

Diameter		50	75	100	125	150	175	200
1/16	0.063	0.8	1.2	1.6	2.0	2.5	2.9	3.3
1/8	0.125	1.6	2.5	3.3	4.1	4.9	5.7	6.5
3/16	0.188	2.5	3.7	4.9	6.1	7.4	8.6	9.8
1/4	0.250	3.3	4.9	6.5	8.2	9.8	11.5	13.1
5/16	0.313	4.1	6.1	8.2	10.2	12.3	14.3	16.4
3/8	0.375	4.9	7.4	9.8	12.3	14.7	17.2	19.6
7/16	0.438	5.7	8.6	11.5	14.3	17.2	20.0	22.9
1/2	0.500	6.5	9.8	13.1	16.4	19.6	22.9	26.2
5/8	0.625	8.2	12.3	16.4	20.5	24.5	28.6	32.7
3/4	0.750	9.8	14.7	19.6	24.5	29.5	34.4	39.3
7/8	0.875	11.5	17.2	22.9	28.6	34.4	40.1	45.8
1	1.000	13.1	19.6	26.2	32.7	39.3	45.8	52.4
1 1/4	1.250	16.4	24.5	32.7	40.9	49.1	57.3	65.4
1 1/2	1.500	19.6	29.5	39.3	49.1	58.9	68.7	78.5
1 3/4	1.750	22.9	34.4	45.8	57.3	68.7	80.2	91.6
2	2.000	26.2	39.3	52.4	65.4	78.5	91.6	104.7
2 1/4	2.250	29.5	44.2	58.9	73.6	88.4	103.1	117.8
2 1/2	2.500	32.7	49.1	65.4	81.8	98.2	114.5	130.9
2 3/4	2.750	36.0	54.0	72.0	90.0	108.0	126.0	144.0
3	3.000	39.3	58.9	78.5	98.2	117.8	137.4	157.1
3 1/2	3.500	45.8	68.7	91.6	114.5	137.4	160.3	183.2
4	4.000	52.4	78.5	104.7	130.9	157.1	183.2	209.4
4 1/2	4.500	58.9	88.4	117.8	147.3	176.7	206.2	235.6
5	5.000	65.4	98.2	130.9	163.6	196.3	229.1	261.8
5 1/2	5.500	72.0	108.0	144.0	180.0	216.0	252.0	288.0
6	6.000	78.5	117.8	157.1	196.3	235.6	274.9	314.1

$$\text{RPM} = (3.82 * \text{SFM}) / \text{Diameter}$$

Cast Iron 60-80 SFM

RPM							
250	300	350	400	450	500	550	600
4.1	4.9	5.7	6.5	7.4	8.2	9.0	9.8
8.2	9.8	11.5	13.1	14.7	16.4	18.0	19.6
12.3	14.7	17.2	19.6	22.1	24.5	27.0	29.5
16.4	19.6	22.9	26.2	29.5	32.7	36.0	39.3
20.5	24.5	28.6	32.7	36.8	40.9	45.0	49.1
24.5	29.5	34.4	39.3	44.2	49.1	54.0	58.9
28.6	34.4	40.1	45.8	51.5	57.3	<b>63.0</b>	<b>68.7</b>
32.7	39.3	45.8	52.4	58.9	<b>65.4</b>	<b>72.0</b>	78.5
40.9	49.1	57.3	<b>65.4</b>	<b>73.6</b>	81.8	90.0	98.2
49.1	58.9	<b>68.7</b>	<b>78.5</b>	88.4	98.2	<b>108.0</b>	<b>117.8</b>
57.3	<b>68.7</b>	<b>80.2</b>	91.6	103.1	<b>114.5</b>	126.0	137.4
<b>65.4</b>	<b>78.5</b>	91.6	<b>104.7</b>	<b>117.8</b>	130.9	144.0	157.1
81.8	98.2	<b>114.5</b>	130.9	147.3	163.6	180.0	196.3
98.2	<b>117.8</b>	137.4	157.1	176.7	196.3	216.0	235.6
<b>114.5</b>	137.4	160.3	183.2	206.2	229.1	<b>252.0</b>	<b>274.9</b>
130.9	157.1	183.2	209.4	235.6	<b>261.8</b>	<b>288.0</b>	<b>314.1</b>
147.3	176.7	206.2	235.6	<b>265.1</b>	<b>294.5</b>	<b>324.0</b>	353.4
163.6	196.3	229.1	<b>261.8</b>	<b>294.5</b>	<b>327.2</b>	359.9	392.7
180.0	216.0	<b>252.0</b>	<b>288.0</b>	<b>324.0</b>	359.9	395.9	431.9
196.3	235.6	<b>274.9</b>	<b>314.1</b>	353.4	392.7	431.9	471.2
229.1	<b>274.9</b>	<b>320.7</b>	366.5	412.3	458.1	503.9	549.7
<b>261.8</b>	<b>314.1</b>	366.5	418.8	471.2	523.6	575.9	628.3
<b>294.5</b>	353.4	412.3	471.2	530.1	589.0	647.9	706.8
<b>327.2</b>	392.7	458.1	523.6	589.0	654.5	719.9	785.3
359.9	431.9	503.9	575.9	647.9	719.9	791.9	863.9
392.7	471.2	549.7	628.3	706.8	785.3	863.9	942.4

Mild Steel 100-125 SFM

Aluminum 250-350 SFM