.19	2.38	2.57	2.76	2.95	3.16	3.38	3.49	3.69	3.87	4.07	4.22	4.43
1160	1.13	1.33	1.53	1.75	1.97	2.22	2.52	2.75	2.97	3.19	3.43	3.66	3.91	4.04	4.27	4.49	4.73	4.90	5.15
1425	1.26	1.51	1.74	1.99	2.26	2.63	2.90	3.17	3.43	3.69	3.96	4.23	4.53	4.68	4.96	5.21	5.47	5.68	5.96
1750	1.39	1.69	1.95	2.25	2.55	3.00	3.31	3.49	3.93	4.23	4.56	4.88	5.21	5.39	5.70	5.99	6.29	6.52	6.85
2850	1.63	2.06	2.43	2.86	3.28	3.93	4.38	4.82	5.24	5.65	6.08	6.50	6.95	7.19	7.58	7.95	8.31	8.62	8.94
3450	1.66	2.14	2.56	3.04	3.52	4.26	4.75	5.24	5.70	6.15	6.61	7.06	7.53	7.78	8.18	8.55	8.90	9.23	9.46
200	0.35	0.39	0.44	0.48	0.55	0.61	0.65	0.71	0.76	0.82	0.86	0.92	0.98	1.01	1.06	1.11	1.17	1.21	1.27
400	0.56	0.65	0.74	0.82	0.92	1.05	1.14	1.24	1.33	1.42	1.52	1.62	1.73	1.79	1.88	1.97	2.06	2.14	2.24
600	0.75	0.87	0.98	1.12	1.25	1.43	1.55	1.69	1.82	1.95	2.09	2.22	2.37	2.45	2.59	2.72	2.85	2.95	3.11
800	0.90	1.06	1.21	1.37	1.52	1.76	1.93	2.10	2.26	2.42	2.60	2.77	2.96	3.06	3.24	3.40	3.57	3.70	3.90
1000	1.03	1.23	1.39	1.59	1.78	2.07	2.27	2.46	2.67	2.87	3.07	3.28	3.51	3.63	3.83	4.02	4.23	4.38	4.61
1200	1.15	1.36	1.56	1.79	2.01	2.34	2.57	2.82	3.04	3.27	3.51	3.75	4.01	4.14	4.38	4.61	4.84	5.02	5.27
1400	1.25	1.50	1.71	1.98	2.23	2.60	2.86	3.13	3.39	3.65	3.91	4.18	4.48	4.62	4.89	5.15	5.41	5.61	5.88
1600	1.33	1.61	1.85	2.13	2.42	2.83	3.13	3.42	3.70	3.99	4.29	4.58	4.89	5.05	5.36	5.64	5.92	6.14	6.46
1800	1.41	1.70	1.98	2.29	2.59	3.05	3.38	3.69	4.00	4.32	4.64	4.97	5.32	5.50	5.80	6.11	6.41	6.64	6.98
2000	1.47	1.80	2.08	2.42	2.76	3.25	3.61	3.95	4.29	4.62	4.96	5.32	5.68	5.87	6.21	6.53	6.85	7.11	7.45
2200	1.53	1.88	2.18	2.55	2.91	3.43	3.81	4.18	4.55	4.90	5.26	5.64	6.03	6.23	6.59	6.93	7.26	7.53	7.88
2400	1.57	1.95	2.26	2.65	3.03	3.61	4.00	4.40	4.78	5.16	5.54	5.94	6.35	6.56	6.93	7.28	7.63	7.91	8.27
2600	1.61	2.00	2.35	2.75	3.15	3.76	4.18	4.59	5.00	5.39	5.80	6.20	6.63	6.85	7.24	7.60	7.96	8.25	8.60
2800	1.63	2.04	2.40	2.83	3.26	3.91	4.34	4.77	5.19	5.61	6.03	6.45	6.90	7.13	7.52	7.88	8.24	8.55	7.60
3000	1.65	2.08	2.46	2.92	3.35	4.03	4.49	4.93	5.36	5.80	6.23	6.67	7.13	7.37	7.76	8.13	8.49	8.81	9.12
3200	1.66	2.11	2.51	2.97	3.44	4.14	4.62	5.08	5.53	5.96	6.42	6.86	7.33	7.57	7.98	8.35	8.70	9.03	9.30
3400	1.66	2.14	2.54	3.03	3.51	4.23	4.72	5.21	5.68	6.13	6.58	7.02	7.50	7.75	8.16	8.51	8.86	9.19	9.44
3600	1.66	2.15	2.57	3.07	3.57	4.33	4.83	5.32	5.79	6.25	6.72	7.17	7.64	7.89	8.29	8.64	8.98	9.31	9.51
3800	1.65	2.15	2.58	3.10	3.61	4.40	4.91	5.42	5.90	6.22	6.82	7.28	7.75	8.00	8.40	8.74	9.06	9.39	9.54
4000	1.63	2.15	2.60	3.13	3.65	4.45	4.98	5.49	5.98	6.44	6.92	7.37	7.83	8.09	8.47	8.79	9.08	9.42	9.50
4200	1.61	2.14	2.60	3.14	3.68	4.49	5.04	5.54	6.04	6.51	6.97	7.42	7.88	8.14	8.50	8.80	9.06	9.39	
4400	1.57	2.12	2.58	3.14	3.68	4.53	5.06	5.58	6.09	6.55	7.01	7.45	7.89	8.15	8.50	8.78	8.99	9.33	
4600	1.53	2.10	2.57	3.13	3.70	4.55	5.09	5.61	6.10	6.56	7.01	0.74	7.87	8.13	8.44	8.70			
4800	1.49	2.06	2.54	3.12	3.68	4.55	5.09	5.61	6.10	6.56	7.00	7.41	7.81	8.07	8.36				
5000	1.43	2.01	2.50	3.09	3.65	4.53	5.08	5.60	6.09	6.53	6.96	7.34	7.73	7.99	8.22				
5200	1.37	1.96	2.46	3.04	3.62	4.51	5.05	5.57	6.03	6.48	6.88	7.25	7.60	7.85					
5400	1.30	1.91	2.40	3.00	3.58	4.47	5.01	5.51	5.98	6.40	6.78	7.12							
5600	1.23	1.84	2.33	2.93	3.51	4.40	4.94	5.43	5.88	6.56	6.65	6.95							
5800	1.15	1.77	2.26	2.86	3.45	4.33	4.86	5.34	5.77	6.15	6.49								
6000	1.06	1.67	2.18	2.77	3.37	4.23	4.75	5.23	5.64	6.00									
6200	0.96	1.59	2.08	2.69	3.26	4.14	4.64	5.09	5.49	5.81									
6400	0.87	1.48	1.98	2.59	3.15	4.02	4.51	4.93	5.30										
6600	0.75	1.38	1.87	2.46	3.03	3.88	4.34	4.75	5.09										
6800	0.64	1.27	1.74	2.19	2.89	3.72	4.17	4.55											
7000	0.51	1.13	1.62	2.20	2.75	3.55	3.98	4.43											

# STANDARD AX SECTION TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 33

RPM	1.00~1.01	1.02~1.04	1.05~1.07	1.06~1.10	1.11~1.14	1.15~1.20	1.21~1.27	1.28~1.39	1.40~1.64	1.65+
485	0.00	0.01	0.03	0.03	0.04	0.05	0.07	0.08	0.08	0.09
575	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.11
690	0.00	0.01	0.03	0.04	0.07	0.08	0.09	0.11	0.12	0.13
725	0.00	0.01	0.03	0.05	0.07	0.08	0.09	0.11	0.13	0.15
870	0.00	0.01	0.04	0.05	0.08	0.09	0.12	0.13	0.15	0.17
950	0.00	0.03	0.04	0.07	0.08	0.11	0.12	0.15	0.16	0.19
1160	0.00	0.03	0.05	0.08	0.11	0.13	0.15	0.17	0.20	0.23
1425	0.00	0.03	0.07	0.09	0.12	0.16	0.19	0.21	0.25	0.28
1750	0.00	0.04	0.08	0.12	0.15	0.19	0.23	0.27	0.31	0.35
2850	0.00	0.07	0.12	0.19	0.25	0.31	0.38	0.44	0.50	0.56
3450	0.00	0.08	0.15	0.23	0.31	0.38	0.46	0.54	0.60	0.68
200	0.00	0.00	0.01	0.01	0.01	0.03	0.03	0.03	0.04	0.04
400	0.00	0.01	0.01	0.03	0.04	0.04	0.05	0.07	0.07	0.08
600	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12
800	0.00	0.01	0.04	0.05	0.07	0.09	0.11	0.12	0.15	0.16
1000	0.00	0.03	0.04	0.07	0.09	0.11	0.13	0.15	0.17	0.20
1200	0.00	0.03	0.05	0.08	0.11	0.13	0.16	0.19	0.21	0.24
1400	0.00	0.03	0.07	0.09	0.12	0.15	0.19	0.21	0.24	0.28
1600	0.00	0.04	0.07	0.11	0.13	0.17	0.21	0.24	0.28	0.32
1800	0.00	0.04	0.08	0.12	0.16	0.20	0.24	0.28	0.32	0.36
2000	0.00	0.04	0.09	0.13	0.17	0.21	0.27	0.31	0.35	0.40
2200	0.00	0.05	0.09	0.15	0.19	0.24	0.29	0.34	0.39	0.43
2400	0.00	0.05	0.11	0.16	0.21	0.27	0.32	0.38	0.43	0.47
2600	0.00	0.05	0.12	0.17	0.23	0.28	0.35	0.40	0.46	0.51
2800	0.00	0.07	0.12	0.19	0.24	0.31	0.38	0.43	0.50	0.55
3000	0.00	0.07	0.13	0.20	0.27	0.34	0.40	0.46	0.52	0.59
3200	0.00	0.07	0.13	0.21	0.28	0.35	0.42	0.50	0.56	0.63
3400	0.00	0.08	0.15	0.23	0.29	0.38	0.44	0.52	0.60	0.67
3600	0.00	0.08	0.16	0.24	0.32	0.40	0.47	0.55	0.63	0.71
3800	0.00	0.08	0.16	0.25	0.34	0.42	0.50	0.59	0.67	0.75
4000	0.00	0.09	0.17	0.27	0.35	0.44	0.52	0.62	0.71	0.79
4200	0.00	0.09	0.19	0.28	0.38	0.46	0.55	0.64	0.74	0.83
4400	0.00	0.09	0.19	0.29	0.39	0.48	0.58	0.68	0.78	0.87
4600	0.00	0.11	0.20	0.31	0.40	0.51	0.60	0.71	0.80	0.91
4800	0.00	0.11	0.21	0.32	0.42	0.52	0.63	0.74	0.84	0.95
5000	0.00	0.11	0.21	0.34	0.44	0.55	0.66	0.76	0.88	0.99
5200	0.00	0.12	0.23	0.35	0.46	0.58	0.68	0.80	0.91	1.03
5400	0.00	0.12	0.24	0.36	0.47	0.59	0.71	0.83	0.95	1.07
5600	0.00	0.12	0.24	0.38	0.50	0.62	0.74	0.86	0.99	1.11
5800	0.00	0.13	0.25	0.39	0.51	0.64	0.76	0.90	1.02	1.15
6000	0.00	0.13	0.27	0.40	0.52	0.66	0.79	0.92	1.06	1.19
6200	0.00	0.13	0.27	0.42	0.55	0.68	0.82	0.95	1.09	1.23
6400	0.00	0.15	0.28	0.43	0.56	0.71	0.84	0.98	1.13	1.26
6600	0.00	0.15	0.29	0.44	0.58	0.72	0.87	1.02	1.17	1.30
6800	0.00	0.15	0.29	0.46	0.60	0.75	0.90	1.05	1.19	1.34
7000	0.00	0.15	0.31	0.46	0.62	0.76	0.92	1.07	1.23	1.38



# STANDARD CX SECTION TRANSMISSION HORSEPOWER RATINGS

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 36

RPM	7.0	7.5	8.0	8.5	9.0	10.0	10.5	12.0	13.0	14.0	16.0
485	6.58	7.22	7.78	8.34	8.91	10.01	10.57	10.94	13.20	14.21	16.25
575	7.52	8.27	8.91	9.55	10.20	11.47	12.11	13.92	15.11	16.25	18.54
690	8.67	9.53	10.26	11.01	11.76	13.22	13.94	16.04	17.39	18.67	21.25
725	8.99	9.90	10.67	11.44	12.21	13.73	14.48	16.65	18.05	19.38	22.03
870	10.32	11.36	12.23	13.14	14.01	15.75	16.60	19.05	20.64	22.09	25.03
950	11.01	12.13	13.07	14.01	14.96	16.80	17.71	20.29	21.96	23.45	26.51
1160	12.72	14.00	15.08	16.17	17.24	19.33	20.34	23.20	25.06	26.61	29.81
1425	14.63	16.09	17.33	18.56	19.76	22.06	23.15	26.21	28.21	29.61	32.64
1750	16.65	18.26	19.62	20.96	22.27	24.69	25.78	28.82	30.80	31.65	
2850	20.56	22.06	23.39	24.53							
3450	20.60										
100	1.80	1.96	2.10	2.25	2.39	2.68	2.83	3.26	3.54	3.81	4.36
200	3.21	3.51	3.77	4.04	4.31	4.84	5.10	5.87	6.38	6.88	7.87
300	4.47	4.91	5.27	5.65	6.04	6.79	7.15	8.23	8.93	9.64	11.04
400	5.64	6.20	6.66	7.14	7.62	7.22	9.06	10.42	11.32	12.19	13.94
500	6.75	7.41	7.97	8.55	9.13	10.26	10.84	12.47	13.54	14.56	16.64
600	7.77	8.55	9.21	9.87	10.54	11.85	12.51	14.40	15.62	16.79	19.16
700	8.75	9.63	10.38	11.13	11.88	13.37	14.10	16.21	17.57	18.87	21.49
800	9.69	10.66	11.50	12.33	13.17	14.80	15.60	17.92	19.41	20.81	23.62
900	10.59	11.66	12.55	13.47	14.37	16.15	17.02	19.52	21.14	22.61	25.60
1000	11.43	12.58	13.57	14.56	15.52	17.43	18.35	21.02	22.74	24.26	27.37
1100	12.24	13.49	14.52	15.58	16.61	18.64	19.62	22.41	24.23	25.77	28.95
1200	13.03	14.33	15.44	16.55	17.64	19.77	20.80	23.71	25.60	27.13	30.33
1300	13.76	15.14	16.31	17.48	18.63	20.83	21.89	24.89	26.85	28.34	31.50
1400	14.46	15.91	17.13	18.34	19.53	21.83	22.90	25.97	27.96	29.38	32.45
1500	15.13	16.63	17.90	19.16	20.39	22.74	23.83	26.92	28.94	30.25	33.16
1600	15.76	17.32	18.62	19.93	21.18	23.57	24.68	27.77	29.79	30.95	
1700	16.35	17.96	19.31	20.64	21.92	24.32	25.44	28.50	30.50	31.46	
1800	16.91	18.55	19.93	21.29	22.59	25.01	26.10	29.09	31.07		
1900	17.45	19.11	20.52	21.89	23.20	25.61	26.67	29.57	31.47		
2000	17.94	19.62	21.05	22.42	23.74	26.13	27.14	29.91	31.73		
2100	18.39	20.09	21.53	22.92	24.22	26.55	27.52	30.10			
2200	18.79	20.50	21.95	23.34	24.63	26.89	27.79				
2300	19.17	20.88	22.33	23.69	24.96	27.14	27.95				
2400	19.52	21.20	22.64	23.99	25.24	27.29					
2500	19.82	21.49	22.92	24.23	25.43	27.34					
2600	20.08	21.71	23.12	24.40	25.54						
2700	20.29	21.89	23.27	24.50	25.58						
2800	20.48	22.02	23.37	24.54	25.54						
2900	20.62	22.09	23.39	24.50							
3000	20.72	22.12	23.37								
3100	20.77	22.08	23.27								
3200	20.79	22.00									
3300	20.74	21.85									
3400	20.66										
3500	20.53										
3600	20.35										
3700	20.13										

# STANDARD CX SECTION TRANSMISSION SPEED RATIO ADDER

HP RATINGS PER BELT FOR SMALL SHEAVE DATUM DIAMETER (IN)

Table 37

RPM	1.00~1.01	1.02~1.04	1.05~1.07	1.08~1.10	1.11~1.14	1.15~1.20	1.21~1.27	1.28~1.39	1.40~1.64	1.65+
485	0.00	0.04	0.07	0.11	0.15	0.17	0.21	0.25	0.28	0.32
575	0.00	0.04	0.08	0.12	0.17	0.21	0.25	0.30	0.34	0.38
690	0.00	0.05	0.11	0.15	0.20	0.25	0.31	0.36	0.40	0.46
725	0.00	0.05	0.11	0.16	0.21	0.27	0.32	0.38	0.43	0.48
870	0.00	0.07	0.13	0.19	0.25	0.32	0.39	0.44	0.51	0.58
950	0.00	0.07	0.13	0.21	0.28	0.35	0.42	0.50	0.56	0.63
1160	0.00	0.08	0.17	0.25	0.34	0.43	0.51	0.60	0.68	0.76
1425	0.00	0.11	0.21	0.32	0.42	0.52	0.63	0.74	0.84	0.94
1750	0.00	0.13	0.25	0.39	0.51	0.64	0.78	0.90	1.03	1.17
2850	0.00	0.21	0.42	0.63	0.84	1.05	1.26	1.48	1.68	1.89
3450	0.00	0.25	0.51	0.76	1.02	1.27	1.53	1.78	2.04	2.29
100	0.00	0.01	0.01	0.03	0.03	0.04	0.04	0.05	0.05	0.07
200	0.00	0.01	0.03	0.04	0.05	0.07	0.09	0.11	0.12	0.13
300	0.00	0.03	0.04	0.07	0.09	0.11	0.13	0.16	0.17	0.20
400	0.00	0.03	0.05	0.09	0.12	0.15	0.17	0.20	0.24	0.27
500	0.00	0.04	0.07	0.11	0.15	0.19	0.21	0.25	0.30	0.34
600	0.00	0.04	0.09	0.13	0.17	0.21	0.27	0.31	0.35	0.40
700	0.00	0.05	0.11	0.16	0.20	0.25	0.31	0.36	0.42	0.47
800	0.00	0.05	0.12	0.17	0.24	0.30	0.35	0.42	0.47	0.54
900	0.00	0.07	0.13	0.20	0.27	0.34	0.40	0.47	0.54	0.59
1000	0.00	0.07	0.15	0.23	0.30	0.36	0.44	0.51	0.59	0.66
1100	0.00	0.08	0.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72
1200	0.00	0.09	0.17	0.27	0.35	0.44	0.54	0.62	0.71	0.79
1300	0.00	0.09	0.19	0.28	0.39	0.48	0.58	0.67	0.76	0.86
1400	0.00	0.11	0.20	0.31	0.42	0.51	0.62	0.72	0.83	0.93
1500	0.00	0.11	0.21	0.34	0.44	0.55	0.66	0.78	0.89	0.99
1600	0.00	0.12	0.24	0.35	0.47	0.59	0.71	0.83	0.94	1.06
1700	0.00	0.12	0.25	0.38	0.50	0.63	0.75	0.87	1.01	1.13
1800	0.00	0.13	0.27	0.40	0.54	0.66	0.79	0.93	1.06	1.19
1900	0.00	0.13	0.28	0.42	0.56	0.70	0.84	0.98	1.13	1.26
2000	0.00	0.15	0.30	0.44	0.59	0.74	0.89	1.03	1.18	1.33
2100	0.00	0.16	0.31	0.47	0.62	0.78	0.93	1.09	1.23	1.39
2200	0.00	0.16	0.32	0.48	0.64	0.80	0.98	1.14	1.30	1.46
2300	0.00	0.17	0.34	0.51	0.68	0.84	1.02	1.18	1.35	1.53
2400	0.00	0.17	0.35	0.54	0.71	0.89	1.06	1.23	1.42	1.60
2500	0.00	0.19	0.36	0.55	0.74	0.93	1.10	1.29	1.48	1.66
2600	0.00	0.19	0.39	0.58	0.76	0.95	1.15	1.34	1.53	1.73
2700	0.00	0.20	0.40	0.60	0.79	0.99	1.19	1.39	1.60	1.78
2800	0.00	0.20	0.42	0.62	0.83	1.03	1.23	1.45	1.65	1.85
2900	0.00	0.21	0.43	0.64	0.86	1.07	1.29	1.50	1.72	1.92
3000	0.00	0.21	0.44	0.67	0.89	1.10	1.33	1.54	1.77	1.98
3100	0.00	0.23	0.46	0.68	0.91	1.14	1.37	1.60	1.82	2.05
3200	0.00	0.24	0.47	0.71	0.94	1.18	1.41	1.65	1.89	2.12
3300	0.00	0.24	0.48	0.72	0.98	1.22	1.46	1.70	1.94	2.19
3400	0.00	0.24	0.50	0.75	1.01	1.25	1.50	1.76	2.01	2.25
3500	0.00	0.25	0.51	0.78	1.03	1.29	1.54	1.81	2.07	2.32
3600	0.00	0.25	0.54	0.79	1.06	1.33	1.60	1.86	2.12	2.39
3700	0.00	0.27	0.55	0.82	1.09	1.37	1.64	1.90	2.19	2.45
3800	0.00	0.28	0.56	0.84	1.11	1.39	1.68	1.96	2.24	2.52
3900	0.00	0.28	0.58	0.86	1.15	1.43	1.73	2.01	2.31	2.59
4000	0.00	0.30	0.59	0.89	1.18	1.48	1.77	2.07	2.36	2.66