

➤ 7745VOD Series

Face Milling Cutter

42° LEAD ANGLE – FACE MILLS

7745VOD cutters are designed for machining most materials. Octagonal inserts offer up to eight economical cutting edges.

These cutters are ideal for roughing, semi-finishing and finishing of Steel, Alloyed Steel, Stainless Steel, High Temperature Alloys, Cast Iron and Aluminium Alloys.

7745VOD cutters are also very robust when machining with tool holder extensions.

They are one of the first choice tools for machining component surface with scale as well as for machining of irregular stock.

Insert sizes: OD..04 available in cutters with medium and fine tooth pitch, giving maximum efficiency and performance in order to reduce cycle times.

Features and Benefits

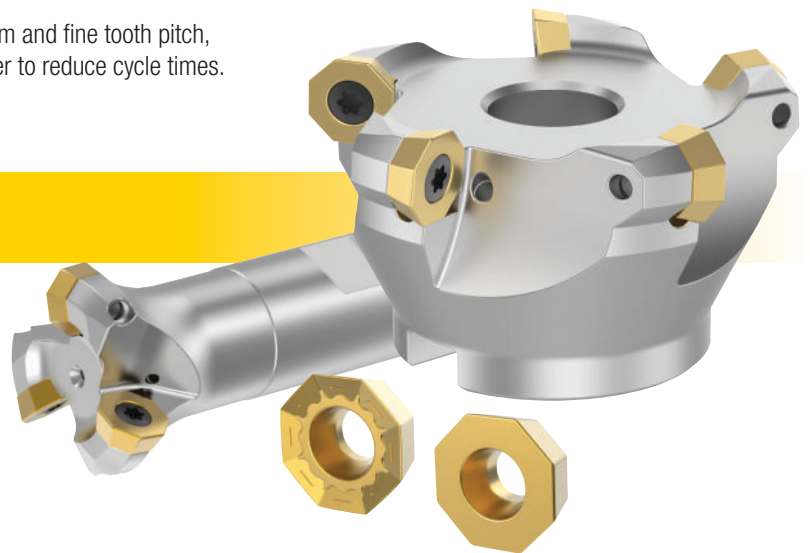
7745VOD

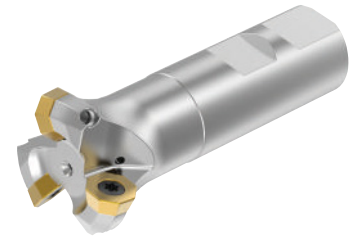
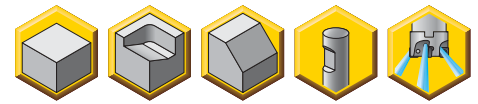
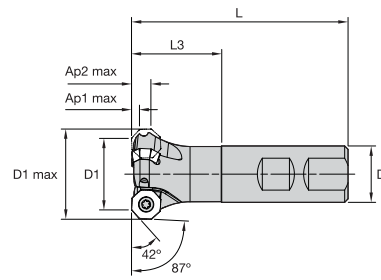
7745VOD04:

Maximum a_p = 3,50mm (8 cutting edges)

Maximum a_p = 8mm (4 cutting edges)

Diameter Range = 32mm to 125mm



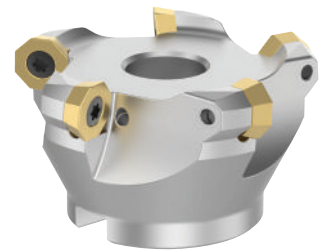
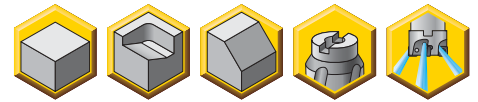
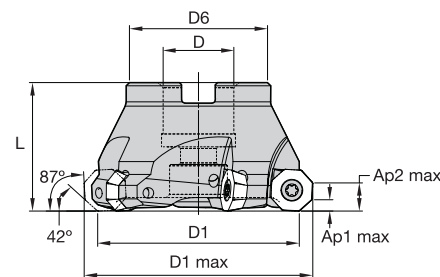


■ End Mill Weldon Shank

order number	catalogue number	D1 max	D1	D	L	L3	Ap1 max	Ap2 max	Z
5672181	7745VOD04WA032R	40	32	25	96	40	3,5	8,0	3

■ Spare Parts

catalogue number	insert screw	Nm	Torx driver
7745VOD04WA032R	F4011T	3,1	T20

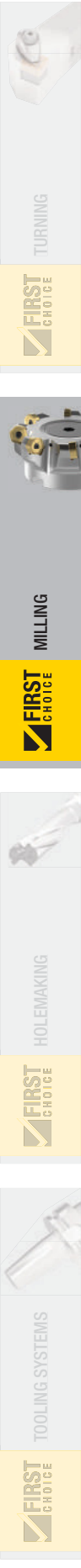


■ Shell Mills

order number	catalogue number	D1 max	D1	D	D6	L	Ap1 max	Ap2 max	Z
5673810	7745VOD04-A040R	48	40	16	35	35	3,5	8,0	4
5672038	7745VOD04-A050Z6R	58	50	22	45	40	3,5	8,0	6
5671836	7745VOD04-A063R	71	63	22	45	40	3,5	8,0	5
5673700	7745VOD04-A080R	88	80	27	65	50	3,5	8,0	6
5672025	7745VOD04-A100R	108	100	32	80	50	3,5	8,0	7
5672190	7745VOD04-A125R	133	125	40	82	63	3,5	8,0	8

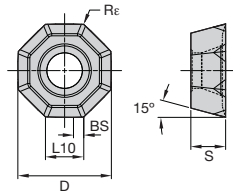
■ Spare Parts

catalogue number	insert screw	Nm	Torx driver	mounting screw	LHCS mounting screw
7745VOD04-A040R	F4011T	3,1	T20	M8 1.25 X 25 SHCS	—
7745VOD04-A050Z6R	F4011T	3,1	T20	M10 1.5 X 25 SHCS	—
7745VOD04-A063R	F4011T	3,1	T20	M10 1.5 X 25 SHCS	—
7745VOD04-A080R	F4011T	3,1	T20	M12 X 1.75 X 30 SHCS	—
7745VOD04-A100R	F4011T	3,1	T20	—	M16X2X40 LHSCS
7745VOD04-A125R	F4011T	3,1	T20	M20 X 2.5 X 50 SHCS	—



- ◆◆ first choice with coolant
- ◇◇ first choice without coolant
- ◆ alternate choice with coolant
- ◇ alternate choice without coolant

P1-P2	◇◇	◇/◆	
P3-P4	◆◆	◇/◆	
P5-P6		◆◆	◇/◆
M1-M2	◇◇	◆◆	
M3	◆	◆◆	
K1-K2	◇◇	◇/◆	
K3	◆◆	◇/◆	
N1			
N2			
S1		◆◆	◆
S2		◆◆	◆
S3		◆◆	
S4		◆	◆◆



ISO catalogue number	D	S	hm	BS	Re	SP6519	X500	X700
Light Machining ODET0404APEN44	12,80	4,76	0,04	1,50	—	5667950	5656499	—



Light Machining ODMT040408EN412	12,80	4,76	0,06	—	0,80	5665818	—	5666904
---	-------	------	------	---	------	---------	---	---------



General Machining ODMT0404APEN41	12,80	4,76	0,06	1,50	0,20	5661185	5657014	—
--	-------	------	------	------	------	---------	---------	---



General Machining ODMT040408EN41	12,80	4,76	0,06	—	0,80	5667576	5656811	—
--	-------	------	------	---	------	---------	---------	---



Heavy Machining ODMW040408SN	12,80	4,76	0,27	—	0,80	5665739	5656555	—
--	-------	------	------	---	------	---------	---------	---

NOTE: ODMW040408SN X500 should be generally used for heavy duty applications as well as Stainless Steel and High-Temperature Alloys with heavy scale.
Geometry -412 is slightly more positive than -41 and can improve tool life in several applications on Stainless Steel and High Temperature Alloys

Recommended Starting Feeds

■ Recommended Starting Feeds [mm]

Light Machining	General Purpose	Heavy Machining
-----------------	-----------------	-----------------

Insert Geometry	Recommended Starting Feed per Tooth (Fz) in Relation to % of Radial Engagement (ae)															Insert Geometry
	10%			20%			30%			40%			50-100%			
.E..44	0,14	0,35	0,58	0,10	0,25	0,41	0,08	0,19	0,31	0,07	0,17	0,28	0,06	0,15	0,25	.E..44
.E..412	0,16	0,41	0,69	0,12	0,30	0,50	0,09	0,23	0,38	0,08	0,20	0,33	0,07	0,18	0,30	.E..412
.E..41	0,18	0,51	0,81	0,13	0,36	0,58	0,10	0,28	0,44	0,09	0,24	0,39	0,08	0,22	0,35	.E..41
.S..N	0,46	0,81	1,15	0,33	0,58	0,83	0,25	0,44	0,63	0,22	0,39	0,55	0,20	0,35	0,50	.S..N

Material Group		SP6519			X500			X700		
P	1	355	260	155	325	240	155	-	-	-
	2	310	230	140	290	215	140	-	-	-
	3	275	200	120	250	185	120	-	-	-
	4	210	150	90	190	145	90	-	-	-
	5	170	125	85	155	120	85	160	125	85
	6	145	100	60	130	95	60	140	100	60
M	1	325	235	140	300	220	140	310	230	140
	2	280	205	125	265	190	120	275	205	125
	3	235	170	100	215	155	95	230	170	100
K	1	355	265	170	310	265	205	-	-	-
	2	290	210	130	265	215	155	-	-	-
	3	265	190	120	205	170	120	-	-	-
N	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-

Material Group		SP6519			X500			X700		
P	1	285	210	125	260	190	125	-	-	-
	2	250	185	110	230	170	110	-	-	-
	3	220	160	95	200	150	95	-	-	-
	4	170	120	70	150	115	70	-	-	-
	5	135	100	70	125	95	70	130	100	70
	6	115	80	50	105	75	50	110	80	50
M	1	260	190	110	240	175	110	250	185	110
	2	225	165	100	210	150	95	220	165	100
	3	190	135	80	170	125	75	185	135	80
K	1	285	210	135	250	210	165	-	-	-
	2	230	170	105	210	170	125	-	-	-
	3	210	150	95	165	135	95	-	-	-
N	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
S	1	50	40	25	50	30	25	50	40	25
	2	50	30	20	45	30	20	45	30	20
	3	50	40	25	50	40	25	50	40	25
	4	75	55	35	70	50	30	70	50	35
H	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-

NOTE: FIRST choice starting speeds are in **bold type**.
As the average chip thickness increases, the speed should be decreased.

- Dry
- Wet



■ Technical Information (mm)

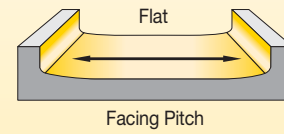
order number	catalogue number	dimension				a _p max helical/linear	max RPM
		facing pitch	ramping angle	helical hole min-max			
5672181	7745VOD04WA032R	32	12,10	60	78	2,00	33200
5673810	7745VOD04-A040R	40	8.50	76	94	2,00	29200
5672038	7745VOD04-A050Z06R	50	6.10	96	114	2,00	25700
5671836	7745VOD04-A063R	63	4.30	122	140	2,00	22700
5673700	7745VOD04-A080R	80	3.00	156	174	2,00	17700
5672025	7745VOD04-A100R	100	2.40	196	214	2,00	17700
5672190	7745VOD04-A125R	125	2.00	246	264	2,00	15700



Ramping



Helical Interpolation



TURNING

FIRST CHOICE

MILLING

FIRST CHOICE

HOLEMAKING

FIRST CHOICE

TOOLING SYSTEMS

FIRST CHOICE