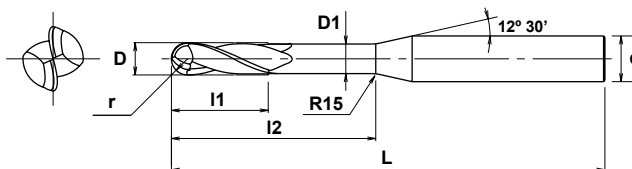


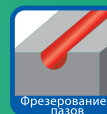
Профильное
фрезерованиеФрезерование
пазовФрезерование
карманов

Концевые фрезы серии Ball Nose

Тип DZ-OCSB-LN

- 2 зуба, угол спирали 30°,
хвостовик с обнижением

Номер по каталогу	Наличие на складе	Размеры, мм						
		D	r	l1	l2	L	D1	d
DZ-OCSB2006-2LN	■	0.6	0.3	0.6	2	50	0.56	4
DZ-OCSB2006-4LN	■	0.6	0.3	0.6	4	50	0.56	4
DZ-OCSB2006-8LN	■	0.6	0.3	0.6	8	50	0.56	4
DZ-OCSB2010-3LN	■	1.0	0.5	1	3	60	0.95	4
DZ-OCSB2010-4LN	■	1.0	0.5	1	4	60	0.95	4
DZ-OCSB2010-5LN	■	1.0	0.5	1	5	60	0.95	4
DZ-OCSB2010-6LN	■	1.0	0.5	1	6	60	0.95	4
DZ-OCSB2010-8LN	■	1.0	0.5	1	8	60	0.95	4
DZ-OCSB2010-11LN	■	1.0	0.5	1	11	60	0.95	4
DZ-OCSB2010-12LN	■	1.0	0.5	1	12	60	0.95	4
DZ-OCSB2010-14LN	■	1.0	0.5	1	14	60	0.95	4
DZ-OCSB2010-17LN	■	1.0	0.5	1	17	60	0.95	4
DZ-OCSB2010-21LN	■	1.0	0.5	1	21	60	0.95	4
DZ-OCSB2015-8LN	■	1.5	0.75	1.5	8	60	1.45	4
DZ-OCSB2015-10LN	■	1.5	0.75	1.5	10	60	1.45	4
DZ-OCSB2015-12LN	■	1.5	0.75	1.5	12	60	1.45	4
DZ-OCSB2015-16LN	■	1.5	0.75	1.5	16	60	1.45	4
DZ-OCSB2015-20LN	■	1.5	0.75	1.5	20	60	1.45	4
DZ-OCSB2020S4-4LN	■	2.0	1.0	2	4	60	1.95	4
DZ-OCSB2020S4-6LN	■	2.0	1.0	2	6	60	1.95	4
DZ-OCSB2020-9LN	■	2.0	1.0	2	9	60	1.95	6
DZ-OCSB2020S4-9LN	■	2.0	1.0	2	9	60	1.95	4
DZ-OCSB2020-11LN	■	2.0	1.0	2	11	60	1.95	6
DZ-OCSB2020S4-11LN	■	2.0	1.0	2	11	60	1.95	4
DZ-OCSB2020S4-12LN	■	2.0	1.0	2	12	60	1.95	4
DZ-OCSB2020S4-14LN	■	2.0	1.0	2	14	60	1.95	4
DZ-OCSB2020-17LN	■	2.0	1.0	2	17	60	1.95	6
DZ-OCSB2020S4-17LN	■	2.0	1.0	2	17	60	1.95	4
DZ-OCSB2020-21LN	■	2.0	1.0	2	21	60	1.95	6
DZ-OCSB2020S4-21LN	■	2.0	1.0	2	21	60	1.95	4
DZ-OCSB2020S4-25LN	■	2.0	1.0	2	25	70	1.95	4
DZ-OCSB2020S4-30LN	■	2.0	1.0	2	30	70	1.95	4
DZ-OCSB2025S4-11LN	■	2.5	1.25	2.5	11	60	2.45	4
DZ-OCSB2025S4-17LN	■	2.5	1.25	2.5	17	60	2.45	4
DZ-OCSB2025S4-21LN	■	2.5	1.25	2.5	21	60	2.45	4
DZ-OCSB2030-9LN	■	3.0	1.5	3.0	9	60	2.95	6
DZ-OCSB2030-10LN	■	3.0	1.5	3.0	10	60	2.95	6
DZ-OCSB2030-12LN	■	3.0	1.5	3.0	12	60	2.95	6
DZ-OCSB2030-17LN	■	3.0	1.5	3.0	17	60	2.95	6
DZ-OCSB2030-21LN	■	3.0	1.5	3.0	21	60	2.95	6
DZ-OCSB2030-30LN	■	3.0	1.5	3.0	30	70	2.95	6
DZ-OCSB2030-35LN	■	3.0	1.5	3.0	35	80	2.95	6
DZ-OCSB2040-10LN	■	4.0	2.0	4.0	10	70	3.95	6
DZ-OCSB2040-13LN	■	4.0	2.0	4.0	13	70	3.95	6
DZ-OCSB2040-17LN	■	4.0	2.0	4.0	17	70	3.95	6
DZ-OCSB2040-21LN	■	4.0	2.0	4.0	21	70	3.95	6
DZ-OCSB2040-30LN	■	4.0	2.0	4.0	30	80	3.95	6
DZ-OCSB2040-40LN	■	4.0	2.0	4.0	40	90	3.95	6
DZ-OCSB2040-50LN	■	4.0	2.0	4.0	50	100	3.95	6



Концевые фрезы серии Ball Nose

Рекомендации по выбору режимов резания для фрез серии DZ-OCSB-LN

Материал				Углеродистые стали S55C (180~280HB)		Закаленные стали SKD, SNCM (180~280HB)		Улучшенные стали NAK55, NAK80 (35~45HRC)		Инструментальные стали SKD, SNCM (300HB)	
Диаметр	I2	ap	ae	n	мм/мин	n	мм/мин	n	мм/мин	n	мм/мин
1.0	3~4	0.07	0.02	40,000	1,800	32,000	1,400	28,000	1,200	32,000	1,400
1.0	5~6	0.06	0.017	36,000	1,600	28,000	1,200	25,000	1,000	28,000	1,200
1.0	8	0.04	0.014	28,000	1,200	22,000	1,000	20,000	900	22,000	1,000
1.0	11~12	0.025	0.012	24,000	1,000	19,000	850	17,000	750	19,000	850
1.0	17	0.015	0.011	20,000	900	16,000	700	14,000	600	16,000	700
1.0	21	0.010	0.010	16,000	700	12,000	500	10,000	450	12,000	500
1.5	8	0.09	0.025	22,000	1,400	18,000	1,200	16,000	1,000	18,000	1,200
1.5	10~12	0.06	0.021	17,000	1,100	14,000	950	12,000	850	14,000	950
1.5	16~20	0.04	0.019	15,000	1,000	12,000	800	10,000	700	12,000	800
2.0	4	0.14	0.04	20,000	1,700	16,000	1,400	14,000	1,200	16,000	1,400
2.0	6	0.14	0.04	20,000	1,700	16,000	1,400	14,000	1,200	14,000	1,200
2.0	9	0.14	0.04	20,000	1,700	16,000	1,400	14,000	1,200	11,000	1,000
2.0	11~12	0.12	0.033	17,000	1,400	14,000	1,200	12,000	1,000	10,000	900
2.0	14	0.08	0.03	13,000	1,200	11,000	1,000	10,000	900	10,000	900
2.0	17	0.08	0.03	13,000	1,200	11,000	1,000	10,000	900	8,000	700
2.0	21	0.05	0.025	12,000	1,000	10,000	900	9,000	800	6,000	500
2.5	11	0.17	0.05	15,000	1,600	12,000	1,350	10,000	1,200	12,000	1,350
2.5	17~21	0.15	0.04	10,000	1,000	8,000	900	7,000	800	8,000	900
3.0	9~12	0.2	0.06	13,000	1,800	11,000	1,500	10,000	1,350	11,000	1,500
3.0	17	0.18	0.05	12,000	1,600	10,000	1,350	9,000	1,200	10,000	1,350
3.0	21	0.12	0.04	10,000	1,200	8,000	1,000	7,000	900	8,000	1,000
4.0	10~17	0.28	0.08	10,000	1,700	8,000	1,400	7,000	1,250	8,000	1,400
4.0	21	0.24	0.067	8,000	1,500	7,000	1,200	6,000	1,000	7,000	1,200

Материал				Закаленные стали SKD, SKT (45~60HRC)		Нержавеющие стали SUS420J2 (270HB)		Серые чугуны FC250 (350N/мм²)		Чугуны с шаровидным графитом FCD450, FCD550 (550N/мм²)	
Диаметр	I2	ap	ae	n	мм/мин	n	мм/мин	n	мм/мин	n	мм/мин
1.0	3~4	0.07	0.02	19,000	850	28,000	1,200	50,000	2,100	40,000	1,800
1.0	5~6	0.06	0.017	16,000	700	25,000	1,000	40,000	1,800	36,000	1,600
1.0	8	0.04	0.014	13,200	600	20,000	900	30,000	1,500	28,000	1,200
1.0	11~14	0.025	0.012	11,000	500	17,000	750	28,000	1,200	24,000	1,000
1.0	17	0.015	0.011	10,000	400	14,000	600	24,000	1,000	20,000	900
1.0	21	0.010	0.010	10,000	450	10,000	450	18,000	750	16,000	700
1.5	8	0.06	0.021	10,000	700	16,000	1,000	27,000	1,800	22,000	1,400
1.5	10~12	0.06	0.021	8,000	550	12,000	850	21,000	1,400	17,000	1,100
1.5	16~20	0.04	0.019	7,000	500	10,000	700	18,000	1,200	15,000	1,000
2.0	4~9	0.14	0.04	10,000	800	14,000	1,200	24,000	2,100	20,000	1,700
2.0	11~12	0.12	0.033	8,000	700	12,000	1,000	21,000	1,800	17,000	1,400
2.0	14~17	0.08	0.03	6,500	600	10,000	900	16,000	1,500	13,000	1,200
2.0	21	0.05	0.025	6,000	500	9,000	800	15,000	1,300	12,000	1,000
2.5	11	0.17	0.05	6,000	800	10,000	1,200	18,000	2,000	15,000	1,600
2.5	17~21	0.15	0.04	5,000	500	7,000	800	12,000	1,350	10,000	1,000
3.0	9~12	0.2	0.06	7,000	900	10,000	1,350	16,000	2,200	13,000	1,800
3.0	17	0.18	0.05	6,000	800	9,000	1,200	15,000	2,000	12,000	1,600
3.0	21	0.12	0.04	5,000	600	7,000	900	12,000	1,500	10,000	1,200
4.0	10~17	0.28	0.08	5,000	800	7,000	1,250	12,000	2,100	10,000	1,700
4.0	21	0.24	0.067	4,000	700	6,000	1,000	10,000	1,800	8,000	1,500