

## USEFUL INFORMATION FOR PRINTERS

### TABLE FOR NEWSPAPER ESTIMATES

WIDTH OF STANDARD COLUMN, 13 12-POINT EMS	5½ POINT	6 POINT	7 POINT	8 POINT	9 POINT	10 POINT
Number of ems in a line . . . . .	28½	26	22½	19½	17½	15½
Solid lines in 1000 ems . . . . .	35½	38½	44½	51½	57½	64½
Inches in 1000 ems . . . . .	2½	3½	4½	5½	7	8½
2 point leads in 1000 ems of leaded matter	26	29	35	41	47	54
2 point leads in column, 4 column paper	132	124	110	99	90	82
2 point " " " 5 " " "	170	160	142	128	116	107
2 point " " " 6 " " "	190	178	158	142	129	119
2 point " " " 7 " " "	209	196	174	157	142	131
2 point " " " 8 " " "	221	207	184	166	151	138
2 point " " " 9 " " "	266	250	222	200	182	167
Weight of 2 point leads in 1000 ems of leaded matter	6 oz.	7 oz.	8½ oz.	10 oz.	11½ oz.	13 oz.
Weight of 2 point leads needed to lead 1000 ems of solid matter	8½ oz.	9½ oz.	11 oz.	12½ oz.	14 oz.	16 oz.

The weight of leads in 1000 ems of leaded matter and the weight needed to lead 1000 ems of solid matter would be approximately the same in any measure.

### NUMBER OF LEADS TO THE POUND

Table showing the approximate number of 2 point and 3 point leads contained in a pound. For 1 point leads, multiply the 2 point columns by 2. For 1½ point leads, multiply the 3 point columns by 2. For 6 point slugs, divide 3 point columns by 2.

EMS LONG	2 POINT	3 POINT	EMS LONG	2 POINT	3 POINT	EMS LONG	2 POINT	3 POINT	EMS LONG	2 POINT	3 POINT
3	288	192	15	57	38	27	31	21	39	22	15
4	216	144	16	54	36	28	30	20	40	21	14
5	168	112	17	51	34	29	30	20	41	21	14
6	144	96	18	48	32	30	29	19	42	20	14
7	123	82	19	45	30	31	28	19	43	20	13
8	108	72	20	42	28	32	27	18	44	19	13
9	96	64	21	40	27	33	26	17	45	19	13
10	84	56	22	39	26	34	25	17	46	18	12
11	78	52	23	37	25	35	24	16	47	18	12
12	72	48	24	36	24	36	24	16	48	18	12
13	66	44	25	34	23	37	23	15	49	17	11
14	61	41	26	33	22	38	22	15	50	17	11

### RELATIVE PROPORTION OF TYPE BODIES

Table showing the number of ems of different bodies contained in 1000 ems space of any given body. Also the weight and space occupied by 1000 ems of any body. Also the number of ems of any body, and the number of inches, in one pound.

1000 EMS OF	3½ POINT	4¼ POINT	5 POINT	5½ POINT	6 POINT	7 POINT	8 POINT	9 POINT	10 POINT	11 POINT	12 POINT	WEIGHT	8Q. INCHES	
3½ point =	605	490	405	341	250	192	151	122	101	85	10 oz.	2.36		
4¼ point =	1653	810	670	563	413	316	250	203	167	141	1½ lbs.	3.91		
5 point =	2041	1235	827	695	510	391	309	250	207	174	1½ lbs.	4.82		
5½ point =	2469	1493	1210	1192	840	617	473	373	303	250	210	1½ lbs.	5.83	
6 point =	2940	1780	1440	1192	840	617	473	373	303	250	210	1½ lbs.	6.94	
7 point =	4000	2420	1950	1620	1364	735	563	445	360	297	250	210	1½ lbs.	9.44
8 point =	5224	3160	2560	2116	1780	1306	1066	840	690	540	490	340	2½ lbs.	12.35
9 point =	6612	4000	3240	2680	2252	1653	1266	790	670	564	41	lbs.	15.62	
10 point =	8164	4940	4000	3308	2780	2041	1563	1236	828	696	5	lbs.	19.29	
11 point =	9876	5972	4840	4000	3360	2469	1891	1492	1210	840	61	lbs.	23.30	
12 point =	11756	7112	5760	4760	4000	2939	2250	1778	1440	1190	71	lbs.	27.77	
Ems in 1 lb.	1600	960	790	650	550	400	300	240	200	160	140		3.75	
Ems in sq. inch . . .	223½	256	207½	171½	144	105½	81	64	51½	42½	36	41 oz.		

### STANDARD SIZES OF NEWSPAPERS

The following table of sizes is based upon the standard sizes of news paper, with columns 13 ems wide and 7 point column rule. The adoption of these sizes is advisable, especially in starting new papers, or putting in a new outfit, thereby gaining desirable uniformity.

4-COLUMN QUARTO	5-COLUMN QUARTO	6-COLUMN QUARTO	7-COLUMN QUARTO	8-COLUMN QUARTO	MATERIAL TO BE CUT TO ORDER	5-COLUMN FOLIO	6-COLUMN FOLIO	7-COLUMN FOLIO	8-COLUMN FOLIO	9-COLUMN FOLIO
22 x 32	26 x 40	30 x 44	35 x 48	40 x 52	For Standard Size of Paper . . . . .	20 x 26	22 x 30	24 x 35	26 x 40	29 x 44
19½ x 30	24½ x 38	28½ x 42	33½ x 46½	37½ x 50½	Size of Matter for each Side, over all . . . . .	18 x 24½	20 x 28½	22 x 33½	24 x 37½	27 x 42½
9 x 14	11½ x 18	13½ x 20	15½ x 22	18½ x 24	Size of each Page of Matter . . . . .	11½ x 18	13½ x 20	15½ x 22	18½ x 24	20½ x 27
24½ x 35	28½ x 43	33½ x 47	38 x 51½	42½ x 55½	Size of Chases, over all, for each Side . . . . .	*21½ x 28½	23½ x 33½	25½ x 38	27½ x 42½	30½ x 47
15½ x 22½	19½ x 26½	21½ x 31	17½ x 23½	19½ x 25½	Size of each Chase, inside . . . . .	19½ x 26½	14½ x 21½	17½ x 23½	19½ x 25½	21½ x 28½
1½	1½	1	1½	1½	Width of Cross-Bar . . . . .	1½				
1½	1½	1	1½	1½	Width of Backs . . . . .	1	1½	1½	1½	1½
2 pairs	2 pairs	2 pairs	4 pairs	4 pairs	Width of Outside Iron . . . . .	1	1½	1½	1½	1½
14½ x 8	18½ x 8	20½ x 8	22½ x 8	24½ x 8	Number of Chases required . . . . .	2 chases	2 pairs	2 pairs	2 pairs	2 pairs
8½ x 4	11½ x 4	13½ x 4	15½ x 4	18½ x 4	Size of Side Sticks . . . . .	18½ x 8	20½ x 8	22½ x 8	24½ x 8	27½ x 8
8 each	8 each	8 each	8 each	8 each	Size of Foot Sticks . . . . .	11½ x 8	13½ x 8	15½ x 8	18½ x 8	20½ x 8
13½	17½	19½	21½	23½	Number of Side and Foot Sticks required . . . . .	4 each	4 each	4 each	4 each	4 each
4	32	40	48	56	Length of 7 Point Column Rules, Inside Pages † . . . . .	17½	19½	21½	23½	25½
53½	67½	80½	94½	108½	Total Number of Column Rules required . . . . .	16	20	24	28	32
9	9	9	9	9	Length of Head Rules and Slugs (Pica ems) . . . . .	67½	80½	94½	108½	121½
11	11	11	11	11	Number of 6 Point Brass Head Slugs required . . . . .	5	5	5	5	5
15	19	21	23	25	Number of 3 Point Brass Head Slugs required . . . . .	5	7	7	7	7
10	12	14	17	19	Length of 3 Point Brass Leads for Side of Chases . . . . .	19	21	23	25	28
8 each	8 each	8 each	8 each	8 each	Length of 3 Point Brass Leads for Head of Chases . . . . .	12	14	17	19	21
					Number of Side and Head Brass Leads required . . . . .	4 each	4 each	4 each	4 each	4 each

\* For five-column folio use news chases.

† For four, five and six-column quartos, twin chases with bars. Size inside each chase (\* and †) includes the width of cross-bar. For all other sizes twin chases should be employed.

‡ The "size of chases over all" for seven and eight column quartos, is the size of two pairs over all. These measurements, with the "size of matter for each side, over all," show the size press necessary to print one side of paper.

§ Length of column rules for first page determined by size of heading, or say about two inches shorter than the others.

### TYPE STANDARDS

The following is the standard adopted by the International Typographical Union. The basis of measurement is the lower-case alphabet, from a to z inclusive, and the ems used are the same body as the type measured.

4½ point . . . . .	18 ems.	8 point . . . . .	14 ems.
5 " . . . . .	17 " "	9 " . . . . .	13 " "
5½ " . . . . .	16 " "	10 " . . . . .	13 " "
6 " . . . . .	15 " "	11 " . . . . .	13 " "
7 " . . . . .	14 " "	12 " . . . . .	13 " "

### HOW TO ESTIMATE

To ascertain the quantity of body type required for a publication, find the number of square inches and divide the same by four, and the quotient will be the approximate weight of type required; but, as it is impossible to set the cases entirely clear, it is necessary to add 25 per cent. to the weight of large fonts, and 33½ per cent. to small fonts, to allow for dead letter.

### AMERICAN POINT SYSTEM

The following table gives the names of the old bodies and their new designation by points:

POINT SYSTEM	OLD SYSTEM
3½ Point . . . . .	Brilliant.
4½ " . . . . .	Diamond.
5 " . . . . .	Pearl.
5½ " . . . . .	Agate.
6 " . . . . .	Nonpareil.
7 " . . . . .	Minion.
8 " . . . . .	Brevier.
9 " . . . . .	Bourgeois.
10 " . . . . .	Long Primer.
11 " . . . . .	Small Pica.
12 " . . . . .	Pica.
14 " . . . . .	2-line Minion or English.
16 " . . . . .	2-line Brevier.
18 " . . . . .	Great Primer.
20 " . . . . .	2-line Long Primer or Paragon.
22 " . . . . .	2-line Small Pica.
24 " . . . . .	2-line Pica.
28 " . . . . .	2-line English.
30 " . . . . .	5-line Nonpareil.
32 " . . . . .	4-line Brevier.
36 " . . . . .	2-line Great Primer.
40 " . . . . .	Double Paragon.
42 " . . . . .	7-line Nonpareil.
48 " . . . . .	4-line Small Pica or Canon.
48 " . . . . .	4-line Pica.
54 " . . . . .	9-line Nonpareil.
60 " . . . . .	5-line Pica.
72 " . . . . .	6-line Pica.

### USEFUL IN ORDERING SORTS

The following table shows what each box in the type case will hold:

LETTERS	WEIGHT IN FULL BOX
a c d i s m n h o u t r . . . . .	2 pounds.
f b l v g y p w . . . . .	15 ounces.
k j z x q and all figures . . . . .	6 " "
e . . . . .	3 pounds.
Caps and Small Caps . . . . .	5 ounces.