



ERRATA and Comments to the Publisher

George Halmos ROLL FORMING HANDBOOK

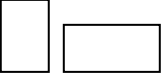
April 6, 2009

PAGE	ITEM	DESCRIPTION
1-2	3 rd para 8th line	Add steel in front of aluminum. 8 th line reads now: steel, aluminum, copper brass, lead, tin, titanium, zirconium and
2-1	Ch 2	<i>"A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools". Douglas Adams: Author, Hitchhiker's Guide to the Galaxy</i> Please insert this quotation in italics as the 1 st sentence, after the Contents, References.....2-32, ahead of Section 2.1 General
2-2	Table 2.1	This table is now on page 2-2. It should be on page 2-26, where the reference to this Table 2.1 is made
2-10	Fig 2.18	Cross hatching missing and incorrect (see Appendix 1 A,B)
2-21	Fig 2.36	Lettering error (see Appendix 2)
2-28	2 nd para 2 nd & 3 rd line	delete (Figure 5.27, Figure 5.100, Figure 5.102a-f) replace it with: (Figure 5.26, Figure 5.100a-f, Figure 5.103, Figure 5.104a-c and Figure 105.)
2-28	6 th para 5 th line	Add a coma between Allen key and wrench. Text should read: ...one size Allen key, wrench or other tool.
2-29	Fig 2.48	Lines are missing (see Appendix 3)
2-32	Sec 2.3.9	2 nd paragraph, 2 nd line: insert (see Fig 2.3.3). The text should read: side of a shaft can be moved easily up and down (see Figure 2.3.3) then the shaft.....
2-33	Literature	References and Further Reading See comments after the table on Page 5.
3-3	Fig 3-16, Table 3.1 and Table 3.2	Figure 3-16, Tables 3.1 and Table 3.2 should be moved to this page from pages 3-16, 3-17 and 3-18
3-5	Fig 3.5	Text in Figure 3.5 change from: grid or plate to grate or plate
3-6	2 nd para 1 st line	Add a comma in front of which. End of line should read: ...less expensive presses, which are better suited for
3-6	2 nd para 3 rd line	Delete letters a, b after Figure 3.6. End of sentence should read: ...are shown in Figure 3.6.
3-13	Fig 3.14	Delete the "with permission"
3-16	Table 3.1	Table submitted with the manuscript was not properly remade. E.g □s in the first 3 lines have been substituted with this symbol  s. For proper format see Appendix 4 A, B. Tables 3.1 and 3.2 from pages 3-16 and 3-17 to be moved to page 3-3 and 3-4.
3-17	Table 3.2	Line 7 under the heading of: PROVIDE drawings and/or description of: same comments as above: □s have been substituted with  s (see Appendix 5 A, B).
3-19	Fig 3.20	Arrows above numbers 4, 5 and 6 should be in the opposite direction (see Appendix 6A, B).
4-4	Fig 4.3	Letters inelible and partial ellipse (oval) should be a partial circle. (see Appendix 7)
4-5	Fig 4.6	Lines missing (see Appendix 8)
4-9	Fig 4,15	Shaft centerlines are incorrectly drawn (see Appendix 9 A, B)
4-12	Fig 4.20	Arrow head missing above the dotted "Tight limit"
4-14	Table 4.1	6th line, 3 rd column 1 st line: Cut to length and punch six holes.... Replace six with four. It should read: Cut to length and punch four holes.... (no change in the second line) (see Appendix 10).

4-27	Fig 4.57b	P2 lettering mistake, (see Appendix 11).
4-29	2 nd para 3rd line	Change 2(10) into 2/10 3 rd line reads now: diameter, creating a (2/10X100=20%) and in the same line replace 40% with 20%. It should read:...and 20% compression in the inner fiber
4-30	Sec. 4.11.4	2 nd and 3 rd line should be plural (change end to ends): Both the front and tail ends of the curved product remain straight (Figure 4.68) The length
4-40	Sec. 4.11.11	End of second paragraph replace [232]. with [233].
4-45	Fig4.106	Delete With permission (Courtesy of Pacific Roller Dies. With permission) It should read: (Courtesy of Pacific Roller Dies)
4-45	Sec. 4.11.16	2 nd paragraph, 7 th line: replace [232] with [233]
4-47		Last paragraph 1st line end replacehence, backlash gears are Withhence, no-backlash gears are
4-50		1 st paragraph 2nd line replace bracket "(" with "/" between 18 and π . In other words Replace 18 (π = 5.73 with 18 / π = 5.73
4-51	Fig 4.116	[Author's error] :In the text following figure number exchange the "n" and "m". It should read: If "m" is too week, increasing the roll diameter sometimes helps ("n" is sufficient).
4-51		Last paragraph - replace: 3. Threading the strip around both rolls with: 3. Threading the strip around one roll
4-52		2 nd paragraph 6 th line add (c) after 4.119 ... Figure 4.119. Replace with ... Figure 4.119(c).
4-58	Sec 4.15.6	Stapling is possible but it is not a frequently used to attach ... Insert "method" after used: Stapling is possible but it is not a frequently used method to attach ...
4-60	Fig 4.137	(courtesy of Nu-Tech Rollforming Inc.) was missed. Should read: Automatically inserted plastic rolls are enclosed into the conveyor channel in the roll forming line (courtesy of Nu-Tech Rollforming Inc.)
5-6	Example 3	A square 2 was missed, the equation should be: $s = \sqrt{56^2 + (2.4674 \times 4^2)} = 56.35$
5-12	Fig 5.16	In 2 places (e and F) replace "2t" with "a" (for details see Appendix 12).
5-29	Table 5.1	At several places the ☒ symbols do not line up with the rows as well as cover the text (see Appendix 13 A, B, C).
5-43	Example 2 5 th line	The numbers are different with those in the Fig. 5.68 . The text should read: rolls can be used for both the 65° and 75° products. One side of the "common roll" has 65° , the other side 75° angles.
5-48	Equation (5.5)	I missed the equation in metric units. Therefore the existing line should be changed and one more line added: in imperial $D_{max} = 2(V_D - d) - S_t - 0.06V_D^{0.4}$ (in mm) (5.5 imperial) in metric $D_{max} = 2(V_D - d) - S_t - 0.42V_D^{0.4}$ (in mm) (5.5 metric)

5-53	Equation 5.6 (imp)	<p>Change 3 numbers in the last fraction of this equation</p> $k = 0.567 \frac{\frac{R_i}{t} + 0.25}{1.2 \frac{R_i}{t} + 1} \times \left(1 + \frac{Y^{2.5}}{250 U^{1.41}} \right)$ <p>to:</p> $k = 0.567 \frac{\frac{R_i}{t} + 0.25}{1.2 \frac{R_i}{t} + 1} \times \left(1 + \frac{Y^{2.25}}{300 UTS^{1.46}} \right)$ <p>and</p> <p>between the $U = \text{tensile strength (ksi)}$ and 5.8.2 Manual Calculation etc. as shown below:</p> <p>where $R_i = \text{inside bend radius (in)}$ $t = \text{metal thickness (in)}$ $Y = \text{yield strength (ksi)}$ $U = \text{tensile strength (ksi)}$ however the “k” factor can not be larger than 0.5.</p> <p style="text-align: center;">5.8.2 Manual Calculation of Strip Width</p>
5-53	Equation (5.6) Cont'd next page	<p>I missed the equation in metric units. Therefore csanging the existing line (see above) add one more line:</p> <p>in imperial $k = 0.567 \frac{\frac{R_i}{t} + 0.25}{1.2 \frac{R_i}{t} + 1} \times \left(1 + \frac{Y^{2.25}}{300 UTS^{1.46}} \right)$</p> <p>(Eq. 5.6 imperial)</p> <p>in metric $k = 0.567 \frac{\frac{R_i}{t} + 0.25}{1.2 \frac{R_i}{t} + 1} \times \left(1 + \frac{Y^{2.25}}{2461 UTS^{1.46}} \right)$</p> <p>(Eq. 5.6 metric)</p>
5-61	1 st para 2nd line	<p>Change then to than. The text should read: used to control variable springback, and often they are adjusted more frequently than the main rolls.....</p>
5-62	1 st para 4th line	<p>Delete letter a after Figure 5.102. End of sentence should read: ...Figure 5.102 shows a typical example.....</p>
5-66	1 st para 5th line	<p>Angle of the ” fingers” by 3° to 6° should read: Angle of the ” fingers” (leg segments) by 3° to 6°</p>
5-68	Table 5.6	<p>Letter “Z” in the first line and in the last line should be “z”</p>
5-68	Table 5.7	<p>Letter “S” should be “s” (the z, s and f letters in the rectangular boxes in tables 5.6, 5.7 and 5.8 should be the same size)</p>
5-69	Table 5.8	<p>Letter (F) in the title of the Table should be (f)</p>
5-69	1 st para 3rd line	<p>Number 11 is incorrect. $(80 \div 10) + 1 = 11$ should be $(80 \div 10) + 1 = 9$.</p>

5-69	Fig 5.10	The 0.003 should be in numerator position instead of denominator position (See Appendix 14)
5-71	Table 5.9	Top line on this page, 4 th drawing from right : Please change: Tubular auto to Tubular auto
5-77	2 nd para 4th line	Replace the in after the number 15 with °. End of sentence should read: Into the first pass at a shallow angle (5 to 15°) (See Appendix 15)
5-80	Fig 5.124	Delete letters (a) in the figure 5.124 text End of sentence should read: FIGURE 5.124 Angles with different leg lengths formed by the same rolls cannot be trapped. Guides adjustable in width and height are recommended between several passes.
5-82	2 nd para 2nd line	Change cannot into can . End of sentence should read: Opposite to the roll with the lead-in flange can reach into the bend line,...
5-92	Fig 5.159	Text of the 3 rd (right hand side) drawing should be: detail enlarged
5-103	Fig 5.173	In text (b) change even into uneven .End of sentence should read: (b) uneven number of ribs.
6-8	3 rd para 6 th line	Greek letter "θ" should be "α" It should read: α = angle of bending radians
6-8	Equation (6.1)	() missed in the bottom line. The equation should be: $e(\%) = \frac{L_o - L_n}{L_n} \times 100 = \frac{(r+t)\alpha - (r+0.33t)\alpha}{(r+0.33t)\alpha} \times 100 = \frac{r+t-r-0.33t}{r+0.33t} \times 100$
6-14	Fig 6.15	Delete "(Courtesy of Steelwood Door)"
7-17	7.6.3.2 3 rd line	Change drain into drive, End of sentence should read: 3. Lubrication for drive chain and gears
7-22	5 th para	Text is the same as page 7-20, Section 7.73, para.4 th line. It is a repeat. Delete paragraph from: It is essential to:..... residual fluid. (see Appendix 15-2)
7-22	6 th para	Text is the same as page 7-20 7.73 para .6 th line. It is a repeat Delete paragraph from: Zinc is rapidly to: surface breakdown.
7-22	7 th para	Text is the same page 7-21 para.1 st line. It is a repeat. Delete paragraph from: The accumulation to steel (iron).
7-22	Last para.	Text is the same as page 7-19 para.8 th line. It is a repeat. Delete paragraph from Because there to electroplated material.
8-19	Fig 8.26	Change Line Thicknesses (see Appendix 16)
9-3	equation	Delete the 2 in the bottom of line. The equation should be: $e_e + e_p = e = \frac{a_0}{r_n} \times 100\%$
9-7	Fig 9.7	Drawings are too small, not legible and in some cases not correct (see Appendix 17)
10-4	Fig 10.3c	Lettering incorrect (see Appendix 18)
10-17	Table 10.2	Change 10.9 into 10.20, End of sentence should read: TABLE 10.2 Typical Lubrication Instruction for Roll Forming Line Shown in Figure 10.20 (Sample Chart) (see Appendix 19 A, B)
10-18	Table 10.3	Change 10.9 into 10.20, as well as some words. End of sentence should read: TABLE 10.3 Typical Lubrication Instruction for Variable Speed drive Shown in Figure 10.21
10-25	Fig 10,28	Delete the words: With permission.
	Fig 10.29	Delete the words: With permission.
10-26	3 rd line	Change 0.25mm into 0.025mm, End of sentence should read: 0.001 in. (0.025mm). A typical chart....

10-29	Fig 10.32	 Photo should be rotated 90° to left (see Appendix 20 A, B)
10-36	Fig 10.38(g)	Cross hatching (Shading) is incorrect (see Appendix 21 A, B)
10-38	Fig 10.38 (ab)	Lines at “Large Radii” are missing (see Appendix 22)
10-39 to 10-51	Table 10.5	Change “Problem” “Possible Pauses” “Check/Eliminate /Prevent” headings on 13 pages to upper case and bold : “PROBLEM” “POSSIBLE CAUSES” “CHECK/ELIMINATE /PREVENT”
10-48	2 nd group	In the 1 st column, 2 nd group delete the b. Sentence should read: Location of prepunched holes, cutouts (in longitudinal direction) [Figure 10.38 (v)]
10-49	2 nd group	In the 1 st column, 2 nd group delete the (26). End of sentence should read: Location of postpunched holes and notches [Figure 10.38 (z)]
10-49	4th problem group	In the 1 st column, last group delete the text of: Embossments, louvers, lances (This text is unnecessarily repeated from the group above it)
10-51	1 st para 1st line	(Text under the Table) Change “then” into “than”. The text should read: It is easier to discuss problems at this stage than to discover ...
11-22	Figure 11.30	Some symbols are different then those in the chapter. For example $\Delta \beta - \Delta b$ (see Appendix 23 A, B)
11-23	Figure 11.31	The same problems as above Two brackets “()” missed in the expressions above Figure 11.31 text (see Appendix 24 A, B)
11-27	Figure 11.33	The bottom picture is not ERW tube as indicated in the text of Figure 11.33. FIGURE 11.33, end of text should read:...strips during roll forming of ERW pipes and channel (see Appendix 25)
13-7	Figure 13.4	In this figure after the text of Clearance line delete the , (coma) and: if more than 1/4 “, see Figure 15.6 for roll surface layout. It should read: ← Clearance line (see Appendix 26)
13-8	Figure 13.5	Closing bracket “)” is missed in the 7 th line of text. End of sentence should read: between the infeed side of the guard and the danger line). (see Appendix 27)
15-2	Ch 15	<i>“The only way of finding the limits of the possible is by going beyond them into the impossible.” Arthur C. Clarke</i> Please insert this quotation as the 1 st sentence in italics at the top of the page, ahead of Section 15.1
A-1	App’x 1	Delete the second line of the title: R7 FS (Jan16,2005). It should read: Appendix 1: Conversion Units and Factors
A-4	Table 2.2	The table is mixed up. The “in” dimension and related Frac, ga, mm, lb/ft should be in ascending order. For example instead of ascending in the full table, after 0.0350 in. the next thicknesses are 0.1345, 0.13780 etc. (instead of 0.0354). The 0.0354, 0.359 etc in. thicknesses are after 0.2441. The 0.0787 is followed by 0.3248 instead of 0.0790, which is printed after 0.3800, The 0.3819 is after 0.1339 and so on. As a result all equivalent mm and other values are similarly out of order. (see Appendix 28)

A-10	Table 2.5	C X F headings are shown only above the first set of 3 columns; they should be shown above the next 5 sets of columns too (see Appendix 29)

Additional Comments to the Publisher:

1. Location of Figures and Tables

At many places the Figures and Tables are several pages away from the text discussing or referring to them. In a few instances the Tables are more than 10 pages away from the reference text. This constant turning of pages back and forth makes reading cumbersome. Rearranging the location of the Figures and Tables would make reading easier in future editions.

2. Size of Figures

A few drawing have been so drastically reduced that the essential details became illegible.

3. Literature and Additional Readings

There is a list of REFERENCES and/or FURTHER READINGS at the end some Chapters. I don't know how it was decided to group them. After Chapter 2 the "Reference" contains literature with author's name and the "Further Reading" has the literature, which does not show authors. However at the end of some other chapters, such as Chapter 6, it is the opposite. In Chapter 5 both the "References" (it is in plural here) and the "Further Reading" Contain literature indicating the name of the authors.

The listing of the literature is not a significant issue but maybe in a future addition the correction can be made.

George Halmos