

Hi-PerCarb® Series 135 and 135L Speed and Feed Recommendations – Fractional and Metric



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Material Classification	Hardness		Speed		Drill Diameter					
	Bhn	RC	sfm	m/min	.015 – .111 in. (.4 – 2.5 mm)	.018 – .197 in. (3 – 5 mm)	.203 – .316 in. (5.5 – 8 mm)	.328 – .500 in. (8.5 – 12.5 mm)	.512 – .640 in. (13 – 16 mm)	.650 – .875 in. (16.5 – 20 mm)
low carbon steel	≤ 170	≤ 5	400	120	.0005 – .005	.005 – .008	.008 – .012	.012 – .016	.016 – .020	.020 – .024
1018	–	–	–	–	(.013 – .13)	(.13 – .21)	(.21 – .31)	(.31 – .40)	(.40 – .50)	(.50 – .60)
alloyed steel	≤ 270	≤ 28	300	90	.0003 – .004	.004 – .006	.006 – .009	.009 – .012	.012 – .015	.015 – .018
4140	–	–	–	–	(.008 – .10)	(.10 – .15)	(.15 – .23)	(.23 – .31)	(.31 – .38)	(.38 – .45)
cast iron	150-200	1-15	400	120	.007 – .010	.010 – .014	.014 – .017	.017 – .020	.020 – .024	.024 – .028
–	–	–	–	–	(.018 – .25)	(.25 – .36)	(.36 – .43)	(.43 – .51)	(.51 – .61)	(.61 – .71)
–	200-300	15-30	245	75	.0005 – .008	.008 – .012	.012 – .014	.014 – .017	.017 – .020	.020 – .024
–	–	–	–	–	(.013 – .21)	(.21 – .31)	(.31 – .36)	(.36 – .43)	(.43 – .51)	(.51 – .61)
–	300-400	30-45	190	60	.0004 – .006	.006 – .010	.010 – .012	.012 – .015	.015 – .018	.018 – .020
–	–	–	–	–	(.010 – .15)	(.15 – .25)	(.25 – .31)	(.31 – .38)	(.38 – .46)	(.46 – .51)
tool steel	≤ 170	≤ 5	230	70	.0003 – .003	.003 – .005	.005 – .007	.007 – .010	.010 – .013	.013 – .016
H-13	–	–	–	–	(.008 – .75)	(.75 – .13)	(.13 – .18)	(.18 – .25)	(.25 – .33)	(.33 – .40)
stainless steel	≤ 170	≤ 5	70-140	20-45	.0002 – .002	.002 – .004	.004 – .006	.006 – .008	.008 – .010	.010 – .012
300 Series	–	–	–	–	(.005 – .05)	(.05 – .10)	(.10 – .15)	(.15 – .21)	(.21 – .25)	(.25 – .31)
titanium	≤ 280	≤ 29	100	30	.0002 – .002	.002 – .003	.003 – .004	.004 – .006	.006 – .008	.008 – .010
6Al4V	–	–	–	–	(.005 – .050)	(.050 – .075)	(.075 – .100)	(.10 – .15)	(.15 – .21)	(.21 – .25)
high temp alloys	≤ 220	≤ 18	50	15	.0001 – .001	.001 – .002	.002 – .003	.003 – .004	.004 – .005	.005 – .006
Inconel 718	–	–	–	–	(.002 – .025)	(.025 – .050)	(.050 – .075)	(.075 – .100)	(.10 – .13)	(.13 – .15)



Resharpener service available upon request.
Reduce Speed 20% when hole depth exceeds 3 diameters.



Servicio de reafilado disponible por pedido.
Reduzca la velocidad en 20% cuando la profundidad del agujero supere 3 diámetros.



Service de réaffutage disponible sur demande.
Réduire la vitesse de 20% lorsque la profondeur du trou dépasse 3 diamètres.