

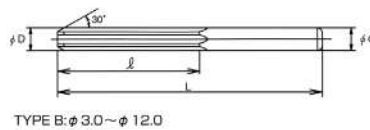
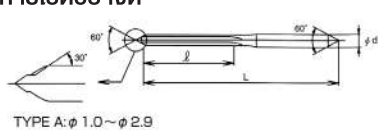
# CUTTING TOOLS & PRECISION TOOLS



โอคาซากิ

## CSR Solid Carbide Reamer (Straight Shank)

ดอกรีมเมอร์คาร์ไบด์ ก้านตรง  
ผลิตจากทังสเตนคาร์ไบด์อย่างดี



Unit : mm

KT Code	TOOL No.	D Dia.	Flute length	L Overall length	d Shank Dia.	NT No. of teeth	ราคา
O081-CSR-0100	CSR-010	1.0	12	50	1.0	4	
O081-CSR-0150	CSR-015	1.5	15	50	1.5	4	
O081-CSR-0200	CSR-020	2.0	18	50	2.0	4	
O081-CSR-0210	CSR-021	2.1	20	50	2.5	4	
O081-CSR-0220	CSR-022	2.2	20	50	2.5	4	
O081-CSR-0230	CSR-023	2.3	20	50	2.5	4	
O081-CSR-0240	CSR-024	2.4	20	50	2.5	4	
O081-CSR-0250	CSR-025	2.5	20	50	2.5	4	
O081-CSR-0260	CSR-026	2.6	20	50	3.0	4	
O081-CSR-0270	CSR-027	2.7	20	50	3.0	4	
O081-CSR-0280	CSR-028	2.8	20	50	3.0	4	
O081-CSR-0290	CSR-029	2.9	20	50	3.0	4	
O081-CSR-0300	CSR-030	3.0	27	60	3.0	4	
O081-CSR-0310	CSR-031	3.1	27	60	3.5	4	
O081-CSR-0320	CSR-032	3.2	27	60	3.5	4	
O081-CSR-0330	CSR-033	3.3	27	60	3.5	4	
O081-CSR-0340	CSR-034	3.4	27	60	3.5	4	
O081-CSR-0350	CSR-035	3.5	27	60	3.5	4	
O081-CSR-0360	CSR-036	3.6	27	60	4.0	4	
O081-CSR-0370	CSR-037	3.7	27	60	4.0	4	
O081-CSR-0380	CSR-038	3.8	27	60	4.0	4	
O081-CSR-0390	CSR-039	3.9	27	60	4.0	4	
O081-CSR-0400	CSR-040	4.0	27	60	4.0	4	
O081-CSR-0410	CSR-041	4.1	30	70	4.5	6	
O081-CSR-0420	CSR-042	4.2	30	70	4.5	6	
O081-CSR-0430	CSR-043	4.3	30	70	4.5	6	
O081-CSR-0440	CSR-044	4.4	30	70	4.5	6	
O081-CSR-0450	CSR-045	4.5	30	70	4.5	6	
O081-CSR-0460	CSR-046	4.6	30	70	5.0	6	
O081-CSR-0470	CSR-047	4.7	30	70	5.0	6	
O081-CSR-0480	CSR-048	4.8	30	70	5.0	6	
O081-CSR-0490	CSR-049	4.9	30	70	5.0	6	
O081-CSR-0500	CSR-050	5.0	30	70	5.0	6	
O081-CSR-0550	CSR-055	5.5	30	80	5.5	6	
O081-CSR-0600	CSR-060	6.0	30	80	6.0	6	
O081-CSR-0650	CSR-065	6.5	35	80	7.0	6	
O081-CSR-0700	CSR-070	7.0	35	80	7.0	6	
O081-CSR-0750	CSR-075	7.5	35	80	8.0	6	
O081-CSR-0800	CSR-080	8.0	35	80	8.0	6	
O081-CSR-0850	CSR-085	8.5	40	90	9.0	6	
O081-CSR-0900	CSR-090	9.0	40	90	9.0	6	
O081-CSR-0950	CSR-095	9.5	40	90	10.0	6	
O081-CSR-1000	CSR-100	10.0	40	90	10.0	6	
O081-CSR-1050	CSR-105	10.5	40	90	11.0	6	
O081-CSR-1100	CSR-110	11.0	40	90	11.0	6	
O081-CSR-1150	CSR-115	11.5	45	90	12.0	6	
O081-CSR-1200	CSR-120	12.0	45	90	12.0	6	

### TECHNICAL INFORMATION : CSR

ข้อมูลทางด้านเทคนิค ของดอกรีมเมอร์คาร์ไบด์ ก้านตรง

### Recommended Drilling Conditions for CSR

• Diameter tolerance table

Work Material		Carbon Steels, Alloy Steels (S55C, SKD, SUS)		Aluminum Alloys (A2024, AC8A)		Cast Iron (FC, FCD)	
Cutting Speed		5~9 m/min		10~20 m/min		9~12 m/min	
Dia. (mm)	Removal Amount (mm)	Drilling Condition		Drilling Condition		Drilling Condition	
		Spindle Speed (rpm)	Feed (mm/rev)	Spindle Speed (rpm)	Feed (mm/rev)	Spindle Speed (rpm)	Feed (mm/rev)
2	0.1 ~ 0.2	1000	0.1 ~ 0.2	2800	0.2 ~ 0.3	1800	0.2 ~ 0.3
4	0.1 ~ 0.2	500	0.1 ~ 0.2	1400	0.2 ~ 0.3	940	0.2 ~ 0.3
6	0.2 ~ 0.3	340	0.2 ~ 0.3	950	0.2 ~ 0.3	630	0.2 ~ 0.3
8	0.2 ~ 0.3	250	0.2 ~ 0.3	720	0.3 ~ 0.4	470	0.3 ~ 0.4
10	0.2 ~ 0.3	190	0.2 ~ 0.3	570	0.3 ~ 0.4	380	0.3 ~ 0.4
12	0.2 ~ 0.3	160	0.2 ~ 0.3	480	0.4 ~ 0.5	300	0.3 ~ 0.5

Dia.	Tolerance
1.0 ≤ Dia < 3.0	+0.006 +0.002
3.0 ≤ Dia < 6.0	+0.009 +0.004
6.0 ≤ Dia < 10.0	+0.012 +0.006
10.0 ≤ Dia < 12.0	+0.015 +0.007

• Applicable Work Material

S50C Carbon Steels ~30HRC	SCM Alloy Steels ~40HRC	SKD Hardened Steels ~50HRC	SKD11 Hardened Steels ~60HRC	SUS304 Stainless Steels	FC Cast Iron	A7075 Aluminum Alloys
○	○	○	○	○	○	○

- 1) Because the change of the appropriate drilling condition is remarkable because of the working condition and the machine tool used, it is necessary to adjust the reamer processing properly.
- 2) The cutting oil must use no water solubility cutting oil with lubricity enough.