

Characteristic Values Grade Table and Applications of ZC Carbide

Comparison					Density g/cm ³	Hardness HRA	TRS N/mm ²	Applications
For Tools of Wear Resistance	ZW4G		KG05		15.00	93.00	2900	Suitable for wear resistance tools for pipe die, wire drawing die, shrinkage pipe die and powder metallurgic mould.
	ZW4T				15.10	93.80	2800	
	ZW6G	G2	KG1	C01	14.90	92.00	3000	
	ZW6T				14.95	92.80	2900	
	ZW6X	G2			14.91	91.50	3000	
	ZW06	G2	KG2	C02	14.98	91.00	3500	
	ZW08	G3	KG3	C03	14.75	90.00	3400	
	ZW10	G4			14.60	89.50	3600	
	ZW12	G5	KG5	S155	14.40	88.50	3800	For anti weary & anti impact tools, e.g cut off tools, heavy extruding fastener dies, etc.
	ZW14	G6	KG6	E36	14.10	87.50	3500	
	ZW70				14.07	87.00	3600	Suitable for extruding tools
	ZW16	CD650	KG7		13.85	89.00	4100	for thin thickness parts' punches, extruding dies, forming dies, etc.
For Tools of High Impact Resistance	ZW18C		KE18		13.60	83.50	2800	for carbide punches on 1st station
	ZW15C		VA70	C27	14.00	86.50	2900	for impact resistance forging dies, gear & spline shape dies, etc.
	ZW20C	G7	VA80	C28	13.55	84.40	3200	for bolts & nuts dies, cut off dies, hex segment dies, etc.
	ZW22C		VA90	E55	13.36	83.50	2600	for nuts dies, cut off dies, carbide punches for 1st station, etc.
	ZW25C		VA95	C11	13.10	81.00	2800	for heavy impact forging dies, nuts dies, etc.
	ZW27C				12.95	80.00	2900	for big flange dies
	ZC18C		ST-6	SI65	13.60	86.50	3200	for white iron screw dies, common straight hole dies, tri-angle hole dies, etc.
	ZC20C		ST-7		13.50	85.50	3200	Suitable for nut dies/bolt dies
	ZC20	G7		E40	13.38	86.30	3200	
	ZC22C				13.18	84.50	2860	
	ZC25C				13.05	82.50	2800	for white iron nuts & screws dies
	ZB18		EA65		13.70	84.50	2900	Suitable for normal bolts dies
	ZB20C	G7	ST-1		13.45	84.40	3000	for both carbon and stainless screws & bolts dies
	ZW23			SI85	13.25	84.10	3000	for gear & spline shape dies, big flange dies, hex segment dies, etc.
	ZC23C				13.17	83.50	2700	for stainless bolts & nuts dies
	ZW80				13.09	84.20	2800	Flower tooth die, head forming die
Super Ultramicro	HZ88	ZN01	WF15	Super Ultramicro	14.40	92.00	3300	for steel & casting iron drillers, broaching dies, cutting tools, carbide punches, etc.
	HZ86	ZN15	WF20		14.15	91.50	3600	
	ZW30				14.05	91.00	3300	
Heat Resistance	HZ40		HA60	Heat Resistance	13.97	84.80	2690	for hot forming dies
	HZ60				13.42	82.50	2800	
	HZ70				13.45	84.50	3000	
New generation for anti weary & anti impact cold forming tools	ZC50				13.88	89.50	3800	for backwards extruding & heavy forward extruding dies.
	ZC60				13.78	86.50	3300	for backwards & forwards extruding dies.
	ZC70				13.80	88.00	3400	for backwards & forwards extruding dies.
	ZC85				13.10	83.60	2700	for big flange, heading, and hex segment dies.
	ZC86				13.30	84.00	2860	for gear shapes plus extruding dies.