

## CUTTING SPEED CHART R.P.M. DEPENDING ON DRILL Ø & CUTTING SPEED

Cutting speed m/min.	Ø DRILLS AND CUTTING SPEED R.P.M.																
	2	2,5	3	4	5	6,5	8	10	13	16	20	25	30	40	50	63	80
<b>3</b>	477	382	318	238	190	147	119	95	73	60	48	38	32	24	19	15	12
<b>5</b>	796	636	530	398	318	245	198	159	122	99	80	64	53	40	32	25	20
<b>8</b>	1.273	1.018	848	636	509	392	318	254	195	159	127	102	85	64	50	40	32
<b>10</b>	1.592	1.273	1.061	795	636	490	398	318	245	199	159	127	106	80	64	50	40
<b>12</b>	1.910	1.528	1.273	955	764	588	477	382	294	238	190	152	127	95	76	60	48
<b>15</b>	2.387	1.910	1.592	1.194	955	735	596	477	367	298	138	190	159	119	95	75	60
<b>20</b>	3.183	2.546	2.122	1.592	1.273	979	795	636	490	398	318	255	212	159	127	101	80
<b>25</b>	3.979	3.183	2.652	1.989	1.592	1224	995	795	612	497	398	318	265	198	159	126	99
<b>30</b>	4.775	3.820	3.183	2.387	1.910	1469	1.194	995	735	596	477	382	318	238	190	151	119
<b>35</b>	5.570	4.456	3.714	2.785	2.228	1.714	1.393	1.114	857	696	557	445	371	278	222	176	139
<b>40</b>	6.366	5.092	4.245	3.183	2.456	1958	1.592	1.273	979	795	636	509	424	318	255	202	159
<b>45</b>	7.162	5.730	4.775	3.581	2.865	2.204	1.790	1.432	1.102	895	716	572	477	358	286	227	179
<b>50</b>	7.958	6.366	5.305	3.978	3.183	2.448	1.990	1.592	1.224	995	795	636	530	398	318	252	198
<b>55</b>	8.754	7.002	5.836	4.376	3.501	2.693	2.188	1.750	1.346	1.094	875	700	584	438	350	277	218
<b>60</b>	9.550	7.639	6.366	4.775	3.820	2.938	2.388	1.910	1.469	1.194	955	764	636	477	382	303	238
<b>70</b>	11.142	8.912	7.428	5.570	4.456	3.428	2.785	2.228	1.714	1.392	1.114	891	742	557	445	354	278
<b>75</b>	11.937	9.549	7.958	5.968	4.775	3.672	2.981	2.387	1.836	1.492	1.194	955	795	596	477	378	298
<b>80</b>	12.732	10.185	8.488	6.366	5.092	3.918	3.183	2.546	1.958	1.592	1.273	1.018	848	636	509	404	318
<b>90</b>	14.324	11.459	9.550	7.162	5.730	4.407	1.581	2.865	2.204	1.790	1.432	1.145	955	716	572	455	358
<b>100</b>	15.915	12.732	10.611	7.958	6.366	4.897	3.978	3.183	2.448	1.989	1.592	1.273	1.061	795	636	505	398

### CONVERSIN FORMULA

$$\text{R.P.M} = \frac{V_c \times 1.000}{\varnothing \times \Pi}$$

$$V_c = \frac{\text{R.P.M.} \times \varnothing \times \Pi}{1.000}$$

- R.P.M. = REVOLUTIONS PER MINUTE
- Vc. = CUTTING DEPTH IN MILLIMETER PER MINUTE
- Ø = DRILL DIAMETER
- Π = 3,1416

### EXAMPLE:

Drilling material: GREY CAST IRON  
DRILL Ø: 10 Vc: 20 m/min.

$$\text{R.P.M.} = \frac{20 \times 1.000}{10 \times \Pi} = 637$$