

# IPDC



## ILJIN Polycrystalline Diamond Compact

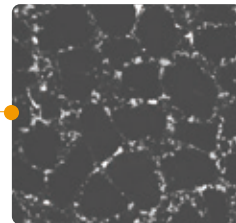
For decades, ILJIN Diamond has been producing top quality superhard materials including synthetic diamonds. As a result of the unceasing technological innovation and accumulative experience, ILJIN Diamond presents IPDC for the utmost drill bit performance. Oil and gas industry will be able to save cost and foster production by the use of IPDC.



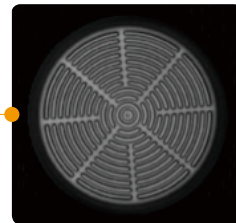
Diamond Table

Interface

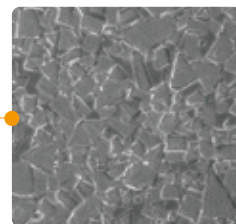
Substrate



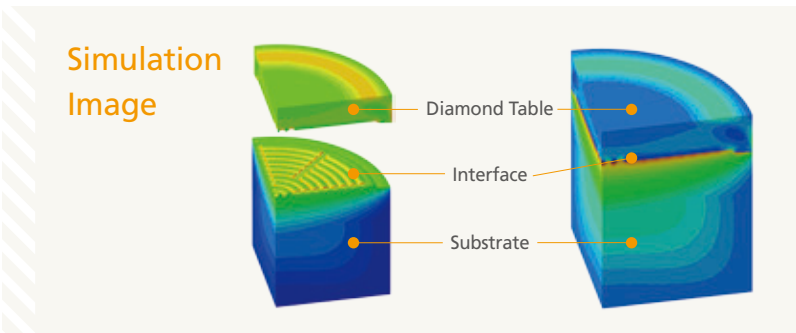
The uniform bonding and high density of diamond particles attribute to ILJIN's advanced HPHT technology.



The carbide interface was designed by FEM simulation to optimize residual stress and strain.



The carbide substrate keeps the diamond layer strong when the PDC is brazed to the drill bit body.



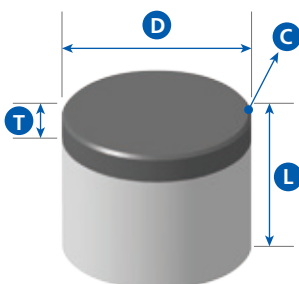
### Simulation Image

Diamond Table

Interface

Substrate

## Size Availability



Grade	13	16	STD	(C0.3)	
Grade	Product size $D+L$			Diamond table thickness $T$	Diamond chamfer length $C$
Wear resistance Grade	1308	1313	1316	STD 2.0mm	C0.2 0.2mm
Impact resistance Grade	1608	1613	1616	15 1.5 mm	C0.3 0.3mm
Balance Grade	1913	1916	1919	23 2.3mm	C0.4 0.4mm
Standard Carbide Chamfer is 0.6mm				25 2.5mm	

\* The specification and design of IPDC can be customized to satisfy the customers' request.

