SUMITOMO
CARBIDE - CBN - DIAMOND

High-speed Milling Cutter
for Aluminium

ALNEX ANX Series

Ultra-High Efficiency Machining and Excellent Chip Control

Expansion: New Range of Modular Tools now available

P M K N S H

SUMITOMO ELECTRIC GROUP

VIDEO OF CUTTING

Features

Drastically Reduced Runout Adjustment Time

Simple screw-fastening structure enables fine adjustments to be made easily.

Blade Through Coolant

Secures a supply of coolant to the cutting edge and breaks chips thoroughly.

Lightweight Aluminum Alloy Body

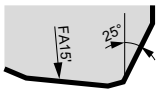
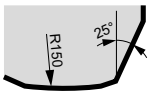
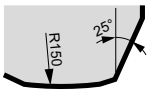
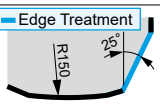
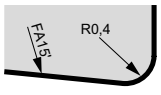
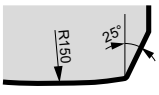
Utilizing aluminum alloy to achieve a total weight of less than 1,3 kg for a Ø 125 mm cutter with 22 teeth.

Product Range

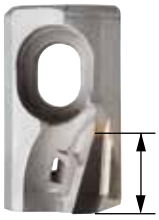
Type	Cat. No.	Body Material	Diameter Range (mm) / No of Teeth									
			Ø 25	Ø 30	Ø 32	Ø 40	Ø 50	Ø 63	Ø 80	Ø 100	Ø 125	Ø 160
Shell	ANXA 16000RS	Aluminum Alloy							6, 10, 14	8, 12, 18	10, 14, 22	12, 20, 28
	ANXA 16000R (Inch)	Aluminum Alloy							6, 10, 14	8, 12, 18	10, 14, 22	12, 20, 28
	ANXS 16000RS	Steel				4, 6	4, 6, 9	6, 8, 12	6, 10, 14	8, 12, 18	10, 14, 22	
	ANXS 16000R (Inch)	Steel						6, 8, 12	6, 10, 14	8, 12, 18	10, 14, 22	
Shank	ANXS 16000E	Steel	2	3, 4	3, 4	4, 6	4, 6, 9					
Modu-lar	ANXS 16000M	Steel	2	3, 4	3, 4	4, 6						

Inch Inch Bore

Blade Selection Guide

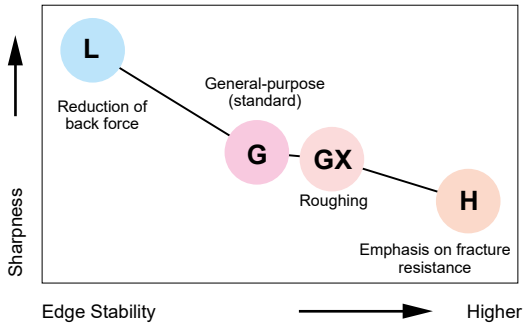
Work Material	N					
Type	L	G	GX	H	—	W
Cutting Edge Shape						
Features	Low Cutting Force	Standard	Long Edge	High Strength	Corner Radius	Wiper
Applica-tions	Finishing / Light Cutting	General Purpose	Roughing			
Edge Length*	6,0 mm	6,0 mm	9,0 mm	6,0 mm		

Edge Treatment



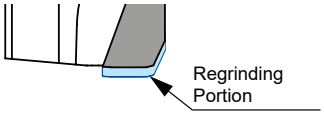
*Edge length
GX type = 9,0 mm

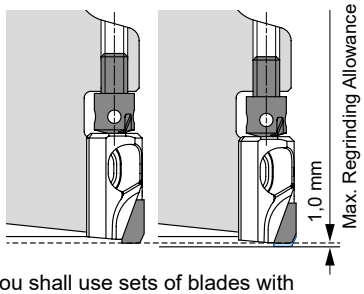
Edge Selection Guide



Reduces Running Costs by Drastically Increasing Blade, Insert Regrinding Allowance (to 1,0 mm)

Assuming 0,2 mm of regrinding each time, an edge can be used up to 6 times.
(Peripheral edge cannot be reground.)





If you wish to use reground blades you shall use sets of blades with matching size of the same level in order to keep the balance.

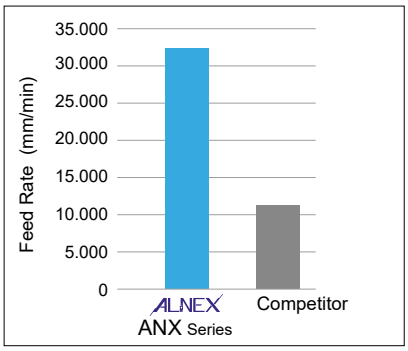
Performances

High-Speed / High-Efficiency Cutting

Realizes ultra-high efficiency machining with v_f = 30.000 mm/min

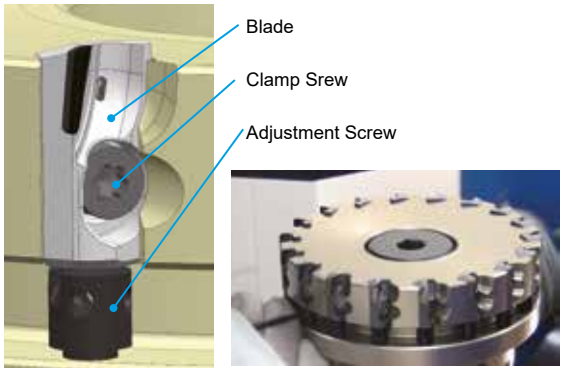
Comparison: Cutter Diameter Ø 100 mm

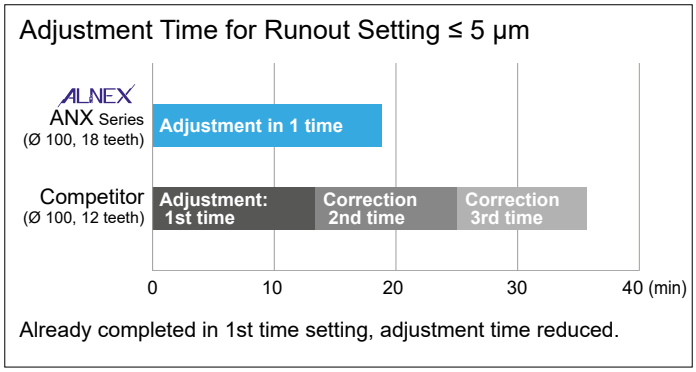
	Spindle Speed min^{-1}	Number of Teeth	Feed Rate v_f (mm/min)
ANX Series	18.000	18	32.400
Competitor	9.500	12	11.400



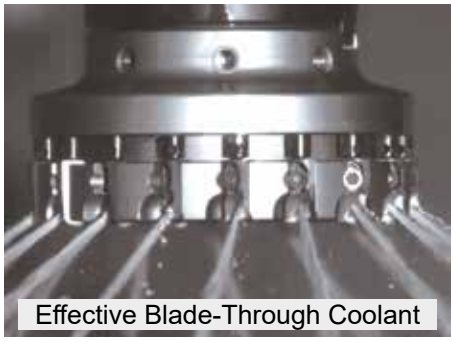
Drastically Reduces Runout Adjustment Time

– Simple screw-fastening structure
– Enables fine adjustments to be made easily
– High-rigidity body





Chip Control



Blade-Through Coolant Chip Breaking

ALNEX ANX Series

Competitor

Work Material: G-AlSi12Cu
Cutting Conditions: v_c = 2500 m/min, f_z = 0,05 mm/t, a_p = 0,5 mm, wet

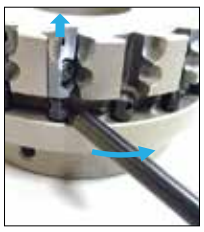
Adjustment of the Blades, Runout Alignment

① 

Insert the blade into its seat.

② 

While holding the blade against the seat, install the clamping bolt using the provided wrench, pre-tightening the bolt. (recommended pre-torque is 1 N·m)

③ 

Using the provided wrench for the height adjustment screw, set the height to your predetermined value.

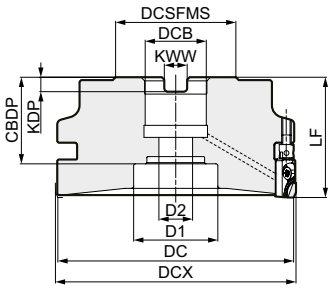
④ 

Fully tighten the clamp bolt. (recommended torque is 2 N·m)

ANXA 16000 R(S)

Rake Angle		
	Radial	+5°
	Axial	+5°

3 mm 90°



Body - ANXA (Aluminum Alloy)

Dimensions (mm)

	Cat. No.	Stock	DC	DCX	DCSFMS	LF	DCB	KWW	KDP	CBDP	D1	D2	No. of Teeth	Weight (kg)
Metric	ANXA 16080RS06	❍	78	80	50	50	27	12,4	7	34	35	14	6	0,5
	16080RS10	●	78	80	50	50	27	12,4	7	34	35	14	10	0,5
	16080RS14	●	78	80	50	50	27	12,4	7	34	35	14	14	0,5
	16100RS08	❍	98	100	50	59	27	12,4	7	34	35	14	8	0,8
	16100RS12	●	98	100	50	50	27	12,4	7	34	35	14	12	0,8
	16100RS18	●	98	100	50	50	27	12,4	7	34	35	14	18	0,9
	16125RS10	❍	123	125	50	50	27	12,4	7	34	35	14	10	1,2
	16125RS14	●	123	125	50	50	27	12,4	7	34	35	14	14	1,2
	16125RS22	●	123	125	50	50	27	12,4	7	34	35	14	22	1,3
	16160RS12	❍	158	160	80	63	40	16,4	9	35	52	29	12	2,6
	16160RS20	❍	158	160	80	63	40	16,4	9	35	52	29	20	2,6
	16160RS28	❍	158	160	80	63	40	16,4	9	35	52	29	28	2,6
Inch	ANXA 16080R06	❍	78	80	50	50	25,4	9,5	6	34	35	14	6	0,5
	16080R10	❍	78	80	50	50	25,4	9,5	6	34	35	14	10	0,5
	16080R14	❍	78	80	50	50	25,4	9,5	6	34	35	14	14	0,5
	16100R08	❍	98	100	50	50	25,4	9,5	6	34	35	14	8	0,8
	16100R12	❍	98	100	50	50	25,4	9,5	6	34	35	14	12	0,9
	16100R18	❍	98	100	50	50	25,4	9,5	6	34	35	14	18	0,9
	16125R10	❍	123	125	50	50	25,4	9,5	6	34	35	14	10	1,2
	16125R14	❍	123	125	50	50	25,4	9,5	6	34	35	14	14	1,2
	16125R22	❍	123	125	50	50	25,4	9,5	6	34	35	14	22	1,3
	16160R12	❍	158	160	80	63	38,1	15,9	10	42,5	55	30	12	2,3
	16160R20	❍	158	160	80	63	38,1	15,9	10	42,5	55	30	20	2,4
	16160R28	❍	158	160	80	63	38,1	15,9	10	42,5	55	30	28	2,6

Blades are sold separately. If using a blade for corner radius machining (ANB1604R/ANB1608R), DC = DCX.
The weight includes the weight of the blade and parts (excluding the centre bolt).
All aluminium alloy bodies with a maximum blade diameter (DCX) of Ø 80 to Ø 125 have the same diameter (DCB) of the retainer hole (metric Ø 27/in Ø 25,4).

Identification Details

ANX	A	16	100	R	S	18
Cutter Series	Aluminum Alloy Body	Blade Size	Cutter Diameter	Feed Direction	Metric	Number of Teeth

● = Euro stock ❍ = Japan stock

Blades

Application	SUMIDIA
High Speed / Light Cut	N
General Purpose	N
Roughing	N

Cat. No.	DA1000	Cutting Edge Length	RE	Wiper Edge Shape	Applications	Fig.
ANB 1600R-L	●	6,0	–	Linear	Low Cutting Force	1
1600R-G	●	6,0	–	Arc-Shaped	General Purpose	1
1600R-H	●	6,0	–	Arc-Shaped	Strong Edge	1
1600R-GX	❍	9,0	–	Arc-Shaped	Long Edge	2
1604R	❍	6,0	0,4	Linear	Corner Radius	3
1608R	❍	6,0	0,8	Linear	Corner Radius	3
1600R-W	❍	2,0	–	Arc-Shaped	Wiper	4

Fig. 1

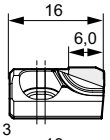


Fig. 2

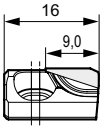


Fig. 3

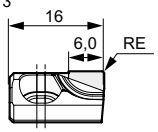
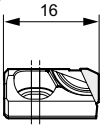


Fig. 4



Wiper Blade

Recommended Cutting Conditions

Si content ≤ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	2.000–**2.500**–3.000	0,05–**0,13**–0,20	DA1000

Si content ≥ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	400–**600**–800	0,05–**0,13**–0,20	DA1000

The above recommended cutting conditions are meant as a guide. Actual conditions will depend on the individual machine rigidity, work clamp rigidity, depth of cut and other factors.

Max. Allowable Spindle Speed

Cat. No.	n max (min^{-1})
ANXA 16080RS06	20.000
16080RS10	20.000
16080RS14	20.000
16100RS08	18.000
16100RS12	18.000
16100RS18	18.000
16125RS10	16.000
16125RS14	16.000
16125RS22	16.000
16160RS12	14.000
16160RS20	14.000
16160RS28	14.000
ANXA 16080R06	20.000
16080R10	20.000
16080R14	20.000
16100R08	18.000
16100R12	18.000
16100R18	18.000
16125R10	16.000
16125R14	16.000
16125R22	16.000
16160R12	14.000
16160R20	14.000
16160R28	14.000

Spare Parts

Sold separately.

Applicable Cutters	Clamp Screw		Adjustment Screw	Wrench	Adjustment Wrench	Centre Bolt		Assembly Wrench
		N·m					N·m	
ANXA 16080RS_ _	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	BXH1235-D33	50	HFVT
16100RS_ _								
16125RS_ _								
16160RS_ _						BXH2036-D50	200	
16080R_ _	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	BXH1235-D33	50	
16100R_ _								
16125R_ _								
16160R_ _						BXH2036-D50	200	

The adjustment spanner (ANT) can also be used for height adjustment of the RF type cutters for high speed machining and the HF type cutters for high efficiency machining.

● = Euro stock ❍ = Japan stock N·m Recommended Tightening Torque (N·m)

ANXS 16000 R(S)

Rake Angle		
	Radial	+5°
	Axial	+5°

3 mm 90°

Fig. 1

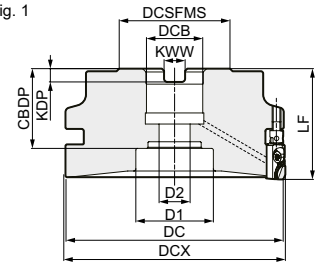
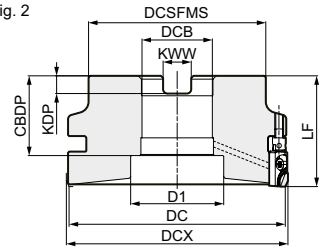


Fig. 2



Body - ANXS (Steel)

Dimensions (mm)

	Cat. No.	Stock	DC	DCX	DCSFMS	LF	DCB	KWW	KDP	CBDP	D1	D2	No. of Teeth	Weight (kg)	Fig.
Metric	ANXS 16040RS04	❍	38	40	38,5	40	16	8,4	5,6	26	14	9	4	0,3	1
	16040RS06	●	38	40	38,5	40	16	8,4	5,6	26	14	9	6	0,3	1
	16050RS04	❍	48	50	48,5	40	22	10,4	6,3	26	18	11	4	0,4	1
	16050RS06	●	48	50	48,5	40	22	10,4	6,3	26	18	11	6	0,4	1
	16050RS09	❍	48	50	48,5	40	22	10,4	6,3	26	18	11	9	0,5	1
	16063RS06	❍	61	63	50	40	22	10,4	6,3	26	18	11	6	0,7	1
	16063RS08	●	61	63	50	40	22	10,4	6,3	26	18	11	8	0,7	1
	16063RS12	●	61	63	50	40	22	10,4	6,3	26	18	11	12	0,7	1
	16080RS06	❍	78	80	50	40	27	12,4	7	34	35	14	6	1,2	1
	16080RS10	❍	78	80	50	50	27	12,4	7	34	35	14	10	1,2	1
	16080RS14	❍	78	80	50	50	27	12,4	7	34	35	14	14	1,2	1
	16100RS08	❍	98	100	80	50	32	14,4	8	32	46	–	8	1,9	2
	16100RS12	❍	98	100	80	50	32	14,4	8	32	46	–	12	2,0	2
	16100RS18	❍	98	100	80	50	32	14,4	8	32	46	–	18	2,0	2
	16125RS10	❍	123	125	80	63	40	16,4	9	35	52	–	10	3,8	2
	16125RS14	❍	123	125	80	63	40	16,4	9	35	52	–	14	3,9	2
	16125RS22	❍	123	125	80	63	40	16,4	9	35	52	–	22	3,9	2
Inch	ANXS 16063R06	❍	61	63	50	50	25,4	9,5	6	31	20	14	6	0,9	1
	16063R08	❍	61	63	50	50	25,4	9,5	6	31	20	14	8	0,9	1
	16063R12	❍	61	63	50	50	25,4	9,5	6	31	20	14	12	0,9	1
	16080R06	❍	78	80	50	50	25,4	9,5	6	34	35	14	6	1,2	1
	16080R10	❍	78	80	50	50	25,4	9,5	6	34	35	14	10	1,2	1
	16080R14	❍	78	80	50	50	25,4	9,5	6	34	35	14	14	1,2	1
	16100R08	❍	98	100	80	50	31,75	12,7	8	36	42	–	8	1,9	2
	16100R12	❍	98	100	80	50	31,75	12,7	8	36	42	–	12	2,0	2
	16100R18	❍	98	100	80	50	31,75	12,7	8	36	42	–	18	2,0	2
	16125R10	❍	123	125	80	63	38,1	15,9	10	42,5	52	–	10	3,9	2
	16125R14	❍	123	125	80	63	38,1	15,9	10	42,5	52	–	14	3,9	2
	16125R22	❍	123	125	80	63	38,1	15,9	10	42,5	52	–	22	3,9	2

Blades are sold separately. If using a blade for corner radius machining (ANB1604R/ANB1608R), DC = DCX.
The weight includes the weight of the blade and parts (excluding the centre bolt).

Identification Details

ANX	S	16	100	R	S	18
Cutter Series	Steel Body	Blade Size	Cutter Diameter	Feed Direction	Metric	Number of Teeth

● = Euro stock ❍ = Japan stock

Blades

Application	SUMIDIA
High Speed / Light Cut	N
General Purpose	N
Roughing	N

Cat. No.	DA1000	Cutting Edge Length	RE	Wiper Edge Shape	Applications	Fig.
ANB 1600R-L	●	6,0	–	Linear	Low Cutting Force	1
1600R-G	●	6,0	–	Arc-Shaped	General Purpose	1
1600R-H	●	6,0	–	Arc-Shaped	Strong Edge	1
1600R-GX	❍	9,0	–	Arc-Shaped	Long Edge	2
1604R	❍	6,0	0,4	Linear	Corner Radius	3
1608R	❍	6,0	0,8	Linear	Corner Radius	3
1600R-W	❍	2,0	–	Arc-Shaped	Wiper	4

Fig. 1

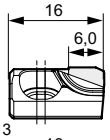


Fig. 2

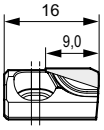


Fig. 3

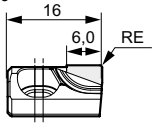
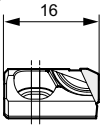


Fig. 4



Wiper Blade

Recommended Cutting Conditions

Si content ≤ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	2.000–**2.500**–3.000	0,05–**0,13**–0,20	DA1000

Si content ≥ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	400–**600**–800	0,05–**0,13**–0,20	DA1000

The above recommended cutting conditions are meant as a guide. Actual conditions will depend on the individual machine rigidity, work clamp rigidity, depth of cut and other factors.

Spare Parts

Sold separately.

Applicable Cutters	Clamp Screw		Adjustment Screw	Wrench	Adjustment Wrench	Centre Bolt		Assembly Wrench
		N·m					N·m	
ANXS 16040RS_ _	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	BXH0825-D13	15	HFVT
16050RS_ _						BXH1030-D16	25	
16063RS_ _								
16080RS_ _						BXH1235-D33	50	
16100RS_ _						BXH1635-D40	100	
16125RS_ _						BXH2036-D50	200	
16063R_ _	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	BXH1235-D18	40	
16080R_ _						BXH1235-D33	50	
16100R_ _						BXH1635-D40	100	
16125R_ _						BXH2036-D50	200	

The adjustment spanner (ANT) can also be used for height adjustment of the RF type cutters for high speed machining and the HF type cutters for high efficiency machining.

Max. Allowable Spindle Speed

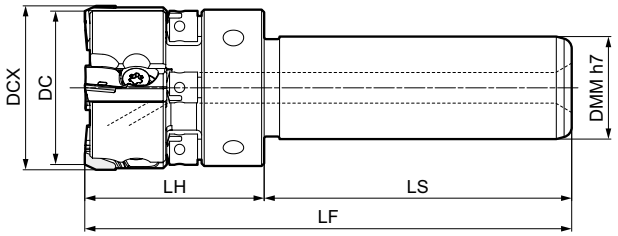
Cat. No.	n max (min^{-1})
ANXS 16040RS04	25.000
16040RS06	25.000
16050RS04	25.000
16050RS06	25.000
16050RS09	25.000
16063RS06	22.000
16063RS08	22.000
16063RS12	22.000
16080RS06	20.000
16080RS10	20.000
16080RS14	20.000
16100RS08	18.000
16100RS12	18.000
16100RS18	18.000
16125RS10	16.000
16125RS14	16.000
16125RS22	16.000
ANXS 16063R06	22.000
16063R08	22.000
16063R12	22.000
16080R06	20.000
16080R10	20.000
16080R14	20.000
16100R08	18.000
16100R12	18.000
16100R18	18.000
16125R10	16.000
16125R14	16.000
16125R22	16.000

● = Euro stock ❍ = Japan stock N·m Recommended Tightening Torque (N·m)

ANXS 16000 E

Rake Angle		
	Radial	-2 – 0°
	Axial	+5°

3 mm 90°



Body - ANXS (Steel)

Dimensions (mm)

Cat. No.	Stock	DC	DCX	DMM	LH	LS	LF	No. of Teeth	Weight (kg)
ANXS 16025E02	●	23	25	20	35	60	95	2	0,2
16030E03	●	28	30	20	35	60	95	3	0,3
16030E04	●	28	30	20	35	60	95	4	0,3
16032E03	●	30	32	20	35	60	95	3	0,3
16032E04	●	30	32	20	35	60	95	4	0,3
16040E04	●	38	40	20	40	60	100	4	0,4
16040E06	●	38	40	20	40	60	100	6	0,5
16050E04	❍	48	50	32	40	80	120	4	1,0
16050E06	●	48	50	32	40	80	120	6	1,0
16050E09	●	48	50	32	40	80	120	9	1,0

Blades are sold separately. If using a blade for corner radius machining (ANB1604R/ANB1608R), DC = DCX.
The weight includes the weight of the blade and parts.

Identification Details

ANX	S	16	032	E	04
Cutter Series	Steel Body	Blade Size	Cutter Diameter	Round Shank	Number of Teeth

● = Euro stock ❍ = Japan stock

Blades

Application	SUMIDIA
High Speed / Light Cut	N
General Purpose	N
Roughing	N

Cat. No.	DA1000	Cutting Edge Length	RE	Wiper Edge Shape	Applications	Fig.
ANB 1600R-L	●	6,0	–	Linear	Low Cutting Force	1
1600R-G	●	6,0	–	Arc-Shaped	General Purpose	1
1600R-H	●	6,0	–	Arc-Shaped	Strong Edge	1
1600R-GX	❍	9,0	–	Arc-Shaped	Long Edge	2
1604R	❍	6,0	0,4	Linear	Corner Radius	3
1608R	❍	6,0	0,8	Linear	Corner Radius	3
1600R-W	❍	2,0	–	Arc-Shaped	Wiper	4

Fig. 1

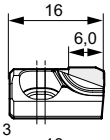


Fig. 2

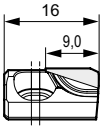


Fig. 3

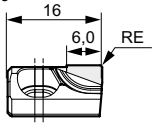
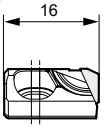


Fig. 4



Wiper Blade

Recommended Cutting Conditions

Si content ≤ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	2.000–**2.500**–3.000	0,05–**0,13**–0,20	DA1000

Si content ≥ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	400–**600**–800	0,05–**0,13**–0,20	DA1000

The above recommended cutting conditions are meant as a guide. Actual conditions will depend on the individual machine rigidity, work clamp rigidity, depth of cut and other factors.

Max. Allowable Spindle Speed

Cat. No.	n max (min^{-1})
ANXS 16025E02	10.000
16030E03	10.000
16030E04	10.000
16032E03	10.000
16032E04	10.000
16040E04	10.000
16040E06	10.000
16050E04	10.000
16050E06	10.000
16050E09	10.000

Spare Parts

Sold separately.

Applicable Cutters	Clamp Screw		Adjustment Screw	Wrench	Adjustment Wrench	Assembly Wrench
ANXS 16025E02	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	HFVT
16030E03						
16030E04						
16032E03						
16032E04						
16040E04						
16040E06						
16050E04						
16050E06						
16050E09						

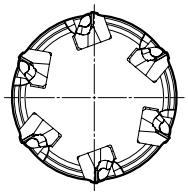
The adjustment spanner (ANT) can also be used for height adjustment of the RF type cutters for high speed machining and the HF type cutters for high efficiency machining.

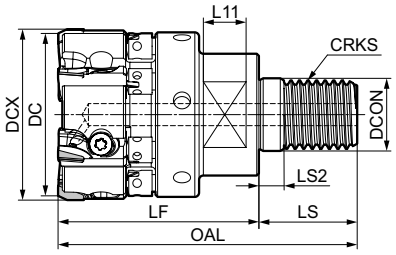
● = Euro stock ❍ = Japan stock (N·m) Recommended Tightening Torque (N·m)

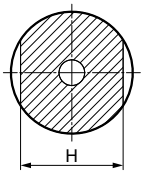
ANXS 16000 M

Rake Angle	Radial	-2 – 0°
	Axial	+5°

3 mm 90°







Body - ANXS (Steel)

Dimensions (mm)

Cat. No.	Stock	DC	DCX	DCON	CRKS	OAL	LF	LS2	LS	L11	H	No. of Teeth	Weight (kg)
ANXS 16025M12Z02	❍	23	25	12,5	**M12**	61	40	5	21	10	19	2	0,1
16030M16Z03	❍	28	30	17,0	**M16**	70	47	5	23	10	24	3	0,2
16030M16Z04	❍	28	30	17,0	**M16**	70	47	5	23	10	24	4	0,2
16032M16Z03	❍	30	32	17,0	**M16**	70	47	5	23	10	24	3	0,3
16032M16Z04	❍	30	32	17,0	**M16**	70	47	5	23	10	24	4	0,3
16040M16Z04	❍	38	40	17,0	**M16**	70	47	5	23	10	24	4	0,4
16040M16Z06	❍	38	40	17,0	**M16**	70	47	5	23	10	24	6	0,4

Blades are sold separately. If using a blade for corner radius machining (ANB1604R/ANB1608R), DC = DCX.
The weight includes the weight of the blade and parts.

Identification Details

ANX	S	16	032	M16	Z03
Cutter Series	Steel Body	Blade Size	Cutter Diameter	Screw size	Number of Blades

● = Euro stock ❍ = Japan stock

Blades

Application	SUMIDIA
High Speed / Light Cut	N
General Purpose	N
Roughing	N

Cat. No.	DA1000	Cutting Edge Length	RE	Wiper Edge Shape	Applications	Fig.
ANB 1600R-L	●	6,0	–	Linear	Low Cutting Force	1
1600R-G	●	6,0	–	Arc-Shaped	General Purpose	1
1600R-H	●	6,0	–	Arc-Shaped	Strong Edge	1
1600R-GX	❍	9,0	–	Arc-Shaped	Long Edge	2
1604R	❍	6,0	0,4	Linear	Corner Radius	3
1608R	❍	6,0	0,8	Linear	Corner Radius	3
1600R-W	❍	2,0	–	Arc-Shaped	Wiper	4

Fig. 1

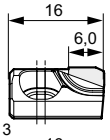


Fig. 2

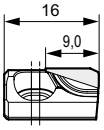


Fig. 3

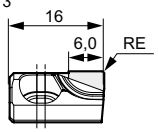
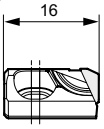


Fig. 4



Wiper Blade

Recommended Cutting Conditions

Si content ≤ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	2.000–**2.500**–3.000	0,05–**0,13**–0,20	DA1000

Si content ≥ 12,6 %

Min. - **Optimum** - Max.

ISO	Work Material	Hard-ness	Cutting Speed v_c (m/min)	Feed Rate f_z (mm/t)	Grade
N	Aluminum Alloy	–	400–**600**–800	0,05–**0,13**–0,20	DA1000

The above recommended cutting conditions are meant as a guide. Actual conditions will depend on the individual machine rigidity, work clamp rigidity, depth of cut and other factors.

Max. Allowable Spindle Speed

Cat. No.	n max (min^{-1})
ANXS 16025M12Z02	10.000
16030M16Z03	10.000
16030M16Z04	10.000
16032M16Z03	10.000
16032M16Z04	10.000
16040M16Z04	10.000
16040M16Z06	10.000

Spare Parts

Sold separately.

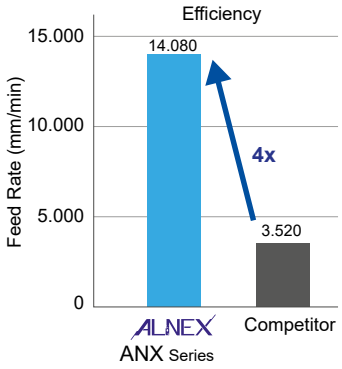
Applicable Cutters	Clamp Screw		Adjustment Screw	Wrench	Adjustment Wrench	Assembly Wrench
ANXS16025M12Z02	BXA0310IP	2,0	HFJ	TRXW10IP	ANT	HFVT
16030M16Z03						
16030M16Z04						
16032M16Z03						
16032M16Z04						
16040M16Z04						
16040M16Z06						

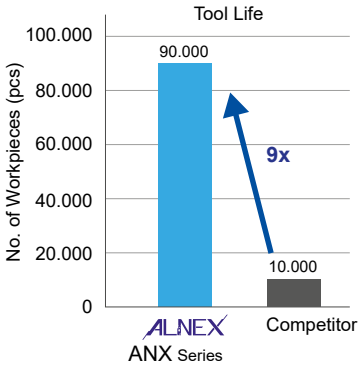
The adjustment spanner (ANT) can also be used for height adjustment of the RF type cutters for high speed machining and the HF type cutters for high efficiency machining.

● = Euro stock ❍ = Japan stock (N·m) Recommended Tightening Torque (N·m)

Application Examples

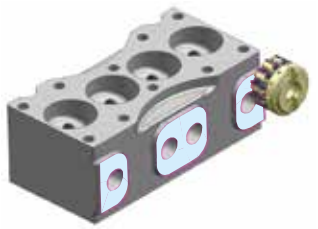
Achieves 4 times the efficiency and 9 times the tool life.

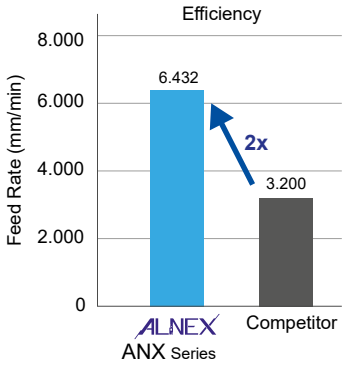


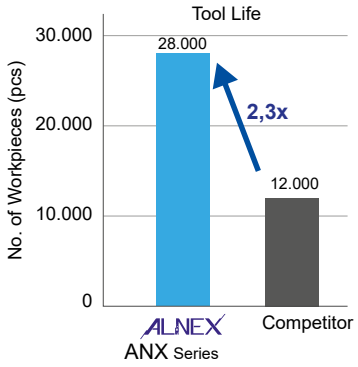


Machine:	Vertical Machining Centre BT30,
Work Material:	G-AlSi12Cu Automotive Component
Tool:	ANXA 16125 R22 (Ø 125, 22 teeth, aluminum body, total weight with arbor 1,75 kg)
Blade:	ANB 1600R-G (DA1000)
Cutting Conditions:	v_c = 3.142 m/min, v_f = 14.080 mm/min, a_p = 0,8 mm, wet

Achieves 2 times the efficiency and 2,3 times the tool life.







Machine:	Vertical Machining Centre HSK63,
Work Material:	G-AlSi12Cu Cylinder Head
Tool:	ANXS 16063 RS12 (Ø 63, 12 teeth, steel body)
Blade:	ANB 1600R-G (DA1000)
Cutting Conditions:	v_c = 1.583 m/min, v_f = 6.432 mm/min, a_p = 0,5 mm, wet

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