

Summary of Corrections to ACA Standard Handbook of Chains

May 2009

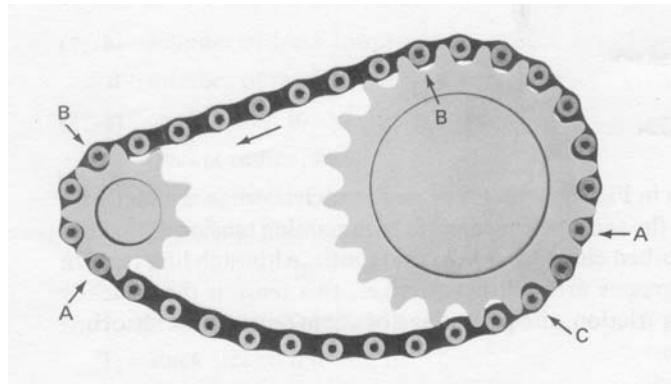
- Page 105, Equation (4.2). In the first set of brackets, the term $\sin \alpha$ should be $\sin \phi$.

Change the current equation to this:

$$P_n = t_n \frac{\sin \alpha}{\sin \phi} = t_0 \left[\frac{\sin \phi}{\sin(\alpha + \phi)} \right]^{n-1} \left[\frac{\sin \alpha}{\sin \alpha + \phi} \right] \quad (4-2)$$

- Page 117, Figure 4-40. The wrong figure was used.

Change the current figure to this:



- Page 166, Equation (5.2). The following term and equations need to be added.

$$L = 2C + \frac{N+n}{2} + \frac{(N-n)^2}{4\pi^2 C}, \text{ pitches} \quad (5.2)$$

$$C = \frac{L - \frac{N+n}{2} + \sqrt{\left(L - \frac{N+n}{2}\right)^2 - 8 \frac{(N-n)^2}{4\pi^2}}}{4}, \text{ pitches} \quad (5.3)$$

$$C' = \frac{L - n[(90 - \alpha)/180] - N[(90 + \alpha)/180]}{2 \cos \alpha}, \text{ pitches} \quad (5.4)$$

...selected values of the term $\frac{L-n}{N-n}$.

$$C' = K_{CD}(2L - N - n), \text{ pitches} \quad (5.4a)$$

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4. Page 208, Table 7-2. Replace the current table with this:

TABLE 7-2
Maximum Bores for Silent Chain Sprockets

Number of Teeth	Bores with standard keyways						
	Chain pitch						
	3/8	1/2	5/8	3/4	1	1 1/2	2
17	7/8	1 3/8	1 3/4	2 1/16	2 3/4	4 1/8	5 1/4
19	1 1/4	1 5/8	2	2 3/8	3 1/4	4 3/4	6
21	1 5/16	1 7/8	2 5/16	2 3/4	3 3/4	5 1/2	7
23	1 1/2	2 1/8	2 5/8	3 1/4	4 1/4	6 1/2	7 3/4
25	1 3/4	2 3/8	2 15/16	3 5/8	4 3/4	7 3/8	8 7/8
27	1 7/8	2 5/8	3 1/4	3 15/16	5 5/16	7 7/8	9 5/8
29	2 1/16	2 13/16	3 5/8	4 3/8	5 9/16	9	10 5/8
31	2 1/8	3 1/16	3 13/16	4 1/2	6 5/16	9 15/16	11 1/8
33	2 5/16	3 1/4	4 1/4	4 15/16	6 15/16	10 11/16	12 3/8

5. Page 339, Main Heading. Replace the current main heading with this:

SAMPLE FLAT-TOP CHAIN CONVEYOR SELECTION

6. Page 345, Table 13-1. Correct the first two temperature ranges to this:

-50 to +50
-20 to +80

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7. Page 365, Figures 14-9 through 14-11. Replace the current “fuzzy” figures with these:

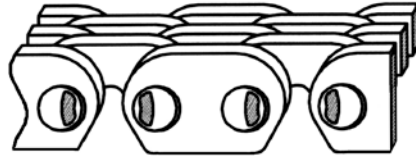


Figure 14-9

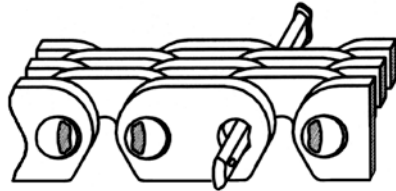


Figure 14-10

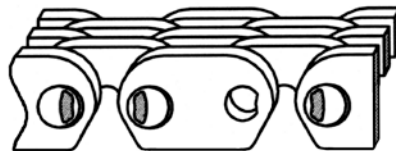


Figure 14-11

8. Page 366, Figures 14-12 through 14-14. Replace the current “fuzzy” figures with these:

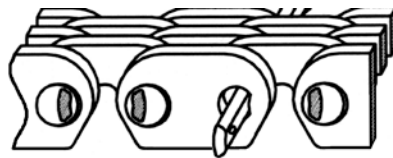


Figure 14-12

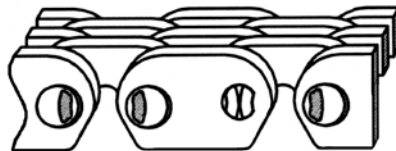


Figure 14-13



Figure 14-14