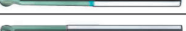


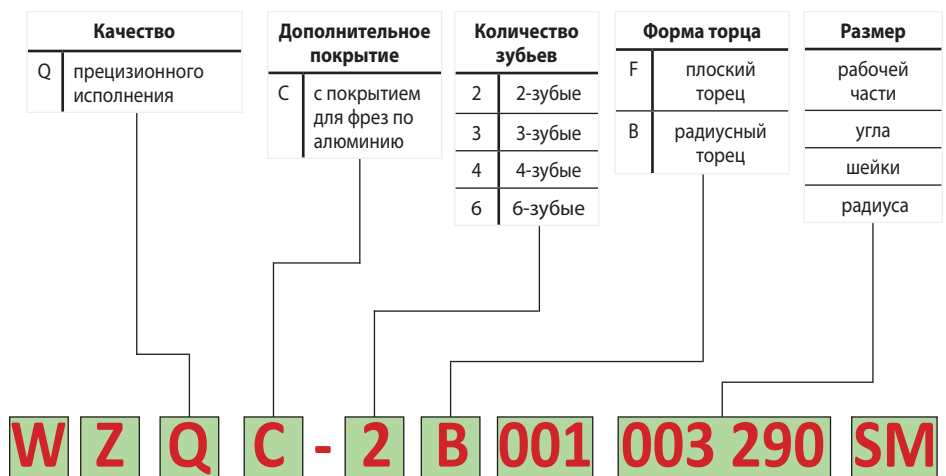
**ПРЕЦИЗИОННЫЕ МОНОЛИТНЫЕ
ФРЕЗЫ**

Содержание

Конструкция	Зубья	Обозначение	Серия	Диапазон диаметров	Материал											стр.		
					P	M	K	N			S	H			Спецификация	Режимы резания		
					Углеродистая сталь	Легированная сталь	Нержавеющая сталь	Чугун	Алюминиевые сплавы	Цветные металлы	Графит	Композитные материалы	Жаропрочные сплавы	Титановые сплавы			Закаленная сталь	
													45-55 HRC	55-60 HRC	60-70 HRC			
Торцевая фреза	2	WZQ-2F		0.05-20		✓	✓	✓		✓				✓	✓	✓	3	33
	4	WZQ-4F		0.6-12		✓	✓	✓		✓				✓	✓	✓	4	34
	4	WHQ-4F		1-16		✓	✓	✓		✓				✓	✓	✓	4	34
	6	WHQ-6F		3-25		✓	✓	✓		✓				✓	✓	✓	5	35
	2	WZQ-2F...M		0.1-6		✓	✓	✓		✓				✓	✓	✓	5	36
	4	WZQ-4F...M		0.8-6		✓	✓	✓		✓				✓	✓	✓	7	38
	3	WMQ-3F...		0.7-20		✓	✓	✓		✓		✓	✓	✓			8	39
	4	WMQ-4F...		1-20		✓	✓	✓		✓		✓	✓	✓			8	39
	2	WAQ-2F...		0.5-20					✓	✓							9	48
	3	WAQ-3F...		1-20					✓	✓							10	49
Сферическая фреза	2	WZQ-2B...M		0.1-12		✓	✓	✓		✓				✓	✓	✓	11	40
	2	WZQ-2B...MV		0.2-12		✓	✓	✓		✓				✓	✓	✓	13	42
	2	WZQ-2B...DM		1-12		✓	✓	✓		✓				✓	✓	✓	16	43
	4	WZQ-4B...DM		1-12		✓	✓	✓		✓				✓	✓	✓	16	43
	4	WZQ-4B...D7M		1-12		✓	✓	✓		✓				✓	✓	✓	17	43
	2	WZQ-2B		0.1-12		✓	✓	✓		✓				✓	✓	✓	17	44
	4	WMQ-4B...		3-16		✓	✓	✓		✓		✓	✓	✓			18	44
Торoidalная фреза	2	WZQ-2F...MV		1-4		✓	✓	✓		✓				✓	✓	✓	19	45
	4	WZQ-4F...MV		1-4		✓	✓	✓		✓				✓	✓	✓	20	46
	2	WZQ-2F...MR		0.2-16		✓	✓	✓		✓				✓	✓	✓	21	45
	4	WZQ-4F...MR		0.8-12		✓	✓	✓		✓				✓	✓	✓	24	46
	2	WZQ-2F...R		0.2-12		✓	✓	✓		✓				✓	✓	✓	27	47
	4	WZQ-4F...R		1-12		✓	✓	✓		✓				✓	✓	✓	29	47
	4	WZQ-4(6)F...R		1-12		✓	✓	✓		✓				✓	✓	✓	30	47
	6	WZQ-6(4)F...R		1-12		✓	✓	✓		✓				✓	✓	✓	30	47
	4	WMQ-4F...RP		1-20		✓	✓	✓		✓		✓	✓	✓			31	39
	3	WMQ-3F...R		3-4		✓	✓	✓		✓		✓	✓	✓			32	48
	4	WMQ-4F...R		5-12		✓	✓	✓		✓		✓	✓	✓			32	48
	5	WMQ-5F...R		14-20		✓	✓	✓		✓		✓	✓	✓			31	48

✓-оптимальное применение

✓- возможное применение



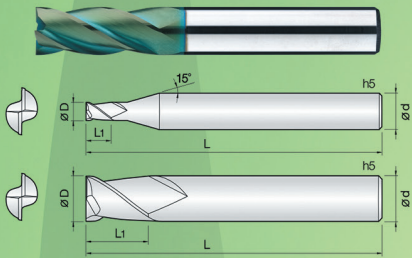
Применяемость	
G	универсальное применение покрытие JMAX или TiSiN угол спирали 35°
T	высокопроизводительные фрезы применение по высокой твердости 50-62 HRC покрытие TiSiN угол спирали 30°
U	U - высокопроизводительные фрезы применение по твердости 50 HRC покрытие TiSiN угол спирали 45°
P	высокопроизводительные фрезы применение по твердости 50 HRC покрытие TiSiN угол спирали 15°
M	по нержавеющей стали покрытие JMAX угол спирали 45° или 42°
W	универсальное применение без покрытия угол спирали 35°
A	по алюминиевым и медным сплавам без покрытия угол спирали 45°
N	по алюминиевым и медным сплавам покрытие DLC или JMAX угол спирали 45°
X	X - по графиту покрытие AlTiN угол спирали 30° или 45°
H	по закаленным сталям твердостью до 65 HRC покрытие TiSiN-S угол спирали 45°
Z	по закаленным сталям твердостью до 68 HRC покрытие TiSiN-S угол спирали 30°
K	центровка универсальная покрытие TiSiN угол спирали 30°
B	по алюминиевым и медным сплавам покрытие JMAX угол спирали 30° или 45°
D	по алюминиевым и медным сплавам покрытие DLC угол спирали 30° или 45°
F	по неметаллам без покрытия угол спирали 30°
I	по графиту покрытие DIA угол спирали 30° или 20° или 15°
O	по неметаллам без покрытия угол спирали 30°
R	высокопроизводительные черновые фрезы применение по твердости 50 HRC покрытие JMAX угол спирали 30°
C	высокопроизводительные черновые фрезы применение по твердости 50 HRC покрытие JMAX угол спирали 45°
Y	по закаленным сталям твердостью до 70 HRC CBN угол спирали 30°
E	по графиту покрытие DIA угол спирали 30° или 45°
L	универсальное применение покрытие JMAX или TiSiN угол спирали 45°
Q	высокопроизводительные черновые фрезы применение по твердости 50 HRC покрытие JMAX угол спирали 35°

Диаметр
1-30 mm

Форма режущей части	
S	уменьшенный хвостовик
M	удлиненная шейка
R	радиус кромки
V	угловая
D	радиус кромки
D7	сфера 230°
P	высокоточные
A	тип заточки A
B	тип заточки B
T	T-образная
L	T-образная
W	угловая под ласточкин хвост
O	угол спирали 0°
E	с защитой кромки

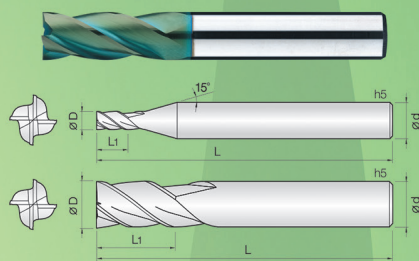
WZQ-2F...

Нумерклатурный номер	D	L ₁	L	d	Нумерклатурный номер	D	L ₁	L	d
-00050008 S	0.05	0.08	38	4	-021060 S	2.1	6	40	4
-0006001 S	0.06	0.1	38	4	-022060 S	2.2	6	40	4
-00070012 S	0.07	0.12	38	4	-023060 S	2.3	6	40	4
-00080015 S	0.08	0.15	38	4	-024080 S	2.4	8	45	4
-00090017 S	0.09	0.17	38	4	-025080 S	2.5	8	45	4
-001002 S	0.1	0.2	38	4	-025080	2.5	8	45	6
-0015003 S	0.15	0.3	38	4	-026080 S	2.6	8	45	4
-002004 S	0.2	0.4	38	4	-027080 S	2.7	8	45	4
-0025005 S	0.25	0.5	38	4	-028080 S	2.8	8	45	4
-003006 S	0.3	0.6	38	4	-029080 S	2.9	8	45	4
-0035007 S	0.35	0.7	38	4	-030080 S	3	8	45	4
-004008 S	0.4	0.8	38	4	-030080	3	8	45	6
-0045009 S	0.45	0.9	38	4	-035100	3.5	10	45	6
-005010 S	0.5	1	38	4	-040100 S	4	10	45	4
-0055011 S	0.55	1.1	38	4	-040110	4	11	45	6
-006012 S	0.6	1.2	38	4	-045110	4.5	11	45	6
-0065013 S	0.65	1.3	38	4	-050130	5	13	50	6
-007014 S	0.7	1.4	38	4	-055130	5.5	13	50	6
-0075015 S	0.75	1.5	38	4	-060130	6	13	50	6
-008016 S	0.8	1.6	38	4	-065160	6.5	16	60	8
-0085017 S	0.85	1.7	38	4	-070160	7	16	60	8
-009020 S	0.9	2	38	4	-075160	7.5	16	60	8
-0095020 S	0.95	2	38	4	-080190	8	19	60	8
-010025 S	1	2.5	40	4	-085190	8.5	19	70	10
-010025	1	2.5	40	6	-090190	9	19	70	10
-011027 S	1.1	2.7	40	4	-095190	9.5	19	70	10
-012030 S	1.2	3	40	4	-100220	10	22	70	10
-013032 S	1.3	3.2	40	4	-105220	10.5	22	75	12
-014035 S	1.4	3.5	40	4	-110220	11	22	75	12
-015040 S	1.5	4	40	4	-115220	11.5	22	75	12
-015040	1.5	4	40	6	-120260	12	26	75	12
-016040 S	1.6	4	40	4	-140260 S	14	26	80	14
-017042 S	1.7	4.2	40	4	-140260	14	26	90	16
-018045 S	1.8	4.5	40	4	-160350	16	35	100	16
-019050 S	1.9	5	40	4	-180350	18	35	100	18
-020060 S	2	6	40	4	-200400	20	40	100	20
-020060	2	6	40	6					



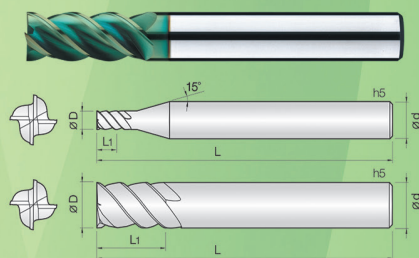
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"H" - по закаленным сталям
твердостью до 65 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

WZQ-4F...

Нумературный номер	D	L ₁	L	d	Нумературный номер	D	L ₁	L	d
-006012 S	0.6	1.2	40	4	-030080	3	8	45	6
-008016 S	0.8	1.6	40	4	-035100	3.5	10	45	6
-010025 S	1	2.5	40	4	-040110 S	4	11	45	4
-010025	1	2.5	40	6	-040110	4	11	45	6
-012030 S	1.2	3	40	4	-045110	4.5	11	45	6
-015040 S	1.5	4	40	4	-050130	5	13	50	6
-015040	1.5	4	40	6	-055130	5.5	13	50	6
-020060 S	2	6	40	4	-060130	6	13	50	6
-020060	2	6	40	6	-080190	8	19	60	8
-025080 S	2.5	8	45	4	-100220	10	22	70	10
-025080	2.5	8	45	6	-120260	12	26	75	12
-030080 S	3	8	45	4					

WHQ-4F...

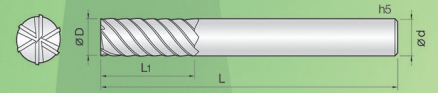
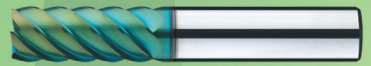
Нумературный номер	D	L ₁	L	d	Нумературный номер	D	L ₁	L	d
-010015	1	1.5	40	6	-050100	5	10	50	6
-010025	1	2.5	40	6	-050130	5	13	50	6
-010035	1	3.5	40	6	-050200	5	20	60	6
-020030	2	3	40	6	-060130	6	13	50	6
-020050	2	5	40	6	-060150	6	15	55	6
-020080	2	8	40	6	-060200	6	20	60	6
-025060	2.5	6	45	6	-080200	8	20	60	8
-025080	2.5	8	45	6	-080250	8	25	70	8
-030060	3	6	45	6	-100220	10	22	70	10
-030080	3	8	45	6	-100300	10	30	80	10
-030120	3	12	50	6	-120260	12	26	75	12
-040080	4	8	45	6	-120350	12	35	90	12
-040110	4	11	45	6	-160350	16	35	90	16
-040150	4	15	55	6	-160500	16	50	110	16

WHQ-6F...

Номенклатурный номер	D	L ₁	L	d	Номенклатурный номер	D	L ₁	L	d
- 030100	3	10	50	6	- 100600	10	60	110	10
- 030150	3	15	50	6	- 120300	12	30	80	12
- 040120	4	12	50	6	- 120450	12	45	90	12
- 040160	4	16	50	6	- 120500	12	50	100	12
- 050150	5	15	50	6	- 120600	12	60	110	12
- 050200	5	20	60	6	- 120700	12	70	120	12
- 060150	6	15	50	6	- 160350	16	35	90	16
- 060200	6	20	60	6	- 160500	16	50	110	16
- 060250	6	25	65	6	- 160650	16	65	120	16
- 060300	6	30	70	6	- 160800	16	80	150	16
- 060350	6	35	75	6	- 160900	16	90	160	16
- 080200	8	20	60	8	- 1601000	16	100	160	16
- 080250	8	25	65	8	- 200450	20	45	100	20
- 080300	8	30	75	8	- 200600	20	60	120	20
- 080350	8	35	80	8	- 200800	20	80	150	20
- 080400	8	40	90	8	- 200900	20	90	160	20
- 080450	8	45	100	8	- 2001000	20	100	160	20
- 080500	8	50	100	8	- 2001100	20	110	170	20
- 100250	10	25	70	10	- 2001200	20	120	180	20
- 100350	10	35	90	10	- 2501000	25	100	160	25
- 100450	10	45	100	10	- 2501300	25	130	200	25
- 100500	10	50	100	10					

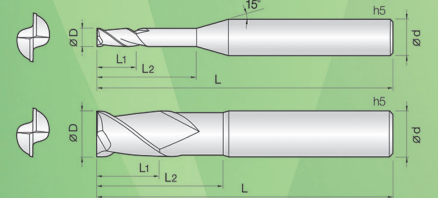
WZQ-2F..M

Номенклатурный номер	D	L ₁	L ₂	L	d	Номенклатурный номер	D	L ₁	L ₂	L	d
-001003 SM	0.1	0.3	-	40	4	-004050 SM	0.4	0.4	5	40	4
-001005 SM	0.1	0.5	-	40	4	-004060 SM	0.4	0.4	6	40	4
-002005 SM	0.2	0.2	0.5	40	4	-004080 SM	0.4	0.5	8	40	4
-002010 SM	0.2	0.2	1	40	4	-005010 SM	0.5	0.5	1	40	4
-002015 SM	0.2	0.2	1.5	40	4	-005020 SM	0.5	0.5	2	40	4
-002020 SM	0.2	0.2	2	40	4	-005030 SM	0.5	0.5	3	40	4
-002025 SM	0.2	0.2	2.5	40	4	-005040 SM	0.5	0.5	4	40	4
-002030 SM	0.2	0.2	3	40	4	-005050 SM	0.5	0.5	5	40	4
-003010 SM	0.3	0.3	1	40	4	-005060 SM	0.5	0.5	6	40	4
-003015 SM	0.3	0.3	1.5	40	4	-005080 SM	0.5	0.5	8	45	4
-003020 SM	0.3	0.3	2	40	4	-005100 SM	0.5	0.6	10	45	4
-003025 SM	0.3	0.3	2.5	40	4	-006010 SM	0.6	0.6	1	40	4
-003030 SM	0.3	0.3	3	40	4	-006020 SM	0.6	0.6	2	40	4
-003035 SM	0.3	0.3	3.5	40	4	-006030 SM	0.6	0.6	3	40	4
-003040 SM	0.3	0.3	4	40	4	-006040 SM	0.6	0.6	4	40	4
-004010 SM	0.4	0.4	1	40	4	-006050 SM	0.6	0.6	5	40	4
-004015 SM	0.4	0.4	1.5	40	4	-006060 SM	0.6	0.6	6	40	4
-004020 SM	0.4	0.4	2	40	4	-006080 SM	0.6	0.6	8	45	4
-004025 SM	0.4	0.4	2.5	40	4	-006100 SM	0.6	0.7	10	45	4
-004030 SM	0.4	0.4	3	40	4	-007020 SM	0.7	0.7	2	40	4
-004035 SM	0.4	0.4	3.5	40	4	-007040 SM	0.7	0.7	4	40	4
-004040 SM	0.4	0.4	4	40	4	-007060 SM	0.7	0.7	6	40	4



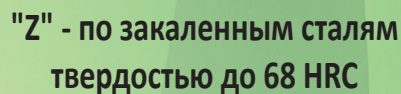
**"Н" - по закаленным сталям
твердостью до 65 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

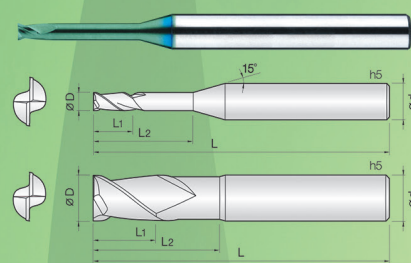


P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

Нумерклатурный номер	D	L ₁	L ₂	L	d	Нумерклатурный номер	D	L ₁	L ₂	L	d
-007080 SM	0.7	0.7	8	45	4	-015250 SM	1.5	1.5	25	60	4
-007100 SM	0.7	0.7	10	45	4	-016060 SM	1.6	1.6	6	45	4
-008010 SM	0.8	0.8	1	40	4	-016100 SM	1.6	1.6	10	50	4
-008020 SM	0.8	0.8	2	40	4	-016140 SM	1.6	1.6	14	50	4
-008030 SM	0.8	0.8	3	40	4	-016180 SM	1.6	1.6	18	50	4
-008040 SM	0.8	0.8	4	40	4	-018100 SM	1.8	1.8	10	50	4
-008050 SM	0.8	0.8	5	40	4	-018140 SM	1.8	1.8	14	50	4
-008060 SM	0.8	0.8	6	40	4	-018180 SM	1.8	1.8	18	50	4
-008080 SM	0.8	0.8	8	45	4	-020060 SM	2	2	6	45	4
-008100 SM	0.8	0.8	10	45	4	-020080 SM	2	2	8	45	4
-008120 SM	0.8	0.8	12	45	4	-020100 SM	2	2	10	50	4
-009040 SM	0.9	0.9	4	40	4	-020120 SM	2	2	12	50	4
-009060 SM	0.9	0.9	6	40	4	-020140 SM	2	2	14	50	4
-009080 SM	0.9	0.9	8	45	4	-020160 SM	2	2	16	50	4
-009100 SM	0.9	0.9	10	45	4	-020180 SM	2	2	18	50	4
-010020 SM	1	1	2	45	4	-020200 SM	2	2	20	50	4
-010030 SM	1	1	3	45	4	-020220 SM	2	2	22	60	4
-010040 SM	1	1	4	45	4	-020250 SM	2	2	25	60	4
-010050 SM	1	1	5	45	4	-020300 SM	2	2	30	60	4
-010060 SM	1	1	6	45	4	-020350 SM	2	2	35	70	4
-010080 SM	1	1	8	45	4	-020400 SM	2	2	40	80	4
-010100 SM	1	1	10	45	4	-025100 SM	2.5	2.5	10	50	4
-010120 SM	1	1	12	50	4	-025120 SM	2.5	2.5	12	50	4
-010140 SM	1	1	14	50	4	-025160 SM	2.5	2.5	16	50	4
-010160 SM	1	1	16	50	4	-025200 SM	2.5	2.5	20	50	4
-010180 SM	1	1	18	50	4	-025250 SM	2.5	2.5	25	60	4
-010200 SM	1	1	20	50	4	-025300 SM	2.5	2.5	30	70	4
-010220 SM	1	1	22	60	4	-025350 SM	2.5	2.5	35	70	4
-010250 SM	1	1	25	60	4	-025400 SM	2.5	2.5	40	80	4
-012040 SM	1.2	1.2	4	45	4	-030060 M	3	3	6	45	6
-012060 SM	1.2	1.2	6	45	4	-030080 M	3	3	8	45	6
-012080 SM	1.2	1.2	8	45	4	-030100 M	3	3	10	50	6
-012100 SM	1.2	1.2	10	45	4	-030120 M	3	3	12	50	6
-012120 SM	1.2	1.2	12	50	4	-030160 M	3	3	16	55	6
-012160 SM	1.2	1.2	16	50	4	-030200 M	3	3	20	60	6
-012200 SM	1.2	1.2	20	50	4	-030250 M	3	3	25	65	6
-012250 SM	1.2	1.2	25	60	4	-030300 M	3	3	30	70	6
-014080 SM	1.4	1.4	8	45	4	-030350 M	3	3	35	75	6
-014100 SM	1.4	1.4	10	45	4	-030400 M	3	3	40	80	6
-014140 SM	1.4	1.4	14	50	4	-030450 M	3	3	45	90	6
-014160 SM	1.4	1.4	16	50	4	-030500 M	3	3	50	100	6
-014200 SM	1.4	1.4	20	50	4	-040080 M	4	4	8	50	6
-015040 SM	1.5	1.5	4	45	4	-040100 M	4	4	10	50	6
-015060 SM	1.5	1.5	6	45	4	-040120 M	4	4	12	50	6
-015080 SM	1.5	1.5	8	45	4	-040160 M	4	4	16	55	6
-015100 SM	1.5	1.5	10	50	4	-040200 M	4	4	20	60	6
-015120 SM	1.5	1.5	12	50	4	-040250 M	4	4	25	65	6
-015140 SM	1.5	1.5	14	50	4	-040300 M	4	4	30	70	6
-015160 SM	1.5	1.5	16	50	4	-040350 M	4	4	35	75	6
-015180 SM	1.5	1.5	18	50	4	-040400 M	4	4	40	80	6
-015200 SM	1.5	1.5	20	50	4	-040450 M	4	4	45	90	6
-015220 SM	1.5	1.5	22	60	4	-040500 M	4	4	50	100	6

WZQ-2F..M

Нумературный номер	D	L ₁	L ₂	L	d	Нумературный номер	D	L ₁	L ₂	L	d
- 050160 M	5	6	16	60	6	- 050500 M	5	6	50	100	6
- 050200 M	5	6	20	60	6	- 060200 M	6	10	20	60	6
- 050250 M	5	6	25	65	6	- 060300 M	6	10	30	75	6
- 050300 M	5	6	30	70	6	- 060400 M	6	10	40	80	6
- 050350 M	5	6	35	75	6	- 060500 M	6	10	50	90	6
- 050400 M	5	6	40	80	6	- 060600 M	6	10	60	110	6

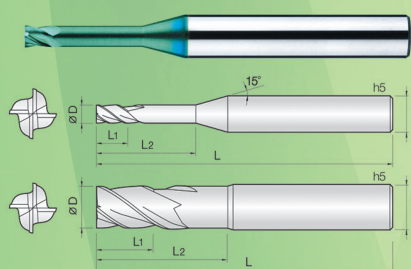


"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

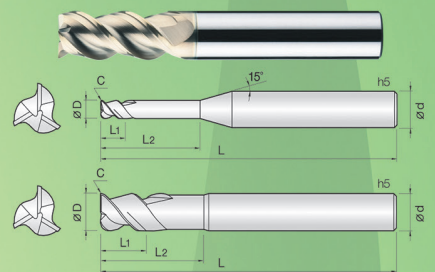
WZQ-4F...M

Нумературный номер	D	L ₁	L ₂	L	d	Нумературный номер	D	L ₁	L ₂	L	d
- 008010 SM	0.8	0.8	1	40	4	- 020160 SM	2	2	16	50	4
- 008020 SM	0.8	0.8	2	40	4	- 020180 SM	2	2	18	50	4
- 008030 SM	0.8	0.8	3	40	4	- 020200 SM	2	2	20	50	4
- 008040 SM	0.8	0.8	4	40	4	- 025100 SM	2.5	2.5	10	50	4
- 008050 SM	0.8	0.8	5	40	4	- 025120 SM	2.5	2.5	12	50	4
- 008060 SM	0.8	0.8	6	40	4	- 025160 SM	2.5	2.5	16	50	4
- 008080 SM	0.8	0.8	8	40	4	- 025200 SM	2.5	2.5	20	50	4
- 010020 SM	1	1	2	45	4	- 025250 SM	2.5	2.5	25	60	4
- 010030 SM	1	1	3	45	4	- 030060 M	3	3	6	45	6
- 010040 SM	1	1	4	45	4	- 030080 M	3	3	8	45	6
- 010060 SM	1	1	6	45	4	- 030100 M	3	3	10	50	6
- 010080 SM	1	1	8	45	4	- 030120 M	3	3	12	50	6
- 010100 SM	1	1	10	50	4	- 030160 M	3	3	16	55	6
- 010120 SM	1	1	12	50	4	- 030200 M	3	3	20	60	6
- 010140 SM	1	1	14	50	4	- 030250 M	3	3	25	65	6
- 010160 SM	1	1	16	50	4	- 030300 M	3	3	30	70	6
- 012040 SM	1.2	1.2	4	45	4	- 040060 M	4	4	6	50	6
- 012060 SM	1.2	1.2	6	45	4	- 040080 M	4	4	8	50	6
- 012080 SM	1.2	1.2	8	45	4	- 040100 M	4	4	10	50	6
- 012100 SM	1.2	1.2	10	50	4	- 040120 M	4	4	12	50	6
- 012120 SM	1.2	1.2	12	50	4	- 040160 M	4	4	16	55	6
- 012160 SM	1.2	1.2	16	50	4	- 040200 M	4	4	20	60	6
- 015040 SM	1.5	1.5	4	45	4	- 040250 M	4	4	25	65	6
- 015060 SM	1.5	1.5	6	45	4	- 040300 M	4	4	30	70	6
- 015080 SM	1.5	1.5	8	45	4	- 040400 M	4	4	40	80	6
- 015100 SM	1.5	1.5	10	50	4	- 050160 M	5	5	16	60	6
- 015120 SM	1.5	1.5	12	50	4	- 050200 M	5	5	20	60	6
- 015160 SM	1.5	1.5	16	50	4	- 050250 M	5	5	25	65	6
- 020040 SM	2	2	4	45	4	- 050300 M	5	5	30	70	6
- 020060 SM	2	2	6	45	4	- 050400 M	5	5	40	80	6
- 020080 SM	2	2	8	45	4	- 060200 M	6	6	20	60	6
- 020100 SM	2	2	10	50	4	- 060300 M	6	6	30	75	6
- 020120 SM	2	2	12	50	4	- 060400 M	6	6	40	80	6
- 020140 SM	2	2	14	50	4	- 060500 M	6	6	50	90	6



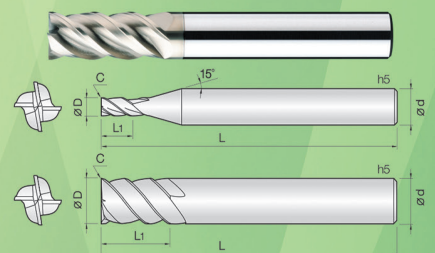
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"M" - по нержавеющей сталям

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		



"M" - по нержавеющей сталям

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		

WMQ-3F

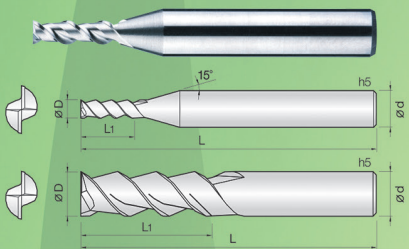
Нумерационный номер	D	L ₁	L ₂	L	d	Нумерационный номер	D	L ₁	L ₂	L	d
-008020 S	0.8	2	-	45	4	-030150	3	8	15	45	6
-008040	0.8	2	4	45	6	-040100 S	4	10	-	50	4
-010025 S	1	2.5	-	45	4	-040100	4	10	-	50	6
-010025	1	2.5	-	45	6	-040150	4	10	15	50	6
-010040	1	2.5	4	45	6	-050120	5	12	-	50	6
-012030 S	1.2	3	-	45	4	-060120	6	12	-	50	6
-012030	1.2	3	-	45	6	-060200	6	12	20	60	6
-012060	1.2	3	6	45	6	-080190	8	19	-	60	8
-015040 S	1.5	4	-	45	4	-080260	8	26	26	60	8
-015040	1.5	4	-	45	6	-100220	10	22	-	70	10
-015060	1.5	4	6	45	6	-100320	10	22	32	70	10
-020050 S	2	5	-	45	4	-120260	12	26	-	80	12
-020050	2	5	-	45	6	-120380	12	26	38	80	12
-020080	2	5	8	45	6	-160360	16	36	-	100	16
-030080 S	3	8	-	45	4	-160450	16	36	45	100	16
-030080	3	8	-	45	6	-200550	20	38	55	110	20

WMQ-4F

Нумерационный номер	D	L ₁	L	d	Нумерационный номер	D	L ₁	L	d
-010 015 S	1	1.5	50	4	-080120	8	12	70	8
-010 025 S	1	2.5	50	4	-080200	8	20	70	8
-010 035 S	1	3.5	50	4	-080240	8	24	70	8
-015 025 S	1.5	2.5	50	4	-080300	8	30	80	8
-015 040 S	1.5	4	50	4	-090140	9	14	80	10
-015 055 S	1.5	5.5	50	4	-090220	9	22	80	10
-020 030 S	2	3	50	4	-090270	9	27	80	10
-020 060 S	2	6	50	4	-100150	10	15	80	10
-020 080 S	2	8	50	4	-100250	10	25	80	10
-025 035 S	2.5	3.5	50	4	-100300	10	30	80	10
-025 080 S	2.5	8	50	4	-100400	10	40	90	10
-030045	3	4.5	60	6	-100500	10	50	100	10
-030100	3	10	60	6	-110170	11	17	90	12
-030120	3	12	60	6	-110220	11	22	90	12
-040060	4	6	60	6	-110330	11	33	90	12
-040120	4	12	60	6	-120180	12	18	90	12
-040160	4	16	60	6	-120300	12	30	90	12
-050075	5	7.5	60	6	-120360	12	36	90	12
-050150	5	15	60	6	-120500	12	50	100	12
-050200	5	20	60	6	-120600	12	60	110	12
-060090	6	9	60	6	-160240	16	24	100	16
-060150	6	15	60	6	-160350	16	35	100	16
-060180	6	18	60	6	-160500	16	50	110	16
-060250	6	25	65	6	-200300	20	30	100	20
-070110	7	11	70	8	-200400	20	40	100	20
-070180	7	18	70	8	-200600	20	60	120	20
-070210	7	21	70	8					

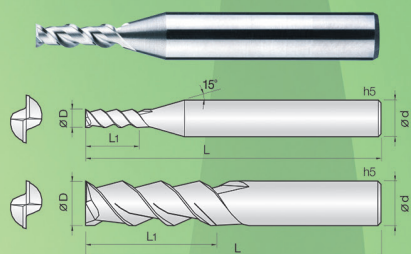
WAQ-2F...

Нумературный номер	D	L ₁	L	d	Нумературный номер	D	L ₁	L	d
-005005 S	0.5	0.5	38	4	-30250	3	25	65	6
-005010 S	0.5	1	38	4	-35100	3.5	10	45	6
-005015 S	0.5	1.5	38	4	-35150	3.5	15	50	6
-005020 S	0.5	2	38	4	-40120	4	12	50	6
-006006 S	0.6	0.6	38	4	-40150	4	15	55	6
-006012 S	0.6	1.2	38	4	-40180	4	18	55	6
-006020 S	0.6	2	38	4	-40250	4	25	65	6
-007007 S	0.7	0.7	38	4	-40300	4	30	70	6
-007014 S	0.7	1.4	38	4	-45120	4.5	12	50	6
-007020 S	0.7	2	38	4	-45180	4.5	18	55	6
-008008 S	0.8	0.8	38	4	-50150	5	15	50	6
-008016 S	0.8	1.6	38	4	-50200	5	20	60	6
-008020 S	0.8	2	38	4	-50250	5	25	65	6
-009009 S	0.9	0.9	38	4	-50300	5	30	70	6
-009018 S	0.9	1.8	38	4	-55150	5.5	15	50	6
-009025 S	0.9	2.5	38	4	-60150	6	15	50	6
-010015 S	1	1.5	40	4	-60200	6	20	60	6
-10015	1	1.5	40	6	-60250	6	25	65	6
-010025 S	1	2.5	40	4	-60300	6	30	70	6
-10025	1	2.5	40	6	-60350	6	35	75	6
-010035 S	1	3.5	40	4	-60400	6	40	80	6
-10035	1	3.5	40	6	-70200	7	20	60	8
-10050	1	5	45	6	-70300	7	30	70	8
-10060	1	6	45	6	-80200	8	20	60	8
-12030	1.2	3	40	6	-80250	8	25	65	8
-12040	1.2	4	40	6	-80300	8	30	70	8
-12060	1.2	6	40	6	-80400	8	40	80	8
-15040	1.5	4	40	6	-80450	8	45	90	8
-15060	1.5	6	40	6	-100250	10	25	70	10
-15080	1.5	8	45	6	-100300	10	30	75	10
-15100	1.5	10	50	6	-100350	10	35	80	10
-15120	1.5	12	50	6	-100450	10	45	90	10
-20050	2	5	45	6	-100500	10	50	100	10
-20070	2	7	45	6	-120300	12	30	75	12
-20100	2	10	50	6	-120350	12	35	80	12
-20120	2	12	50	6	-120400	12	40	90	12
-20140	2	14	50	6	-120450	12	45	100	12
-20160	2	16	60	6	-120500	12	50	100	12
-25080	2.5	8	45	6	-120600	12	60	110	12
-25120	2.5	12	50	6	-140300	14	30	80	14
-25150	2.5	15	60	6	-160400	16	40	90	16
-30080	3	8	45	6	-160550	16	55	110	16
-30100	3	10	45	6	-160700	16	70	120	16
-30120	3	12	50	6	-200450	20	45	100	20
-30150	3	15	50	6	-200650	20	65	120	20
-30200	3	20	60	6	-200800	20	80	135	20



"А" - по алюминиевым и медным сплавам

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
				V	V						



"A" - по алюминиевым и
медным сплавам

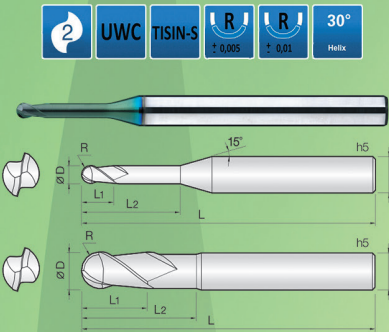
P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
				V	V						

WAQ-3F...

Нумературный номер	D	L ₁	L	d	Нумературный номер	D	L ₁	L	d
-10015	1	1.5	40	6	-060150 050	6	15	50	6
-10030	1	3	40	6	-060200055	6	20	55	6
-10050	1	5	45	6	-060250060	6	25	60	6
-12030	1.2	3	40	6	-060300070	6	30	70	6
-12040	1.2	4	40	6	-060350070	6	35	70	6
-12060	1.2	6	40	6	-060400075	6	40	75	6
-15025	1.5	2.5	40	6	-080120060	8	12	60	8
-15040	1.5	4	40	6	-080200060	8	20	60	8
-15060	1.5	6	45	6	-080250065	8	25	65	8
-15080	1.5	8	45	6	-080300070	8	30	70	8
-15100	1.5	10	50	6	-080350 075	8	35	75	8
-15120	1.5	12	50	6	-080400080	8	40	80	8
-20030	2	3	45	6	-080450090	8	45	90	8
-20050	2	5	45	6	-080500090	8	50	90	8
-20070	2	7	45	6	-080550100	8	55	100	8
-20100	2	10	50	6	-080600110	8	60	110	8
-20120	2	12	50	6	-100150070	10	15	70	10
-20140	2	14	60	6	-100250070	10	25	70	10
-20160	2	16	60	6	-100300075	10	30	75	10
-25040	2.5	4	45	6	-100350080	10	35	80	10
-25080	2.5	8	45	6	-100400090	10	40	90	10
-25120	2.5	12	50	6	-100450090	10	45	90	10
-25150	2.5	15	60	6	-100500100	10	50	100	10
-30045	3	4.5	45	6	-100550100	10	55	100	10
-30080	3	8	45	6	-100600110	10	60	110	10
-30120	3	12	50	6	-100650110	10	65	110	10
-30150	3	15	50	6	-100700120	10	70	120	10
-30200	3	20	55	6	-120180075	12	18	75	12
-30250	3	25	60	6	-120260075	12	26	75	12
-30300	3	30	65	6	-120350080	12	35	80	12
-35055	3.5	5.5	45	6	-120400090	12	40	90	12
-35100	3.5	10	45	6	-120450090	12	45	90	12
-35150	3.5	15	50	6	-120500100	12	50	100	12
-40060	4	6	45	6	-120550100	12	55	100	12
-40110	4	11	45	6	-120650110	12	65	110	12
-40160	4	16	50	6	-120700120	12	70	120	12
-40200	4	20	55	6	-140300080	14	30	80	14
-40250	4	25	60	6	-140450110	14	45	110	14
-40300	4	30	65	6	-160300085	16	30	85	16
-45120	4.5	12	50	6	-160500110	16	50	110	16
-45180	4.5	18	55	6	-160650120	16	65	120	16
-50075	5	7.5	50	6	-160800130	16	80	130	16
-50130	5	13	50	6	-200500100	20	50	100	20
-50200	5	20	55	6	-200750130	20	75	130	20
-50250	5	25	60	6	-2001000160	20	100	160	20
-50300	5	30	65	6	-2001300200	20	130	200	20
-55150	5.5	15	50	6					
-60090050	6	9	50	6					

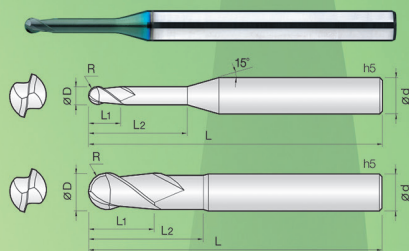
WZQ-2B...M

Нумерклатурный номер	DxR	L1	L2	L	d	Нумерклатурный номер	DxR	L1	L2	L	d
-001003 SM	0.1x0.05	0.3	-	40	4	-006030 SM	0.6x0.3	0.6	3	45	4
-001005 SM	0.1x0.05	0.5	-	40	4	-006030 M	0.6x0.3	0.6	3	50	6
-002005 SM	0.2x0.1	0.2	0.5	40	4	-006040 SM	0.6x0.3	0.6	4	45	4
-002010 SM	0.2x0.1	0.2	1	40	4	-006040 M	0.6x0.3	0.6	4	50	6
-002015 SM	0.2x0.1	0.2	1.5	40	4	-006050 SM	0.6x0.3	0.6	5	45	4
-002020 SM	0.2x0.1	0.2	2	40	4	-006050 M	0.6x0.3	0.6	5	50	6
-002025 SM	0.2x0.1	0.2	2.5	40	4	-006060 SM	0.6x0.3	0.6	6	45	4
-002030 SM	0.2x0.1	0.2	3	40	4	-006060 M	0.6x0.3	0.6	6	50	6
-003010 SM	0.3x0.15	0.3	1	40	4	-006080 SM	0.6x0.3	0.6	8	45	4
-003015 SM	0.3x0.15	0.3	1.5	40	4	-006080 M	0.6x0.3	0.6	8	50	6
-003020 SM	0.3x0.15	0.3	2	40	4	-006100 SM	0.6x0.3	0.6	10	45	4
-003025 SM	0.3x0.15	0.3	2.5	40	4	-006120 SM	0.6x0.3	0.6	12	45	4
-003030 SM	0.3x0.15	0.3	3	40	4	-006140 SM	0.6x0.3	0.6	14	45	4
-003035 SM	0.3x0.15	0.3	3.5	40	4	-007020 SM	0.7x0.35	0.7	2	45	4
-003040 SM	0.3x0.15	0.3	4	40	4	-007040 SM	0.7x0.35	0.7	4	45	4
-003050 SM	0.3x0.15	0.3	5	40	4	-007060 SM	0.7x0.35	0.7	6	45	4
-004010 SM	0.4x0.2	0.4	1	40	4	-007080 SM	0.7x0.35	0.7	8	45	4
-004015 SM	0.4x0.2	0.4	1.5	40	4	-007100 SM	0.7x0.35	0.7	10	45	4
-004020 SM	0.4x0.2	0.4	2	40	4	-007120 SM	0.7x0.35	0.7	12	45	4
-004025 SM	0.4x0.2	0.4	2.5	40	4	-008020 SM	0.8x0.4	0.8	2	45	4
-004030 SM	0.4x0.2	0.4	3	40	4	-008020 M	0.8x0.4	0.8	2	50	6
-004035 SM	0.4x0.2	0.4	3.5	40	4	-008030 SM	0.8x0.4	0.8	3	45	4
-004040 SM	0.4x0.2	0.4	4	40	4	-008030 M	0.8x0.4	0.8	3	50	6
-004045 SM	0.4x0.2	0.4	4.5	40	4	-008040 SM	0.8x0.4	0.8	4	45	4
-004050 SM	0.4x0.2	0.4	5	40	4	-008040 M	0.8x0.4	0.8	4	50	6
-004060 SM	0.4x0.2	0.4	6	40	4	-008050 SM	0.8x0.4	0.8	5	45	4
-004080 SM	0.4x0.2	0.4	8	40	4	-008050 M	0.8x0.4	0.8	5	50	6
-005010 SM	0.5x0.25	0.5	1	45	4	-008060 SM	0.8x0.4	0.8	6	45	4
-005010 M	0.5x0.25	0.5	1	50	6	-008060 M	0.8x0.4	0.8	6	50	6
-005015 SM	0.5x0.25	0.5	1.5	45	4	-008080 SM	0.8x0.4	0.8	8	45	4
-005020 SM	0.5x0.25	0.5	2	45	4	-008080 M	0.8x0.4	0.8	8	50	6
-005020 M	0.5x0.25	0.5	2	50	6	-008100 SM	0.8x0.4	0.8	10	45	4
-005025 SM	0.5x0.25	0.5	2.5	45	4	-008120 SM	0.8x0.4	0.8	12	45	4
-005030 SM	0.5x0.25	0.5	3	45	4	-009040 SM	0.9x0.45	0.9	4	45	4
-005030 M	0.5x0.25	0.5	3	50	6	-009060 SM	0.9x0.45	0.9	6	45	4
-005035 SM	0.5x0.25	0.5	3.5	45	4	-009080 SM	0.9x0.45	0.9	8	45	4
-005040 SM	0.5x0.25	0.5	4	45	4	-009100 SM	0.9x0.45	0.9	10	50	4
-005040 M	0.5x0.25	0.5	4	50	6	-009120 SM	0.9x0.45	0.9	12	50	4
-005045 SM	0.5x0.25	0.5	4.5	45	4	-010020 SM	1x0.5	1	2	45	4
-005050 SM	0.5x0.25	0.5	5	45	4	-010020 M	1x0.5	1	2	50	6
-005050 M	0.5x0.25	0.5	5	50	6	-010030 SM	1x0.5	1	3	45	4
-005060 SM	0.5x0.25	0.5	6	45	4	-010030 M	1x0.5	1	3	50	6
-005060 M	0.5x0.25	0.5	6	50	6	-010040 SM	1x0.5	1	4	45	4
-005080 SM	0.5x0.25	0.5	8	45	4	-010040 M	1x0.5	1	4	50	6
-005100 SM	0.5x0.25	0.5	10	45	4	-010050 SM	1x0.5	1	5	45	4
-005120 SM	0.5x0.25	0.5	12	45	4	-010050 M	1x0.5	1	5	50	6
-006010 SM	0.6x0.3	0.6	1	45	4	-010060 SM	1x0.5	1	6	45	4
-006010 M	0.6x0.3	0.6	1	50	6	-010060 M	1x0.5	1	6	50	6
-006020 SM	0.6x0.3	0.6	2	45	4	-010080 SM	1x0.5	1	8	45	4
-006020 M	0.6x0.3	0.6	2	50	6	-010080 M	1x0.5	1	8	50	6



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M		K		N		S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3	
	V	V	V		V				V	V	V	

WZQ-2B...M

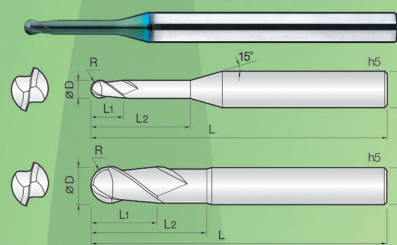
Нумературный номер	DxR	L1	L2	L	d	Нумературный номер	DxR	L1	L2	L	d
-010100 SM	1X0.5	1	10	50	4	-018060 SM	1.8X0.9	1.8	6	50	4
-010100 M	1X0.5	1	10	50	6	-018080 SM	1.8X0.9	1.8	8	50	4
-010120 SM	1X0.5	1	12	50	4	-018120 SM	1.8X0.9	1.8	12	50	4
-010120 M	1X0.5	1	12	50	6	-018160 SM	1.8X0.9	1.8	16	50	4
-010140 SM	1X0.5	1	14	50	4	-018200 SM	1.8X0.9	1.8	20	50	4
-010160 SM	1X0.5	1	16	50	4	-020040 SM	2X1	2	4	45	4
-010180 SM	1X0.5	1	18	50	4	-020040 M	2X1	2	4	50	6
-010200 SM	1X0.5	1	20	50	4	-020060 SM	2X1	2	6	45	4
-010220 SM	1X0.5	1	22	65	4	-020060 M	2X1	2	6	50	6
-010250 SM	1X0.5	1	25	65	4	-020080 SM	2X1	2	8	45	4
-012040 SM	1.2X0.6	1.2	4	45	4	-020080 M	2X1	2	8	50	6
-012040 M	1.2X0.6	1.2	4	50	6	-020100 SM	2X1	2	10	50	4
-012060 SM	1.2X0.6	1.2	6	45	4	-020100 M	2X1	2	10	50	6
-012060 M	1.2X0.6	1.2	6	50	6	-020120 SM	2X1	2	12	50	4
-012080 SM	1.2X0.6	1.2	8	45	4	-020120 M	2X1	2	12	50	6
-012080 M	1.2X0.6	1.2	8	50	6	-020140 SM	2X1	2	14	50	4
-012100 SM	1.2X0.6	1.2	10	50	4	-020140 M	2X1	2	14	50	6
-012100 M	1.2X0.6	1.2	10	50	6	-020160 SM	2X1	2	16	50	4
-012120 SM	1.2X0.6	1.2	12	50	4	-020160 M	2X1	2	16	60	6
-012120 M	1.2X0.6	1.2	12	50	6	-020180 SM	2X1	2	18	50	4
-012160 SM	1.2X0.6	1.2	16	50	4	-020180 M	2X1	2	18	60	6
-012200 SM	1.2X0.6	1.2	20	50	4	-020200 SM	2X1	2	20	50	4
-012240 SM	1.2X0.6	1.2	24	60	4	-020200 M	2X1	2	20	60	6
-014060 SM	1.4X0.7	1.4	6	45	4	-020220 SM	2X1	2	22	60	4
-014080 SM	1.4X0.7	1.4	8	45	4	-020250 SM	2X1	2	25	60	4
-014120 SM	1.4X0.7	1.4	12	50	4	-020300 SM	2X1	2	30	60	4
-014160 SM	1.4X0.7	1.4	16	50	4	-025080 SM	2.5X1.25	2.5	8	45	4
-015030 SM	1.5X0.75	1.5	3	45	4	-025080 M	2.5X1.25	2.5	8	50	6
-015030 M	1.5X0.75	1.5	3	50	6	-025100 SM	2.5X1.25	2.5	10	50	4
-015040 SM	1.5X0.75	1.5	4	45	4	-025100 M	2.5X1.25	2.5	10	50	6
-015040 M	1.5X0.75	1.5	4	50	6	-025160 SM	2.5X1.25	2.5	16	50	4
-015060 SM	1.5X0.75	1.5	6	45	4	-025160M	2.5X1.25	2.5	16	60	6
-015060 M	1.5X0.75	1.5	6	50	6	-025200 SM	2.5X1.25	2.5	20	60	4
-015080 SM	1.5X0.75	1.5	8	45	4	-025200 M	2.5X1.25	2.5	20	60	6
-015080 M	1.5X0.75	1.5	8	50	6	-025250 SM	2.5X1.25	2.5	25	60	4
-015100 SM	1.5X0.75	1.5	10	50	4	-025300 SM	2.5X1.25	2.5	30	70	4
-015100 M	1.5X0.75	1.5	10	50	6	-030060 M	3X1.5	3	6	50	6
-015120 SM	1.5X0.75	1.5	12	50	4	-030080 M	3X1.5	3	8	50	6
-015120 M	1.5X0.75	1.5	12	50	6	-030100 M	3X1.5	3	10	50	6
-015140 SM	1.5X0.75	1.5	14	50	4	-030120 M	3X1.5	3	12	50	6
-015140 M	1.5X0.75	1.5	14	50	6	-030160 M	3X1.5	3	16	60	6
-015160 SM	1.5X0.75	1.5	16	50	4	-030200 M	3X1.5	3	20	60	6
-015160 M	1.5X0.75	1.5	16	60	6	-030250 M	3X1.5	3	25	65	6
-015180 SM	1.5X0.75	1.5	18	50	4	-030300 M	3X1.5	3	30	70	6
-015200 SM	1.5X0.75	1.5	20	50	4	-030350 M	3X1.5	3	35	75	6
-015220 SM	1.5X0.75	1.5	22	60	4	-030400 M	3X1.5	3	40	80	6
-015250 SM	1.5X0.75	1.5	25	60	4	-030450 M	3X1.5	3	45	90	6
-015300 SM	1.5X0.75	1.5	30	70	4	-035100 M	3.5X1.75	3.5	10	50	6
-016060 SM	1.6X0.8	1.6	6	45	4	-035150 M	3.5X1.75	3.5	15	60	6
-016080 SM	1.6X0.8	1.6	8	45	4	-035200 M	3.5X1.75	3.5	20	60	6
-016120 SM	1.6X0.8	1.6	12	50	4	-035250 M	3.5X1.75	3.5	25	65	6
-016160 SM	1.6X0.8	1.6	16	50	4	-035300 M	3.5X1.75	3.5	30	70	6
-016200 SM	1.6X0.8	1.6	20	50	4	-035350 M	3.5X1.75	3.5	35	75	6

WZQ-2B...M

Нумературный номер	DxR	L ₁	L ₂	L	d	Нумературный номер	D	L ₁	L ₂	L	d
-035400 M	3.5x1.75	3.5	40	80	6	-050160 M	5x2.5	6	16	60	6
-040080 M	4x2	4	8	50	6	-050200 M	5x2.5	6	20	60	6
-040100 M	4x2	4	10	50	6	-050250 M	5x2.5	6	25	70	6
-040120 M	4x2	4	12	50	6	-050300 M	5x2.5	6	30	75	6
-040160 M	4x2	4	16	60	6	-050400 M	5x2.5	6	40	80	6
-040200 M	4x2	4	20	60	6	-050450 M	5x2.5	6	45	90	6
-040250 M	4x2	4	25	65	6	-060150 M	6x3	10	15	55	6
-040300 M	4x2	4	30	70	6	-080250060 M	8x4	12	25	60	8
-040350 M	4x2	4	35	75	6	-100300070 M	10x5	16	30	70	10
-040400 M	4x2	4	40	80	6	-120300075 M	12x6	18	30	75	12
-040450 M	4x2	4	45	90	6						

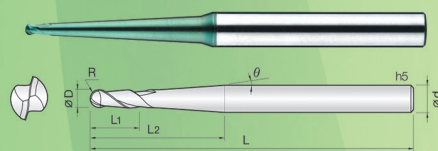
WZQ-2B...MV

Нумературный номер	DxR	θ	L ₁	L ₂	L	d	Нумературный номер	D	θ	L ₁	L ₂	L	d
-002003015 SMV	0.2x0.1	0°30	0.2	1.5	40	4	-004003040 SMV	0.4x0.2	0°30	0.4	4	40	4
-002003020 SMV	0.2x0.1	0°30	0.2	2	40	4	-004003050 SMV	0.4x0.2	0°30	0.4	5	40	4
-002010015 SMV	0.2x0.1	1°	0.2	1.5	40	4	-004003060 SMV	0.4x0.2	0°30	0.4	6	40	4
-002010020 SMV	0.2x0.1	1°	0.2	2	40	4	-004010020 SMV	0.4x0.2	1°	0.4	2	40	4
-002010025 SMV	0.2x0.1	1°	0.2	2.5	40	4	-004010030 SMV	0.4x0.2	1°	0.4	3	40	4
-002013015 SMV	0.2x0.1	1°30	0.2	1.5	40	4	-004010040 SMV	0.4x0.2	1°	0.4	4	40	4
-002013020 SMV	0.2x0.1	1°30	0.2	2	40	4	-004010050 SMV	0.4x0.2	1°	0.4	5	40	4
-002013025 SMV	0.2x0.1	1°30	0.2	2.5	40	4	-004010060 SMV	0.4x0.2	1°	0.4	6	40	4
-002020015 SMV	0.2x0.1	2°	0.2	1.5	40	4	-004013020 SMV	0.4x0.2	1°30	0.4	2	40	4
-002020020 SMV	0.2x0.1	2°	0.2	2	40	4	-004013030 SMV	0.4x0.2	1°30	0.4	3	40	4
-002020025 SMV	0.2x0.1	2°	0.2	2.5	40	4	-004013040 SMV	0.4x0.2	1°30	0.4	4	40	4
-002030015 SMV	0.2x0.1	3°	0.2	1.5	40	4	-004013050 SMV	0.4x0.2	1°30	0.4	5	40	4
-002030020 SMV	0.2x0.1	3°	0.2	2	40	4	-004013060 SMV	0.4x0.2	1°30	0.4	6	40	4
-002030025 SMV	0.2x0.1	3°	0.2	2.5	40	4	-004020020 SMV	0.4x0.2	2°	0.4	2	40	4
-002050020 SMV	0.2x0.1	5°	0.2	2	40	4	-004020030 SMV	0.4x0.2	2°	0.4	3	40	4
-003003030 SMV	0.3x0.15	0°30	0.3	3	40	4	-004020040 SMV	0.4x0.2	2°	0.4	4	40	4
-003010020 SMV	0.3x0.15	1°	0.3	2	40	4	-004020050 SMV	0.4x0.2	2°	0.4	5	40	4
-003010030 SMV	0.3x0.15	1°	0.3	3	40	4	-004020060 SMV	0.4x0.2	2°	0.4	6	40	4
-003010040 SMV	0.3x0.15	1°	0.3	4	40	4	-005003040 SMV	0.5x0.25	0°30	0.5	4	45	4
-003010050 SMV	0.3x0.15	1°	0.3	5	40	4	-005003060 SMV	0.5x0.25	0°30	0.5	6	45	4
-003013020 SMV	0.3x0.15	1°30	0.3	2	40	4	-005010040 SMV	0.5x0.25	1°	0.5	4	45	4
-003013030 SMV	0.3x0.15	1°30	0.3	3	40	4	-005010060 SMV	0.5x0.25	1°	0.5	6	45	4
-003013040 SMV	0.3x0.15	1°30	0.3	4	40	4	-005010080 SMV	0.5x0.25	1°	0.5	8	45	4
-003013050 SMV	0.3x0.15	1°30	0.3	5	40	4	-005010100 SMV	0.5x0.25	1°	0.5	10	45	4
-003020020 SMV	0.3x0.15	2°	0.3	2	40	4	-005013040 SMV	0.5x0.25	1°30	0.5	4	45	4
-003020030 SMV	0.3x0.15	2°	0.3	3	40	4	-005013060 SMV	0.5x0.25	1°30	0.5	6	45	4
-003020040 SMV	0.3x0.15	2°	0.3	4	40	4	-005013080 SMV	0.5x0.25	1°30	0.5	8	45	4
-003020050 SMV	0.3x0.15	2°	0.3	5	40	4	-005013100 SMV	0.5x0.25	1°30	0.5	10	45	4
-003030020 SMV	0.3x0.15	3°	0.3	2	40	4	-005020040 SMV	0.5x0.25	2°	0.5	4	45	4
-003030030 SMV	0.3x0.15	3°	0.3	3	40	4	-005020060 SMV	0.5x0.25	2°	0.5	6	45	4
-003030040 SMV	0.3x0.15	3°	0.3	4	40	4	-005020080 SMV	0.5x0.25	2°	0.5	8	45	4
-003030050 SMV	0.3x0.15	3°	0.3	5	40	4	-005020100 SMV	0.5x0.25	2°	0.5	10	45	4
-003050050 SMV	0.3x0.15	5°	0.3	5	40	4	-005030080 SMV	0.5x0.25	3°	0.5	8	45	4
-004003020 SMV	0.4x0.2	0°30	0.4	2	40	4	-005030120 SMV	0.5x0.25	3°	0.5	12	50	4
-004003030 SMV	0.4x0.2	0°30	0.4	3	40	4	-006003040 SMV	0.6x0.3	0°30	0.6	4	45	4



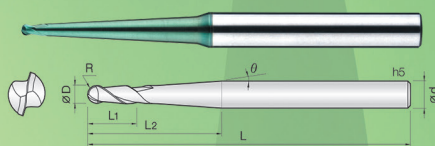
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

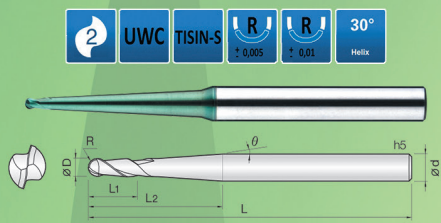
P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

WZQ-2B...MV

Нумерационный номер	D	θ	L ₁	L ₂	L	d	Нумерационный номер	D	θ	L ₁	L ₂	L	d
-006003060 SMV	0.6x0.3	0°30	0.6	6	45	4	-010010100 SMV	1x0.5	1°	1	10	50	4
-006003080 SMV	0.6x0.3	0°30	0.6	8	45	4	-010010150 SMV	1x0.5	1°	1	15	50	4
-006010040 SMV	0.6x0.3	1°	0.6	4	45	4	-010010200 SMV	1x0.5	1°	1	20	50	4
-006010060 SMV	0.6x0.3	1°	0.6	6	45	4	-010010250 SMV	1x0.5	1°	1	25	60	4
-006010080 SMV	0.6x0.3	1°	0.6	8	45	4	-010010300 SMV	1x0.5	1°	1	30	70	4
-006010100 SMV	0.6x0.3	1°	0.6	10	45	4	-010010350 SMV	1x0.5	1°	1	35	75	4
-006010120 SMV	0.6x0.3	1°	0.6	12	50	4	-010013060 SMV	1x0.5	1°30	1	6	50	4
-006010150 SMV	0.6x0.3	1°	0.6	15	50	4	-010013080 SMV	1x0.5	1°30	1	8	50	4
-006013040 SMV	0.6x0.3	1°30	0.6	4	45	4	-010013100 SMV	1x0.5	1°30	1	10	50	4
-006013060 SMV	0.6x0.3	1°30	0.6	6	45	4	-010013150 SMV	1x0.5	1°30	1	15	50	4
-006013080 SMV	0.6x0.3	1°30	0.6	8	45	4	-010013200 SMV	1x0.5	1°30	1	20	50	4
-006013100 SMV	0.6x0.3	1°30	0.6	10	45	4	-010013250 SMV	1x0.5	1°30	1	25	60	4
-006013120 SMV	0.6x0.3	1°30	0.6	12	50	4	-010013300 SMV	1x0.5	1°30	1	30	70	4
-006020060 SMV	0.6x0.3	2°	0.6	6	45	4	-010020150 SMV	1x0.5	2°	1	15	50	4
-006020080 SMV	0.6x0.3	2°	0.6	8	45	4	-010020200 SMV	1x0.5	2°	1	20	50	4
-006020100 SMV	0.6x0.3	2°	0.6	10	45	4	-010020250 SMV	1x0.5	2°	1	25	60	4
-006030130 SMV	0.6x0.3	3°	0.6	13	50	4	-010020300 SMV	1x0.5	2°	1	30	70	4
-008003040 SMV	0.8x0.4	0°30	0.8	4	45	4	-010030200 SMV	1x0.5	3°	1	20	50	4
-008003060 SMV	0.8x0.4	0°30	0.8	6	45	4	-010030300 MV	1x0.5	3°	1	30	70	6
-008003080 SMV	0.8x0.4	0°30	0.8	8	45	4	-010030400 MV	1x0.5	3°	1	40	80	6
-008003100 SMV	0.8x0.4	0°30	0.8	10	45	4	-010050230 MV	1x0.5	5°	1	23	60	6
-008003120 SMV	0.8x0.4	0°30	0.8	12	50	4	-012003080 SMV	1.2x0.6	0°30	1.2	8	50	4
-008010040 SMV	0.8x0.4	1°	0.8	4	45	4	-012003120 SMV	1.2x0.6	0°30	1.2	12	50	4
-008010060 SMV	0.8x0.4	1°	0.8	6	45	4	-012003180 SMV	1.2x0.6	0°30	1.2	18	50	4
-008010080 SMV	0.8x0.4	1°	0.8	8	45	4	-012003240 SMV	1.2x0.6	0°30	1.2	24	60	4
-008010100 SMV	0.8x0.4	1°	0.8	10	45	4	-012010080 SMV	1.2x0.6	1°	1.2	8	50	4
-008010120 SMV	0.8x0.4	1°	0.8	12	50	4	-012010120 SMV	1.2x0.6	1°	1.2	12	50	4
-008010160 SMV	0.8x0.4	1°	0.8	16	50	4	-012010180 SMV	1.2x0.6	1°	1.2	18	50	4
-008013040 SMV	0.8x0.4	1°30	0.8	4	45	4	-012010240 SMV	1.2x0.6	1°	1.2	24	60	4
-008013060 SMV	0.8x0.4	1°30	0.8	6	45	4	-012013080 SMV	1.2x0.6	1°30	1.2	8	50	4
-008013080 SMV	0.8x0.4	1°30	0.8	8	45	4	-012013120 SMV	1.2x0.6	1°30	1.2	12	50	4
-008013100 SMV	0.8x0.4	1°30	0.8	10	45	4	-012013180 SMV	1.2x0.6	1°30	1.2	18	50	4
-008013120 SMV	0.8x0.4	1°30	0.8	12	50	4	-012013240 SMV	1.2x0.6	1°30	1.2	24	60	4
-008013160 SMV	0.8x0.4	1°30	0.8	16	50	4	-012020080 SMV	1.2x0.6	2°	1.2	8	50	4
-008020080 SMV	0.8x0.4	2°	0.8	8	50	4	-012020120 SMV	1.2x0.6	2°	1.2	12	50	4
-008020100 SMV	0.8x0.4	2°	0.8	10	50	4	-012020180 SMV	1.2x0.6	2°	1.2	18	50	4
-008020120 SMV	0.8x0.4	2°	0.8	12	50	4	-012020240 SMV	1.2x0.6	2°	1.2	24	60	4
-008020160 SMV	0.8x0.4	2°	0.8	16	50	4	-015003080 SMV	1.5x0.75	0°30	1.5	8	50	4
-008030080 SMV	0.8x0.4	3°	0.8	8	50	4	-015003010 SMV	1.5x0.75	0°30	1.5	10	50	4
-008030120 SMV	0.8x0.4	3°	0.8	12	50	4	-015003120 SMV	1.5x0.75	0°30	1.5	12	50	4
-008030160 SMV	0.8x0.4	3°	0.8	16	50	4	-015003150 SMV	1.5x0.75	0°30	1.5	15	50	4
-010003060 SMV	1x0.5	0°30	1	6	50	4	-015003200 SMV	1.5x0.75	0°30	1.5	20	60	4
-010003080 SMV	1x0.5	0°30	1	8	50	4	-015003300 SMV	1.5x0.75	0°30	1.5	30	70	4
-010003100 SMV	1x0.5	0°30	1	10	50	4	-015010080 SMV	1.5x0.75	1°	1.5	8	50	4
-010003150 SMV	1x0.5	0°30	1	15	50	4	-015010100 SMV	1.5x0.75	1°	1.5	10	50	4
-010003200 SMV	1x0.5	0°30	1	20	60	4	-015010120 SMV	1.5x0.75	1°	1.5	12	50	4
-010003250 SMV	1x0.5	0°30	1	25	60	4	-015010150 SMV	1.5x0.75	1°	1.5	15	50	4
-010003300 SMV	1x0.5	0°30	1	30	70	4	-015010200 SMV	1.5x0.75	1°	1.5	20	60	4
-010010060 SMV	1x0.5	1°	1	6	50	4	-015010250 SMV	1.5x0.75	1°	1.5	25	60	4
-010010080 SMV	1x0.5	1°	1	8	50	4	-015010300 SMV	1.5x0.75	1°	1.5	30	70	4

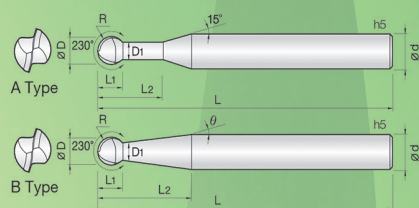
WZQ-2B...MV

Нумерклаурный номер	DxR	θ	L ₁	L ₂	L	d	Нумерклаурный номер	D	θ	L ₁	L ₂	L	d
-015013080 SMV	1.5x0.75	1°30	1.5	8	50	4	-020050380 MV	2x1	5°	2	38	80	8
-015013100 SMV	1.5x0.75	1°30	1.5	10	50	4	-030003160 MV	3x1.5	0°30	3	16	60	6
-015013120 SMV	1.5x0.75	1°30	1.5	12	50	4	-030003200 MV	3x1.5	0°30	3	20	65	6
-015013150 SMV	1.5x0.75	1°30	1.5	15	50	4	-030003300 MV	3x1.5	0°30	3	30	70	6
-015013200 SMV	1.5x0.75	1°30	1.5	20	60	4	-030003400 MV	3x1.5	0°30	3	40	80	6
-015013250 SMV	1.5x0.75	1°30	1.5	25	60	4	-030003500 MV	3x1.5	0°30	3	50	90	6
-015013300 SMV	1.5x0.75	1°30	1.5	30	70	4	-030010160 MV	3x1.5	1°	3	16	60	6
-015020100 SMV	1.5x0.75	2°	1.5	10	50	4	-030010200 MV	3x1.5	1°	3	20	65	6
-015020150 SMV	1.5x0.75	2°	1.5	15	50	4	-030010300 MV	3x1.5	1°	3	30	70	6
-015020200 SMV	1.5x0.75	2°	1.5	20	60	4	-030010400 MV	3x1.5	1°	3	40	80	6
-015020300 SMV	1.5x0.75	2°	1.5	30	70	4	-030010500 MV	3x1.5	1°	3	50	90	6
-015030420 MV	1.5x0.75	3°	1.5	42	80	6	-030013160 MV	3x1.5	1°30	3	16	60	6
-015050250 MV	1.5x0.75	5°	1.5	25	70	6	-030013200 MV	3x1.5	1°30	3	20	65	6
-020003080 SMV	2x1	0°30	2	8	50	4	-030013300 MV	3x1.5	1°30	3	30	70	6
-020003120 SMV	2x1	0°30	2	12	50	4	-030013400 MV	3x1.5	1°30	3	40	80	6
-020003160 SMV	2x1	0°30	2	16	50	4	-030013500 MV	3x1.5	1°30	3	50	90	6
-020003200 SMV	2x1	0°30	2	20	60	4	-030020160 MV	3x1.5	2°	3	16	60	6
-020003300 SMV	2x1	0°30	2	30	70	4	-030020200 MV	3x1.5	2°	3	20	65	6
-020003400 SMV	2x1	0°30	2	40	80	4	-030020300 MV	3x1.5	2°	3	30	70	6
-020010080 SMV	2x1	1°	2	8	50	4	-030020480 MV	3x1.5	2°	3	48	90	6
-020010120 SMV	2x1	1°	2	12	50	4	-030030300 MV	3x1.5	3°	3	30	70	6
-020010160 SMV	2x1	1°	2	16	50	4	-030030500 MV	3x1.5	3°	3	50	90	8
-020010200 SMV	2x1	1°	2	20	60	4	-030050330 MV	3x1.5	5°	3	33	90	8
-020010250 SMV	2x1	1°	2	25	60	4	-040003600 MV	4x2	0°30	4	60	100	6
-020010300 SMV	2x1	1°	2	30	70	4	-040010500 MV	4x2	1°	4	50	90	6
-020010350 SMV	2x1	1°	2	35	75	4	-040010600 MV	4x2	1°	4	60	100	6
-020010400 SMV	2x1	1°	2	40	80	4	-040013450 MV	4x2	1°30	4	45	90	6
-020010500 SMV	2x1	1°	2	50	90	4	-040013600 MV	4x2	1°30	4	60	110	8
-020013080 SMV	2x1	1°30	2	8	50	4	-040030250 MV	4x2	3°	4	25	70	6
-020013120 SMV	2x1	1°30	2	12	50	4	-040050290 MV	4x2	5°	4	29	90	8
-020013160 SMV	2x1	1°30	2	16	50	4	-050013400 MV	5x2.5	1°30	5	40	90	8
-020013200 SMV	2x1	1°30	2	20	60	4	-050013600 MV	5x2.5	1°30	5	60	110	8
-020013250 SMV	2x1	1°30	2	25	60	4	-050030400 MV	5x2.5	3°	5	40	90	8
-020013300 SMV	2x1	1°30	2	30	70	4	-060013490 MV	6x3	1°30	9	49	110	8
-020013350 MV	2x1	1°30	2	35	75	6	-060020600 MV	6x3	2°	9	60	110	10
-020013400 MV	2x1	1°30	2	40	80	6	-060030290 MV	6x3	3°	9	29	90	8
-020013500 MV	2x1	1°30	2	50	90	6	-060050320 MV	6x3	5°	9	32	110	10
-020020300 MV	2x1	2°	2	30	70	6	-080013520 MV	8x4	1°30	12	52	110	10
-020020400 MV	2x1	2°	2	40	80	6	-080030330 MV	8x4	3°	12	33	100	10
-020020500 MV	2x1	2°	2	50	90	6	-100013540 MV	10x5	1°30	18	54	130	12
-020030300 MV	2x1	3°	2	30	70	6	-100030370 MV	10x5	3°	18	37	110	12
-020030400 MV	2x1	3°	2	40	80	6	-120013850 MV	12x6	1°30	22	85	160	16
-020050250 MV	2x1	5°	2	25	60	6	-120030630 MV	12x6	3°	22	63	130	16



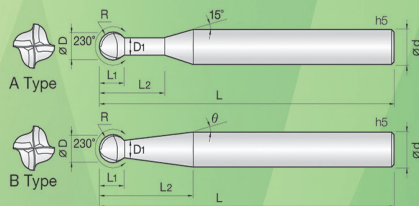
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	6.1	6.2	6.3
	V	V	V		V		V	V	V

WZQ-2B...DM

Нумературный номер	D	D1	L1	L2	θ	L	Тип	d
-010040 DM	1	0.91	0.7	4	0°	60	A	6
-010060 DM	1	0.91	0.7	6	0°	60	A	6
-010013200 DM	1	0.91	0.7	20	1°30	80	B	6
-015060 DM	1.5	1.36	1	6	0°	60	A	6
-015080 DM	1.5	1.36	1	8	0°	60	A	6
-015013200 DM	1.5	1.36	1	20	1°30	80	B	6
-020060 DM	2	1.8	1.4	6	0°	60	A	6
-020100 DM	2	1.8	1.4	10	0°	60	A	6
-020013200 DM	2	1.8	1.4	20	1°30	80	B	6
-030100 DM	3	2.7	2.1	10	0°	70	A	6
-030150 DM	3	2.7	2.1	15	0°	70	A	6
-030013300 DM	3	2.7	2.1	30	1°30	80	B	6
-040120 DM	4	3.6	2.8	12	0°	70	A	6
-040200 DM	4	3.6	2.8	20	0°	70	A	6
-040030250 DM	4	3.6	2.8	25	3°	80	B	6
-050010400 DM	5	4.5	3.5	40	1°	90	B	6
-060150 DM	6	5.4	4.2	15	0°	90	A	6
-060300 DM	6	5.4	4.2	30	0°	90	A	6
-060010210 DM	6	5.4	4.2	21	1°	100	B	6
-080010280 DM	8	7.2	5.7	28	1°	100	B	8
-100010350 DM	10	9	7.1	35	1°	110	B	10
-120010420 DM	12	10.8	8.5	42	1°	120	B	12

WZQ-4B...DM

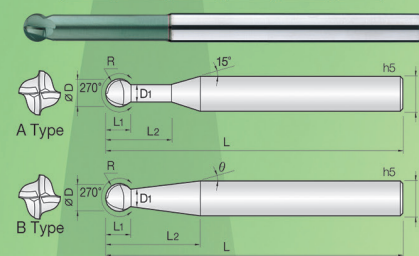
Нумературный номер	D	D1	L1	L2	θ	L	Тип	d
-010040 DM	1	0.91	0.7	4	0°	60	A	6
-010060 DM	1	0.91	0.7	6	0°	60	A	6
-010013200 DM	1	0.91	0.7	20	1°30	80	B	6
-015060 DM	1.5	1.36	1	6	0°	60	A	6
-015080 DM	1.5	1.36	1	8	0°	60	A	6
-015013200 DM	1.5	1.36	1	20	1°30	80	B	6
-020060 DM	2	1.8	1.4	6	0°	60	A	6
-020100 DM	2	1.8	1.4	10	0°	60	A	6
-020013200 DM	2	1.8	1.4	20	1°30	80	B	6
-030100 DM	3	2.7	2.1	10	0°	70	A	6
-030150 DM	3	2.7	2.1	15	0°	70	A	6
-030013300 DM	3	2.7	2.1	30	1°30	80	B	6
-040120 DM	4	3.6	2.8	12	0°	70	A	6
-040200 DM	4	3.6	2.8	20	0°	70	A	6
-040030250 DM	4	3.6	2.8	25	3°	80	B	6
-050010400 DM	5	4.5	3.5	40	1°	90	B	6
-060150 DM	6	5.4	4.2	15	0°	90	A	6
-060300 DM	6	5.4	4.2	30	0°	90	A	6
-060010210 DM	6	5.4	4.2	21	1°	100	B	6
-080010280 DM	8	7.2	5.7	28	1°	100	B	8
-100010350 DM	10	9	7.1	35	1°	110	B	10
-120010420 DM	12	10.8	8.5	42	1°	120	B	12

WZQ-4B...D7M

Номенклатурный номер	D	D1	L1	L2	θ	L	Тип	d
-010040 D7M	1	0.7	0.8	4	0°	60	A	6
-010060 D7M	1	0.7	0.8	6	0°	60	A	6
-010013200 D7M	1	0.7	0.8	20	1°30'	80	B	6
-015060 D7M	1.5	1	1.2	6	0°	60	A	6
-015080 D7M	1.5	1	1.2	8	0°	60	A	6
-015013200 D7M	1.5	1	1.2	20	1°30'	80	B	6
-020060 D7M	2	1.4	1.7	6	0°	60	A	6
-020100 D7M	2	1.4	1.7	10	0°	60	A	6
-020013200 D7M	2	1.4	1.7	20	1°30'	80	B	6
-030100 D7M	3	2.1	2.5	10	0°	70	A	6
-030150 D7M	3	2.1	2.5	15	0°	70	A	6
-030013300 D7M	3	2.1	2.5	30	1°30'	80	B	6
-040120 D7M	4	2.8	3.4	12	0°	70	A	6
-040200 D7M	4	2.8	3.4	20	0°	70	A	6
-040030250 D7M	4	2.8	3.4	25	3°	80	B	6
-050010400 D7M	5	3.5	4.2	40	1°	90	B	6
-060150 D7M	6	4.2	5.1	15	0°	90	A	6
-060300 D7M	6	4.2	5.1	30	0°	90	A	6
-060010210 D7M	6	4.2	5.1	21	1°	100	B	6
-080010280 D7M	8	5.6	6.8	28	1°	100	B	8
-100010350 D7M	10	7	8.5	35	1°	110	B	10
-120010420 D7M	12	8.5	10	42	1°	120	B	12

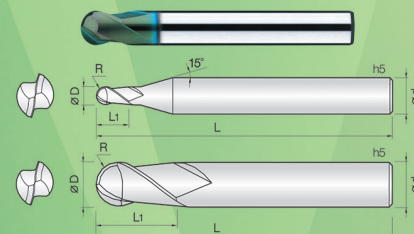
WZQ-2B...

Номенклатурный номер	D	L1	L	d	Номенклатурный номер	D	L1	L	d
-001001 S	0.1	0.1	38	4	-008012 S	0.8	1.2	38	4
-0010015 S	0.1	0.15	38	4	-008020 S	0.8	2	45	4
-001002 S	0.1	0.2	40	4	-009009 S	0.9	0.9	38	4
-00150015 S	0.15	0.15	38	4	-009013 S	0.9	1.3	38	4
-0015002 S	0.15	0.2	38	4	-009020 S	0.9	2	45	4
-0015003 S	0.15	0.3	40	4	-010010 S	1	1	40	4
-002002 S	0.2	0.2	38	4	-010010	1	1	40	6
-002003 S	0.2	0.3	38	4	-010015 S	1	1.5	40	4
-002004 S	0.2	0.4	40	4	-010015	1	1.5	40	6
-003003 S	0.3	0.3	38	4	-010025 S	1	2.5	50	4
-0030045	0.3	0.45	38	4	-010025	1	2.5	50	6
-003006 S	0.3	0.6	40	4	-010025070	1	2.5	70	6
-004004 S	0.4	0.4	38	4	-012030 S	1.2	3	50	4
-004006 S	0.4	0.6	38	4	-015015 S	1.5	1.5	40	4
-004008 S	0.4	0.8	40	4	-015015	1.5	1.5	40	6
-005005 S	0.5	0.5	38	4	-015023 S	1.5	2.3	40	4
-005075 S	0.5	0.75	38	4	-015023	1.5	2.3	40	6
-005010 S	0.5	1	45	4	-015040 S	1.5	4	50	4
-006006 S	0.6	0.6	38	4	-015040	1.5	4	50	6
-006009 S	0.6	0.9	38	4	-015040070	1.5	4	70	6
-006012 S	0.6	1.2	45	4	-020020 S	2	2	45	4
-007007 S	0.7	0.7	38	4	-020020	2	2	45	6
-007010 S	0.7	1	38	4	-020030 S	2	3	45	4
-007015 S	0.7	1.5	45	4	-020030	2	3	45	6
-008008 S	0.8	0.8	38	4	-020050 S	2	5	50	4



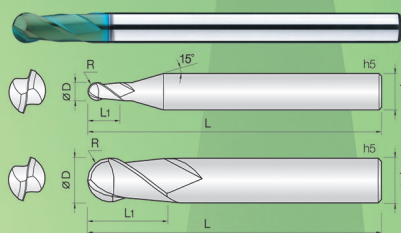
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



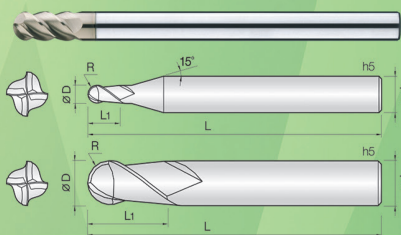
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твёрдостью до 68 HRC

P		M		K		N		S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3	
	V	V	V		V				V	V	V	



"M" - по нержавеющей сталям

P		M		K		N		S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3	
	V	V	V		V		V	V	V			

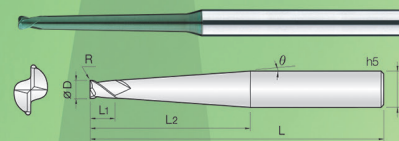
WZQ-2B...

Нумерационный номер	D	L1	L	d	Нумерационный номер	D	L1	L	d
- 020050	2	5	50	6	- 050050	5	5	50	6
- 020050075	2	5	75	6	- 050075	5	7.5	50	6
- 025060 S	2.5	6	50	4	- 050100	5	10	75	6
- 025060	2.5	6	75	6	- 060060	6	6	50	6
- 030030 S	3	3	45	4	- 060080	6	8	55	6
- 030030	3	3	45	6	- 060100	6	10	60	6
- 030045 S	3	4.5	45	4	- 060120	6	12	90	6
- 030045	3	4.5	45	6	- 080080	8	8	50	8
- 030080 S	3	8	50	4	- 080110	8	11	60	8
- 030080	3	8	60	6	- 080120	8	12	60	8
- 030080080	3	8	80	6	- 080140	8	14	100	8
- 035080	3.5	8	60	6	- 100100	10	10	60	10
- 040040 S	4	4	45	4	- 100130	10	13	60	10
- 040040	4	4	45	6	- 100150	10	15	70	10
- 040060 S	4	6	45	4	- 100180	10	18	100	10
- 040060	4	6	45	6	- 120120	12	12	60	12
- 040080 S	4	8	60	4	- 120150	12	15	60	12
- 040080080 S	4	8	80	4	- 120180	12	18	75	12
- 040080	4	8	70	6	- 120220	12	22	110	12
- 040080090	4	8	90	6					

WMQ-4B...

Нумерационный номер	DxR	L1	L	d	Нумерационный номер	DxR	L1	L	d
- 030080	3x1.5	8	60	6	- 080140	8x4	14	100	8
- 040080	4x2	8	70	6	- 100180	10x5	18	100	10
- 050100	5x2.5	10	80	6	- 120220	12x6	22	110	12
- 060120	6x3	12	90	6	- 160300	16x8	30	130	16

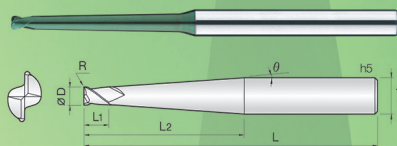
WZQ-2F...MV



"Z" - по закаленным сталям
твердостью до 68 HRC

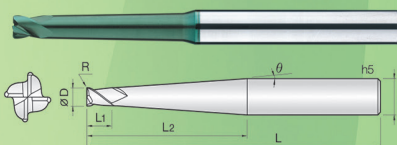
P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

Нумературный номер	D	θ	L ₁	L ₂	L	d	Нумературный номер	D	θ	L ₁	L ₂	L	d
-010001060 SMV	1x0.1	1°	1	6	50	4	-020002400 SMV	2x0.2	1°	2	40	80	4
-010001100 SMV	1x0.1	1°	1	10	50	4	-020002500 SMV	2x0.2	1°	2	50	90	4
-010001150 SMV	1x0.1	1°	1	15	50	4	-020003120 SMV	2x0.3	1°	2	12	50	4
-010001200 SMV	1x0.1	1°	1	20	60	4	-020003160 SMV	2x0.3	1°	2	16	50	4
-010001250 SMV	1x0.1	1°	1	25	60	4	-020003200 SMV	2x0.3	1°	2	20	60	4
-010001300 SMV	1x0.1	1°	1	30	70	4	-020003250 SMV	2x0.3	1°	2	25	60	4
-010001350 SMV	1x0.1	1°	1	35	75	4	-020003300 SMV	2x0.3	1°	2	30	70	4
-010002060 SMV	1x0.2	1°	1	6	50	4	-020003350 SMV	2x0.3	1°	2	35	75	4
-010002100 SMV	1x0.2	1°	1	10	50	4	-020003400 SMV	2x0.3	1°	2	40	80	4
-010002150 SMV	1x0.2	1°	1	15	50	4	-020003500 SMV	2x0.3	1°	2	50	90	4
-010002200 SMV	1x0.2	1°	1	20	60	4	-020005120 SMV	2x0.5	1°	2	12	50	4
-010002250 SMV	1x0.2	1°	1	25	60	4	-020005160 SMV	2x0.5	1°	2	16	50	4
-010002300 SMV	1x0.2	1°	1	30	70	4	-020005200 SMV	2x0.5	1°	2	20	60	4
-010002350 SMV	1x0.2	1°	1	35	75	4	-020005250 SMV	2x0.5	1°	2	25	60	4
-010003060 SMV	1x0.3	1°	1	6	50	4	-020005300 SMV	2x0.5	1°	2	30	70	4
-010003100 SMV	1x0.3	1°	1	10	50	4	-020005350 SMV	2x0.5	1°	2	35	75	4
-010003150 SMV	1x0.3	1°	1	15	50	4	-020005400 SMV	2x0.5	1°	2	40	80	4
-010003200 SMV	1x0.3	1°	1	20	60	4	-020005500 SMV	2x0.5	1°	2	50	90	4
-010003250 SMV	1x0.3	1°	1	25	60	4	-030002200 MV	3x0.2	1°	3	20	60	6
-010003300 SMV	1x0.3	1°	1	30	70	4	-030002300 MV	3x0.2	1°	3	30	70	6
-010003350 SMV	1x0.3	1°	1	35	75	4	-030002400 MV	3x0.2	1°	3	40	80	6
-015002100 SMV	1.5x0.2	1°	1.5	10	50	4	-030002500 MV	3x0.2	1°	3	50	90	6
-015002150 SMV	1.5x0.2	1°	1.5	15	50	4	-030002600 MV	3x0.2	1°	3	60	100	6
-015002200 SMV	1.5x0.2	1°	1.5	20	60	4	-030003200 MV	3x0.3	1°	3	20	60	6
-015002250 SMV	1.5x0.2	1°	1.5	25	60	4	-030003300 MV	3x0.3	1°	3	30	70	6
-015002300 SMV	1.5x0.2	1°	1.5	30	70	4	-030003400 MV	3x0.3	1°	3	40	80	6
-015002350 SMV	1.5x0.2	1°	1.5	35	75	4	-030003500 MV	3x0.3	1°	3	50	90	6
-015003100 SMV	1.5x0.3	1°	1.5	10	50	4	-030003600 MV	3x0.3	1°	3	60	100	6
-015003150 SMV	1.5x0.3	1°	1.5	15	50	4	-030005200 MV	3x0.5	1°	3	20	60	6
-015003200 SMV	1.5x0.3	1°	1.5	20	60	4	-030005300 MV	3x0.5	1°	3	30	70	6
-015003250 SMV	1.5x0.3	1°	1.5	25	60	4	-030005400 MV	3x0.5	1°	3	40	80	6
-015003300 SMV	1.5x0.3	1°	1.5	30	70	4	-030005500 MV	3x0.5	1°	3	50	90	6
-015003350 SMV	1.5x0.3	1°	1.5	35	75	4	-030005600 MV	3x0.5	1°	3	60	100	6
-015005100 SMV	1.5x0.5	1°	1.5	10	50	4	-030010200 MV	3x1	1°	3	20	60	6
-015005150 SMV	1.5x0.5	1°	1.5	15	50	4	-030010300 MV	3x1	1°	3	30	70	6
-015005200 SMV	1.5x0.5	1°	1.5	20	60	4	-030010400 MV	3x1	1°	3	40	80	6
-015005250 SMV	1.5x0.5	1°	1.5	25	60	4	-030010500 MV	3x1	1°	3	50	90	6
-015005300 SMV	1.5x0.5	1°	1.5	30	70	4	-030010600 MV	3x1	1°	3	60	100	6
-015005350 SMV	1.5x0.5	1°	1.5	35	75	4	-040002200 MV	4x0.2	1°	4	20	60	6
-020002120 SMV	2x0.2	1°	2	12	50	4	-040002300 MV	4x0.2	1°	4	30	70	6
-020002160 SMV	2x0.2	1°	2	16	50	4	-040002400 MV	4x0.2	1°	4	40	80	6
-020002200 SMV	2x0.2	1°	2	20	60	4	-040002500 MV	4x0.2	1°	4	50	90	6
-020002250 SMV	2x0.2	1°	2	25	60	4	-040002600 MV	4x0.2	1°	4	60	100	6
-020002300 SMV	2x0.2	1°	2	30	70	4	-040003200 MV	4x0.3	1°	4	20	60	6
-020002350 SMV	2x0.2	1°	2	35	75	4	-040003300 MV	4x0.3	1°	4	30	70	6



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M		K		N		S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3	
	V	V	V		V				V	V	V	



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M		K		N		S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3	
	V	V	V		V				V	V	V	

WZQ-2F...MV

Нумературный номер	D	θ	L ₁	L ₂	L	d	Нумературный номер	D	θ	L ₁	L ₂	L	d
-040003400 MV	4x0.3	1°	4	40	80	6	-040005600 MV	4x0.5	1°	4	60	100	6
-040003500 MV	4x0.3	1°	4	50	90	6	-040010200 MV	4x1	1°	4	20	60	6
-040003600 MV	4x0.3	1°	4	60	100	6	-040010300 MV	4x1	1°	4	30	70	6
-040005200 MV	4x0.5	1°	4	20	60	6	-040010400 MV	4x1	1°	4	40	80	6
-040005300 MV	4x0.5	1°	4	30	70	6	-040010500 MV	4x1	1°	4	50	90	6
-040005400 MV	4x0.5	1°	4	40	80	6	-040010600 MV	4x1	1°	4	60	100	6
-040005500 MV	4x0.5	1°	4	50	90	6							

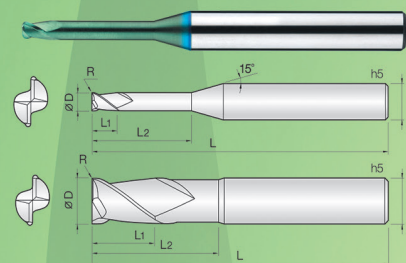
WZQ-4F...MV

Нумературный номер	DxR	θ	L ₁	L ₂	L	d	Нумературный номер	DxR	θ	L ₁	L ₂	L	d
-010001060 SMV	1x0.1	1	1	6	50	4	-020002350 SMV	2x0.2	1	2	35	75	4
-010001100 SMV	1x0.1	1	1	10	50	4	-020002400 SMV	2x0.2	1	2	40	80	4
-010001150 SMV	1x0.1	1	1	15	50	4	-020002500 SMV	2x0.2	1	2	50	90	4
-010001200 SMV	1x0.1	1	1	20	60	4	-020005120 SMV	2x0.5	1	2	12	50	4
-010001250 SMV	1x0.1	1	1	25	60	4	-020005160 SMV	2x0.5	1	2	16	50	4
-010001300 SMV	1x0.1	1	1	30	70	4	-020005200 SMV	2x0.5	1	2	20	60	4
-010001350 SMV	1x0.1	1	1	35	75	4	-020005250 SMV	2x0.5	1	2	25	60	4
-010002060 SMV	1x0.2	1	1	6	50	4	-020005300 SMV	2x0.5	1	2	30	70	4
-010002100 SMV	1x0.2	1	1	10	50	4	-020005350 SMV	2x0.5	1	2	35	75	4
-010002150 SMV	1x0.2	1	1	15	50	4	-020005400 SMV	2x0.5	1	2	40	80	4
-010002200 SMV	1x0.2	1	1	20	60	4	-020005500 SMV	2x0.5	1	2	50	90	4
-010002250 SMV	1x0.2	1	1	25	60	4	-0300022001 MV	3x0.2	1	3	20	60	6
-010002300 SMV	1x0.2	1	1	30	70	4	-0300023001 MV	3x0.2	1	3	30	70	6
-010002350 SMV	1x0.2	1	1	35	75	4	-0300024001 MV	3x0.2	1	3	40	80	6
-015002100 SMV	1.5x0.2	1	1.5	10	50	4	-0300025001 MV	3x0.2	1	3	50	90	6
-015002150 SMV	1.5x0.2	1	1.5	15	50	4	-0300026001 MV	3x0.2	1	3	60	100	6
-015002200 SMV	1.5x0.2	1	1.5	20	60	4	-0300052001 MV	3x0.5	1	3	20	60	6
-015002250 SMV	1.5x0.2	1	1.5	25	60	4	-0300053001 MV	3x0.5	1	3	30	70	6
-015002300 SMV	1.5x0.2	1	1.5	30	70	4	-0300054001 MV	3x0.5	1	3	40	80	6
-015002350 SMV	1.5x0.2	1	1.5	35	75	4	-0300055001 MV	3x0.5	1	3	50	90	6
-015005100 SMV	1.5x0.5	1	1.5	10	50	4	-0300056001 MV	3x0.5	1	3	60	100	6
-015005150 SMV	1.5x0.5	1	1.5	15	50	4	-0400022001 MV	4x0.2	1	4	20	60	6
-015005200 SMV	1.5x0.5	1	1.5	20	60	4	-0400023001 MV	4x0.2	1	4	30	70	6
-015005250 SMV	1.5x0.5	1	1.5	25	60	4	-0400024001 MV	4x0.2	1	4	40	80	6
-015005300 SMV	1.5x0.5	1	1.5	30	70	4	-0400025001 MV	4x0.2	1	4	50	90	6
-015005350 SMV	1.5x0.5	1	1.5	35	75	4	-0400026001 MV	4x0.2	1	4	60	100	6
-020002120 SMV	2x0.2	1	2	12	50	4	-0400052001 MV	4x0.5	1	4	20	60	6
-020002160 SMV	2x0.2	1	2	16	50	4	-0400053001 MV	4x0.5	1	4	30	70	6
-020002200 SMV	2x0.2	1	2	20	60	4	-0400054001 MV	4x0.5	1	4	40	80	6
-020002250 SMV	2x0.2	1	2	25	60	4	-0400055001 MV	4x0.5	1	4	50	90	6
-020002300 SMV	2x0.2	1	2	30	70	4	-0400056001 MV	4x0.5	1	4	60	100	6

WZQ-2F...MR

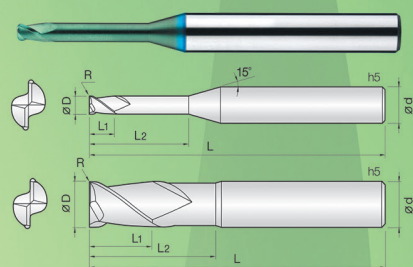


Нумерклатурный номер	D	L ₁	L ₂	L	d	Нумерклатурный номер	D	L ₁	L ₂	L	d
-0020002005 SMR	0.2x0.02	0.2	0.5	40	4	-0060002030 SMR	0.6x0.02	0.6	3	45	4
-0020002010 SMR	0.2x0.02	0.2	1	40	4	-0060002040 SMR	0.6x0.02	0.6	4	45	4
-0020002015 SMR	0.2x0.02	0.2	1.5	40	4	-0060002060 SMR	0.6x0.02	0.6	6	45	4
-0020005005 SMR	0.2x0.05	0.2	0.5	40	4	-0060002080 SMR	0.6x0.02	0.6	8	45	4
-0020005010 SMR	0.2x0.05	0.2	1	40	4	-0060005020 SMR	0.6x0.05	0.6	2	45	4
-0020005015 SMR	0.2x0.05	0.2	1.5	40	4	-0060005030 SMR	0.6x0.05	0.6	3	45	4
-0030002010 SMR	0.3x0.02	0.3	1	40	4	-0060005040 SMR	0.6x0.05	0.6	4	45	4
-0030002020 SMR	0.3x0.02	0.3	2	40	4	-0060005060 SMR	0.6x0.05	0.6	6	45	4
-0030002030 SMR	0.3x0.02	0.3	3	40	4	-0060005080 SMR	0.6x0.05	0.6	8	45	4
-0030005010 SMR	0.3x0.05	0.3	1	40	4	-006001020 SMR	0.6x0.1	0.6	2	45	4
-0030005020 SMR	0.3x0.05	0.3	2	40	4	-006001030 SMR	0.6x0.1	0.6	3	45	4
-0030005030 SMR	0.3x0.05	0.3	3	40	4	-006001040 SMR	0.6x0.1	0.6	4	45	4
-0040002010 SMR	0.4x0.02	0.4	1	40	4	-006001060 SMR	0.6x0.1	0.6	6	45	4
-0040002020 SMR	0.4x0.02	0.4	2	40	4	-006001080 SMR	0.6x0.1	0.6	8	45	4
-0040002030 SMR	0.4x0.02	0.4	3	40	4	-007001020 SMR	0.7x0.1	0.7	2	45	4
-0040002040 SMR	0.4x0.02	0.4	4	40	4	-007001040 SMR	0.7x0.1	0.7	4	45	4
-0040005010 SMR	0.4x0.05	0.4	1	40	4	-007001060 SMR	0.7x0.1	0.7	6	45	4
-0040005020 SMR	0.4x0.05	0.4	2	40	4	-0080002020 SMR	0.8x0.02	0.8	2	45	4
-0040005030 SMR	0.4x0.05	0.4	3	40	4	-0080002040 SMR	0.8x0.02	0.8	4	45	4
-0040005040 SMR	0.4x0.05	0.4	4	40	4	-0080002060 SMR	0.8x0.02	0.8	6	45	4
-004001010 SMR	0.4x0.1	0.4	1	40	4	-0080002080 SMR	0.8x0.02	0.8	8	45	4
-004001015 SMR	0.4x0.1	0.4	1.5	40	4	-0080005020 SMR	0.8x0.05	0.8	2	45	4
-004001020 SMR	0.4x0.1	0.4	2	40	4	-0080005040 SMR	0.8x0.05	0.8	4	45	4
-004001030 SMR	0.4x0.1	0.4	3	40	4	-0080005060 SMR	0.8x0.05	0.8	6	45	4
-004001040 SMR	0.4x0.1	0.4	4	40	4	-0080005080 SMR	0.8x0.05	0.8	8	45	4
-0050002010 SMR	0.5x0.02	0.5	1	45	4	-008001020 SMR	0.8x0.1	0.8	2	45	4
-0050002015 SMR	0.5x0.02	0.5	1.5	45	4	-008001040 SMR	0.8x0.1	0.8	4	45	4
-0050002020 SMR	0.5x0.02	0.5	2	45	4	-008001060 SMR	0.8x0.1	0.8	6	45	4
-0050002025 SMR	0.5x0.02	0.5	2.5	45	4	-008001080 SMR	0.8x0.1	0.8	8	45	4
-0050002030 SMR	0.5x0.02	0.5	3	45	4	-008002020 SMR	0.8x0.2	0.8	2	45	4
-0050002040 SMR	0.5x0.02	0.5	4	45	4	-008002040 SMR	0.8x0.2	0.8	4	45	4
-0050002050 SMR	0.5x0.02	0.5	5	45	4	-008002060 SMR	0.8x0.2	0.8	6	45	4
-0050002060 SMR	0.5x0.02	0.5	6	45	4	-008002080 SMR	0.8x0.2	0.8	8	45	4
-0050005010 SMR	0.5x0.05	0.5	1	45	4	-0100002040 SMR	1x0.02	1	4	45	4
-0050005015 SMR	0.5x0.05	0.5	1.5	45	4	-0100002060 SMR	1x0.02	1	6	45	4
-0050005020 SMR	0.5x0.05	0.5	2	45	4	-0100002080 SMR	1x0.02	1	8	45	4
-0050005025 SMR	0.5x0.05	0.5	2.5	45	4	-0100002100 SMR	1x0.02	1	10	50	4
-0050005030 SMR	0.5x0.05	0.5	3	45	4	-0100002120 SMR	1x0.02	1	12	50	4
-0050005040 SMR	0.5x0.05	0.5	4	45	4	-0100002160 SMR	1x0.02	1	16	50	4
-0050005050 SMR	0.5x0.05	0.5	5	45	4	-0100002200 SMR	1x0.02	1	20	50	4
-0050005060 SMR	0.5x0.05	0.5	6	45	4	-0100005040 SMR	1x0.05	1	4	45	4
-005001010 SMR	0.5x0.1	0.5	1	45	4	-0100005060 SMR	1x0.05	1	6	45	4
-005001015 SMR	0.5x0.1	0.5	1.5	45	4	-0100005080 SMR	1x0.05	1	8	45	4
-005001020 SMR	0.5x0.1	0.5	2	45	4	-0100005100 SMR	1x0.05	1	10	50	4
-005001025 SMR	0.5x0.1	0.5	2.5	45	4	-0100005120 SMR	1x0.05	1	12	50	4
-005001030 SMR	0.5x0.1	0.5	3	45	4	-0100005160 SMR	1x0.05	1	16	50	4
-005001040 SMR	0.5x0.1	0.5	4	45	4	-0100005200 SMR	1x0.05	1	20	50	4
-005001050 SMR	0.5x0.1	0.5	5	45	4	-01000040 SMR	1x0.1	1	4	45	4
-005001060 SMR	0.5x0.1	0.5	6	45	4	-010001060 SMR	1x0.1	1	6	45	4
-0060002020 SMR	0.6x0.02	0.6	2	45	4	-010001080 SMR	1x0.1	1	8	45	4



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M		K		N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3		
	V	V	V		V					V	V	V	

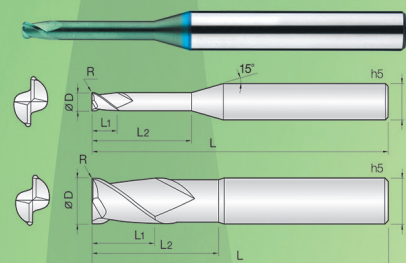
WZQ-2F...MR

Нумературный номер	D	L ₁	L ₂	L	d	Нумературный номер	D	L ₁	L ₂	L	d
-010001100 SMR	1x0.1	1	10	50	4	-012003120 SMR	1.2x0.3	1.2	12	50	4
-010001120 SMR	1x0.1	1	12	50	4	-012003160 SMR	1.2x0.3	1.2	16	50	4
-010001160 SMR	1x0.1	1	16	50	4	-012003200 SMR	1.2x0.3	1.2	20	50	4
-010001200 SMR	1x0.1	1	20	50	4	-0150002040 SMR	1.5x0.02	1.5	4	45	4
-010002040 SMR	1x0.2	1	4	45	4	-0150002060 SMR	1.5x0.02	1.5	6	45	4
-010002060 SMR	1x0.2	1	6	45	4	-0150002080 SMR	1.5x0.02	1.5	8	45	4
-010002080 SMR	1x0.2	1	8	45	4	-0150002100 SMR	1.5x0.02	1.5	10	50	4
-010002100 SMR	1x0.2	1	10	50	4	-0150002120 SMR	1.5x0.02	1.5	12	50	4
-010002120 SMR	1x0.2	1	12	50	4	-0150002160 SMR	1.5x0.02	1.5	16	50	4
-010002160 SMR	1x0.2	1	16	50	4	-0150002200 SMR	1.5x0.02	1.5	20	50	4
-010002200 SMR	1x0.2	1	20	50	4	-0150005040 SMR	1.5x0.05	1.5	4	45	4
-010003040 SMR	1x0.3	1	4	45	4	-0150005060 SMR	1.5x0.05	1.5	6	45	4
-010003060 SMR	1x0.3	1	6	45	4	-0150005080 SMR	1.5x0.05	1.5	8	45	4
-010003080 SMR	1x0.3	1	8	45	4	-0150005100 SMR	1.5x0.05	1.5	10	50	4
-010003100 SMR	1x0.3	1	10	50	4	-0150005120 SMR	1.5x0.05	1.5	12	50	4
-010003120 SMR	1x0.3	1	12	50	4	-0150005160 SMR	1.5x0.05	1.5	16	50	4
-010003160 SMR	1x0.3	1	16	50	4	-0150005200 SMR	1.5x0.05	1.5	20	50	4
-010003200 SMR	1x0.3	1	20	50	4	-015001040 SMR	1.5x0.1	1.5	4	45	4
-0120002040 SMR	1.2x0.02	1.2	4	45	4	-015001060 SMR	1.5x0.1	1.5	6	45	4
-0120002060 SMR	1.2x0.02	1.2	6	45	4	-015001080 SMR	1.5x0.1	1.5	8	45	4
-0120002080 SMR	1.2x0.02	1.2	8	45	4	-015001100 SMR	1.5x0.1	1.5	10	50	4
-0120002100 SMR	1.2x0.02	1.2	10	50	4	-015001120 SMR	1.5x0.1	1.5	12	50	4
-0120002120 SMR	1.2x0.02	1.2	12	50	4	-015001160 SMR	1.5x0.1	1.5	16	50	4
-0120002160 SMR	1.2x0.02	1.2	16	50	4	-015001200 SMR	1.5x0.1	1.5	20	50	4
-0120002200 SMR	1.2x0.02	1.2	20	50	4	-015002040 SMR	1.5x0.2	1.5	4	45	4
-0120005040 SMR	1.2x0.05	1.2	4	45	4	-015002060 SMR	1.5x0.2	1.5	6	45	4
-0120005060 SMR	1.2x0.05	1.2	6	45	4	-015002080 SMR	1.5x0.2	1.5	8	45	4
-0120005080 SMR	1.2x0.05	1.2	8	45	4	-015002100 SMR	1.5x0.2	1.5	10	50	4
-0120005100 SMR	1.2x0.05	1.2	10	50	4	-015002120 SMR	1.5x0.2	1.5	12	50	4
-0120005120 SMR	1.2x0.05	1.2	12	50	4	-015002160 SMR	1.5x0.2	1.5	16	50	4
-0120005160 SMR	1.2x0.05	1.2	16	50	4	-015002200 SMR	1.5x0.2	1.5	20	50	4
-0120005200 SMR	1.2x0.05	1.2	20	50	4	-015003040 SMR	1.5x0.3	1.5	4	45	4
-012001040 SMR	1.2x0.1	1.2	4	45	4	-015003060 SMR	1.5x0.3	1.5	6	45	4
-012001060 SMR	1.2x0.1	1.2	6	45	4	-015003080 SMR	1.5x0.3	1.5	8	45	4
-012001080 SMR	1.2x0.1	1.2	8	45	4	-015003100 SMR	1.5x0.3	1.5	10	50	4
-012001100 SMR	1.2x0.1	1.2	10	50	4	-015003120 SMR	1.5x0.3	1.5	12	50	4
-012001120 SMR	1.2x0.1	1.2	12	50	4	-015003160 SMR	1.5x0.3	1.5	16	50	4
-012001160 SMR	1.2x0.1	1.2	16	50	4	-015003200 SMR	1.5x0.3	1.5	20	50	4
-012001200 SMR	1.2x0.1	1.2	20	50	4	-015005040 SMR	1.5x0.5	1.5	4	45	4
-012002040 SMR	1.2x0.2	1.2	4	45	4	-015005060 SMR	1.5x0.5	1.5	6	45	4
-012002060 SMR	1.2x0.2	1.2	6	45	4	-015005080 SMR	1.5x0.5	1.5	8	45	4
-012002080 SMR	1.2x0.2	1.2	8	45	4	-015005100 SMR	1.5x0.5	1.5	10	50	4
-012002100 SMR	1.2x0.2	1.2	10	50	4	-015005120 SMR	1.5x0.5	1.5	12	50	4
-012002120 SMR	1.2x0.2	1.2	12	50	4	-015005160 SMR	1.5x0.5	1.5	16	50	4
-012002160 SMR	1.2x0.2	1.2	16	50	4	-015005200 SMR	1.5x0.5	1.5	20	50	4
-012002200 SMR	1.2x0.2	1.2	20	50	4	-0200002060 SMR	2x0.02	2	6	45	4
-012003040 SMR	1.2x0.3	1.2	4	45	4	-0200002080 SMR	2x0.02	2	8	45	4
-012003060 SMR	1.2x0.3	1.2	6	45	4	-0200002100 SMR	2x0.02	2	10	50	4
-012003080 SMR	1.2x0.3	1.2	8	45	4	-0200002120 SMR	2x0.02	2	12	50	4
-012003100 SMR	1.2x0.3	1.2	10	50	4	-0200002160 SMR	2x0.02	2	16	50	4

WZQ-2F...MR

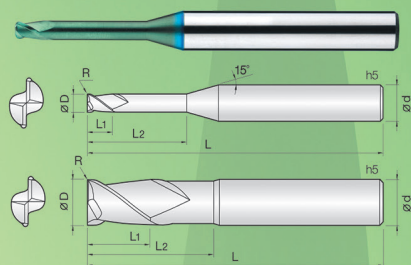


Номенклатурный номер	D	L ₁	L ₂	L	d	Номенклатурный номер	D	L ₁	L ₂	L	d
- 0200002200 SMR	2x0.02	2	20	50	4	- 030001120 MR	3x0.1	3	12	50	6
- 0200002250 SMR	2x0.02	2	25	60	4	- 030001160 MR	3x0.1	3	16	55	6
- 0200005060 SMR	2x0.05	2	6	45	4	- 030001200 MR	3x0.1	3	20	60	6
- 0200005080 SMR	2x0.05	2	8	45	4	- 030001250 MR	3x0.1	3	25	65	6
- 0200005100 SMR	2x0.05	2	10	50	4	- 030001300 MR	3x0.1	3	30	70	6
- 0200005120 SMR	2x0.05	2	12	50	4	- 030001350 MR	3x0.1	3	35	75	6
- 0200005160 SMR	2x0.05	2	16	50	4	- 030001400 MR	3x0.1	3	40	80	6
- 0200005200 SMR	2x0.05	2	20	50	4	- 030002100 MR	3x0.2	3	10	50	6
- 0200005250 SMR	2x0.05	2	25	60	4	- 030002120 MR	3x0.2	3	12	50	6
- 020001060 SMR	2x0.1	2	6	45	4	- 030002160 MR	3x0.2	3	16	55	6
- 020001080 SMR	2x0.1	2	8	45	4	- 030002200 MR	3x0.2	3	20	60	6
- 020001100 SMR	2x0.1	2	10	50	4	- 030002250 MR	3x0.2	3	25	65	6
- 020001120 SMR	2x0.1	2	12	50	4	- 030002300 MR	3x0.2	3	30	70	6
- 020001160 SMR	2x0.1	2	16	50	4	- 030002350 MR	3x0.2	3	35	75	6
- 020001200 SMR	2x0.1	2	20	50	4	- 030002400 MR	3x0.2	3	40	80	6
- 020001250 SMR	2x0.1	2	25	60	4	- 030003100 MR	3x0.3	3	10	50	6
- 020002060 SMR	2x0.2	2	6	45	4	- 030003120 MR	3x0.3	3	12	50	6
- 020002080 SMR	2x0.2	2	8	45	4	- 030003160 MR	3x0.3	3	16	55	6
- 020002100 SMR	2x0.2	2	10	50	4	- 030003200 MR	3x0.3	3	20	60	6
- 020002120 SMR	2x0.2	2	12	50	4	- 030003250 MR	3x0.3	3	25	65	6
- 020002160 SMR	2x0.2	2	16	50	4	- 030003300 MR	3x0.3	3	30	70	6
- 020002200 SMR	2x0.2	2	20	50	4	- 030003350 MR	3x0.3	3	35	75	6
- 020002250 SMR	2x0.2	2	25	60	4	- 030003400 MR	3x0.3	3	40	80	6
- 020003060 SMR	2x0.3	2	6	45	4	- 030005100 MR	3x0.5	3	10	50	6
- 020003080 SMR	2x0.3	2	8	45	4	- 030005120 MR	3x0.5	3	12	50	6
- 020003100 SMR	2x0.3	2	10	50	4	- 030005160 MR	3x0.5	3	16	55	6
- 020003120 SMR	2x0.3	2	12	50	4	- 030005200 MR	3x0.5	3	20	60	6
- 020003160 SMR	2x0.3	2	16	50	4	- 030005250 MR	3x0.5	3	25	65	6
- 020003200 SMR	2x0.3	2	20	50	4	- 030005300 MR	3x0.5	3	30	70	6
- 020003250 SMR	2x0.3	2	25	60	4	- 030005350 MR	3x0.5	3	35	75	6
- 020005060 SMR	2x0.5	2	6	45	4	- 030005400 MR	3x0.5	3	40	80	6
- 020005080 SMR	2x0.5	2	8	45	4	- 030010100 MR	3x1	3	10	50	6
- 020005100 SMR	2x0.5	2	10	50	4	- 030010120 MR	3x1	3	12	50	6
- 020005120 SMR	2x0.5	2	12	50	4	- 030010160 MR	3x1	3	16	55	6
- 020005160 SMR	2x0.5	2	16	50	4	- 030010200 MR	3x1	3	20	60	6
- 020005200 SMR	2x0.5	2	20	50	4	- 030010250 MR	3x1	3	25	65	6
- 020005250 SMR	2x0.5	2	25	60	4	- 030010300 MR	3x1	3	30	70	6
- 025001100 SMR	2.5x0.1	2.5	10	50	4	- 030010350 MR	3x1	3	35	75	6
- 025001160 SMR	2.5x0.1	2.5	16	50	4	- 030010400 MR	3x1	3	40	80	6
- 025001200 SMR	2.5x0.1	2.5	20	50	4	- 040001120 MR	4x0.1	4	12	50	6
- 025002100 SMR	2.5x0.2	2.5	10	50	4	- 040001160 MR	4x0.1	4	16	55	6
- 025002160 SMR	2.5x0.2	2.5	16	50	4	- 040001200 MR	4x0.1	4	20	60	6
- 025002200 SMR	2.5x0.2	2.5	20	50	4	- 040001250 MR	4x0.1	4	25	65	6
- 025003100 SMR	2.5x0.3	2.5	10	50	4	- 040001300 MR	4x0.1	4	30	70	6
- 025003160 SMR	2.5x0.3	2.5	16	50	4	- 040001350 MR	4x0.1	4	35	75	6
- 025003200 SMR	2.5x0.3	2.5	20	50	4	- 040001400 MR	4x0.1	4	40	80	6
- 025005100 SMR	2.5x0.5	2.5	10	50	4	- 040002120 MR	4x0.2	4	12	50	6
- 025005160 SMR	2.5x0.5	2.5	16	50	4	- 040002160 MR	4x0.2	4	16	55	6
- 025005200 SMR	2.5x0.5	2.5	20	50	4	- 040002200 MR	4x0.2	4	20	60	6
- 030001100 MR	3x0.1	3	10	50	6	- 040002250 MR	4x0.2	4	25	65	6



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

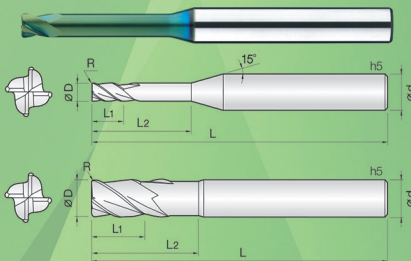


"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

WZQ-2F...MR

Номенклатурный номер	D	L ₁	L ₂	L	d	Номенклатурный номер	D	L ₁	L ₂	L	d
-040002300 MR	4x0.2	4	30	70	6	-050010300 MR	5x1	6	30	70	6
-040002350 MR	4x0.2	4	35	75	6	-050010400 MR	5x1	6	40	80	6
-040002400 MR	4x0.2	4	40	80	6	-060001200 MR	6x0.1	7	20	60	6
-040003120 MR	4x0.3	4	12	50	6	-060001400 MR	6x0.1	7	40	80	6
-040003160 MR	4x0.3	4	16	55	6	-060002200 MR	6x0.2	7	20	60	6
-040003200 MR	4x0.3	4	20	60	6	-060002400 MR	6x0.2	7	40	80	6
-040003250 MR	4x0.3	4	25	65	6	-060003200 MR	6x0.3	7	20	60	6
-040003300 MR	4x0.3	4	30	70	6	-060003400 MR	6x0.3	7	40	80	6
-040003350 MR	4x0.3	4	35	75	6	-060005200 MR	6x0.5	7	20	60	6
-040003400 MR	4x0.3	4	40	80	6	-060005400 MR	6x0.5	7	40	80	6
-040005120 MR	4x0.5	4	12	50	6	-060010200 MR	6x1	7	20	60	6
-040005160 MR	4x0.5	4	16	55	6	-060010400 MR	6x1	7	40	80	6
-040005200 MR	4x0.5	4	20	60	6	-060015200 MR	6x1.5	7	20	60	6
-040005250 MR	4x0.5	4	25	65	6	-060015400 MR	6x1.5	7	40	80	6
-040005300 MR	4x0.5	4	30	70	6	-080002220 MR	8x0.2	9	22	65	8
-040005350 MR	4x0.5	4	35	75	6	-080003220 MR	8x0.3	9	22	65	8
-040005400 MR	4x0.5	4	40	80	6	-080005220 MR	8x0.5	9	22	65	8
-040010120 MR	4x1	4	12	50	6	-080010220 MR	8x1	9	22	65	8
-040010160 MR	4x1	4	16	55	6	-080015220 MR	8x1.5	9	22	65	8
-040010200 MR	4x1	4	20	60	6	-100002240 MR	10x0.2	11	24	70	10
-040010250 MR	4x1	4	25	65	6	-100003240 MR	10x0.3	11	24	70	10
-040010300 MR	4x1	4	30	70	6	-100005240 MR	10x0.5	11	24	70	10
-040010350 MR	4x1	4	35	75	6	-100010240 MR	10x1	11	24	70	10
-040010400 MR	4x1	4	40	80	6	-100015240 MR	10x1.5	11	24	70	10
-050002150 MR	5x0.2	6	15	60	6	-100020240 MR	10x2	11	24	70	10
-050002250 MR	5x0.2	6	25	70	6	-120002260 MR	12x0.2	13	26	80	12
-050002300 MR	5x0.2	6	30	70	6	-120003260 MR	12x0.3	13	26	80	12
-050002400 MR	5x0.2	6	40	80	6	-120005260 MR	12x0.5	13	26	80	12
-050005150 MR	5x0.5	6	15	60	6	-120010260 MR	12x1	13	26	80	12
-050005250 MR	5x0.5	6	25	70	6	-120015260 MR	12x1.5	13	26	80	12
-050005300 MR	5x0.5	6	30	70	6	-120020260 MR	12x2	13	26	80	12
-050005400 MR	5x0.5	6	40	80	6	-120030260 MR	12x3	13	26	80	12
-050010150 MR	5x1	6	15	60	6	-160005350 MR	16x0.5	20	35	110	16
-050010250 MR	5x1	6	25	70	6	-160010350 MR	16x1	20	35	110	16



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

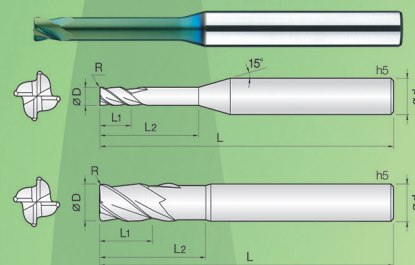
WZQ-4F...MR

Номенклатурный номер	DxR	L ₁	L ₂	L	d	Номенклатурный номер	DxR	L ₁	L ₂	L	d
-0080002020 SMR	0.8x0.02	0.8	2	45	4	-008001020 SMR	0.8x0.1	0.8	2	45	4
-0080002040 SMR	0.8x0.02	0.8	4	45	4	-008001040 SMR	0.8x0.1	0.8	4	45	4
-0080002060 SMR	0.8x0.02	0.8	6	45	4	-008001060 SMR	0.8x0.1	0.8	6	45	4
-0080002080 SMR	0.8x0.02	0.8	8	45	4	-008001080 SMR	0.8x0.1	0.8	8	45	4
-0080002100 SMR	0.8x0.02	0.8	10	45	4	-008001100 SMR	0.8x0.1	0.8	10	45	4
-0080005020 SMR	0.8x0.05	0.8	2	45	4	-0100002040 SMR	1x0.02	1	4	45	4
-0080005040 SMR	0.8x0.05	0.8	4	45	4	-0100002060 SMR	1x0.02	1	6	45	4
-0080005060 SMR	0.8x0.05	0.8	6	45	4	-0100002080 SMR	1x0.02	1	8	45	4
-0080005080 SMR	0.8x0.05	0.8	8	45	4	-0100002100 SMR	1x0.02	1	10	50	4
-0080005100 SMR	0.8x0.05	0.8	10	45	4	-0100002120 SMR	1x0.02	1	12	50	4

WZQ-4F...MR

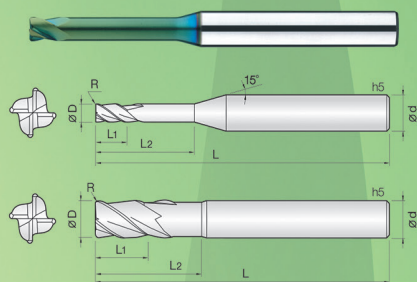


Нумерклатурный номер	DxR	L ₁	L ₂	L	d	Нумерклатурный номер	DxR	L ₁	L ₂	L	d
-0100005040 SMR	1x0.05	1	4	45	4	-0150005060 SMR	1.5x0.05	1.5	6	45	4
-0100005060 SMR	1x0.05	1	6	45	4	-0150005080 SMR	1.5x0.05	1.5	8	45	4
-0100005080 SMR	1x0.05	1	8	45	4	-0150005100 SMR	1.5x0.05	1.5	10	50	4
-0100005100 SMR	1x0.05	1	10	50	4	-0150005120 SMR	1.5x0.05	1.5	12	50	4
-0100005120 SMR	1x0.05	1	12	50	4	-0150005160 SMR	1.5x0.05	1.5	16	50	4
-010001040 SMR	1x0.1	1	4	45	4	-015001060 SMR	1.5x0.1	1.5	6	45	4
-010001060 SMR	1x0.1	1	6	45	4	-015001080 SMR	1.5x0.1	1.5	8	45	4
-010001080 SMR	1x0.1	1	8	45	4	-015001100 SMR	1.5x0.1	1.5	10	50	4
-010001100 SMR	1x0.1	1	10	50	4	-015001120 SMR	1.5x0.1	1.5	12	50	4
-010001120 SMR	1x0.1	1	12	50	4	-015001160 SMR	1.5x0.1	1.5	16	50	4
-010002040 SMR	1x0.2	1	4	45	4	-015002060 SMR	1.5x0.2	1.5	6	45	4
-010002060 SMR	1x0.2	1	6	45	4	-015002080 SMR	1.5x0.2	1.5	8	45	4
-010002080 SMR	1x0.2	1	8	45	4	-015002100 SMR	1.5x0.2	1.5	10	50	4
-010002100 SMR	1x0.2	1	10	50	4	-015002120 SMR	1.5x0.2	1.5	12	50	4
-010002120 SMR	1x0.2	1	12	50	4	-015002160 SMR	1.5x0.2	1.5	16	50	4
-010003040 SMR	1x0.3	1	4	45	4	-015003060 SMR	1.5x0.3	1.5	6	45	4
-010003060 SMR	1x0.3	1	6	45	4	-015003080 SMR	1.5x0.3	1.5	8	45	4
-010003080 SMR	1x0.3	1	8	45	4	-015003100 SMR	1.5x0.3	1.5	10	50	4
-010003100 SMR	1x0.3	1	10	50	4	-015003120 SMR	1.5x0.3	1.5	12	50	4
-010003120 SMR	1x0.3	1	12	50	4	-015003160 SMR	1.5x0.3	1.5	16	50	4
-0120002040 SMR	1.2x0.02	1.2	4	45	4	-015005060 SMR	1.5x0.5	1.5	6	45	4
-0120002060 SMR	1.2x0.02	1.2	6	45	4	-015005080 SMR	1.5x0.5	1.5	8	45	4
-0120002080 SMR	1.2x0.02	1.2	8	45	4	-015005100 SMR	1.5x0.5	1.5	10	50	4
-0120002100 SMR	1.2x0.02	1.2	10	50	4	-015005120 SMR	1.5x0.5	1.5	12	50	4
-0120002120 SMR	1.2x0.02	1.2	12	50	4	-015005160 SMR	1.5x0.5	1.5	16	50	4
-0120005040 SMR	1.2x0.05	1.2	4	45	4	-0200002060 SMR	2x0.02	2	6	45	4
-0120005060 SMR	1.2x0.05	1.2	6	45	4	-0200002080 SMR	2x0.02	2	8	45	4
-0120005080 SMR	1.2x0.05	1.2	8	45	4	-0200002100 SMR	2x0.02	2	10	50	4
-0120005100 SMR	1.2x0.05	1.2	10	50	4	-0200002120 SMR	2x0.02	2	12	50	4
-0120005120 SMR	1.2x0.05	1.2	12	50	4	-0200002160 SMR	2x0.02	2	16	50	4
-012001040 SMR	1.2x0.1	1.2	4	45	4	-0200002200 SMR	2x0.02	2	20	50	4
-012001060 SMR	1.2x0.1	1.2	6	45	4	-0200002250 SMR	2x0.02	2	25	60	4
-012001080 SMR	1.2x0.1	1.2	8	45	4	-0200005060 SMR	2x0.05	2	6	45	4
-012001100 SMR	1.2x0.1	1.2	10	50	4	-0200005080 SMR	2x0.05	2	8	45	4
-012001120 SMR	1.2x0.1	1.2	12	50	4	-0200005100 SMR	2x0.05	2	10	50	4
-012002040 SMR	1.2x0.2	1.2	4	45	4	-0200005120 SMR	2x0.05	2	12	50	4
-012002060 SMR	1.2x0.2	1.2	6	45	4	-0200005160 SMR	2x0.05	2	16	50	4
-012002080 SMR	1.2x0.2	1.2	8	45	4	-0200005200 SMR	2x0.05	2	20	50	4
-012002100 SMR	1.2x0.2	1.2	10	50	4	-0200005250 SMR	2x0.05	2	25	60	4
-012002120 SMR	1.2x0.2	1.2	12	50	4	-020001060 SMR	2x0.1	2	6	45	4
-012003040 SMR	1.2x0.3	1.2	4	45	4	-020001080 SMR	2x0.1	2	8	45	4
-012003060 SMR	1.2x0.3	1.2	6	45	4	-020001100 SMR	2x0.1	2	10	50	4
-012003080 SMR	1.2x0.3	1.2	8	45	4	-020001120 SMR	2x0.1	2	12	50	4
-012003100 SMR	1.2x0.3	1.2	10	50	4	-020001160 SMR	2x0.1	2	16	50	4
-012003120 SMR	1.2x0.3	1.2	12	50	4	-020001200 SMR	2x0.1	2	20	50	4
-015002060 SMR	1.5x0.2	1.5	6	45	4	-020001250 SMR	2x0.1	2	25	60	4
-015002080 SMR	1.5x0.2	1.5	8	45	4	-020002060 SMR	2x0.2	2	6	45	4
-015002100 SMR	1.5x0.2	1.5	10	50	4	-020002080 SMR	2x0.2	2	8	45	4
-015002120 SMR	1.5x0.2	1.5	12	50	4	-020002100 SMR	2x0.2	2	10	50	4
-015002160 SMR	1.5x0.2	1.5	16	50	4	-020002120 SMR	2x0.2	2	12	50	4



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

WZQ-4F...MR

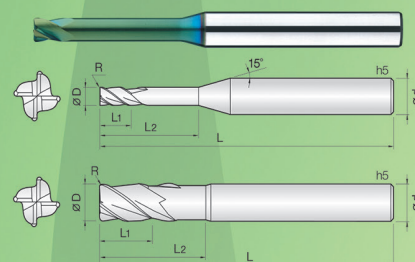
Номенклатурный номер	DxR	L ₁	L ₂	L	d	Номенклатурный номер	DxR	L ₁	L ₂	L	d
-020002160 SMR	2x0.2	2	16	50	4	-030003200 MR	3x0.3	3	20	60	6
-020002200 SMR	2x0.2	2	20	50	4	-030003250 MR	3x0.3	3	25	65	6
-020002250 SMR	2x0.2	2	25	60	4	-030003300 MR	3x0.3	3	30	70	6
-020003060 SMR	2x0.3	2	6	45	4	-030003350 MR	3x0.3	3	35	75	6
-020003080 SMR	2x0.3	2	8	45	4	-030005100 MR	3x0.5	3	10	50	6
-020003100 SMR	2x0.3	2	10	50	4	-030005120 MR	3x0.5	3	12	50	6
-020003120 SMR	2x0.3	2	12	50	4	-030005160 MR	3x0.5	3	16	55	6
-020003160 SMR	2x0.3	2	16	50	4	-030005200 MR	3x0.5	3	20	60	6
-020003200 SMR	2x0.3	2	20	50	4	-030005250 MR	3x0.5	3	25	65	6
-020003250 SMR	2x0.3	2	25	60	4	-030005300 MR	3x0.5	3	30	70	6
-020005060 SMR	2x0.5	2	6	45	4	-030005350 MR	3x0.5	3	35	75	6
-020005080 SMR	2x0.5	2	8	45	4	-030010100 MR	3x1	3	10	50	6
-020005100 SMR	2x0.5	2	10	50	4	-030010120 MR	3x1	3	12	50	6
-020005120 SMR	2x0.5	2	12	50	4	-030010160 MR	3x1	3	16	55	6
-020005160 SMR	2x0.5	2	16	50	4	-030010200 MR	3x1	3	20	60	6
-020005200 SMR	2x0.5	2	20	50	4	-030010250 MR	3x1	3	25	65	6
-020005250 SMR	2x0.5	2	25	60	4	-030010300 MR	3x1	3	30	70	6
-025001100 SMR	2.5x0.1	2.5	10	50	4	-030010350 MR	3x1	3	35	75	6
-025001160 SMR	2.5x0.1	2.5	16	50	4	-040001130 MR	4x0.1	4	13	55	6
-025001200 SMR	2.5x0.1	2.5	20	50	4	-040001160 MR	4x0.1	4	16	55	6
-025001250 SMR	2.5x0.1	2.5	25	60	4	-040001200 MR	4x0.1	4	20	60	6
-025002100 SMR	2.5x0.2	2.5	10	50	4	-040001250 MR	4x0.1	4	25	65	6
-025002160 SMR	2.5x0.2	2.5	16	50	4	-040001300 MR	4x0.1	4	30	70	6
-025002200 SMR	2.5x0.2	2.5	20	50	4	-040001350 MR	4x0.1	4	35	75	6
-025002250 SMR	2.5x0.2	2.5	25	60	4	-040001400 MR	4x0.1	4	40	80	6
-025003100 SMR	2.5x0.3	2.5	10	50	4	-040002130 MR	4x0.2	4	13	55	6
-025003160 SMR	2.5x0.3	2.5	16	50	4	-040002160 MR	4x0.2	4	16	55	6
-025003200 SMR	2.5x0.3	2.5	20	50	4	-040002200 MR	4x0.2	4	20	60	6
-025003250 SMR	2.5x0.3	2.5	25	60	4	-040002250 MR	4x0.2	4	25	65	6
-025005100 SMR	2.5x0.5	2.5	10	50	4	-040002300 MR	4x0.2	4	30	70	6
-025005160 SMR	2.5x0.5	2.5	16	50	4	-040002350 MR	4x0.2	4	35	75	6
-025005200 SMR	2.5x0.5	2.5	20	50	4	-040002400 MR	4x0.2	4	40	80	6
-025005250 SMR	2.5x0.5	2.5	25	60	4	-040003130 MR	4x0.3	4	13	55	6
-030001100 MR	3x0.1	3	10	50	6	-040003160 MR	4x0.3	4	16	55	6
-030001120 MR	3x0.1	3	12	50	6	-040003200 MR	4x0.3	4	20	60	6
-030001160 MR	3x0.1	3	16	55	6	-040003250 MR	4x0.3	4	25	65	6
-030001200 MR	3x0.1	3	20	60	6	-040003300 MR	4x0.3	4	30	70	6
-030001250 MR	3x0.1	3	25	65	6	-040003350 MR	4x0.3	4	35	75	6
-030001300 MR	3x0.1	3	30	70	6	-040003400 MR	4x0.3	4	40	80	6
-030001350 MR	3x0.1	3	35	75	6	-040005130 MR	4x0.5	4	13	55	6
-030002100 MR	3x0.2	3	10	50	6	-040005160 MR	4x0.5	4	16	55	6
-030002120 MR	3x0.2	3	12	50	6	-040005200 MR	4x0.5	4	20	60	6
-030002160 MR	3x0.2	3	16	55	6	-040005250 MR	4x0.5	4	25	65	6
-030002200 MR	3x0.2	3	20	60	6	-040005300 MR	4x0.5	4	30	70	6
-030002250 MR	3x0.2	3	25	65	6	-040005350 MR	4x0.5	4	35	75	6
-030002300 MR	3x0.2	3	30	70	6	-040005400 MR	4x0.5	4	40	80	6
-030002350 MR	3x0.2	3	35	75	6	-040010130 MR	4x1	4	13	55	6
-030003100 MR	3x0.3	3	10	50	6	-040010160 MR	4x1	4	16	55	6
-030003120 MR	3x0.3	3	12	50	6	-040010200 MR	4x1	4	20	60	6
-030003160 MR	3x0.3	3	16	55	6	-040010250 MR	4x1	4	25	65	6

WZQ-4F...MR

Нумературный номер	DxR	L ₁	L ₂	L	d	Нумературный номер	DxR	L ₁	L ₂	L	d
-040010300 MR	4x1	4	30	70	6	-060015400 MR	6x1.5	7	40	80	6
-040010350 MR	4x1	4	35	75	6	-080003220 MR	8x0.3	9	22	65	8
-040010400 MR	4x1	4	40	80	6	-080005220 MR	8x0.5	9	22	65	8
-050001160 MR	5x0.1	5	16	60	6	-080005400 MR	8x0.5	9	40	100	8
-050001300 MR	5x0.1	5	30	70	6	-080010220 MR	8x1	9	22	65	8
-050002160 MR	5x0.2	5	16	60	6	-080010400 MR	8x1	9	40	100	8
-050002300 MR	5x0.2	5	30	70	6	-080015220 MR	8x1.5	9	22	65	8
-050003160 MR	5x0.3	5	16	60	6	-080020220 MR	8x2	9	22	65	8
-050003300 MR	5x0.3	5	30	70	6	-100003240 MR	10x0.3	11	24	70	10
-050005160 MR	5x0.5	5	16	60	6	-100005240 MR	10x0.5	11	24	70	10
-050005300 MR	5x0.5	5	30	70	6	-100005400 MR	10x0.5	11	40	100	10
-050010160 MR	5x1	5	16	60	6	-100010240 MR	10x1	11	24	70	10
-050010300 MR	5x1	5	30	70	6	-100010400 MR	10x1	11	40	100	10
-060001200 MR	6x0.1	7	20	60	6	-100015240 MR	10x1.5	11	24	70	10
-060001400 MR	6x0.1	7	40	80	6	-100020240 MR	10x2	11	24	70	10
-060002200 MR	6x0.2	7	20	60	6	-100025240 MR	10x2.5	11	24	70	10
-060002400 MR	6x0.2	7	40	80	6	-120003260 MR	12x0.3	13	26	80	12
-060003200 MR	6x0.3	7	20	60	6	-120005260 MR	12x0.5	13	26	80	12
-060003400 MR	6x0.3	7	40	80	6	-120005400 MR	12x0.5	13	40	110	12
-060005200 MR	6x0.5	7	20	60	6	-120010260 MR	12x1	13	26	80	12
-060005400 MR	6x0.5	7	40	80	6	-120010400 MR	12x1	13	40	110	12
-060010200 MR	6x1	7	20	60	6	-120015260 MR	12x1.5	13	26	80	12
-060010400 MR	6x1	7	40	80	6	-120020260 MR	12x2	13	26	80	12
-060015200 MR	6x1.5	7	20	60	6	-120030260 MR	12x3	13	26	80	12

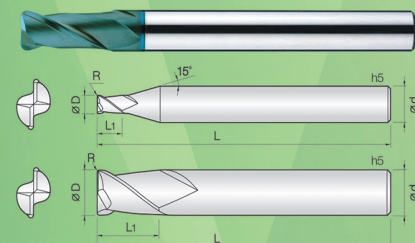
WZQ-2F...R

Нумературный номер	DxR	L ₁	L	d	Нумературный номер	DxR	L ₁	L	d
-0020002 SR	0.2x0.02	0.4	45	4	-0080005 SR	0.8x0.05	1.6	45	4
-0020005 SR	0.2x0.05	0.4	45	4	-008001 SR	0.8x0.1	1.6	45	4
-0020002 SR	0.3x0.02	0.6	45	4	-008002 SR	0.8x0.2	1.6	45	4
-0030005 SR	0.3x0.05	0.6	45	4	-0090005 SR	0.9x0.05	1.8	45	4
-003001 SR	0.3x0.1	0.6	45	4	-009001 SR	0.9x0.1	1.8	45	4
-0040002 SR	0.4x0.02	0.8	45	4	-0100002 SR	1x0.02	2.5	45	4
-0040005 SR	0.4x0.05	0.8	45	4	-0100005 SR	1x0.05	2.5	45	4
-004001 SR	0.4x0.1	0.8	45	4	-010001 SR	1x0.1	2.5	45	4
-0050002 SR	0.5x0.02	1	45	4	-010002 SR	1x0.2	2.5	45	4
-0050005 SR	0.5x0.05	1	45	4	-010003 SR	1x0.3	2.5	45	4
-005001 SR	0.5x0.1	1	45	4	-0120002 SR	1.2x0.02	3.2	45	4
-0060002 SR	0.6x0.02	1.2	45	4	-0120005 SR	1.2x0.05	3.2	45	4
-0060005 SR	0.6x0.05	1.2	45	4	-012001 SR	1.2x0.1	3.2	45	4
-006001 SR	0.6x0.1	1.2	45	4	-012002 SR	1.2x0.2	3.2	45	4
-006002 SR	0.6x0.2	1.2	45	4	-012003 SR	1.2x0.3	3.2	45	4
-0070005 SR	0.7x0.05	1.4	45	4	-0150002 SR	1.5x0.02	4	45	4
-007001 SR	0.7x0.1	1.4	45	4	-0150005 SR	1.5x0.05	4	45	4
-007002 SR	0.7x0.2	1.4	45	4	-015001 SR	1.5x0.1	4	45	4
-0080002 SR	0.8x0.02	1.6	45	4	-015002 SR	1.5x0.2	4	45	4



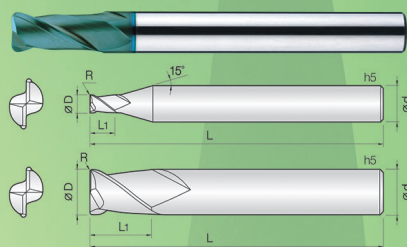
"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



"Z" - по закаленным сталям
твердостью до 68 HRC

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



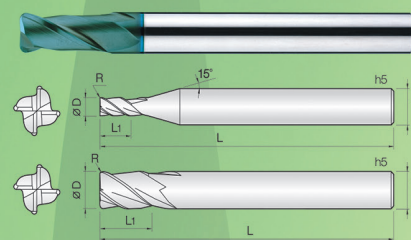
"Z" - по закаленным сталям
твёрдостью до 68 HRC

P		M		K		N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3		
	V	V	V		V				V	V	V		

WZQ-2F...R

Нумературный номер	DxR	L ₁	L	d	Нумературный номер	DxR	L ₁	L	d
-015003 SR	1.5x0.3	4	45	4	-080002100 R	8x0.2	19	100	8
-015005 SR	1.5x0.5	4	45	4	-080003070 R	8x0.3	16	70	8
-0200002 SR	2x0.02	6	45	4	-080003100 R	8x0.3	19	100	8
-0200005 SR	2x0.05	6	45	4	-080005070 R	8x0.5	16	70	8
-020001 SR	2x0.1	6	45	4	-080005100 R	8x0.5	19	100	8
-020002 SR	2x0.2	6	45	4	-080010070 R	8x1	16	70	8
-020003 SR	2x0.3	6	45	4	-080010100 R	8x1	19	100	8
-020005 SR	2x0.5	6	45	4	-080015070 R	8x1.5	16	70	8
-025001 SR	2.5x0.1	6	50	4	-080015100 R	8x1.5	19	100	8
-025002 SR	2.5x0.2	6	50	4	-080020070 R	8x2	16	70	8
-025003 SR	2.5x0.3	6	50	4	-080020100 R	8x2	19	100	8
-025005 SR	2.5x0.5	6	50	4	-080025100 R	8x2.5	19	100	8
-030001 R	3x0.1	8	60	6	-080030100 R	8x3	19	100	8
-030002 R	3x0.2	8	60	6	-080035100 R	8x3.5	19	100	8
-030003 R	3x0.3	8	60	6	-100001075 R	10x0.1	19	75	10
-030005 R	3x0.5	8	60	6	-100001100 R	10x0.1	22	100	10
-030010 R	3x1	8	60	6	-100002075 R	10x0.2	19	75	10
-040001 SR	4x0.1	9	60	4	-100002100 R	10x0.2	22	100	10
-040001 R	4x0.1	10	70	6	-100003075 R	10x0.3	19	75	10
-040002 SR	4x0.2	9	60	4	-100003100 R	10x0.3	22	100	10
-040002 R	4x0.2	10	70	6	-100005075 R	10x0.5	19	75	10
-040003 SR	4x0.3	9	60	4	-100005100 R	10x0.5	22	100	10
-040003 R	4x0.3	10	70	6	-100010075 R	10x1	19	75	10
-040005 SR	4x0.5	9	60	4	-100010100 R	10x1	22	100	10
-040005 R	4x0.5	10	70	6	-100015075 R	10x1.5	19	75	10
-040010 SR	4x1	9	60	4	-100015100 R	10x1.5	22	100	10
-040010 R	4x1	10	70	6	-100020075 R	10x2	19	75	10
-040001 R	5x0.1	13	75	6	-100020100 R	10x2	22	100	10
-050002 R	5x0.2	13	75	6	-100025100 R	10x2.5	22	100	10
-050003 R	5x0.3	13	75	6	-100030100 R	10x3	22	100	10
-050005 R	5x0.5	13	75	6	-100040100 R	10x4	22	100	10
-050010 R	5x1	13	75	6	-120001080 R	12x0.1	22	80	12
-060001 R	6x0.1	11	60	6	-120001110 R	12x0.1	26	110	12
-060001 R	6x0.1	13	90	6	-120002080 R	12x0.2	22	80	12
-060002 R	6x0.2	11	60	6	-120002110 R	12x0.2	26	110	12
-060002 R	6x0.2	13	90	6	-120003080 R	12x0.3	22	80	12
-060003 R	6x0.3	11	60	6	-120003110 R	12x0.3	26	110	12
-060003 R	6x0.3	13	90	6	-120005080 R	12x0.5	22	80	12
-060005 R	6x0.5	11	60	6	-120005110 R	12x0.5	26	110	12
-060005 R	6x0.5	13	90	6	-120010080 R	12x1	22	80	12
-060010 R	6x1	11	60	6	-120010110 R	12x1	26	110	12
-060010 R	6x1	13	90	6	-120015080 R	12x1.5	22	80	12
-060015 R	6x1.5	11	60	6	-120015110 R	12x1.5	26	110	12
-060015 R	6x1.5	13	90	6	-120020080 R	12x2	22	80	12
-060020 R	6x2	11	60	6	-120020110 R	12x2	26	110	12
-060020 R	6x2	13	90	6	-120025110 R	12x2.5	26	110	12
-060025 R	6x2.5	13	90	6	-120030110 R	12x3	26	110	12
-080001070 R	8x0.1	16	70	8	-120040110 R	12x4	26	110	12
-080001100 R	8x0.1	19	100	8	-120050110 R	12x5	26	110	12
-080002070 R	8x0.2	16	70	8					

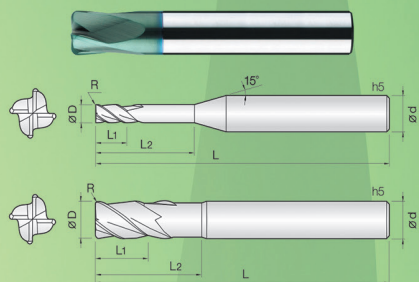
WZQ-4F...R



"Z" - по закаленным сталям
твердостью до 68 HRC

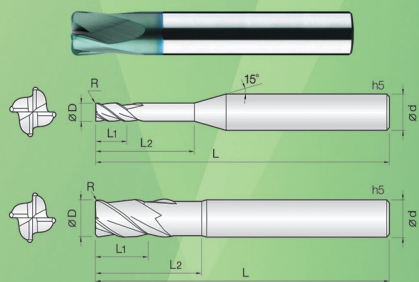
P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

Нумерклатурный номер	DxR	L ₁	L	d	Нумерклатурный номер	DxR	L ₁	L	d
-0100005 SR	1x0.05	2.5	45	4	-060002110 R	6x0.2	11	55	6
-010001 SR	1x0.1	2.5	45	4	-060002130 R	6x0.2	13	80	6
-010002 SR	1x0.2	2.5	45	4	-060003110 R	6x0.3	11	55	6
-010003 SR	1x0.3	2.5	45	4	-060003130 R	6x0.3	13	80	6
-0150005 SR	1.5x0.05	4	45	4	-060005110 R	6x0.5	11	55	6
-015001 SR	1.5x0.1	4	45	4	-060005130 R	6x0.5	13	80	6
-015002 SR	1.5x0.2	4	45	4	-060010110 R	6x1	11	55	6
-015003 SR	1.5x0.3	4	45	4	-060010130 R	6x1	13	80	6
-015005 SR	1.5x0.5	4	45	4	-060015110 R	6x1.5	11	55	6
-0200005 SR	2x0.05	6	45	4	-060015130 R	6x1.5	13	80	6
-020001 SR	2x0.1	6	45	4	-060020110 R	6x2	11	55	6
-020002 SR	2x0.2	6	45	4	-060020130 R	6x2	13	80	6
-020003 SR	2x0.3	6	45	4	-080003060160	8x0.3	16	60	8
-020005 SR	2x0.5	6	45	4	-080003090190	8x0.3	19	90	8
-025001 SR	2.5x0.1	6	50	4	-080005060160	8x0.5	16	60	8
-025002 SR	2.5x0.2	6	50	4	-080005090190	8x0.5	19	90	8
-025003 SR	2.5x0.3	6	50	4	-080010060160	8x1	16	60	8
-025005 SR	2.5x0.5	6	50	4	-080010090190	8x1	19	90	8
-030001 R	3x0.1	8	60	6	-080015060160	8x1.5	16	60	8
-030002 R	3x0.2	8	60	6	-080015090190	8x1.5	19	90	8
-030003 R	3x0.3	8	60	6	-080020060160	8x2	16	60	8
-030005 R	3x0.5	8	60	6	-080020090190	8x2	19	90	8
-030010 R	3x1	8	60	6	-100003070190	10x0.3	19	70	10
-035001 R	3.5x0.1	9	70	6	-100003100220	10x0.3	22	100	10
-035002 R	3.5x0.2	9	70	6	-100005070190	10x0.5	19	70	10
-035003 R	3.5x0.3	9	70	6	-100005100220	10x0.5	22	100	10
-035005 R	3.5x0.5	9	70	6	-100010070190	10x1	19	70	10
-040001 SR	4x0.1	9	60	4	-100010100220	10x1	22	100	10
-040001 R	4x0.1	10	70	6	-100015070190	10x1.5	19	70	10
-040002 SR	4x0.2	9	60	4	-100015100220	10x1.5	22	100	10
-040002 R	4x0.2	10	70	6	-100020070190	10x2	19	70	10
-040003 SR	4x0.3	9	60	4	-100020100220	10x2	22	100	10
-040003 R	4x0.3	10	70	6	-100025070190	10x2.5	19	70	10
-040005 SR	4x0.5	9	60	4	-100025100220	10x2.5	22	100	10
-040005 R	4x0.5	10	70	6	-12003075220	12x0.3	22	75	12
-040010 SR	4x1	9	60	4	-120003110260	12x0.3	26	110	12
-040010 R	4x1	10	70	6	-120005075220	12x0.5	22	75	12
-045002 R	4.5x0.2	11	75	6	-120005110260	12x0.5	26	110	12
-045005 R	4.5x0.5	11	75	6	-120010075220	12x1	22	75	12
-050001 R	5x0.1	13	75	6	-120010110260	12x1	26	110	12
-050002 R	5x0.2	13	75	6	-120015075220	12x1.5	22	75	12
-050003 R	5x0.3	13	75	6	-120015110260	12x1.5	26	110	12
-050005 R	5x0.5	13	75	6	-120020075220	12x2	22	75	12
-050010 R	5x1	13	75	6	-120020110260	12x2	26	110	12
-0600005110 R	6x0.05	11	55	6	-120025075220	12x2.5	22	75	12
-0600005130 R	6x0.05	13	80	6	-120025110260	12x2.5	26	110	12
-060001110 R	6x0.1	11	55	6	-120030075220	12x3	22	75	12
-060001130 R	6x0.1	13	80	6	-120030110260	12x3	26	110	12



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V



**"Z" - по закаленным сталям
твердостью до 68 HRC**

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V				V	V	V

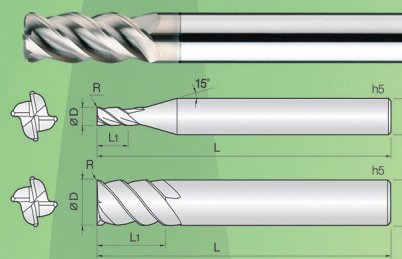
WZQ-4(6)F...R

Номенклатурный номер	DxR	L ₁	L ₂	L	d	Номенклатурный номер	DxR	L ₁	L ₂	L	d
- 010002025 SR	1x0.2	1	2.5	50	4	- 100003200 R	10x0.3	10	20	70	10
- 015005040 SR	1.5x0.5	1.5	4	50	4	- 100005200 R	10x0.5	10	20	70	10
- 020005060 R	2x0.5	2	6	50	6	- 100005250 R	10x0.5	10	25	90	10
- 030005080 R	3x0.5	3	8	50	6	- 100005300 R	10x0.5	10	30	120	10
- 040005120 R	4x0.5	4	12	60	6	- 100010200 R	10x1	10	20	70	10
- 040005160 R	4x0.5	4	16	60	6	- 100010250 R	10x1	10	25	90	10
- 040010120 R	4x1	4	12	60	6	- 100010300 R	10x1	10	30	120	10
- 040010160 R	4x1	4	16	60	6	- 100020200 R	10x2	10	20	70	10
- 050005150 R	5x0.5	5	15	60	6	- 100020250 R	10x2	10	25	90	10
- 050010150 R	5x1	5	15	60	6	- 100020300 R	10x2	10	30	120	10
- 060003150 R	6x0.3	6	15	60	6	- 120005250 R	12x0.5	12	25	80	12
- 060005150 R	6x0.5	6	15	60	6	- 120005300 R	12x0.5	12	30	100	12
- 060010150 R	6x1	6	15	60	6	- 120005350 R	12x0.5	12	35	130	12
- 060015150 R	6x1.5	6	15	60	6	- 120010250 R	12x1	12	25	80	12
- 080003160 R	8x0.3	8	16	60	8	- 120010300 R	12x1	12	30	100	12
- 080005160 R	8x0.5	8	16	60	8	- 120010350 R	12x1	12	35	130	12
- 080005200 R	8x0.5	8	20	80	8	- 120020250 R	12x2	12	25	80	12
- 080005300 R	8x0.5	8	30	110	8	- 120020300 R	12x2	12	30	100	12
- 080010160 R	8x1	8	16	60	8	- 120020350 R	12x2	12	35	130	12
- 080010200 R	8x1	8	20	80	8	- 120030250 R	12x3	12	25	80	12
- 080010300 R	8x1	8	30	110	8	- 160010300 R	16x1	16	30	110	16
- 080020160 R	8x2	8	16	60	8	- 160010400 R	16x1	16	40	160	16
- 080020200 R	8x2	8	20	80	8	- 160020300 R	16x2	16	30	110	16
- 080020300 R	8x2	8	30	110	8	- 160020400 R	16x2	16	40	160	16

WZQ-6(4)F...R

Нумерклатурный номер	DxR	L ₁	L ₂	L	d	Нумерклатурный номер	DxR	L ₁	L ₂	L	d
-060005060 R	6x0.5	12	-	60	6	-100010070 R	10x1	20	-	70	10
-060010060 R	6x1	12	-	60	6	-100020070 R	10x2	20	-	70	10
-080005060 R	8x0.5	16	-	60	8	-120005080 R	12x0.5	25	-	80	12
-080010060 R	8x1	16	-	60	8	-120010080 R	12x1	25	-	80	12
-080020060 R	8x2	16	-	60	8	-120020080 R	12x2	25	-	80	12
-100005070 R	10x0.5	20	-	70	10						

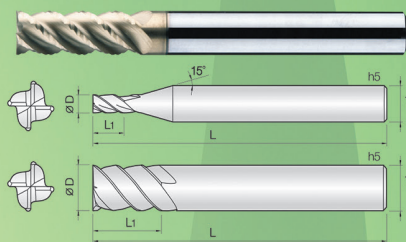
WMQ-4F...RP



"М" - по нержавеющей сталям

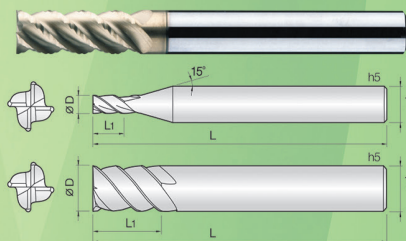
P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		

Номенклатурный номер	DxR	L ₁	L	d	Номенклатурный номер	DxR	L ₁	L	d
- 010001 SRP	1x0.1	2.5	50	4	- 70003 RP	7 X 0.3	20	80	8
- 010002 SRP	1x0.2	2.5	50	4	- 80003070 RP	8 X 0.3	16	70	8
- 012001 SRP	1.2x0.1	3	50	4	- 80003 RP	8 X 0.3	20	80	8
- 012002 SRP	1.2x0.2	3	50	4	- 80005070 RP	8 X 0.5	16	70	8
- 015001 SRP	1.5x0.1	4	50	4	- 80005 RP	8 X 0.5	20	80	8
- 015002 SRP	1.5x0.2	4	50	4	- 80010070 RP	8 X 1	16	70	8
- 015003 SRP	1.5x0.3	4	50	4	- 80010 RP	8 X 1	20	80	8
- 020001 SRP	2 X R0.1	6	50	4	- 85003 RP	8.5 X 0.3	22	80	10
- 020002 SRP	2x0.2	6	50	4	- 90003 RP	9 X 0.3	25	80	10
- 020003 SRP	2x0.3	6	50	4	- 100003070 RP	10 X 0.3	20	70	10
- 020005 SRP	2x0.5	6	50	4	- 100003 RP	10 X 0.3	25	80	10
- 025001 SRP	2.5x0.1	7	50	4	- 100005070 RP	10 X 0.5	20	70	10
- 025002 S RP	2.5x0.2	7	50	4	- 100005 RP	10x0.5	25	80	10
- 025003 SRP	2.5x0.3	7	50	4	- 100010070 RP	10 X R1	20	70	10
- 30001 RP	3x0.1	10	60	6	- 100010 RP	10 X R1	25	80	10
- 30002055 RP	3x0.2	6	55	6	- 100015070 RP	10x1.5	20	70	10
- 30002 RP	3x0.2	10	60	6	- 100015 RP	10x1.5	25	80	10
- 30003 RP	3x0.3	10	60	6	- 100020070 RP	10x2	20	70	10
- 30005055 RP	3x0.5	6	55	6	- 100020 RP	10x2	25	80	10
- 30005 RP	3x0.5	10	60	6	- 100025070 RP	10x2.5	20	70	10
- 35002 RP	3.5x0.2	10	60	6	- 100025 RP	10x2.5	25	80	10
- 40001 RP	4x0.1	12	60	6	- 100030070 RP	10x3	20	70	10
- 40002055 RP	4x0.2	8	55	6	- 100030 RP	10x3	25	80	10
- 40002 RP	4x0.2	12	60	6	- 120003080 RP	12x0.3	24	80	12
- 40003 RP	4x0.3	12	60	6	- 120003 RP	12x0.3	30	100	12
- 40005055 RP	4x0.5	8	55	6	- 120005080 RP	12x0.5	24	80	12
- 40005 RP	4x0.5	12	60	6	- 120005 RP	12x0.5	30	100	12
- 40010 RP	4x1	12	60	6	- 120010080 RP	12x1	24	80	12
- 45002 RP	4.5x0.2	14	60	6	- 120010 RP	12x1	30	100	12
- 50002055 RP	5x0.2	10	55	6	- 120015080 RP	12x1.5	24	80	12
- 50002 RP	5x0.2	15	60	6	- 120015 RP	12x1.5	30	100	12
- 50003 RP	5x0.3	15	60	6	- 120020080 RP	12x2	24	90	12
- 50005055 RP	5x0.5	10	55	6	- 120020 RP	12x2	30	100	12
- 50005 RP	5x0.5	15	60	6	- 120025 RP	12x2.5	30	100	12
- 50010 RP	5x1	15	60	6	- 120030080 RP	12x3	24	90	12
- 55002 RP	5.5x0.2	15	60	6	- 120030 RP	12x3	30	100	12
- 60003055 RP	6x0.3	12	55	6	- 160005100 RP	16x0.5	32	100	16
- 60003 RP	6x0.3	15	60	6	- 160005 RP	16x0.5	42	110	16
- 60005055 RP	6 x0.5	12	55	6	- 160010100 RP	16x1	32	100	16
- 60005 RP	6x0.5	15	60	6	- 160010 RP	16x1	42	110	16
- 60010055 RP	6xR1	12	55	6	- 200005 RP	20x0.5	48	110	20
- 60010 RP	6xR1	15	60	6	- 200010 RP	20xR1	48	110	20
- 65003 RP	6.5x0.3	18	60	8					



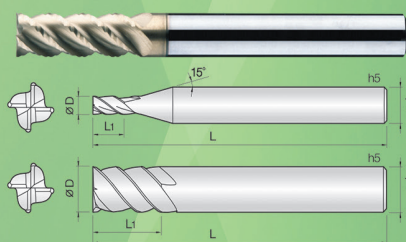
"М" - по нержавеющей сталям

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		



"М" - по нержавеющей сталям

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		



"М" - по нержавеющей сталям

P		M	K	N			S		H		
1.1	1.2	2.1	3.1	4.1	4.2	4.3	5.1	5.2	6.1	6.2	6.3
	V	V	V		V		V	V	V		

WMQ-3F...R

Нумературный номер	DxR	L ₁	L ₂	L	d	Нумературный номер	DxR	L ₁	L ₂	L	d
- 030002 R	3x0.2	8	-	50	6	- 040002 R	4x0.2	10	-	50	6

WMQ-4F...R

Нумературный номер	DxR	L ₁	L ₂	L	d	Нумературный номер	DxR	L ₁	L ₂	L	d
-50002 R	5x0.2	13	-	50	6	-90003 R	9x0.3	20	-	70	10
-60002200 R	6x0.2	10	20	60	6	-100003300 R	10x0.3	15	30	75	10
-60002 R	6x0.2	13	-	60	6	-100003 R	10x0.3	22	-	75	10
-60005 R	6x0.5	13	-	60	6	-100010 R	10x1	22	-	75	10
-70002 R	7x0.2	18	-	70	8	-110003 R	11x0.3	25	-	80	12
-80002250 R	8x0.2	12	25	70	8	-120003350 R	12x0.3	20	35	80	12
-80002 R	8x0.2	19	-	70	8	-120003 R	12x0.3	26	-	80	12
-80010 R	8x1	19	-	70	8	-120010 R	12x1	26	-	80	12

WMQ-5F...R

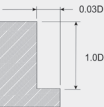
Нумературный номер	DxR	L ₁	L ₂	L	d	Нумературный номер	DxR	L ₁	L ₂	L	d
-140005090 R	14x0.5	28	-	90	16	-200005100 R	20x0.5	38	-	100	20
-160005100 R	16x0.5	32	-	100	16	-200020110 R	20x2	45	-	110	20
-160005110 R	16x0.5	42	-	110	16	-200005100 R	20x0.5	38	-	100	20
-160015100 R	16x1.5	32	-	100	16	-200020110 R	20x2	45	-	110	20
-160015110 R	16x1.5	42	-	110	16						

WZQ-2F...

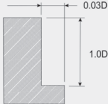
Материал	Подкаленные стали/ Закаленные стали				Закаленные стали					
Твердость	40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.1 mm	45.000	100	40.000	90	33.000	50	33.000	40	26.400	30
0.2 mm	45.000	115	40.000	95	33.000	60	33.000	45	20.000	35
0.3 mm	45.000	140	40.000	115	33.000	70	25.000	50	20.000	40
0.4 mm	45.000	180	40.000	140	33.000	90	25.000	55	20.000	60
0.5 mm	45.000	280	40.000	220	33.000	140	25.000	85	20.000	75
0.6 mm	45.000	360	40.000	285	30.000	160	25.000	105	15.200	80
0.8 mm	40.000	440	30.000	295	25.000	185	19.000	110	14.000	90
0.9 mm	39.000	520	27.800	330	22.700	205	17.500	125	12.500	85
1mm	38,000	570	25,500	360	20,500	215	16,000	135	12,500	85
2mm	26,000	680	17,500	420	14,500	260	11,000	160	9,500	115
3mm	17,300	680	11,500	420	9,500	260	7,500	160	6,400	115
4mm	13,200	700	8,800	440	7,200	270	5,600	170	4,750	118
5mm	12,500	805	8,300	500	6,400	285	5,100	180	4,450	132
6mm	10,350	770	6,900	480	5,300	280	4,200	180	3,700	130
8mm	7,800	720	5,200	445	4,000	255	3,200	165	2,800	120
10mm	6,150	680	4,100	415	3,200	240	2,550	155	2,200	112
12mm	5,250	680	3,500	415	2,650	240	2,100	155	1,860	112
16mm	4,340	610	2,600	360	1,840	180	1,800	100	1,460	100
18mm	4,340	610	2,600	360	1,840	180	1,800	100	1,460	100
20mm	3,650	570	2,100	300	1,460	180	1,400	100	1,100	100
										

WZQ-2F...

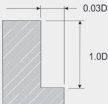
Материал	Подкаленные стали/ Закаленные стали				Закаленные стали					
Твердость	40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
1mm	38,000	820	25,500	510	20,500	310	16,000	190	12,500	125
2mm	26,000	970	17,500	600	14,500	370	11,000	230	9,500	165
3mm	17,300	970	11,500	600	9,500	370	7,500	230	6,400	165
4mm	13,200	1,000	8,800	625	7,200	385	5,600	240	4,750	170
5mm	12,500	1,150	8,300	710	6,400	410	5,100	260	4,450	190
6mm	10,350	1,100	6,900	690	5,300	400	4,200	255	3,700	185
8mm	7,800	1,030	5,200	635	4,000	365	3,200	235	2,800	170
10mm	6,150	970	4,100	590	3,200	340	2,550	220	2,200	160
12mm	5,250	970	3,500	590	2,650	340	2,100	220	1,860	160
16mm	4,340	880	2,600	530	1,840	300	1,800	190	1,800	190
18mm	4,340	880	2,600	530	1,840	300	1,800	190	1,800	190
20mm	3,650	800	2,100	500	1,460	295	1,400	180	1,400	180
5 mm	12.500	805	8.300	500	6.400	285	5.100	180	4.450	132
6 mm	10.350	770	6.900	480	5.300	280	4.200	180	3.700	130
8 mm	7.800	720	5.200	445	4.000	255	3.200	165	2.800	120
10 mm	6.150	680	4.100	415	3.200	240	2.550	155	2.200	112



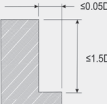
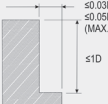
WZQ-2F...

Материал	Подкаленные стали/ Закаленные стали				Закаленные стали					
Твердость	40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
12 mm	5.250	680	3.500	415	2.650	240	2.100	155	1.860	112
16 mm	4.340	610	2.600	360	1.840	180	1.800	100	1.460	100
18 mm	4.340	610	2.600	360	1.840	180	1.800	100	1.460	100
20 mm	3.650	570	2.100	300	1.460	180	1.400	100	1.100	100
										

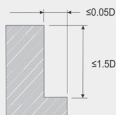
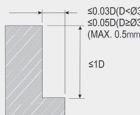
WZQ-4F...

Материал	Закаленные стали			
Твердость	45 HRC ~ 50 HRC		50HRC ~ 55HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача
1mm	38.000	1.050	25.500	710
2mm	26.000	1.250	17.500	840
3mm	17.300	1.250	11.500	840
4mm	13.200	1.300	8.800	880
5mm	12.500	1.500	8.300	1.000
6mm	10.350	1.400	6.900	950
7mm	9.000	1.380	5.200	900
8mm	7.800	1.350	4.100	840
9mm	6.150	1.260	3.500	840
10mm	5.250	1.260	2.800	800
11mm	4.300	1.150	2.500	800
12mm	4.300	1.150	2.300	760
14mm	3.500	1.050	2.100	760
16mm	3.500	1.050	2.000	700
18mm	2.800	1.000	2.000	700
20mm	2.600	980	1.800	650
				

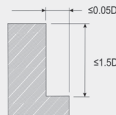
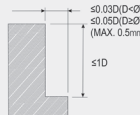
WHQ-4F...

Материал	Закаленные стали			Закаленные стали		
Твердость	55 HRC ~ 62 HRC			62HRC ~ 68HRC		
Внешний диаметр	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
1mm	40.000	800	0.030	32.000	500	0.020
1.5mm	40.000	900	0.040	32.000	550	0.020
2mm	24.000	1.000	0.050	16.000	600	0.050
3mm	38.400	4.560	0.100	19.200	2.280	0.050
						

WHQ-4F...

Материал	Закаленные стали			Закаленные стали		
Твердость	55 HRC ~ 62 HRC			62HRC ~ 68HRC		
Внешний диаметр	Обороты	Подача	Ar Осевой припуск	Обороты	Подача	Ar Осевой припуск
4mm	28.800	5.280	0.100	14.400	2.640	0.050
5mm	24.000	6.000	0.100	12.000	3.000	0.050
6mm	19.200	6.960	0.200	9.600	3.480	0.100
8mm	14.400	6.960	0.200	7.200	3.480	0.100
10mm	11.520	6.960	0.300	5.760	3.480	0.200
12mm	9.600	5.760	0.300	4.800	2.880	0.200
16mm	7.200	4.320	0.500	3.600	2.160	0.300
20mm	5.760	3.480	0.500	2.880	1.680	0.300
						

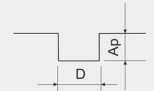
WHQ-6F...

Материал	Закаленные стали			Закаленные стали		
Твердость	55 HRC ~ 62 HRC			62HRC ~ 68HRC		
Внешний диаметр	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
3mm	16.000	1.900	0.100	11.000	1.200	0.050
4mm	12.000	2.200	0.100	8.000	1.300	0.050
5mm	10.000	2.500	0.100	6.000	1.500	0.050
6mm	8.000	2.900	0.200	5.300	1.800	0.100
8mm	6.000	2.900	0.200	4.000	1.800	0.100
10mm	4.800	2.900	0.300	3.200	1.800	0.200
12mm	4.000	2.400	0.300	2.700	1.500	0.200
16mm	3.000	1.800	0.500	2.000	1.100	0.300
20mm	2.400	1.400	0.500	1.600	880	0.300
25mm	2.000	1.000	0.500	1.000	700	0.400
						

WZQ-2F...M

Материал		Углеродистая сталь			Легированная сталь			Подкаленная сталь/ Закаленные стали		
Твердость		35 HRC ~ 45 HRC			45HRC ~ 55HRC			55HRC ~ 65HRC		
Внешний диаметр	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
0.1 mm	0.3	48.600	345	0.006	42.750	255	0.006	40.050	206	0.006
"	0.5	48.600	346	0.004	42.750	255	0.004	40.050	206	0.004
0.2 mm	0.5	38.250	403	0.020	33.750	301	0.020	31.500	242	0.020
"	1	38.250	403	0.014	33.750	301	0.014	31.500	242	0.014
"	1.5	34.425	362	0.008	30.375	271	0.008	28.350	218	0.008
0.3 mm	1	34.000	358	0.021	30.000	267	0.021	28.000	215	0.021
"	1.5	34.000	358	0.021	30.000	267	0.021	28.000	215	0.021
"	2	30.600	322	0.012	27.000	241	0.012	25.200	194	0.012
"	3	30.600	322	0.008	27.000	241	0.008	25.200	194	0.008
0.4 mm	1	27.200	446	0.040	24.000	333	0.040	22.400	268	0.040
"	2	27.200	446	0.028	24.000	333	0.028	22.400	268	0.028
"	3	24.480	401	0.016	21.600	299	0.016	20.160	241	0.016
"	4	24.480	401	0.010	21.600	299	0.010	20.160	241	0.010
"	5	21.760	260	0.010	19.200	230	0.010	17.920	181	0.010
"	6	21.760	260	0.006	19.200	230	0.006	17.920	181	0.006
0.5 mm	1	27.200	446	0.050	24.000	333	0.050	22.400	268	0.050
"	2	27.200	446	0.035	24.000	333	0.035	22.400	268	0.035
"	3	24.480	401	0.020	21.600	299	0.020	20.160	241	0.020
"	4	24.480	401	0.020	21.600	299	0.020	20.160	241	0.020
"	5	24.480	401	0.013	21.600	299	0.013	20.160	241	0.013
"	6	21.760	260	0.013	19.200	230	0.013	17.920	181	0.013
"	8	21.760	247	0.008	19.200	194	0.008	17.920	147	0.008
0.6 mm	2	27.200	636	0.042	24.000	475	0.042	22.400	383	0.042
"	4	24.480	573	0.024	21.600	428	0.024	20.160	345	0.024
"	6	24.480	573	0.015	21.600	428	0.015	20.160	345	0.015
"	8	21.760	372	0.015	19.200	328	0.015	17.920	258	0.015
"	10	21.760	372	0.009	19.200	328	0.009	17.920	258	0.009
0.7 mm	2	27.200	636	0.070	24.000	475	0.070	22.400	383	0.070
"	4	24.480	573	0.049	21.600	428	0.049	20.160	345	0.049
"	6	24.480	573	0.018	21.600	428	0.018	20.160	345	0.018
"	8	21.760	372	0.018	19.200	328	0.018	17.920	258	0.018
"	10	21.760	372	0.018	19.200	328	0.018	17.920	258	0.018
0.8 mm	4	27.200	636	0.056	24.000	475	0.056	22.400	383	0.056
"	6	24.480	573	0.032	21.600	428	0.032	20.160	345	0.032
"	8	24.480	573	0.020	21.600	428	0.020	20.160	345	0.020
"	10	21.760	372	0.020	19.200	328	0.020	17.920	258	0.020
"	12	21.760	372	0.012	19.200	328	0.012	17.920	258	0.012
0.9 mm	6	24.480	573	0.036	21.600	428	0.036	20.160	345	0.036
"	8	24.480	573	0.023	21.600	328	0.023	20.160	345	0.023
"	10	21.760	372	0.023	19.200	328	0.023	17.920	258	0.023
1 mm	4	24.480	936	0.100	21.600	699	0.100	20.160	563	0.100
"	6	22.032	773	0.040	19.440	577	0.040	18.144	465	0.040
"	8	22.032	773	0.040	19.440	577	0.040	18.144	465	0.040
"	10	22.032	773	0.025	19.440	577	0.025	18.144	465	0.025
"	12	19.584	502	0.025	17.280	443	0.025	16.128	348	0.025
"	14	19.584	502	0.025	17.280	443	0.025	16.128	348	0.025
"	16	19.584	476	0.015	17.280	373	0.015	16.128	283	0.015

WZQ-2F...M

Материал		Углеродистая сталь			Легированная сталь			Подкаленная сталь/ Закаленные стали		
Твердость		35 HRC ~ 45 HRC			45HRC ~ 55HRC			55HRC ~ 65HRC		
Внешний диаметр	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
1.2 mm	6	21.760	764	0.084	19.200	570	0.084	17.920	460	0.084
"	8	19.584	687	0.048	17.280	513	0.048	16.128	414	0.048
"	10	19.584	687	0.030	17.280	513	0.030	16.128	414	0.030
"	12	19.584	687	0.030	17.280	513	0.030	16.128	414	0.030
"	16	17.408	611	0.020	15.360	456	0.020	14.336	368	0.020
1.4 mm	8	19.040	668	0.100	16.800	499	0.100	15.680	402	0.100
"	10	17.136	601	0.056	15.120	449	0.056	14.112	362	0.056
"	14	17.136	601	0.035	15.120	449	0.035	14.112	362	0.035
"	16	15.232	391	0.035	13.440	345	0.035	12.544	271	0.035
1.5 mm	6	19.040	668	0.110	16.800	499	0.110	15.680	402	0.110
"	8	19.040	668	0.110	16.800	499	0.110	15.680	402	0.110
"	10	17.136	601	0.060	15.120	449	0.060	14.112	362	0.060
"	12	17.136	601	0.060	15.120	449	0.060	14.112	362	0.060
"	14	17.136	601	0.060	15.120	449	0.060	14.112	362	0.060
"	16	15.232	391	0.038	13.440	345	0.038	12.544	271	0.038
"	18	15.232	391	0.038	13.440	345	0.038	12.544	271	0.038
"	20	15.232	391	0.038	13.440	345	0.038	12.544	271	0.038
"	25	11.424	278	0.023	10.080	218	0.023	9.408	165	0.023
1.6 mm	10	15.912	621	0.040	14.040	463	0.040	13.104	373	0.040
"	14	15.912	621	0.040	14.040	463	0.040	13.104	373	0.040
"	18	15.912	621	0.040	14.040	463	0.040	13.104	373	0.040
1.8 mm	10	15.912	621	0.072	14.040	463	0.072	13.104	373	0.072
"	14	15.912	621	0.072	14.040	463	0.072	13.104	373	0.072
"	18	15.912	621	0.072	14.040	463	0.072	13.104	373	0.072
2 mm	6	14.280	668	0.200	12.600	499	0.200	11.760	402	0.200
"	8	14.280	668	0.140	12.600	499	0.140	11.760	402	0.140
"	10	14.280	668	0.140	12.600	499	0.140	11.760	402	0.140
"	12	12.852	601	0.080	11.340	449	0.080	10.584	362	0.080
"	14	12.852	601	0.080	11.340	449	0.080	10.584	362	0.080
"	16	12.852	601	0.080	11.340	449	0.080	10.584	362	0.080
"	18	12.852	601	0.050	11.340	449	0.050	10.584	362	0.050
"	20	12.852	601	0.050	11.340	449	0.050	10.584	362	0.050
"	25	11.424	391	0.050	10.080	345	0.050	9.408	271	0.050
"	30	11.424	391	0.030	10.080	345	0.030	9.408	271	0.030
2.5 mm	12	12.240	716	0.180	10.800	535	0.180	10.080	431	0.180
"	16	11.116	644	0.100	9.720	388	0.100	9.072	388	0.100
"	20	11.116	644	0.100	9.720	481	0.100	9.072	388	0.100
3 mm	12	10.880	636	0.210	9.600	475	0.210	8.960	383	0.210
"	16	9.792	573	0.120	8.640	428	0.120	8.064	345	0.120
"	20	9.792	573	0.120	8.640	428	0.12	8.064	345	0.120
"	25	9.792	573	0.080	8.640	428	0.08	8.064	345	0.080
"	30	9.792	573	0.080	8.640	428	0.08	8.064	345	0.080
"	40	8.704	509	0.050	7.680	380	0.05	7.168	307	0.050
4 mm	12	8.000	1.358	0.4	7.050	902	0.4	6.580	727	0.400
"	16	8.000	1.358	0.4	7.050	902	0.4	6.580	727	0.400
"	20	7.800	1.200	0.3	6.800	800	0.3	6.200	720	0.300
"	25	7.800	1.200	0.3	6.800	800	0.3	6.200	720	0.300
										

WZQ-2F...M

Материал		Углеродистая сталь			Легированная сталь			Подкаленная сталь/ Закаленные стали		
Твердость		35 HRC ~ 45 HRC			45HRC ~ 55HRC			55HRC ~ 65HRC		
Внешний диаметр	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
"	30	7.800	1.200	0.3	6.800	800	0.3	6.200	720	0.300
"	35	7.600	1.150	0.2	6.700	780	0.2	6.000	700	0.200
"	40	7.600	1.150	0.2	6.700	780	0.2	6.000	700	0.200
"	45	7.600	1.150	0.2	6.700	780	0.2	6.000	700	0.200
"	50	7.600	1.150	0.2	6.700	780	0.2	6.000	700	0.200
5 mm	16	7.400	1.060	0.100	6.600	760	0.400	5.900	680	0.400
"	20	7.400	1.060	0.100	6.600	760	0.400	5.900	680	0.400
"	25	7.400	1.060	0.100	6.600	760	0.300	5.900	680	0.300
"	30	7.200	1.000	0.090	6.200	740	0.200	5.800	650	0.200
"	35	7.200	1.000	0.090	6.200	740	0.200	5.800	650	0.200
"	40	7.000	980	0.090	6.000	700	0.200	5.600	620	0.200
"	50	7.000	980	0.090	6.000	700	0.200	5.600	620	0.200

WZQ-4F...M

Материал	Подкаленные стали/ Закаленные стали				Закаленные стали/ Нержавеющая сталь		Закаленные стали		Закаленные стали	
Твердость	40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 70HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
1mm	38.000	1.050	25.500	710	20.500	430	16.000	270	12.500	175
2mm	26.000	1.250	17.500	840	14.500	520	11.000	320	9.500	230
3mm	17.300	1.250	11.500	840	9.500	520	7.500	320	6.400	230
4mm	13.200	1.300	8.800	880	7.200	540	335	4,750	4.750	240
5mm	12.500	1.500	8.300	1,000	6.400	580	5.100	370	4.450	270
6mm	10.350	1.400	6.900	950	5.300	560	4.200	350	3.700	260
8mm	7.800	1.350	5.200	900	4.000	520	3.200	330	2.800	240
10mm	6.150	1.260	4.100	840	3.200	480	2.550	310	2.200	220
12mm	5.250	1.260	3.500	840	2.650	480	2.100	300	1.860	220

WMQ-3F...

Материал	Углеродистая сталь/ Легированная сталь		Нержавеющая сталь/ Титановые сплавы		Закаленные стали		Жаропрочные стали	
Твердость	~ 45HRc				45HRc ~ 55HRc			
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.8mm	7,200	80	6,400	60	3,900	30	2,000	10
1mm	6,400	100	5,600	70	3,500	30	1,700	15
2mm	5,600	110	4,800	80	2,900	34	1,400	20
3mm	4,800	200	4,000	90	2,200	45	1,400	25
4mm	4,000	200	3,300	140	1,800	70	1,200	35
5mm	3,200	230	2,700	170	1,500	90	1,000	45
6mm	2,900	250	2,400	180	1,400	90	900	45
8mm	2,200	270	1,800	190	1,000	100	720	40
10mm	1,700	260	1,400	190	900	110	600	40
12mm	1,400	230	1,200	150	700	90	500	35
16mm	1,000	160	900	120	550	60	360	30

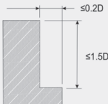
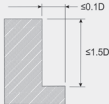
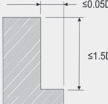
Technical drawing of a hole in a plate. Dimensions: hole diameter ≤ 20 , plate thickness $\leq 1.5D$.

Technical drawing of a hole in a plate. Dimensions: hole diameter D , plate thickness $\leq 0.5D$ ($D \leq 18$) and $\leq 0.3D$ ($D > 18$).

Technical drawing of a hole in a plate. Dimensions: hole diameter $\leq 0.05D$, plate thickness $\leq D$.

Technical drawing of a hole in a plate. Dimensions: hole diameter D , plate thickness $\leq 0.5D$.

WMQ-4F.../ WMQ-4F...RP

Материал	Углеродистая сталь/ Легированная сталь		Нержавеющая сталь/ Титановые сплавы		Закаленные стали	
Твердость	~ 45HRc				45HRc ~ 55HRc	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача
2mm	21,000	1,100	14,000	560	4,800	130
3mm	15,000	1,250	10,600	850	4,200	200
4mm	11,000	1,400	8,000	960	3,200	220
5mm	9,600	1,900	6,400	1,000	2,500	250
6mm	8,000	2,200	5,300	1,000	2,100	250
7mm	6,800	1,900	4,500	1,000	1,800	260
8mm	6,000	1,600	4,000	960	1,600	260
9mm	5,300	1,480	3,500	840	1,400	220
10mm	4,800	1,440	3,200	770	1,300	210
11mm	4,400	1,350	2,900	760	1,200	190
12mm	4,000	1,250	2,700	760	1,100	180
16mm	3,000	1,140	2,000	560	800	130
20mm	2,400	860	1,600	510	600	100
						

WZQ-2B...M

Материал		Подкаленные стали / Закаленные стали				Закаленные стали				Закаленные стали				Закаленные стали			
Твердость		~ 55 HRc				55HRc ~ 62HRc				62HRc ~ 66HRc				66HRc ~ 70HRc			
Радиус	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск
R0.1	0.5	60.000	200	0.003	0.005	60.000	200	0.002	0.003	60.000	130	0.002	0.003	45.000	65	0.002	0.003
"	1	60.000	200	0.003	0.005	60.000	200	0.002	0.003	60.000	130	0.002	0.003	45.000	65	0.002	0.003
"	1.5	60.000	130	0.002	0.003	48.000	80	0.001	0.002	48.000	65	0.001	0.002	36.000	30	0.001	0.002
"	2	60.000	90	0.001	0.002	48.000	50	0.001	0.001	48.000	40	0.001	0.001	36.000	20	0.001	0.001
R0.15	1	60.000	350	0.006	0.008	45.000	310	0.004	0.007	43.500	180	0.003	0.005	32.500	90	0.003	0.005
"	1.5	60.000	350	0.006	0.008	45.000	310	0.004	0.007	43.500	180	0.003	0.005	32.500	90	0.003	0.005
"	2	60.000	210	0.004	0.007	45.000	190	0.003	0.005	43.500	110	0.002	0.004	32.500	55	0.002	0.004
"	3	42.500	140	0.002	0.004	32.000	80	0.002	0.004	32.000	65	0.001	0.002	24.000	30	0.001	0.002
R0.2	1	50.000	500	0.010	0.020	37.500	420	0.007	0.012	35.000	240	0.005	0.008	26.250	120	0.005	0.008
"	2	50.000	500	0.010	0.020	37.500	420	0.007	0.012	35.000	240	0.005	0.008	26.250	120	0.005	0.008
"	3	40.000	250	0.005	0.008	31.900	210	0.004	0.008	30.500	160	0.003	0.005	22.800	80	0.002	0.005
"	4	32.000	180	0.003	0.005	25.500	150	0.002	0.004	24.300	120	0.002	0.004	18.200	60	0.002	0.004
R0.25	1	44.000	650	0.015	0.040	33.000	530	0.010	0.020	30.000	300	0.007	0.010	22.500	150	0.007	0.010
"	2	44.000	650	0.015	0.040	33.000	530	0.010	0.020	30.000	300	0.007	0.010	22.500	150	0.007	0.010
"	3	40.000	500	0.010	0.020	31.000	400	0.007	0.010	28.550	230	0.005	0.008	21.400	115	0.005	0.008
"	4	32.700	180	0.005	0.015	27.150	150	0.003	0.008	25.650	100	0.002	0.005	19.900	50	0.002	0.005
"	5	27.000	135	0.003	0.008	24.200	110	0.002	0.005	23.500	75	0.002	0.004	17.600	35	0.002	0.004
"	6	21.350	90	0.002	0.005	21.300	75	0.001	0.003	21.300	50	0.001	0.002	16.000	25	0.001	0.002
"	8	15.900	60	0.001	0.003	15.900	40	0.001	0.002	15.900	25	0.001	0.002	11.950	12	0.001	0.002
R0.3	1	40.000	1.400	0.045	0.150	30.000	1.500	0.030	0.130	26.500	1.000	0.015	0.090	20.000	500	0.015	0.090
"	2	40.000	1.100	0.030	0.130	30.000	1.200	0.020	0.100	26.500	800	0.010	0.075	20.000	400	0.010	0.075
"	3	40.000	800	0.020	0.100	30.000	800	0.015	0.090	26.500	520	0.008	0.065	20.000	260	0.008	0.065
"	4	40.000	500	0.015	0.090	30.000	500	0.010	0.075	26.500	340	0.006	0.050	20.000	170	0.006	0.050
"	5	32.000	400	0.010	0.075	25.000	390	0.007	0.050	23.000	260	0.005	0.040	18.000	130	0.005	0.040
"	6	24.000	300	0.007	0.060	21.000	320	0.005	0.040	19.500	210	0.004	0.030	15.000	105	0.004	0.030
"	8	16.000	200	0.005	0.050	16.000	240	0.003	0.020	16.000	160	0.003	0.020	12.000	80	0.003	0.020
"	10	14.900	175	0.003	0.020	14.900	175	0.002	0.015	14.900	115	0.002	0.015	11.100	55	0.002	0.015
"	12	13.800	150	0.002	0.015	13.800	110	0.001	0.010	13.800	70	0.001	0.010	10.350	35	0.001	0.010
R0.4	2	35.000	1.600	0.060	0.210	27.000	1.600	0.040	0.170	23.500	1.000	0.020	0.120	17.500	500	0.020	0.120
"	4	35.000	1.200	0.040	0.170	27.000	1.200	0.025	0.135	23.500	600	0.012	0.095	17.500	300	0.012	0.095
"	6	28.000	600	0.020	0.120	23.000	600	0.012	0.095	20.500	400	0.006	0.065	15.500	200	0.006	0.065
"	8	19.500	330	0.012	0.095	18.000	375	0.007	0.070	17.000	285	0.005	0.060	12.750	140	0.005	0.060
"	10	15.000	260	0.010	0.085	14.700	340	0.005	0.060	14.650	225	0.004	0.050	11.000	110	0.004	0.050
R0.5	2	30.000	1.750	0.200	0.400	24.000	2.000	0.100	0.300	21.000	1.750	0.050	0.200	16.000	875	0.050	0.200
"	3	30.000	1.750	0.100	0.300	24.000	2.000	0.050	0.200	21.000	1.750	0.030	0.170	16.000	875	0.030	0.170
"	4	30.000	1.750	0.100	0.300	24.000	2.000	0.050	0.200	21.000	1.750	0.030	0.170	16.000	875	0.030	0.170
"	5	30.000	1.750	0.100	0.300	24.000	2.000	0.050	0.200	21.000	1.750	0.030	0.170	16.000	875	0.030	0.170
"	6	30.000	1.150	0.060	0.230	21.500	1.250	0.030	0.170	19.700	1.050	0.025	0.150	14.500	525	0.025	0.150
"	8	18.500	480	0.025	0.150	18.500	580	0.015	0.120	18.400	480	0.015	0.120	13.800	240	0.015	0.120
"	10	14.800	360	0.018	0.130	14.800	430	0.010	0.090	14.700	360	0.010	0.090	11.100	180	0.010	0.090
"	12	14.150	320	0.015	0.120	13.400	380	0.008	0.080	13.300	290	0.008	0.080	9.950	140	0.008	0.080
"	14	13.500	280	0.012	0.100	12.000	350	0.007	0.080	12.000	220	0.007	0.080	9.000	110	0.007	0.080
"	16	12.750	240	0.008	0.080	10.500	250	0.005	0.045	10.500	160	0.005	0.045	7.850	80	0.005	0.045
"	18	12.350	220	0.006	0.065	9.750	200	0.004	0.035	9.750	130	0.004	0.035	7.300	85	0.004	0.035
"	20	12.000	200	0.005	0.030	9.000	150	0.003	0.020	9.000	100	0.003	0.020	6.750	50	0.003	0.020
"	22	12.000	150	0.003	0.020	9.000	110	0.002	0.012	9.000	75	0.002	0.012	6.750	35	0.002	0.012
R0.6	6	30.000	2.000	0.120	0.360	20.000	2.000	0.060	0.240	17.500	1.750	0.036	0.200	13.100	875	0.036	0.200

WZQ-2B...M

Материал		Подкаленные стали / Закаленные стали				Закаленные стали				Закаленные стали				Закаленные стали			
Твердость		~ 55 HRC				55HRC ~ 62HRC				62HRC ~ 66HRC				66HRC ~ 70HRC			
Радиус	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск
"	8	20.200	800	0.050	0.230	16.600	900	0.025	0.170	15.850	750	0.025	0.170	11.900	375	0.025	0.170
"	10	15.500	480	0.030	0.180	15.500	580	0.015	0.130	15.350	480	0.015	0.130	11.500	240	0.015	0.130
R0.7	8	25.200	1.300	0.080	0.320	15.350	1.250	0.040	0.230	14.050	1.050	0.030	0.200	10.550	525	0.030	0.200
R0.75	3	30.000	2.450	0.250	0.550	17.000	2.000	0.120	0.400	15.000	1.750	0.060	0.290	11.250	875	0.060	0.290
	4	30.000	2.450	0.250	0.550	17.000	2.000	0.120	0.400	15.000	1.750	0.060	0.290	11.250	875	0.060	0.290
	6	30.000	2.450	0.150	0.450	17.000	2.000	0.070	0.310	15.000	1.750	0.040	0.240	11.250	875	0.040	0.240
	8	23.500	1.300	0.100	0.370	15.000	1.250	0.045	0.250	14.000	1.050	0.030	0.210	10.500	525	0.030	0.210
	10	23.500	1.300	0.100	0.370	15.000	1.250	0.045	0.250	14.000	1.050	0.030	0.210	10.500	525	0.030	0.210
	12	13.100	480	0.030	0.210	13.000	580	0.020	0.170	13.000	480	0.020	0.170	9.750	240	0.020	0.170
	14	11.200	400	0.025	0.190	10.900	485	0.015	0.145	10.900	385	0.015	0.145	8.200	190	0.015	0.145
	16	9.350	320	0.020	0.170	8.850	390	0.012	0.130	8.800	290	0.012	0.130	6.600	145	0.012	0.130
	20	9.000	280	0.018	0.160	8.800	350	0.010	0.120	8.000	220	0.010	0.120	6.000	110	0.010	0.120
R0.8	8	30.000	2.500	0.160	0.480	17.500	2.100	0.080	0.320	15.300	1.800	0.050	0.275	11.500	900	0.050	0.275
"	12	13.500	500	0.040	0.245	13.500	600	0.024	0.190	13.400	490	0.024	0.190	10.050	245	0.025	0.190
"	16	10.800	375	0.030	0.210	10.800	450	0.016	0.150	10.700	370	0.016	0.150	8.000	185	0.016	0.150
R1	4	28.000	2.900	0.300	0.700	14.000	2.100	0.150	0.500	12.250	1.800	0.080	0.350	9.200	900	0.080	0.350
"	6	28.000	2.900	0.200	0.600	14.000	2.100	0.100	0.400	12.250	1.800	0.060	0.300	9.200	900	0.060	0.300
"	8	28.000	2.900	0.200	0.600	14.000	2.100	0.100	0.400	12.250	1.800	0.060	0.300	9.200	900	0.060	0.300
"	10	28.000	2.900	0.200	0.600	14.000	2.100	0.100	0.400	12.250	1.800	0.060	0.300	9.200	900	0.060	0.300
"	12	19.500	1.350	0.120	0.450	12.400	1.350	0.060	0.340	11.500	1.100	0.045	0.270	8.650	550	0.045	0.270
"	14	19.500	1.350	0.120	0.450	12.400	1.350	0.060	0.340	11.500	1.100	0.045	0.270	8.650	550	0.045	0.270
"	16	10.800	500	0.050	0.300	10.800	600	0.030	0.240	10.700	490	0.030	0.240	8.00	245	0.030	0.240
"	18	9.700	435	0.040	0.280	9.700	520	0.025	0.220	9.650	430	0.025	0.220	7.250	215	0.025	0.220
"	20	8.650	375	0.035	0.250	8.650	450	0.020	0.190	8.560	370	0.020	0.190	6.400	185	0.020	0.190
"	22	8.450	350	0.032	0.245	8.200	440	0.018	0.180	8.200	330	0.018	0.180	6.150	165	0.018	0.180
"	25	8.250	320	0.030	0.240	7.800	440	0.016	0.160	7.800	290	0.016	0.160	5.850	145	0.016	0.160
"	30	7.850	280	0.024	0.200	7.000	350	0.014	0.160	7.000	220	0.014	0.160	5.250	110	0.014	0.160
R1.25	20	9.600	520	0.060	0.380	9.600	630	0.040	0.310	9.600	510	0.040	0.310	7.200	255	0.040	0.310
R1.5	6	21.000	3.000	0.400	1.000	10.500	2.200	0.200	0.700	9.200	1.900	0.120	0.550	6.900	950	0.120	0.550
"	8	21.000	3.000	0.400	1.000	10.500	2.200	0.200	0.700	9.200	1.900	0.120	0.550	6.900	950	0.120	0.550
"	10	21.000	3.000	0.300	0.900	10.500	2.200	0.150	0.650	9.200	1.900	0.100	0.500	6.900	950	0.100	0.500
"	12	21.000	3.000	0.300	0.900	10.500	2.200	0.150	0.650	9.200	1.900	0.100	0.500	6.900	950	0.100	0.500
"	16	21.000	3.000	0.300	0.900	10.500	2.200	0.150	0.650	9.200	1.900	0.100	0.500	6.900	950	0.100	0.500
"	20	14.500	1.360	0.180	0.700	9.250	1.400	0.100	0.500	8.600	1.150	0.075	0.450	6.450	575	0.075	0.450
"	25	8.000	520	0.007	0.450	8.000	630	0.050	0.380	8.00	510	0.050	0.380	6.000	255	0.050	0.380
"	30	5.750	375	0.050	0.380	5.750	450	0.030	0.290	5.700	370	0.030	0.290	4.275	185	0.030	0.290
"	35	5.550	335	0.045	0.360	5.300	440	0.025	0.270	5.350	310	0.025	0.270	4.000	155	0.025	0.270
"	40	5.350	300	0.040	0.340	4.900	390	0.200	0.240	4.950	250	0.020	0.240	3.700	125	0.020	0.240
R2	8	18.000	3.200	0.500	1.300	9.000	2.300	0.250	0.950	7.900	2.000	0.150	0.750	5.900	1.000	0.150	0.750
"	10	18.000	3.200	0.500	1.300	9.000	2.300	0.250	0.950	7.900	2.000	0.150	0.750	5.900	1.000	0.150	0.750
"	12	18.000	3.200	0.400	1.200	9.000	2.300	0.200	0.850	7.900	2.000	0.130	0.700	5.900	1.000	0.130	0.700
"	16	18.000	3.200	0.400	1.200	9.000	2.300	0.200	0.850	7.900	2.000	0.130	0.700	5.900	1.000	0.130	0.700
"	20	18.000	3.200	0.400	1.200	9.000	2.300	0.200	0.850	7.900	2.000	0.130	0.700	5.900	1.000	0.130	0.700
"	25	12.500	1.500	0.250	0.950	8.000	1.450	0.130	0.700	7.450	1.250	0.090	0.550	5.600	625	0.090	0.550
"	30	7.000	550	0.100	0.600	7.000	660	0.060	0.450	7.000	540	0.060	0.450	5.250	270	0.060	0.450
"	35	6.000	520	0.090	0.590	6.000	630	0.055	0.430	6.000	510	0.055	0.430	4.500	255	0.055	0.430
"	40	4.300	375	0.065	0.500	4.300	450	0.040	0.390	4.300	370	0.040	0.390	3.200	185	0.040	0.390

Ap

Ae

WZQ-2B...M

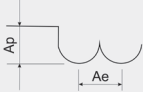
Материал		Подкаленные стали / Закаленные стали				Закаленные стали				Закаленные стали				Закаленные стали			
Твердость		~ 55 HRC				55HRC ~ 62HRC				62HRC ~ 66HRC				66HRC ~ 70HRC			
Радиус	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск
R2.5	20	14.400	3.200	0.500	1.500	7.200	2.300	0.250	1.050	6.350	2.000	0.160	0.880	4.750	1.000	0.160	0.880
"	30	10.000	1.500	0.310	1.200	6.400	1.450	0.160	0.880	6.200	1.250	0.110	0.730	4.650	625	0.110	0.730
"	40	6.000	570	0.125	0.780	6.000	690	0.080	0.625	6.000	570	0.080	0.625	4.500	285	0.080	0.625
"	15	13.000	3.500	0.600	1.800	6.500	2.500	0.300	1.300	5.700	2.200	0.200	1.000	4.300	1.100	0.200	1.000
"	25	9.500	3.000	0.700	2.100	5.200	2.200	0.400	1.700	4.500	1.900	0.250	1.350	3.400	950	0.250	1.350
"	30	7.500	2.500	0.800	2.500	4.300	2.000	0.500	2.100	3.750	1.750	0.300	1.700	2.800	875	0.300	1.700
"	30	6.200	2.000	0.900	3.000	3.600	1.750	0.600	2.600	3.150	1.500	0.350	2.000	2.350	750	0.350	2.000

WZQ-2B...MV

Материал		Цветные металлы / Углеродистая сталь			Подкаленные стали/ Закаленные стали			Закаленные стали			Закаленные стали		
Твердость		30HRC ~ 45HRC			30HRC ~ 45HRC			45HRC ~ 55HRC			55HRC ~ 68HRC		
Радиус	Длина рабочей части	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск	Обороты	Подача	Ар Осевой припуск
R0.1	1.5	42.000	630	0.007	28.350	431	0.005	27.300	326	0.005	27.300	252	0.004
"	2	32.550	368	0.005	22.575	252	0.004	21.000	200	0.003	21.000	179	0.003
R0.15	2	34.650	641	0.008	23.310	399	0.006	21.525	336	0.005	21.525	294	0.004
"	3	32.550	494	0.003	22.050	326	0.002	19.950	242	0.002	19.650	189	0.001
R0.2	3	42.000	1.155	0.016	28.350	788	0.013	26.250	672	0.011	26.250	473	0.008
"	6	25.200	525	0.004	17.850	326	0.003	16.800	294	0.003	16.800	252	0.002
R0.25	4	34.650	1.187	0.019	28.350	861	0.015	24.675	630	0.013	24.675	609	0.011
"	8	21.525	609	0.006	17.850	431	0.005	15.750	368	0.004	15.750	326	0.003
R0.3	4	43.050	2.142	0.032	31.500	1.418	0.022	23.625	788	0.021	23.625	704	0.016
"	8	26.775	998	0.016	22.050	735	0.013	16.800	515	0.011	16.800	410	0.008
"	12	2.625	893	0.008	22.575	714	0.006	14.700	399	0.005	13.650	336	0.004
R0.4	4	43.050	2.310	0.037	29.400	1.470	0.028	24.150	861	0.026	24.150	714	0.016
"	8	26.775	1.365	0.021	18.900	945	0.016	15.750	630	0.016	15.750	578	0.011
"	12	26.775	1.050	0.016	16.275	525	0.013	12.600	462	0.011	12.600	420	0.007
R0.5	8	26.250	2.100	0.047	17.850	1.365	0.037	17.850	1.050	0.032	16.800	861	0.026
"	15	17.850	1.103	0.023	12.600	767	0.019	11.550	683	0.017	11.550	525	0.013
"	25	15.750	945	0.014	10.500	683	0.011	9.450	567	0.008	9.450	462	0.008
"	35	9.450	609	0.008	6.300	399	0.006	6.300	378	0.005	6.300	273	0.004
R0.75	10	18.900	2.205	0.063	12.600	1.470	0.042	12.600	1.155	0.037	12.600	893	0.032
"	20	13.650	1.260	0.032	9.450	945	0.021	9.450	735	0.016	9.450	630	0.014
"	30	9.450	893	0.016	7.350	651	0.013	7.350	546	0.011	7.350	504	0.011
R1	12	15.750	2.468	0.084	11.550	1.785	0.068	11.025	1.428	0.059	11.025	1.124	0.048
"	20	10.500	1.470	0.063	8.400	1.050	0.053	9.450	1.050	0.047	9.450	924	0.037
"	30	9.450	1.260	0.047	7.350	840	0.037	7.350	819	0.032	7.350	672	0.026
"	40	9.450	1.260	0.037	7.035	819	0.032	6.300	735	0.026	6.300	609	0.021
R1.5	20	10.500	2.310	0.095	8.400	1.365	0.074	7.350	1.260	0.063	7.350	1.155	0.053
"	30	9.450	1.890	0.079	7.350	1.103	0.063	6.300	1.050	0.053	6.300	924	0.044

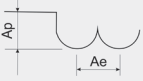
WZQ-2B...MV

Материал		Цветные металлы / Углеродистая сталь			Подкаленные стали/ Закаленные стали			Закаленные стали			Закаленные стали		
Твердость		30HRc ~ 45HRc			30HRc ~ 45HRc			45HRc ~ 55HRc			55HRc ~ 68HRc		
Радиус	Длина рабочей части	Обороты	Подача	Ар Осовой припуск	Обороты	Подача	Ар Осовой припуск	Обороты	Подача	Ар Осовой припуск	Обороты	Подача	Ар Осовой припуск
*	40	7.875	1.470	0.063	5.250	924	0.053	5.355	840	0.042	5.355	735	0.037
*	50	7.875	1.365	0.042	5.250	840	0.032	5.355	788	0.026	5.355	683	0.024
R2	40	6.300	1.260	0.085	3.675	630	0.068	3.360	557	0.053	3.360	525	0.045
*	60	4.200	767	0.063	3.150	473	0.047	2.940	420	0.042	2.940	368	0.033
R3	29	9.450	2.205	0.147	7.350	1.103	0.105	6.300	998	0.084	6.300	893	0.061
*	49	4.725	1.470	0.074	4.095	735	0.063	3.570	683	0.053	3.570	578	0.042
R4	33	9.345	2.310	0.189	7.350	1.155	0.147	6.300	1.050	0.105	6.300	840	0.086
*	52	4.515	1.365	0.095	3.360	683	0.084	3.045	578	0.068	3.045	473	0.042
R5	37	5.775	1.785	0.194	3.675	893	0.168	3.570	735	0.126	3.570	630	0.084
*	54	4.200	998	0.093	3.150	504	0.068	2.940	420	0.053	2.940	336	0.034
R6	63	3.990	735	0.126	2.940	368	0.086	2.625	326	0.063	2.625	231	0.047
*	85	2.940	336	0.063	1.995	168	0.032	1.575	158	0.016	1.575	105	0.011



WZQ-2B...DM/WZQ-4B...DM/WZQ-4B...D7M

Материал	Легированная сталь / Инструментальная сталь		Подкаленные стали/ Закаленные стали		Закаленные стали/ Нержавеющая сталь		Закаленные стали		Закаленные стали	
Твердость	~ 30HRc		30HRc ~ 38HRc		38HRc ~ 45HRc		45HRc ~ 55HRc		55HRc ~ 60HRc	
Радиус	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
R0.5	25.600	680	25.600	680	25.600	680	25.600	680	25.600	610
R0.75	22.000	850	22.000	850	22.000	850	22.000	850	22.000	750
R1	19.200	1.080	19.200	1.080	19.200	1.080	19.200	1.080	17.600	960
R2	12.400	1.440	11.200	1.240	10.800	1.160	10.000	1.080	8.800	920
R3	8.400	1.480	7.600	1.360	7.200	1.280	6.800	1.200	5.900	1.040
R4	6.400	1.120	5.700	1.000	5.500	960	5.100	880	4.400	790
R5	5.100	880	4.600	800	4.400	784	4.000	720	3.600	640
R6	4.800	840	3.800	670	3.640	640	3.400	600	3.000	540



WZQ-2B...

Материал	Подкаленная сталь / Закаленная сталь				Закаленные стали				Закаленные стали				Закаленные стали			
Твердость	~ 55HRC				55HRC ~ 62HRC				62HRC ~ 65HRC				65HRC ~ 68HRC			
Радиус	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск	Обороты	Подача	Ар Осевой припуск	Ае Боковой припуск
R0.05	60.000	150	0.002	0.004	60.000	150	0.002	0.003	60.000	100	0.001	0.0012	52.500	30	0.001	0.002
R0.1	60.000	180	0.003	0.005	60.000	180	0.002	0.003	60.000	120	0.002	0.003	45.000	60	0.002	0.003
R0.15	60.000	350	0.006	0.008	45.000	310	0.004	0.007	43.500	180	0.003	0.005	32.500	90	0.003	0.005
R0.2	50.000	500	0.010	0.020	37.500	420	0.007	0.012	35.000	240	0.005	0.008	26.250	120	0.005	0.008
R0.25	44.000	350	0.015	0.040	33.000	530	0.010	0.020	30.000	300	0.007	0.010	22.500	150	0.007	0.010
R0.3	40.000	1.100	0.030	0.130	30.000	1.200	0.020	0.100	26.500	800	0.010	0.075	20.000	400	0.010	0.075
R0.4	35.000	1.600	0.060	0.210	27.000	1.600	0.040	0.170	23.500	1.000	0.020	0.120	17.500	500	0.020	0.120
R0.5	30.000	1.750	0.200	0.400	24.000	2.000	0.100	0.300	21.000	1.750	0.050	0.200	16.000	875	0.050	0.200
R0.6	30.000	2.000	0.230	0.450	21.000	2.000	0.100	0.300	18.000	1.750	0.050	0.200	14.500	875	0.050	0.200
R0.75	30.000	2.450	0.250	0.550	17.000	2.000	0.120	0.400	15.000	1.750	0.060	0.290	11.250	875	0.060	0.290
R1	28.000	2.900	0.300	0.700	14.000	2.100	0.150	0.500	12.250	1.800	0.080	0.350	9.200	900	0.080	0.350
R1.25	24.500	2.950	0.350	0.850	12.250	2.150	0.170	0.600	10.700	1.850	0.100	0.450	8.050	925	0.100	0.450
R1.5	21.000	3.000	0.400	1.000	10.500	2.200	0.200	0.700	9.200	1.900	0.120	0.550	6.900	950	0.120	0.550
R2	18.000	3.200	0.500	1.300	9.000	2.300	0.250	0.950	7.900	2.000	0.150	0.750	5.900	1.000	0.150	0.750
R2.5	15.600	3.500	0.500	1.500	7.800	2.500	0.250	1.050	6.800	2.100	0.150	0.850	5.100	1.050	0.150	0.850
R3	13.000	3.500	0.600	1.800	6.500	2.500	0.300	1.300	5.700	2.200	0.200	1.000	4.300	1.100	0.200	1.000
R4	9.500	3.000	0.700	2.100	5.200	2.200	0.400	1.700	4.500	1.900	0.250	1.350	3.400	950	0.250	1.350
R5	7.500	2.500	0.800	2.500	4.300	2.000	0.500	2.100	3.750	1.750	0.300	1.700	2.800	875	0.300	1.700
R6	6.200	2.000	0.900	3.000	3.600	1.750	0.600	2.600	3.150	1.500	0.350	2.000	2.350	750	0.350	2.000

WMQ-4B...

Материал	Конструктивная сталь						Нержавеющая сталь					
Твердость	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Ар Осевой припуск	Ае Боковой припуск	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Ар Осевой припуск	Ае Боковой припуск
Радиус	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача		
R1.5	32,000	7,700	21,000	3,200	0.25	0.75	24,000	4,800	16,000	1,900	0.25	0.75
R2	24,000	5,800	16,000	2,800	0.33	1	18,000	4,000	12,000	1,700	0.33	1
R2.5	19,000	5,300	12,700	2,600	0.42	1.25	14,400	3,500	9,600	1,500	0.42	1.25
R3	16,000	4,800	10,600	2,100	0.5	1.5	12,000	3,200	8,000	1,400	0.5	1.5
R4	12,000	4,300	8,000	1,900	0.8	2	9,000	3,200	6,000	1,400	0.8	2
R5	9,600	4,100	6,400	1,800	1	2.5	7,200	3,000	4,800	1,300	1	2.5
R6	8,000	4,000	5,300	1,800	1.2	3	6,000	3,000	4,000	1,300	1.2	3

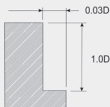
WMQ-4B...

Материал	Цветные металлы						Жаропрочная сталь					
Твердость	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Ар Осевой припуск	Ае Боковой припуск	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Ар Осевой припуск	Ае Боковой припуск
Радиус	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача		
R1.5	38,000	9,100	25,000	3,800	0.25	0.75	6,400	640	4,200	340	0.13	0.3
R2	29,000	7,000	19,000	3,300	0.33	1	4,800	580	3,200	260	0.17	0.4
R2.5	23,000	6,400	15,000	3,100	0.42	1.25	3,800	530	2,500	250	0.21	0.5
R3	19,000	5,700	13,000	2,600	0.5	1.5	3,200	500	2,100	210	0.25	0.6
R4	14,000	5,000	9,600	2,300	0.8	2	2,400	430	1,600	190	0.4	0.8
R5	12,000	5,100	7,700	2,200	1	2.5	2,000	420	1,300	180	0.5	1
R6	9,600	4,800	6,400	2,200	1.2	3	1,700	350	1,100	150	0.6	1.2

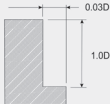
WZQ-2F...MR/WZQ-2F...MV

Материал	Подкаленные стали/ Закаленные стали		Закаленные стали					
Твердость	50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.4mm	40.000	155	33.000	105	25.000	60	25.000	60
0.5mm	40.000	175	33.000	110	25.000	65	20.000	40
0.6mm	40.000	225	30.000	125	25.000	85	20.000	50
0.8mm	30.000	235	25.000	145	19.000	90	16.000	55
1mm	25.500	288	20.500	172	16.000	108	12.500	70
2mm	17.500	336	14.500	208	11.000	128	9.500	92
3mm	11.500	336	9.500	208	7.500	128	6.400	92
4mm	8.800	352	7.200	216	5.600	136	4.750	94
5mm	8.300	400	6.400	228	5.100	144	4.450	105
6mm	6.900	384	5.300	224	4.200	144	3.700	104
8mm	5.200	356	4.000	204	3.200	132	2.800	96
10mm	4.100	332	3.200	192	2.550	124	2.200	90
12mm	3.500	332	2.650	192	2.100	124	1.860	90

WZQ-2F...MR/WZQ-2F...MV

Материал	Подкаленные стали/ Закаленные стали		Закаленные стали					
Твердость	50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.4mm	40.000	110	33.000	70	25.000	40	25.000	40
0.5mm	40.000	125	33.000	80	25.000	45	20.000	30
0.6mm	40.000	160	30.000	90	25.000	60	20.000	35
0.8mm	30.000	165	25.000	100	19.000	65	16.000	40
1mm	25.500	408	20.500	248	16.000	152	12.500	100
2mm	17.500	480	14.500	296	11.000	184	9.500	132
3mm	11.500	480	9.500	296	7.500	184	6.400	132
4mm	8.800	500	7.200	308	5.600	192	4.750	136
5mm	8.300	568	6.400	328	5.100	208	4.450	152
6mm	6.900	552	5.300	320	4.200	204	3.700	148
8mm	5.200	508	4.000	292	3.200	188	2.800	136
10mm	4.100	472	3.200	272	2.550	176	2.200	128
12mm	3.500	472	2.650	272	2.100	176	1.860	128
								

WZQ-4F...MR/WZQ-4F...MV

Материал	Подкаленные стали/ Закаленные стали		Закаленные стали					
Твердость	50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.4mm	40.000	580	33.000	350	25.000	240	20.000	150
0.5mm	40.000	600	33.000	365	25.000	245	20.000	140
0.6mm	40.000	650	30.000	380	25.000	250	20.000	150
0.8mm	30.000	660	25.500	400	19.000	260	16.000	155
1mm	25.500	710	20.500	430	16.000	270	12.500	175
2mm	17.500	840	14.500	520	11.000	320	9.500	230
3mm	11.500	840	9.500	520	7.500	320	6.400	230
4mm	8.800	880	7.200	540	5.600	335	4.750	240
5mm	8.300	1,000	6.400	580	5.100	370	4.450	270
6mm	6.900	950	5.300	560	4.200	350	3.700	260
8mm	5.200	900	4.000	520	3.200	330	2.800	240
10mm	4.100	840	3.200	480	2.550	310	2.200	220
12mm	3.500	840	2.650	480	2.100	300	1.860	220
								

WZQ-2F...R

Материал	Подкаленные стали/ Закаленные стали		Подкаленные стали/ Закаленные стали		Закаленные стали							
Твердость	50HRC ~ 68HRC		40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
0.4mm	45.000	100	45.000	120	40.000	110	33.000	70	25.000	40	25.000	40
0.5mm	45.000	115	45.000	160	40.000	125	33.000	80	25.000	45	20.000	30
0.6mm	45.000	140	45.000	200	40.000	160	30.000	90	25.000	60	20.000	35
0.8mm	45.000	180	40.000	245	30.000	165	25.000	100	19.000	65	16.000	40
1mm	45.000	280	38.000	656	25.500	408	20.500	248	16.000	152	12.500	100
2mm	45.000	360	26.000	776	17.500	480	14.500	296	11.000	184	9.500	132
3mm	40.000	440	17.300	776	11.500	480	9.500	296	7.500	184	6.400	132
4mm	39.000	520	13.200	800	8.800	500	7.200	308	5.600	192	4.750	136
5mm	38.000	570	12.500	920	8.300	568	6.400	328	5.100	208	4.450	152
6mm	26.000	680	10.350	880	6.900	552	5.300	320	4.200	204	3.700	148
8mm	17.300	680	7.800	824	5.200	508	4.000	292	3.200	188	2.800	136
10mm	13.200	700	6.150	776	4.100	472	3.200	272	2.550	176	2.200	128
12mm	12.500	805	5.250	776	3.500	472	2.650	272	2.100	176	1.860	128

WZQ-4F...R/WZQ-4(6)F...R/ WZQ-6(4)F...R

Материал	Подкаленные стали/ Закаленные стали				Закаленные стали					
Твердость	40HRC ~ 50HRC		50HRC ~ 55HRC		55HRC ~ 60HRC		60HRC ~ 65HRC		65HRC ~ 68HRC	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
1mm	38.000	840	25.500	568	20.500	344	16.000	216	12.500	140
2mm	26.000	1.000	17.500	672	14.500	416	11.000	256	9.500	184
3mm	17.300	1.000	11.500	672	9.500	416	7.500	256	6.400	184
4mm	13.200	1.040	8.800	704	7.200	432	5.600	268	4.750	192
5mm	12.500	1.200	8.300	800	6.400	464	5.100	296	4.450	216
6mm	10.350	1.120	6.900	760	5.300	448	4.200	280	3.700	208
8mm	7.800	1.080	5.200	720	4.000	416	3.200	264	2.800	192
10mm	6.150	1.008	4.100	672	3.200	384	2.550	248	2.200	176
12mm	5.250	1.008	3.500	672	2.650	384	2.100	240	1.860	176

Technical drawing of a square end mill. The drawing shows a cross-section of the tool with a square profile. The diameter of the tool is indicated as 1.00 mm. The chip height (the distance from the top of the chip to the top of the tool) is indicated as 0.030 mm. The tool is shown with a hatched pattern on the left side, indicating the material being removed.

WMQ-3F...R/ WMQ-4F...R/ WMQ-5F...R

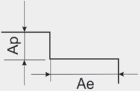
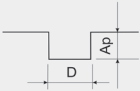
Материал	Подкаленные стали/ Закаленные стали		
Внешний диаметр	Обороты	Подача	Ар Осевой припуск
3mm	4,400	380	0.25D
4mm	3,800	350	
5mm	3,300	350	
6mm	3,000	340	
7mm	2,700	340	
8mm	2,200	340	
9mm	2,000	340	
10mm	1,750	330	
12mm	1,300	330	0.15D
14mm	5,000	310	
16mm	4,800	300	0.1D
20mm	4,700	210	

WAQ-2F...

Материал	Алюминиевые сплавы							
Скорость	300 м/мин		240 м/мин		240м/мин		200м/мин	
Внешний диаметр	Обороты	Подача	Обороты	Подача	Обороты	Подача	Обороты	Подача
1mm	34.000	500	34.000	400	34.000	400	34.000	300
2mm	34.000	950	32.300	720	32.300	720	27.200	470
3mm	27.200	1.200	21.300	800	21.300	800	18.000	510
4mm	20.400	1.300	16.000	850	16.000	850	14.000	550
5mm	16.200	1.400	13.000	850	13.000	850	11.000	600
6mm	13.600	1.600	11.000	940	11.000	940	9.400	640
8mm	10.200	1.600	8.000	1.000	8.000	1.000	6.800	680
10mm	8.100	1.600	6.500	1.000	6.500	1.000	5.400	680
12mm	6.800	1.600	5.400	1.000	5.400	1.000	4.500	680
16mm	5.100	1.600	4.100	1.000	4.100	1.000	3.400	610
20mm	4.100	1.300	3.200	850	3.200	850	2.700	560

WAQ-3F...

Материал	Алюминиевый сплав			
Внешний диаметр	Обороты	Подача		
		Вертикаль	Паз	Боковое фрезерование
1mm	25,500	130	770	930
2mm	25,500	190	1,530	1,800
3mm	18,400	190	1,700	2,000
4mm	14,000	255	1,700	2,000
5mm	11,000	255	1,700	2,000
6mm	9,200	255	1,700	2,000
8mm	7,000	255	1,700	2,000
10mm	5,500	210	1,700	2,000
12mm	4,400	170	1,700	2,000
16mm	3,200	130	1,530	1,900
20mm	2,000	85	1,360	1,700



Официальный дистрибьютор в России ООО "Аврора"
avroratools21@gmail.com
avrora-tools.ru