

# KRUZ-FSL Drills, Cutting Speed Recommendation

Drill Dia.	Φ8~16mm		Φ16~25mm		Φ25~32mm		Φ32~40mm		Φ40~50mm	
Condition Material Group	Speed (m/min)	Feed (mm/rev)								
Grey cast iron <b>(FC)</b>	80~150	0.20~0.30	80~150	0.25~0.45	80~160	0.35~0.55	90~200	0.34~0.58	90~200	0.38~0.60
Nodular cast iron <b>(FCD)</b>	80~140	0.15~0.25	80~140	0.22~0.45	80~150	0.32~0.52	90~160	0.35~0.62	90~200	0.38~0.60
Carbon steel <b>(S45C)</b>	80~140	0.15~0.30	80~140	0.16~0.40	80~150	0.20~0.40	80~150	0.22~0.48	80~160	0.25~0.54
Alloy steel <b>(SCM440)</b>	70~140	0.15~0.30	70~140	0.15~0.40	70~140	0.18~0.40	80~140	0.25~0.47	80~140	0.27~0.52
Hardened steel <b>(SKD11)</b>	40~50	0.10~0.20	40~50	0.12~0.28	40~50	0.16~0.35	40~60	0.20~0.38	40~60	0.22~0.42
Stainless steel <b>(SUS)</b>	30~40	0.10~0.20	35~50	0.10~0.22	35~50	0.15~0.28	40~55	0.18~0.30	40~55	0.22~0.32
Aluminum 130HB <b>(AL)</b>	120~200	0.20~0.30	120~200	0.25~0.40	120~200	0.30~0.45	120~200	0.30~0.45	120~200	0.30~0.50

- ☞ This data is recommended for 3xDia. And should be reduced about 15~20% for 5xD, 7xD, 10xD drills.
- ☞ The data is normally suggested for oil-mist(MQL) coolant condition and also possible to run in other normal condition if machining environment like clamping etc. are secured in good .