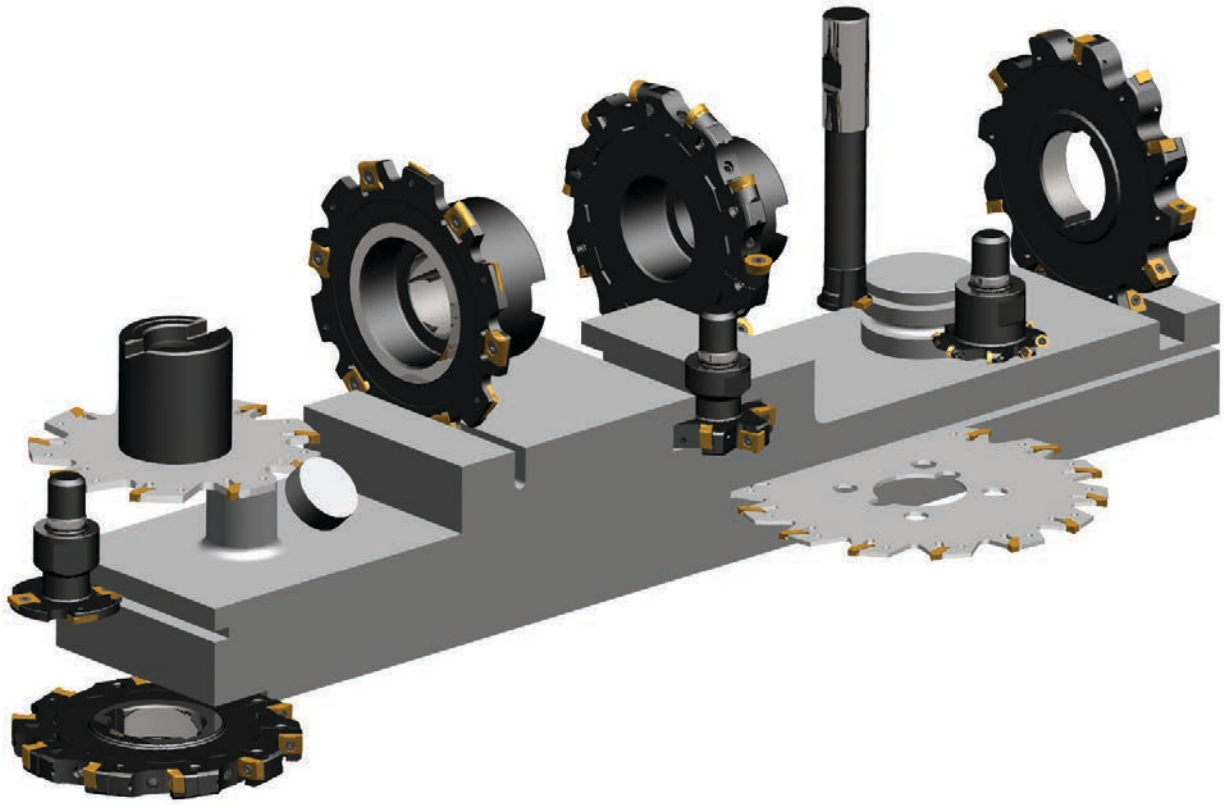
DISC MILLING

AS YOUR CHALLENGES EVOLVE, SO DO OUR SOLUTIONS

SECO

A SOLUTION FOR EVERY APPLICATION



The challenges you face are constantly evolving and to understand those changes, we listen to our customer needs and supply solutions to help tackle your everyday challenges. Seco's extensive range of disc milling cutters is another example of being a solutions provider. With our industry leading range of standard disc milling cutters, insert radii, geometry and grades, those uncommon challenges brought by disc milling applications can be tackled with confidence.

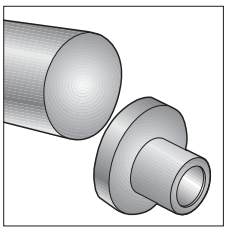
SOLUTIONS FOR SPECIAL APPLICATIONS

Our full line of standard disc milling cutters covers most all applications, but we are also experts in designing and manufacturing special solutions for industry specific needs.

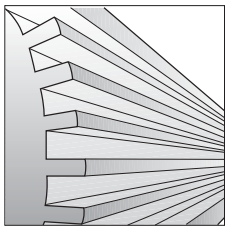
Power Generation: cutters for gear machining
Automotive: crankshaft milling
Aerospace: large diameters cutter solutions for many typical aerospace components
Oil and Gas: cutters for pipe sawing
Medical: cutters with round inserts for hip prosthesis

POWER GENERATION | AUTOMOTIVE | AEROSPACE | OIL & GAS | MEDICAL

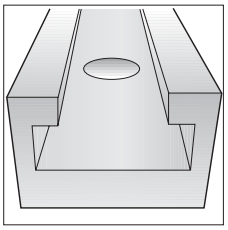
A DISC MILL FOR ANY CHALLENGE


Cutting-off /sawing

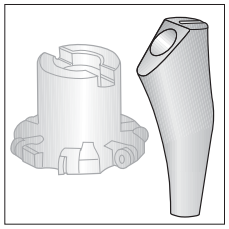
Cut-off/sawing: Thin width cutters make excellent tools for cutting-off or sawing. Using an indexable disc milling cutters saves time and money over traditional saws.


Deep slotting

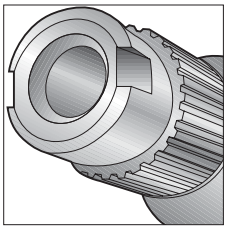
Deep slotting: Typical disc milling application of forming a deep slot to a predetermined width and depth.


T-slotting

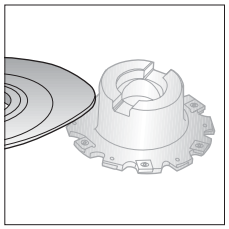
T-slotting: Disc mills are available in standard t-slot sizes and are very productive compared to traditional t-slot cutters.


Copy milling

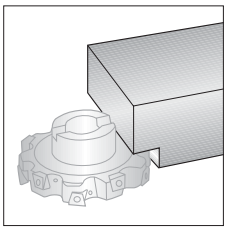
Copy milling: Disc mills using round inserts can be used to generate machined profiles in many different components especially in hard to reach places.


Slotting

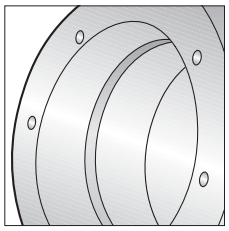
Slotting: Typical disc milling application of forming a slot to a predetermined width and depth.


Back facing

Back facing: Some components need to be completed in one operation to save time or dimensional accuracy. Disc mills are excellent tools for both needs.


Square shoulder milling

Square shoulder milling: Disc mills can be used in everyday operations needing a square shoulder or where square shoulders are needed in hard to reach places.


Circular / helical interpolation

Circular or helical interpolation: Components with bores can be machined by circular or helical interpolation using disc mills. This is very beneficial if the bore has an undercut and the same tool can be used to complete both operations.

COMPLETE. EASY. INNOVATIVE.

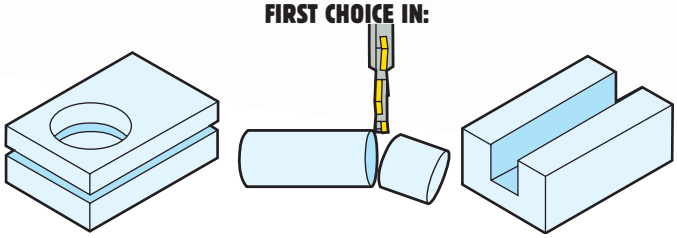
The cornerstone of our approach to disc milling is to offer the widest range of inserts, cutter bodies, and attachment types in the industry. Seco is your single source tooling supplier for slotting, backfacing, circular interpolation, circlip grooving, dual-radius slotting, and trochoidal T-slotting.

The complete standard range of disc milling cutters consists of 7 systems:

- 335.15 for circlip snap ring grooves .063 -.203 inch (1.6-5.15mm)
- 335.10 for width .089 -.157 inch (2.25-4.1mm)
- 335.19 for width .156 -.500 inch (4-14mm) – SNHQ inserts
- 335.18 for width .315 -.750 inch (8-20mm) – LNK. inserts
- 335.18 for width .787-1.20 inch (14-30mm) – AP..16, AC..15 inserts
- 335.25 for width 1.0 inch (25mm) – XNHQ14.., LNHQ14.. inserts
- 335.29 with Ø .236, .315, .394, .472 and .630 inch (5, 6, 7, 8, 10, 12mm)– with round inserts

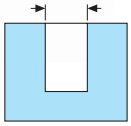
335.19 CUTTER WITH SNHQ INSERT

FIRST CHOICE IN:



FIRST CHOICE FOR CUTTING WIDTH:

0.157 to 0.500" (4 to 12 mm)

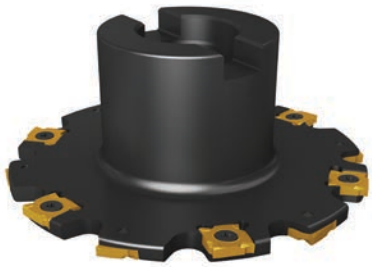


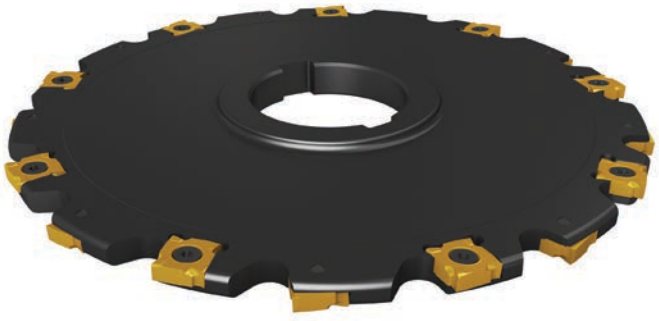
MAIN FEATURES

- Width of cut:
  0.157, 0.187, 0.250, 0.312, 0.375, 0.500 inch
  (4, 5, 6, 7, 8, 10, 12mm)
- From diameter 1.5" to 10" (40 - 250mm)
- Combimaster, disc and shell end connection
- Inserts corner radius available from 0.008 to 0.236"
  (0.2 - 6mm)
- Generates a slot with flat bottom

ADVANTAGES & BENEFITS

- Economical solution with 4 cutting edges per insert
- Positive geometries generating low cutting forces for soft cutting even in unstable conditions
- Wide choice of carbide grades and cutting geometries available for optimum tool life in all materials
- Built-in wiper flat for fine surface finish





FOR SMALL SLOT WIDTHS

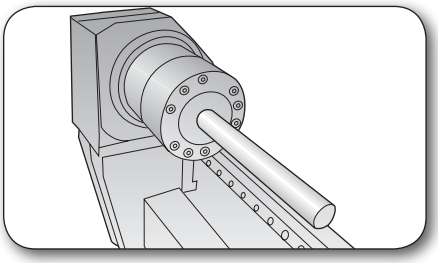
6 SIZES OF INSERTS TO COVER ALL WIDTH OF CUT FROM 0.157 TO 0.500" (4 - 12MM)

FROM INSERT CORNER RADIUS 0.008" TO 0.236" (0.2 - 6MM)

INSERT FEATURES

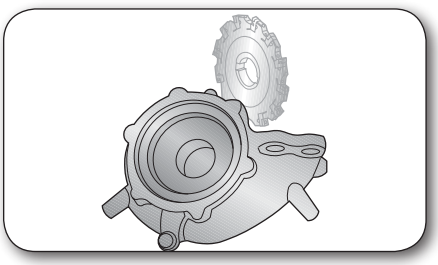
- The inserts are excellent at reducing cutting forces, due to positive insert geometries
- Right- and left-handed
- Four-edged inserts are available with corner radii from 0.008" - 0.079" (0.2 - 2.0mm)
- Two-edged inserts are available with corner radii from 0.094" - 0.236" (2.4 - 6.0mm)
- SNHQ replaces 335.19 inserts, and now provides additional features like wiper flats and more radius options.
- Full radii option in metric widths
- Surface finish below Ra<80 µin

APPLICATION CASES



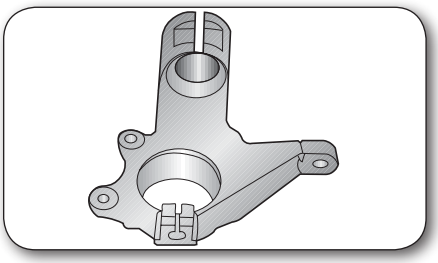
Bar splitting : steel 4140 – automotive industry
- Cutter dia 16" – width 0.25"
- V_c: 650 SFM / F_z: 0.004 in/tooth

Tooling cost 1/3 less than conventional HSS cutter



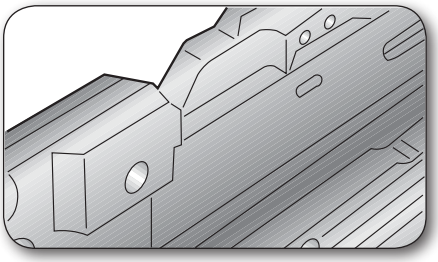
Slotting full radius: Cast iron
- Cutter dia 5" – width 0.156"
- V_c: 600 SFM / F_z: 0.002 in/tooth

Replaced competitor tool with 4 cutting edges instead of one and 30% higher tool life



Sawing steering knuckle: nodular cast iron
- Cutter dia 8.5" – width 0.312"
- V_c: 500 SFM / F_z: 0.006 in/tooth

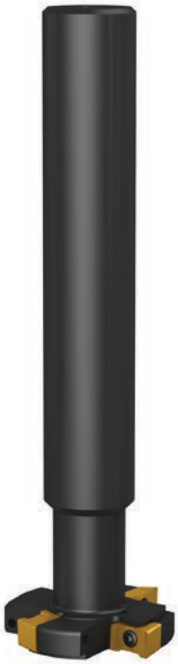
Tool life = 60,000 cuts!



Back square shoulder : Aluminum launch pad
- Cutter dia 4" – width 0.375"
- V_c: 7000 SFM / F_z: 0.006 in/tooth

Eliminated finishing tool

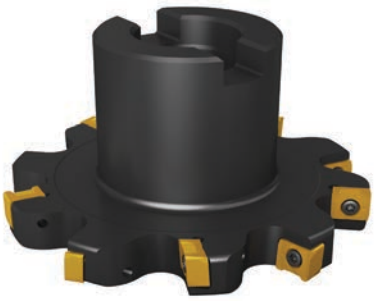
335.18 CUTTER WITH LNK INSERT

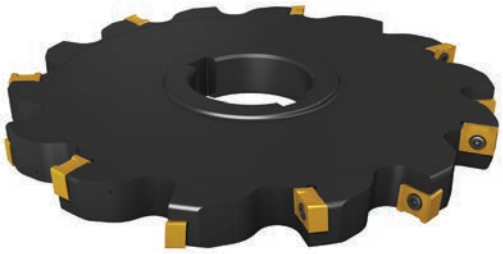


MAIN FEATURES

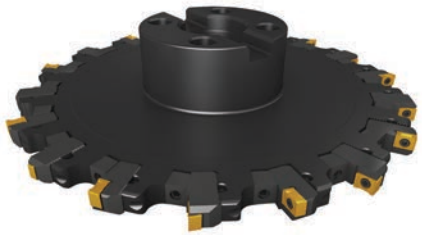
- Available in both fixed or adjustable pockets
- Width of cut fixed pocket: 0.312, 0.375, 0.500, 0.625, 0.750 inch (8, 10, 12, 14, 17, 20mm)
- Width of cut adjustable pocket: 0.312 to 0.390 - 0.390 to 0.470' - 0.470 to 0.590 inch (8-10, 10-12, 12-15mm)
- From diameter 1.5 to 12 inch (40 - 315mm)
- Cylindrical, replacable end, shell end, and arbor mount
- Inserts corner radius available from 0.0157 to 0.157 inch (0.4 - 4mm)
- Generates a slot with flat bottom

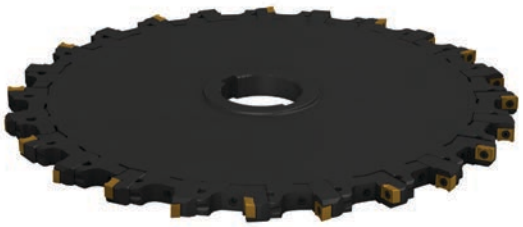
FIXED POCKET VERSION



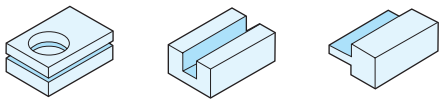


ADJUSABLE POCKET VERSION



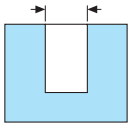


FIRST CHOICE IN:



FIRST CHOICE FOR CUTTING WIDTH:

0.312 to 0.750 inch (8 to 20mm)

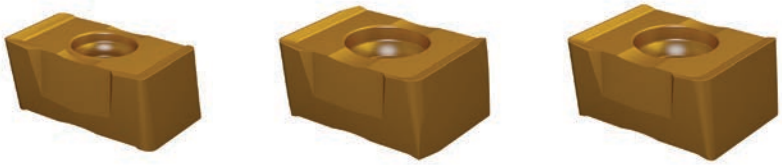


ADVANTAGES & BENEFITS

- Economical solution with up to 4 cutting edges per insert (2RH + 2RL)
- Positive insert geometries generating low cutting forces for soft cutting even in unstable conditions
- Wide choice of carbide grades and cutting geometries available for optimum tool life in all materials
- Built-in wiper flat for fine surface finishes
- Fixed pocket or adjustable version for maximum flexibility and versatility

FOR MEDIUM SLOT WIDTHS

SIX SIZES OF INSERTS FOR ALL WIDTH OF CUT FROM 0.312" - 0.750" (8 - 20MM)

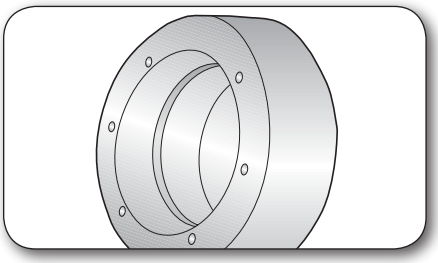


INSERT CORNER RADIUS FROM 0.0157 - 0.157" (0.4 - 4.0MM)

INSERT FEATURES

- Very tough inserts designed for weaker machines or unstable machining conditions
- Surface finish below Ra<2 µ
- Widths from 0.312 - 0.590" (8 - 15 mm) for adjustable pocket configuration
- Widths from 0.312 - 0.750" (8 - 20 mm) for fixed pocket version
- Four cutting edges (2RH + 2LH) from radius 0.0157 - 0.079" (0.4 - 2.0mm)
- Two cutting edges (1RH + 1LH) for radius 0.094" (2.4mm)
- Left hand and right hand insert for radius 0.122 - 0.157" (3.1 - 4.0mm)

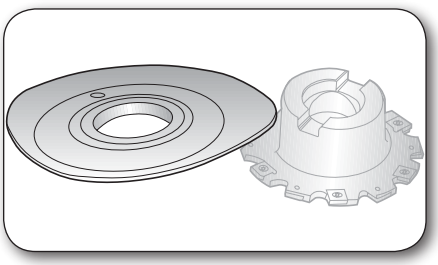
APPLICATION CASES



Circular interpolation – steel SMG 4
Power generation casing

- Cutter dia 5" adjustable – width 0.500"
- V_c: 460 SFM / F_z: 0.007 in/tooth

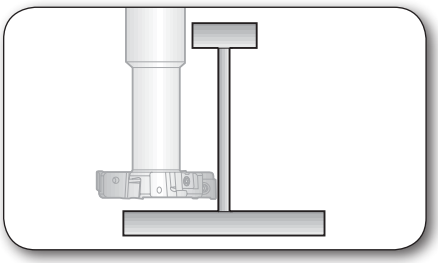
Opearation performed with standard tooling only (corner radius 0.157" needed)



Back and front facing – cam steel 52100

- Cutter dia 6" fixed pocket – width 0.500"
- V_c: 800 SFM / F_z: 0.005 in/tooth

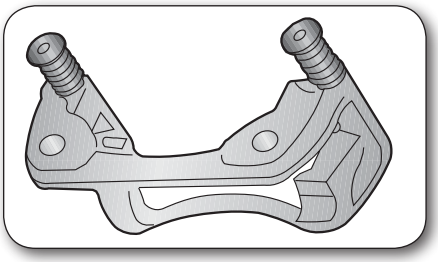
Tool life doubled vs. competition and smoother cutting



Slotting and back square shoulder – aluminum stiffner for aeropsace

- Cutter dia 1.5" fixed pocket – width 0.375"
- V_c: 7500 SFM / F_z: 0.009 in/tooth

Replace HSS cutter with standard insert (no regrinding and tool life x 3)



Slotting – bracket for automotive – nodular cast iron

- Cutter dia 10" adjustable – width 0.562"
- V_c: 820 SFM / F_z: 0.008 in/tooth

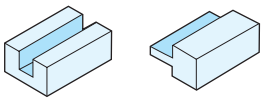
Seco standard tooling replace special tooling from competition with 4 cutting edges instead of 2 per insert

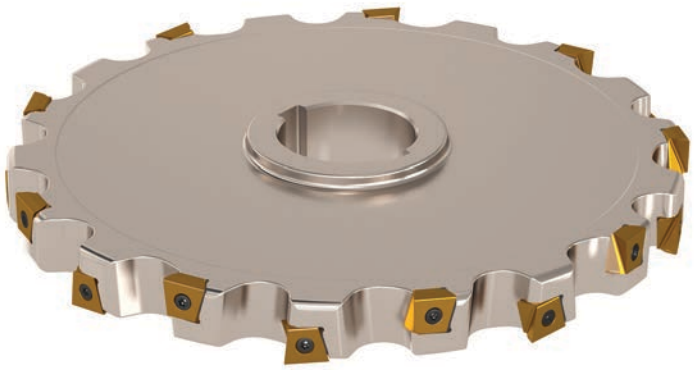
335.25 CUTTER WITH XNHQ INSERT

MAIN FEATURES

- Available in 1.0” and 25mm widths
- From diameter 5 - 10” (125 - 250mm)
- Available in shell mill mount - with integrated coolant for dia 5 and 6” (125 - 160mm) and arbor mount
- Inserts corner radius available from 0.032 - 0.236” (0.8 - 6.0mm)
- Generates a slot with flat bottom

FIRST CHOICE IN:





ADVANTAGES & BENEFITS

- Economical solution with up to 4 cutting edges per insert (2RH + 2RL)
- Positive insert geometries generating low cutting forces for soft cutting even in unstable conditions
- Wide choice of carbide grades and cutting geometries available for optimum tool life in all materials
- Built-in wiper flat for fine surface finishes

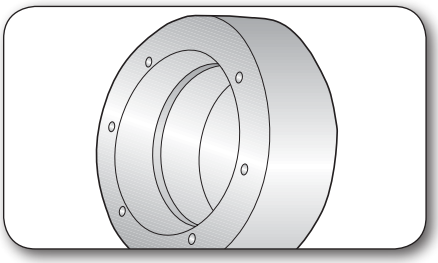
FOR LARGE SLOT WIDTHS

FROM INSERT CORNER RADIUS 0.031" TO 0.236" (.8 - 6MM)

INSERT FEATURES

- 4 cutting edges per insert whatever the radius value
- On edge insert with optimized geometry reduces cutting forces, noise level and improves chip flow
- Two insert types can be used: XNHQ14.. for positive cutting rake and LNHQ14.. for negative cutting rake
- Integrated wiper flat for excellent surface finishes
- Strong, reliable pocket seat
- Error proof indexing does not allow inserts to be mounted in wrong pocket

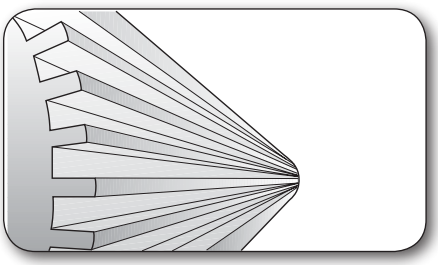
APPLICATION CASES



Circular & helical interpolation in Steel 4140
Internal bore machining

- Cutter dia 5"– width 1"
- V_c: 880 SFM / F_z: 0.02 in/tooth

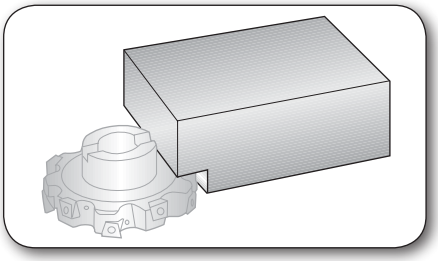
More stable and improved productivity by 40%. Removed an extra chamfering operation thanks to standard radius insert



Slotting – end stop for tractor in Steel 4142

- Cutter dia 10"– width 1"
- V_c: 600 SFM / F_z: 0.006 in/tooth

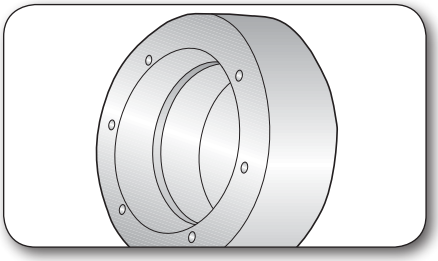
Doubled tool life and increased productivity by 300% thru interrupted cut



Back facing – Excavator frame Steel 1055

- Cutter dia 10"– width 1"
- V_c: 500 SFM / F_z: 0.015 in/tooth

Decreased cycle time by 50% with an increase in tool life of 30% with better surface finish



Circular interpolation – Bearing in steel and aluminum

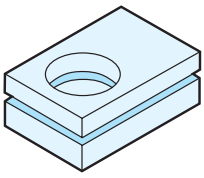
- Cutter dia 5"– width 1"
- V_c: 1000 SFM / F_z: 0.01 in/tooth

Reduced cycle time by 66% while increasing tool life 30%

MORE OPTIONS IN THE DISC MILLING FAMILY

335.15... First choice for circlip and narrow grooves

a_p .063-.203 inch

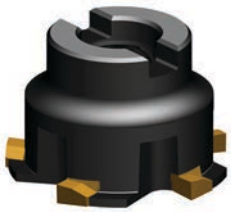


Grooving

Insert designation:
R335.15-13...
R335.15-18...

Basic choice for grooving.
From dia 1.00-2.50 in
2 cutting edges per insert.
ap = .063-.203 in
Edge form: Chamfer

Cylindrical: 1.00 and 1.25 in

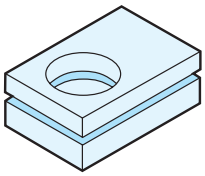


B type: 2.50 in

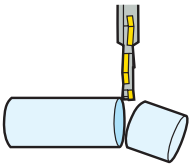
See MN Milling for full range.

335.10… First choice for cutting off and narrow grooves

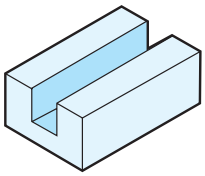
a_p .089-.157 inch



Grooving



Cut-off



Slotting

Cylindrical: 2.50-3.00 in

A type: 3.00-12.00 in

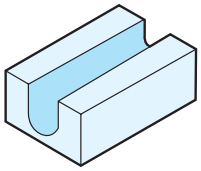
B type: 2.50-6.00 in

Insert designation:
150.10...

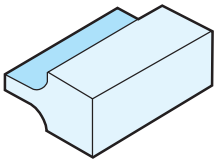
Basic choice for grooving, cut-off, full side and face.
From dia 2.50-12.00 in
1 cutting edges per insert.
ap = .089-.157 in
Edge form: Radius

335.18/335.29 Equipped with cassettes for round inserts

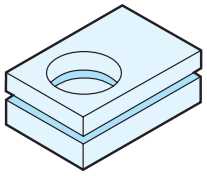
a_p .236-.709 inch



Full radius



Half radius



Grooving

Combimaster Ø
1.50-2.00 in Fixed pocket

B Type Ø 2.50-3.00 in
Fixed pocket

A Type Ø 4.00-12.00 in
Adjustable

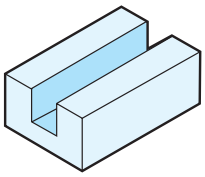
B Type Ø 3.00-12.00 in
Adjustable

Insert designation:
RD..06T1M0
RD..0803M0
RD..10T3M0
RP..1204M0
RP..1605

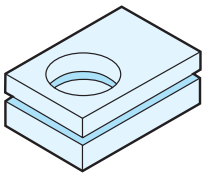
Basic choice for full radius profiling, half radius profiling and grooving.
From dia 1.50-12.00 in
ap = .236-.709 in
Edge form: Full radius .118-.315”

335.18 LNK/335.18/AC..15/AP..16 Adjustable – First choice LNK type

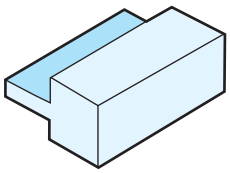
a_p .394-1.20 inch



Slotting



Grooving



Half side and face

A Type Ø 4.00-12.00 in
Adjustable

B Type Ø 3.00-12.00 in
Adjustable

Insert designation:
LNK..06..
LNK..08..
335.18
AC..15
AP..16

Basic choice for full side, face, half side and grooving.
From dia 3.00-12.00 in
1 to 4 cutting edges per insert depending on radii
ap = .394-1.20 in
Edge form: Corner radii .016-.236 in

THE TOTAL PACKAGE

With EPB tooling systems you will find the most recent spindle tooling products and application techniques to successfully equip your machine tools.

There are 5 different product families:
MONOBLOC – COMBIMASTER – GRAFLEX® - SECO CAPTO™ – SHRINKFIT DEVICES

Holders have been developed especially for disc milling cutters (A-type configuration) and are available in both Graflex and Seco Capto™.

These holders provide far better reach than conventional holders since they are equipped with a slim front end adjustable sliding shaft arbor.

For more complete information regarding Seco's EPB disc mill holders please see our Machining Navigator or ask your local Seco Tools representative.

Combimaster™ is Seco's two-piece milling cutter system, offering maximum flexibility in a wide variety of applications, including disc milling.

We offer holding systems for the entire Combimaster range of shank types, lengths and interchangeable cutter heads.

Leading with technological innovation is part of what makes Seco the total disc milling partner!

Seco's "long-term partnership' approach has always focused on providing superior performance, whether you're using sophisticated machining centers and CAM software or older machines. From introducing new products to making it easier to find and order the right cutter for any application, to offering the most comprehensive and technologically advanced range of disc milling products on the market, our commitment to continual improvement, maximum productivity and increased cutting tool functionality is constant.

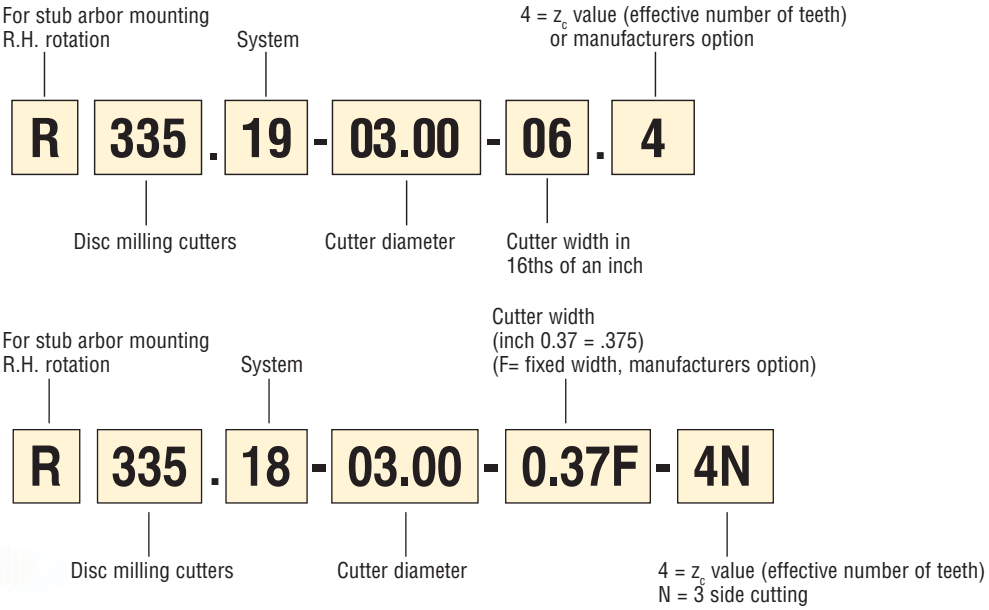
Yet, as strong as Seco is in disc milling, we are also an industry leader in copy, plunge, helical, square-shoulder and face-milling. And, our EasyShrink systems offer the best precision toolholding solutions available for gripping and releasing tool shanks.

Seco raises the bar from tool supplier to TOTAL supplier.

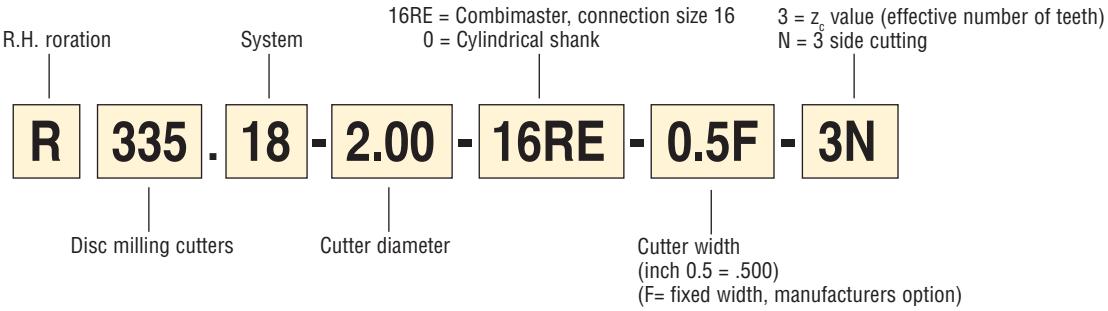
Furthermore, if we don't have a tool in our standard range to fit the bill, our full-service engineering department can design and manufacture custom tooling to meet the customers demands.

DISC MILLING CUTTERS – CODE KEYS

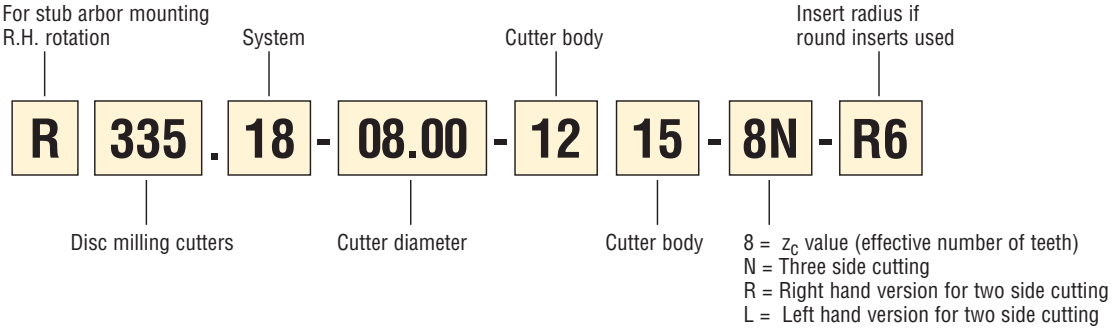
Fixed pocket disc milling cutters



Shank type fixed pocket (Cylindrical or Combimaster replaceable end)



Adjustable cassette disc milling cutters

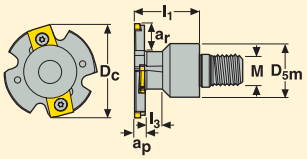


DISC MILLING CUTTERS

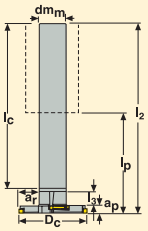
(R) 335.19

Insert SNHQ

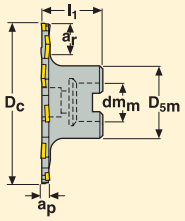
Type RE for Combimaster



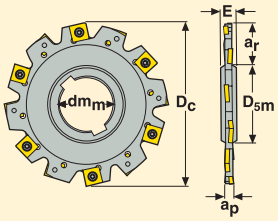
Type Cyl for Cylindrical



Type B for shell mill holder



Type A for milling arbor



For insert selection and cutting data recommendations, see page 26

For insert program, see pages 30-31

For spare parts see page 17

Type	a_p	a_r	EDP	Part No.	Dimensions in inch								Z_{c*}	lbs		SNHQ.. ( ) = No. of inserts	
					D_c	dm_m	E	l_1	$D5_m$	l_3	M					Right hand inserts	Left hand inserts
				Inch													
RE	0.156	0.46	70593	R335.19-01.50-10RE-02.2	1.50	–	–	0.91	0.73	0.33	M10	4	2	0.11	21000	1102R..(2)	1102L..(2)
RE	0.156	0.55	21495	R335.19-02.00-16RE-02.2	2.00	–	–	1.37	1.18	0.44	M16	4	2	0.42	19100	1102R..(2)	1102L..(2)
B	0.156	0.55	21498	R335.19-02.50-02B.2	2.50	0.75	–	2.00	1.57	–	–	6	3	0.79	17100	1102R..(3)	1102L..(3)
B	0.156	0.80	21500	R335.19-03.00-02B.2	3.00	0.75	–	2.00	1.57	–	–	8	4	0.84	15200	1102R..(4)	1102L..(4)
B	0.156	0.89	21504	R335.19-04.00-02B.2	4.00	1.00	–	2.00	1.88	–	–	12	6	1.5	13500	1102R..(6)	1102L..(6)
A	0.156	1.00	21505	335.19-04.00-02.2	4.00	1.00	0.500	–	1.75	–	–	12	6	0.53	13500	1102R..(6)	1102L..(6)
A	0.156	1.46	21506	335.19-05.00-02.2	5.00	1.25	0.500	–	1.87	–	–	14	7	0.73	12200	1102R..(7)	1102L..(7)
A	0.156	1.74	21507	335.19-06.00-02.2	6.00	1.25	0.500	–	2.25	–	–	16	8	1.17	10700	1102R..(8)	1102L..(8)
RE	0.187	0.46	70594	R335.19-01.50-10RE-02.3	1.50	–	–	0.91	0.73	0.30	M10	4	2	0.13	18000	1103R..(2)	1103L..(2)
RE	0.187	0.55	21496	R335.19-02.00-16RE-03.2	2.00	–	–	1.37	1.18	0.41	M16	4	2	0.42	16800	1103R..(2)	1103L..(2)
B	0.187	0.46	72132	R335.19-02.50-03B.2	2.50	0.75	–	2.00	1.58	–	–	6	3	1.1	14900	1103R..(3)	1103L..(3)
B	0.187	0.71	54717	R335.19-03.00-03B.2	3.00	0.75	–	2.00	1.58	–	–	8	4	1.3	13200	1103R..(4)	1103L..(4)
B	0.187	0.89	72136	R335.19-04.00-03B.2	4.00	1.00	–	1.57	1.89	–	–	10	5	1.5	11800	1103R..(6)	1103L..(3)
A	0.187	1.00	72103	335.19-04.00-03.2	4.00	1.00	0.500	–	1.75	–	–	8	4	0.6	13200	1103R..(4)	1103L..(4)
A	0.187	1.46	72080	335.19-05.00-03.2	5.00	1.25	0.500	–	1.87	–	–	12	6	1	11800	1103R..(6)	1103L..(6)
A	0.187	1.90	80437	335.19-06.00-03.2	6.00	1.25	0.500	–	1.90	–	–	14	7	1.5	10700	1103R..(7)	1103L..(7)
RE	0.25	0.55	21497	R335.19-02.00-16RE-04.2	2.00	–	–	1.37	1.18	0.35	M16	4	2	0.44	12300	1204R..(2)	1204L..(2)
B	0.25	0.46	80424	R335.19-02.50-04B.2	2.50	0.75	–	2.00	1.58	–	–	6	3	1.1	17100	1204R..(3)	1204L..(3)
B	0.25	0.71	54718	R335.19-03.00-04B.2	3.00	0.75	–	2.00	1.58	–	–	8	4	1.3	15200	1204R..(4)	1204L..(4)
B	0.25	0.89	80426	R335.19-04.00-04B.2	4.00	1.00	–	1.57	1.89	–	–	10	5	1.5	13500	1204R..(5)	1204L..(5)
B	0.25	0.97	54720	R335.19-05.00-04B.2	5.00	1.25	–	2.00	2.75	–	–	12	6	3	12000	1204R..(6)	1204L..(6)
B	0.25	0.97	54724	R335.19-06.00-04B.2	6.00	1.50	–	2.00	3.75	–	–	14	7	4.4	10700	1204R..(7)	1204L..(7)
A	0.25	1.00	80429	335.19-04.00-04.2	4.00	1.00	0.500	–	1.75	–	–	10	5	0.8	13500	1204R..(5)	1204L..(5)
A	0.25	1.46	80433	335.19-05.00-04.2	5.00	1.25	0.500	–	1.87	–	–	12	6	1	12000	1204R..(6)	1204L..(6)
A	0.25	1.90	80438	335.19-06.00-04.2	6.00	1.25	0.500	–	1.87	–	–	14	7	1.7	10000	1204R..(7)	1204L..(7)
A	0.25	2.50	80441	335.19-08.00-04.2	8.00	1.50	0.500	–	2.75	–	–	18	9	3.5	8000	1204R..(9)	1204L..(9)
A	0.25	2.50	54713	335.19-10.00-04.2	10.00	2.00	0.500	–	3.00	–	–	24	12	7.2	7300	1204R..(12)	1204L..(12)
B	0.312	0.46	80425	R335.19-02.50-05B.2	2.50	0.75	–	2.00	1.58	–	–	6	3	1.1	9400	12045R..(3)	12045L..(3)
B	0.312	0.71	54719	R335.19-03.00-05B.2	3.00	0.75	–	2.00	1.58	–	–	8	4	1.3	8400	12045R..(4)	12045L..(4)
B	0.312	0.89	80427	R335.19-04.00-05B.2	4.00	1.00	–	1.57	1.89	–	–	10	5	1.8	7500	12045R..(5)	12045L..(5)
B	0.312	0.97	54721	R335.19-05.00-05B.2	5.00	1.25	–	2.00	2.75	–	–	12	6	3	6700	12045R..(6)	12045L..(6)
B	0.312	0.97	54725	R335.19-06.00-05B.2	6.00	1.50	–	2.00	3.75	–	–	16	8	4.4	5900	12045R..(8)	12045L..(8)
A	0.312	1.00	80430	335.19-04.00-05.2	4.00	1.00	0.500	–	1.75	–	–	10	5	0.6	8400	12045R..(5)	12045L..(5)
A	0.312	1.46	80434	335.19-05.00-05.2	5.00	1.25	0.500	–	1.87	–	–	12	6	1.2	7500	12045R..(6)	12045L..(6)
A	0.312	1.90	80439	335.19-06.00-05.2	6.00	1.25	0.500	–	1.87	–	–	14	7	2.2	6700	12045R..(7)	12045L..(7)
A	0.312	2.50	80442	335.19-08.00-05.2	8.00	1.50	0.500	–	2.75	–	–	18	9	3.6	5900	12045R..(9)	12045L..(9)
A	0.312	3.38	54714	335.19-10.00-05.2	10.00	2.00	0.500	–	3.00	–	–	24	12	7.3	5200	12045R.(12)	12045L.(12)
B	0.375	0.45	21499	R335.19-02.50-06B.2	2.50	0.75	–	2.00	1.57	–	–	6	3	0.86	8400	1205R..(3)	1205L..(3)
B	0.375	0.71	21503	R335.19-03.00-06B.2	3.00	0.75	–	2.00	1.57			6	4	1.01	7400	1205R..(4)	1205L..(4)
B	0.375	0.89	72075	R335.19-04.00-06B.2	4.00	1.00	–	1.57	1.89	–	–	10	5	1.8	6600	1205R..(5)	1205L..(5)
B	0.375	0.97	54722	R335.19-05.00-06B.2	5.00	1.25	–	2.00	2.75	–	–	12	6	3.5	6000	1205R..(6)	1205L..(6)
B	0.375	0.97	54726	R335.19-06.00-06B.2	6.00	1.50	–	2.00	3.75	–	–	16	8	4.6	5200	1205R..(8)	1205L..(8)

* Effective numer of teeth

DISC MILLING CUTTERS

(R) 335.19

Insert SNHQ

Type	a_p	a_r	EDP	Part No.	Dimensions in inch								Z_{c*}	lbs		SNHQ.. ( ) = No. of inserts	
					D_c	dm_m	E	l_1	$D5_m$	l_3	M					Right hand inserts	Left hand inserts
A	0.375	1.00	**80431**	**335.19-04.00-06.2**	4.00	1.00	0.500	–	1.75	–	–	10	5	0.8	6600	1205R..(5)	1205L..(5)
A	0.375	1.46	**80435**	**335.19-05.00-06.2**	5.00	1.25	0.500	–	1.87	–	–	12	6	1.3	6000	1205R..(6)	1205L..(6)
A	0.375	1.90	**72128**	**335.19-06.00-06.2**	6.00	1.25	0.500	–	1.87	–	–	14	7	2.4	5200	1205R..(7)	1205L..(7)
A	0.375	2.50	**72086**	**335.19-08.00-06.2**	8.00	1.50	0.500	–	2.75	–	–	18	9	3.8	4700	1205R..(9)	1205L..(9)
A	0.375	3.38	**54715**	**335.19-10.00-06.2**	10.00	2.00	0.500	–	3.00	–	–	24	12	7.4	4200	1205R..(12)	1205L..(12)
B	0.5	0.89	**80428**	**R335.19-04.00-08B.2**	4.00	1.00	–	1.57	1.89	–	–	10	5	2	6000	1207R..(5)	1207L..(5)
B	0.5	0.97	**54723**	**R335.19-05.00-08B.2**	5.00	1.25	–	2.00	2.75	–	–	12	6	3.5	5300	1207R..(6)	1207L..(5)
B	0.5	0.97	**54727**	**R335.19-06.00-08B.2**	6.00	1.50	–	3.75	3.75	–	–	16	8	4.6	4700	1207R..(8)	1207L..(8)
A	0.5	1.00	**80432**	**335.19-04.00-08.2**	4.00	1.00	0.500	–	1.75	–	–	10	5	0.9	6000	1207R..(5)	1207L..(5)
A	0.5	1.46	**80436**	**335.19-05.00-08.2**	5.00	1.25	0.500	–	1.87	–	–	12	6	1.4	5300	1207R..(6)	1207L..(6)
A	0.5	1.90	**80440**	**335.19-06.00-08.2**	6.00	1.25	0.500	–	1.87	–	–	14	7	2.8	4700	1207R..(7)	1207L..(7)
A	0.5	2.50	**80443**	**335.19-08.00-08.2**	8.00	1.50	0.500	–	2.75	–	–	18	9	4.6	4200	1207R..(9)	1207L..(9)
A	0.5	3.38	**54716**	**335.19-10.00-08.2**	10.00	2.00	0.500	–	3.00	–	–	24	12	7.5	3700	1207R..(12)	1207L..(12)

Type	a_p	a_r	EDP	Part No.	Dimensions in mm								Z_{c*}	lbs		SNHQ.. ( ) = No. of inserts	
					D_c	dm_m	E	l_1/l_p	$D5_m$	l_3/l_c	M					Right hand inserts	Left hand inserts
				Metric													
RE	4	12.4	**70443**	**R335.19-1040.RE-04.2**	40	–	–	23	18.5	–	M10	4	2	0.22	21000	1102R..(2)	1102L..(2)
Cyl	4	13.9	**31019**	**R335.19-2550.0-04.2**	50	25	150	94	–	11/132	–	4	2	1.32	19100	1102R.. (2)	1102L.. (2)
RE	4	13.9	**48372**	**R335.19-1650.RE-04.2**	50	–	–	35	30	11	M16	4	2	0.44	19100	1102R.. (2)	1102L.. (2)
RE	4	13.9	**31018**	**R335.19-1663.RE-04.4**	63	–	–	35	33	–	M16	8	4	0.66	17100	1102R.. (4)	1102L.. (4)
B	4	13.9	**31014**	**R335.19-063.04.16-4**	63	16	–	35	33	–	–	8	4	0.66	17100	1102R.. (4)	1102L.. (4)
B	4	13.9	**11447**	**R335.19-063.04.22-3**	63	22	–	50	40	11	–	6	3	0.88	17100	1102R.. (3)	1102L.. (3)
A	4	13.5	**31011**	**335.19-063.04.22-4**	63	22	8	–	33	–	–	8	4	0.22	17100	1102R.. (4)	1102L.. (4)
B	4	22.4	**66088**	**R335.19-080.04.22-4**	80	22	–	50		11	–	8	4	1.32	15200	1102R.. (4)	1102L.. (4)
B	4	22.4	**31015**	**R335.19-080.04.22-5**	80	22	–	50	40	11	–	10	5	1.32	15200	1102R.. (5)	1102L.. (5)
A	4	18.6	**88985**	**335.19-080.04.22-4**	80	22	12	–	33	–	–	8	4	0.44	15200	1102R.. (4)	1102L.. (4)
A	4	20	**31012**	**335.19-080.04.22-5**	80	22	12	–	33	–	–	10	5	0.44	15200	1102R.. (5)	1102L.. (5)
B	4	22.1	**97532**	**R335.19-100.04.27-6**	100	27	–	50	48	–	–	12	6	1.54	13500	1102R.. (6)	1102L.. (6)
A	4	24.6	**90131**	**335.19-100.04.27-6**	100	27	12	–	41	–	–	12	6	0.44	13500	1102R.. (6)	1102L.. (6)
B	4	29.6	**31016**	**R335.19-125.04.32-7**	125	32	–	50	58	–	–	14	7	2.20	12200	1102R.. (7)	1102L.. (7)
A	4	30.1	**35811**	**335.19-125.04.40-7**	125	40	12	–	55	–	–	14	7	0.88	12200	1102R.. (7)	1102L.. (7)
B	4	41.1	**31017**	**R335.19-160.04.40-9**	160	40	–	50	70	–	–	18	9	2.65	10700	1102R.. (9)	1102L.. (9)
A	4	42.6	**90137**	**335.19-160.04.40-9**	160	40	12	–	65	–	–	18	9	1.32	10700	1102R.. (9)	1102L.. (9)
RE	5	12.4	**70445**	**R335.19-1040.RE-05.2**	40	–	–	23	18.5	–	M10	4	2				
Cyl	5	13.9	**31031**	**R335.19-2550.0-05.2**	50	25	150	94	–	10/132	–	4	2	1.32	16800	1103R.. (2)	1103L.. (2)
RE	5	13.9	**48591**	**R335.19-1650.RE-05.2**	50	–	–	35	30	10	M16	4	2	0.44	16800	1103R.. (2)	1103L.. (2)
RE	5	13.9	**31030**	**R335.19-1663.RE-05.4**	63	–	–	35	33	–	M16	8	4	0.66	14900	1103R.. (4)	1103L.. (4)
B	5	13.9	**31025**	**R335.19-063.05.16-4**	63	16	–	35	33	–	–	8	4	0.66	14900	1103R.. (4)	1103L.. (4)
B	5	13.9	**11452**	**R335.19-063.05.22-3**	63	22	–	50	40	10	–	6	3	0.88	14900	1103R.. (3)	1103L.. (3)
A	5	13.5	**31023**	**335.19-063.05.22-4**	63	22	8	–	33	–	–	8	4	0.22	14900	1103R.. (4)	1103L.. (4)
Cyl	5	22.5	**31033**	**R335.19-3280.0-05.5**	80	32	170	110	–	16/148	–	10	5	2.65	13200	1103R.. (5)	1103L.. (5)
B	5	22.4	**66089**	**R335.19-080.05.22-4**	80	22	–	50	40	10	–	8	4	1.32	13200	1103R.. (4)	1103L.. (4)
B	5	22.4	**31026**	**R335.19-080.05.22-5**	80	22	–	50	40	10	–	10	5	1.32	13200	1103R.. (5)	1103L.. (5)
A	5	19.6	**88986**	**335.19-080.05.22-4**	80	22	12	–	33	–	–	8	4	0.44	13200	1103R.. (4)	1103L.. (4)
A	5	20	**31024**	**335.19-080.05.22-5**	80	22	12	–	33	–	–	10	5	0.44	13200	1103R.. (5)	1103L.. (5)
B	5	22.1	**11453**	**R335.19-100.05.27-6**	100	27	–	50	48	–	–	12	6	1.54	11800	1103R.. (6)	1103L.. (6)
A	5	24.6	**90132**	**335.19-100.05.27-6**	100	27	12	–	41	–	–	12	6	0.66	11800	1103R.. (6)	1103L.. (6)
B	5	29.6	**31027**	**R335.19-125.05.32-7**	125	32	–	50	58	–	–	14	7	2.20	10700	1103R.. (7)	1103L.. (7)
A	5	30.1	**35812**	**335.19-125.05.40-7**	125	40	12	–	55	–	–	14	7	0.88	10700	1103R.. (7)	1103L.. (7)
B	5	41.1	**31029**	**R335.19-160.05.40-9**	160	40	–	50	70	–	–	18	9	2.65	9300	1103R.. (9)	1103L.. (9)
A	5	42.6	**90138**	**335.19-160.05.40-9**	160	40	12	–	65	–	–	18	9	1.54	9300	1103R.. (9)	1103L.. (9)

* Effective numer of teeth

(R) 335.19

Insert SNHQ

Type	a_p	a_r	EDP	Part No.	Dimensions in mm							Z_c*	lbs		SNHQ.. ( ) = No. of inserts	
					D_c	dm_m	E	l_1/l_p	$D5_m$	l_3/l_c	M				Right hand inserts	Left hand inserts
RE	6	13.9	**48609**	**R335.19-1650.RE-06.2**	50	–	–	35	30	9	M16	4	2	0.44	12300	1203R.. (2)	1203L.. (2)
Cyl	6	13.9	**31038**	**R335.19-2550.0-06.2**	50	25	150	94	–	9/132	–	4	2	1.32	12300	1203R.. (2)	1203L.. (2)
RE	6	13.9	**31037**	**R335.19-1663.RE-06.3**	63	–	–	35	33	–	M16	6	3	0.66	10900	1203R.. (3)	1203L.. (3)
B	6	13.9	**31035**	**R335.19-063.06.16-3**	63	16	–	35	33	–	–	6	3	0.66	10900	1203R.. (3)	1203L.. (3)
B	6	13.9	**11448**	**R335.19-063.06.22-3**	63	22	–	50	40	–	–	6	3	1.10	10900	1203R.. (3)	1203L.. (3)
A	6	13.5	**31034**	**335.19-063.06.22-3**	63	22	12	–	33	–	–	6	3	0.22	10900	1203R.. (3)	1203L.. (3)
Cyl	6	22.5	**31040**	**R335.19-3280.0-06.4**	80	32	170	110	–	15/148	–	8	4	2.65	9700	1203R.. (4)	1203L.. (4)
B	6	22.4	**66090**	**R335.19-080.06.22-4**	80	22	–	50	40	9	–	8	4	1.32	9700	1203R.. (4)	1203L.. (4)
A	6	19.6	**88987**	**335.19-080.06.22-4**	80	22	12	–	32	–	–	8	4	0.44	9700	1203R.. (4)	1203L.. (4)
B	6	22	**11450**	**R335.19-100.06.27-5**	100	27	–	50	48	–	–	10	5	1.54	8700	1203R.. (5)	1203L.. (5)
A	6	25.6	**11284**	**335.19-100.06.27-5**	100	27	12	–	41	–	–	10	5	0.66	8700	1203R.. (5)	1203L.. (5)
B	6	29	**31036**	**R335.19-125.06.32-6**	125	32	–	50	58	–	–	12	6	2.43	7700	1203R.. (6)	1203L.. (6)
B	6	23	**12911**	**R335.19-125.06.40-6**	125	40	–	50	70	–	–	12	6	2.43	7700	1203R.. (6)	1203L.. (6)
A	6	31	**11289**	**335.19-125.06.40-6**	125	40	12	–	55	–	–	12	6	0.88	7700	1203R.. (6)	1203L.. (6)
B	6	40.5	**12913**	**R335.19-160.06.40-8**	160	40	–	50	70	–	–	16	8	3.09	6800	1203R.. (8)	1203L.. (8)
A	6	43	**11294**	**335.19-160.06.40-8**	160	40	12	–	65	–	–	16	8	1.76	6800	1203R.. (8)	1203L.. (8)
A	6	61	**90141**	**335.19-200.06.50-9**	200	50	12	–	69	–	–	18	9	2.65	6300	1203R.. (9)	1203L.. (9)
A	6	86	**12301**	**335.19-250.06.50-12**	250	50	12	–	69	–	–	24	12	3.97	5600	1203R.. (12)	1203L.. (12)
B	7/8**	13.8	**31041**	**R335.19-063.07.16-3**	63	16	–	35/35.5	33	–	–	6	3	0.66	9400	1204/12045...R (3)	1204/12045...L (3)
B	7/8**	13.8	**71780**	**R335.19-063.07.22-3**	63	22	–	50/50.5	40	–	–	6	3	0.88	9400	1204/12045...R (3)	1204/12045...L (3)
B	7/8**	22	**66091**	**R335.19-080.07.22-4**	80	22	–	50/50.5	40	–	–	8	4	1.10	8400	1204/12045...R (4)	1204/12045...L (4)
A	7/8**	20.5	**88988**	**335.19-080.07.22-4**	80	22	12	–	33	–	–	8	4	0.44	8400	1204/12045...R (4)	1204/12045...L (4)
B	7/8**	22	**74118**	**R335.19-100.07.27-5**	100	27	–	50/50.5	48	–	–	10	5	1.76	7500	1204/12045...R (5)	1204/12045...L (5)
A	7/8**	26.5	**12670**	**335.19-100.07.27-5**	100	27	12	–	41	–	–	10	5	0.66	7500	1204/12045...R (5)	1204/12045...L (5)
B	7/8**	29.5	**31042**	**R335.19-125.07.32-6**	125	32	–	50/50.5	58	–	–	12	6	4.19	6700	1204/12045...R (6)	1204/12045...L (6)
B	7/8**	23.5	**12683**	**R335.19-125.07.40-6**	125	40	–	50/50.5	70	–	–	12	6	2.65	6700	1204/12045...R (6)	1204/12045...L (6)
A	7/8**	32	**78779**	**335.19-125.07.40-6**	125	40	12	–	55	–	–	12	6	1.10	6700	1204/12045...R (6)	1204/12045...L (6)
B	7/8**	41	**12685**	**R335.19-160.07.40-8**	160	40	–	50/50.5	70	–	–	16	8	3.31	5900	1204/12045...R (8)	1204/12045...L (8)
A	7/8**	44.5	**73321**	**335.19-160.07.40-8**	160	40	12	–	65	–	–	16	8	1.98	5900	1204/12045...R (8)	1204/12045...L (8)
A	7/8**	62.5	**78781**	**335.19-200.07.50-9**	200	50	12	–	69	–	–	18	9	2.87	5200	1204/12045...R (9)	1204/12045...L (9)
A	7/8**	87.5	**14895**	**335.19-250.07.50-12**	250	50	12	–	69	–	–	24	12	4.63	4700	1204/12045..R(12)	1204/12045..L(12)
B	10	22	**11451**	**R335.19-100.10.27-5**	100	27	–	50	48	–	–	10	5	1.76	6600	1205...R (5)	1205...L (5)
A	10	27.5	**11228**	**335.19-100.10.27-5**	100	27	12	–	41	–	–	10	5	0.88	6600	1205...R (5)	1205...L (5)
B	10	29.5	**31043**	**R335.19-125.10.32-6**	125	32	–	50	58	–	–	12	6	2.87	6000	1205...R (6)	1205...L (6)
B	10	23.5	**12912**	**R335.19-125.10.40-6**	125	40	–	50	70	–	–	12	6	2.65	6000	1205...R (6)	1205...L (6)
A	10	32	**11293**	**335.19-125.10.40-6**	125	40	12	–	55	–	–	12	6	1.10	6000	1205...R (6)	1205...L (6)
B	10	41	**12914**	**R335.19-160.10.40-8**	160	40	–	50	70	–	–	16	8	3.97	5200	1205...R (8)	1205...L (8)
A	10	44.6	**11298**	**335.19-160.10.40-8**	160	40	12	–	65	–	–	16	8	1.98	5200	1205...R (8)	1205...L (8)
A	10	63.5	**48324**	**335.19-200.10.50-9**	200	50	12	–	69	–	–	18	9	3.97	4700	1205...R (9)	1205...L (9)
A	10	88.5	**12210**	**335.19-250.10.50-12**	250	50	12	–	69	–	–	24	12	6.61	4200	1205...R (12)	1205...L (12)
B	12	22	**12682**	**R335.19-100.12.27-5**	100	27	–	50	48	–	–	10	5	1.98	6000	1207...R (5)	1207...L (5)
A	12	27.8	**78374**	**335.19-100.12.27-5**	100	27	12	–	41	–	–	10	5	0.88	6000	1207...R (5)	1207...L (5)
B	12	29.5	**31044**	**R335.19-125.12.32-6**	125	32	–	50	58	–	–	12	6	2.87	5300	1207...R (6)	1207...L (6)
B	12	23.5	**12684**	**R335.19-125.12.40-6**	125	40	–	50	70	–	–	12	6	2.87	5300	1207...R (6)	1207...L (6)
A	12	33.8	**78780**	**335.19-125.12.40-6**	125	40	12	–	55	–	–	12	6	1.54	5300	1207...R (6)	1207...L (6)
B	12	41	**12686**	**R335.19-160.12.40-8**	160	40	–	50	70	–	–	16	8	3.97	4700	1207...R (8)	1207...L (8)
A	12	45.8	**12339**	**335.19-160.12.40-8**	160	40	12	–	65	–	–	16	8	2.87	4700	1207...R (8)	1207...L (8)
A	12	64	**78782**	**335.19-200.12.50-9**	200	50	12	–	69	–	–	18	9	4.63	4200	1207...R (9)	1207...L (9)
A	12	89.1	**57562**	**335.19-250.12.50-11**	250	50	12	–	69	–	–	22	11	7.94	3700	1207...R (11)	1207...L (11)

* Effective numer of teeth

** For ap = 7 mm use insert SNHQ 1204.., l1 = 50 mm and 35 mm. For ap = 8 mm use insert SNHQ 12045.., l1 50.5 mm and 35.5 mm.

Locking screw/key

For a_p inch	Locking screw 	Key* 	Torque value in/lbs
0.156	C93504-T09P	T09P-3	17.70
0.187	C93505-T09P	T09P-3	17.70
0.250	C94006-T15P	T15P-3	30.97
0.312	C94006-T15P	T15P-3	30.97
0.375	C94008-T15P	T15P-3	30.97
0.500	C94010-T15P	T15P-3	30.97

* Dynamomentic keys, See Machining Navigator.

Locking screw/key

For a_p mm	Locking screw 	Key* 	Torque value Nm
4	C93504-T09P	T09P-3	2
5	C93505-T09P	T09P-3	2
6	C94005-T15P	T15P-3	3.5
7-8	C94006-T15P	T15P-3	3.5
10	C94008-T15P	T15P-3	3.5
12	C94010-T15P	T15P-3	3.5
14	C94008-T15P	T15P-3	3.5

* Dynamomentic keys, See Machining Navigator.

Arbor screw for type B

For cutter dia. inch	Arbor screw 
2.50	UF6S 3/8 UNF x 2
3.00	UF6S 3/8 UNF x 2
4.00	UF6S 1/2 UNF x 1 1/2
5.00	UF6S 5/8 UNF x 1 1/4
6.00	UF6S 3/4 UNF x 2

Arbor screw for type B

For cutter dia. mm	Arbor screw 	dm_m
63	TCEI0825	16
63	MC6S 10x40	22
80	MC6S 10x40	22
100	MC6S 12x35	27
125	220.17-694	32
125	–	40
160	–	40

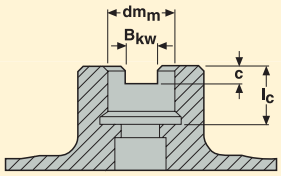
Keyway dimensions for “A” Type milling arbors

Dia. dm_m inch	Keyway width	Keyway depth
0.75	0.125	0.062
1.00	0.250	0.094
1.25	0.312	0.125
1.50	0.375	0.156
2.00	0.500	0.187

Keyway dimensions for “A” Type milling arbors

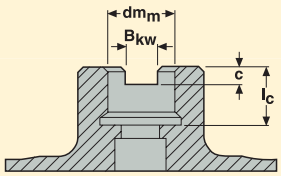
Dia. dm_m mm	Keyway width	Keyway depth
22	6	2.15
27	7	2.9
40	10	3.6
50	12	3.6

Mounting dimensions inch



For cutter	dm_m	B_{kw}	c	l_c
R335.19-2.50-3.00	0.75	0.32	0.19	.787
R335.19-4.00	1.00	0.38	0.22	.866
R335.19-5.00	1.25	0.51	0.28	1.18
R335.19-6.00	1.50	0.63	0.38	1.18

Mounting dimensions metric

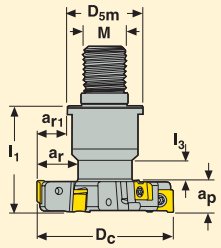


For cutter	dm_m	B_{kw}	c	l_c
R335.19-063	16	8.4	5.6	18
R335.19-063	22	10.4	6.3	20
R335.19-080	22	10.4	6.3	20
R335.19-100	27	12.4	7	22
R335.19-125	32	14.4	8	25
R335.19-125	40	16.4	9	30
R335.19-160	40	16.4	9	30

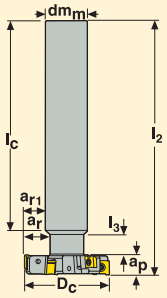
(R) 335.18

Insert LNK

Type RE For Combimaster



Type Cyl Cylindrical



For insert selection and cutting data recommendations, see page 27

For insert program, see page 32

For spare parts see page 24

Type	a_p	a_r	a_{r1}	EDP	Part No.	Dimensions in inch									Z_{c*}	lbs		Insert
						D_c	dm_m	l_1	l_2	l_3	l_c	$D5_m$	M					
					Inch													
Cyl	0.312	0.35	0.31	**29096**	**R335.18-01.25-0-0.31F-1N**	1.25	0.63	–	5.50	0.75	4.42	–	–	2	1	0.66	17300	LNK.05..
Cyl	0.312	0.41	0.37	**29097**	**R335.18-01.50-0-0.31F-2N**	1.50	0.75	–	5.50	0.75	4.42	–	–	4	2	0.7	15400	LNK.05..
RE	0.312	0.61	0.45	**29094**	**R335.18-02.00.RE-0.31F-3N**	2.00	–	1.40	–	0.49	–	1.10	M16	6	3	0.44	13800	LNK.05..
Cyl	0.312	0.59	0.50	**29098**	**R335.18-02.00-0-0.31F-3N**	2.00	1.00	–	6.00	1.20	4.49	–	–	6	3	1.32	13800	LNK.05..
Cyl	0.312	–	0.63	**29101**	**R335.18-02.50-0-0.31F-3N**	2.50	1.25	–	6.75	–	6.44	–	–	6	3	2.51	11900	LNK.05..
Cyl	0.375	0.35	0.31	**29102**	**R335.18-01.25-0-0.37F-1N**	1.25	0.63	–	5.50	0.69	4.43	–	–	2	1	0.49	17300	LNK.05..
Cyl	0.375	0.41	0.37	**29105**	**R335.18-01.50-0-0.37F-2N**	1.50	0.75	–	5.50	0.69	4.43	–	–	4	2	0.75	17300	LNK.05..
RE	0.375	0.61	0.45	**29095**	**R335.18-02.00-RE-0.37F-3N**	2.00	–	1.40	–	0.43	–	1.10	M16	6	3	0.45	13800	LNK.05..
Cyl	0.375	0.59	0.50	**29106**	**R335.18-02.00-0-0.37F-3N**	2.00	1.00	–	6.00	1.13	4.49	–	–	6	3	1.33	13800	LNK.05..
Cyl	0.375	–	0.63	**29107**	**R335.18-02.50-0-0.37F-3N**	2.50	1.25	–	6.75	–	6.37	–	–	6	3	2.53	12300	LNK.05..
RE	0.500	0.60	0.45	**21513**	**R335.18-02.00-16RE-0.5F-3N**	2.00	–	1.40	–	0.31	–	1.10	M16	4	2	0.22	13400	LNK.08..
Cyl	0.500	0.59	0.50	**21524**	**R335.18-02.00-0-0.50F-3N**	2.00	1.00	–	6.00	1.01	4.49	–	–	6	3	0.62	13400	LNK.08..
Cyl	0.500	–	0.63	**21525**	**R335.18-02.50-0-0.50F-3N**	2.50	1.25	–	6.75	–	6.25	–	–	6	3	1.2	11900	LNK.08..
Cyl	0.500	–	0.85	**21526**	**R335.18-03.00-0-0.50F-4N**	3.00	1.25	–	6.75	–	6.25	–	–	8	4	1.26	10500	LNK.08..

Type	a_p	a_r	a_{r1}	EDP	Part No.	Dimensions in mm							Z_{c*}	lbs		Insert
						D_c	dm_m	l_1	l_c	$D5_m$	M					
					Metric											
Cyl	8	9.0	8.0	**29062**	**R335.18-1632.0-08.1N**	32	16	–	23	108	–	2	1	0.45	17300	LNK..05
Cyl	8	12.0	10.0	**29063**	**R335.18-2040.0-08.2N**	40	20	–	22	108	–	4	2	0.88	15400	LNK..05
Cyl	8	15.0	12.5	**29066**	**R335.18-2550.0-08.3N**	50	25	–	29.5	110	–	6	3	1.54	13800	LNK..05
RE	8	15.0	11.0	**29061**	**R335.18-1650.RE-08.3N**	50	–	35	12	28	M16	6	3	0.66	13800	LNK..05
Cyl	8	15.5	15.5	**29069**	**R335.18-3263.0-08.3N**	63	32	–	–	162	–	6	3	2.65	12300	LNK..05
Cyl.	10	9.0	8.0	**29070**	**R335.18-1632.0-10.1N-LN05**	32	16	–	108	92	–	2	1	0.66	17300	LNK.05..
Cyl.	10	12.0	10.0	**29072**	**R335.18-2040.0-10.2N-LN05**	40	20	–	108	90	–	4	2	0.88	15400	LNK.05..
Cyl.	10	12.0	10.0	**18753**	**R335.18-2040.0-10.2N**	40	20	–	108	90	–	4	2	0.88	14900	LNK.06..
RE	10	15.0	11.0	**18755**	**R335.18-1650.RE-10.3N**	50	–	35	28	–	M16	6	3	0.66	13400	LNK.06..
Cyl.	10	15.0	12.5	**18757**	**R335.18-2550.0-10.3N**	50	25	–	110	94	–	6	3	1.54	13400	LNK.06..
Cyl.	10	15.5	15.5	**18758**	**R335.18-3263.0-10.3N**	63	32	–	160	110	–	6	3	2.87	11900	LNK.06..
Cyl.	10	24.0	24.0	**18759**	**R335.18-3280.0-10.4N**	80	32	–	160	110	–	8	4	5.76	10500	LNK.06..
RE	12	15.0	11.0	**18760**	**R335.18-1650.RE-12.3N**	50	–	35	28	–	M16	6	3	0.66	13400	LNK.06..
Cyl.	12	15.0	12.5	**18761**	**R335.18-2550.0-12.3N**	50	25	–	110	94	–	6	3	1.54	13400	LNK.06..
Cyl.	12	15.5	15.5	**18762**	**R335.18-3263.0-12.3N**	63	32	–	158	110	–	6	3	2.87	11900	LNK.06..
Cyl	12	24.0	24.0	**18764**	**R335.18-3280.0-12.4N**	80	32	–	158	110	–	8	4	2.43	10500	LNK.06..

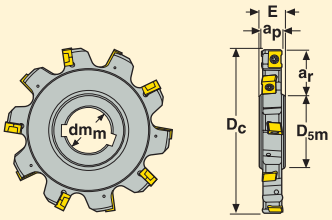
* Effective numer of teeth

DISC MILLING CUTTERS

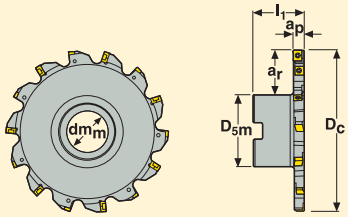
(R) 335.18

Insert LNK

A type for milling arbor – fixed pockets (Type A FP)
– adjustable pocket (Typer A adj)



B type for stub arbor – fixed pockets (Type B FP)
– adjustable pocket (Typer B adj)



For insert selection and cutting data recommendations, see page 27

For insert program, see page 32

For spare parts see page 24

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_1	$D5_m$					
				Inch										
B FP	0.312	0.60	**29085**	**R335.18-02.50-0.31F-3N**	2.5	0.75	–	2.00	1.58	6	3	0.88	12300	LNK.05..
B FP	0.312	0.71	**29086**	**R335.18-03.00-0.31F-4N**	3.0	1.00	–	2.00	1.88	8	4	0.88	10900	LNK.05..
B FP	0.312	1.06	**29087**	**R335.18-04.00-0.31F-5N**	4.0	1.00	–	2.00	1.88	10	5	1.80	9700	LNK.05..
B adj	.312-.390	1.06	**16742**	**R335.18-04.00-0506N**	4.0	1.00		2.00	1.88	8	4	1.76	9400	LNK.05..
B FP	0.312	1.38	**29088**	**R335.18-05.00-0.31F-6N**	5.0	1.25	–	2.00	2.25	12	6	2.20	8400	LNK.05..
B adj	.312-.390	1.37	**16746**	**R335.18-05.00-0506N**	5.0	1.25	–	2.00	2.25	10	5	3.74	7500	LNK.05..
B adj	.312-.390	1.62	**16748**	**R335.18-06.00-0506N**	6.0	1.50	–	2.00	2.75	12	6	6.61	6400	LNK.05..
A FP	0.312	0.71	**29048**	**335.18-03.00-0.31F-4N**	3.0	1.00	0.625	–	1.55	8	4	0.88	10900	LNK.05..
A FP	0.312	1.16	**29073**	**335.18-04.00-0.31F-5N**	4.0	1.00	0.625	–	1.55	10	5	0.88	9700	LNK.05..
A adj	.312-.390	1.08	**11678**	**335.18-04.00-0506N**	4.0	1.00	0.625	–	1.55	8	4	0.88	9400	LNK.05..
A FP	0.312	1.31	**29077**	**335.18-05.00-0.31F-6N**	5.0	1.50	0.625	–	2.25	12	6	1.50	8400	LNK.05..
A adj	.312-.390	1.37	**11698**	**335.18-05.00-0506N**	5.0	1.50	0.625	–	2.25	10	5	1.32	8400	LNK.05..
A adj	.312-.390	1.87	**16602**	**335.18-06.00-0506N**	6.0	1.50	0.625	–	2.25	12	6	2.42	7500	LNK.05..
B FP	0.375	0.60	**29089**	**R335.18-02.50-0.37F-3N**	2.5	0.75	–	2.00	1.58	6	3	0.88	12300	LNK.05..
B FP	0.375	0.71	**29091**	**R335.18-03.00-0.37F-4N**	3.0	1.00	–	2.00	1.88	8	4	0.88	10900	LNK.05..
B FP	0.375	1.06	**29092**	**R335.18-04.00-0.37F-5N**	4.0	1.00	–	2.00	1.88	10	5	1.80	9700	LNK.05..
B adj	.390-.470	1.06	**79782**	**R335.18-04.00-0708N**	4.0	1.00	–	2.00	1.88	8	4	1.76	9400	LNK.06..
B FP	0.375	1.38	**29093**	**R335.18-05.00-0.37F-6N**	5.0	1.25	–	2.00	2.25	12	6	2.00	8400	LNK.05..
B adj	.390-.470	1.37	**79783**	**R335.18-05.00-0708N**	5.0	1.25	–	2.00	2.25	10	5	2.20	8400	LNK.06..
B adj	.390-.470	1.62	**79784**	**R335.18-06.00-0708N**	6.0	1.50	–	2.00	2.75	12	6	3.74	7500	LNK.06..
B adj	.390-.470	2.25	**79785**	**R335.18-08.00-0708N**	8.0	1.50	–	2.00	3.50	16	8	6.61	6700	LNK.06..
A FP	0.375	0.71	**29082**	**335.18-03.00-0.37F-4N**	3.0	1.00	0.625	–	1.55	8	4	0.88	10900	LNK.05..
A FP	0.375	1.16	**29083**	**335.18-04.00-0.37F-5N**	4.0	1.00	0.625	–	1.55	10	5	0.88	9700	LNK.05..
A FP	0.375	1.31	**29084**	**335.18-05.00-0.37F-6N**	5.0	1.50	0.625	–	2.25	12	6	1.50	8400	LNK.05..
A adj	.390-.470	1.37	**79701**	**335.18-05.00-0708N**	5.0	1.50	0.625	–	2.25	10	5	1.32	8400	LNK.06..
A adj	.390-.470	1.87	**79702**	**335.18-06.00-0708N**	6.0	1.50	0.625	–	2.25	12	6	2.42	7500	LNK.06..
A adj	.390-.470	2.50	**79703**	**335.18-08.00-0708N**	8.0	2.00	0.625	–	3.00	16	8	3.96	6700	LNK.06..
A adj	.390-.470	3.50	**79752**	**335.18-10.00-0708N**	10.0	2.00	0.625	–	3.00	18	9	6.17	6000	LNK.06..
B FP	0.500	0.46	**21514**	**R335.18-02.50-0.50F-3N**	2.5	0.75	–	2.00	1.58	6	3	1.20	11900	LNK.08..
B FP	0.500	0.56	**21515**	**R335.18-03.00-0.50F-4N**	3.0	1.00	–	2.00	1.88	8	4	1.26	10500	LNK.08..
B FP	0.500	1.06	**21516**	**R335.18-04.00-0.50F-5N**	4.0	1.00	–	2.00	1.88	10	5	1.76	9400	LNK.08..
B adj	.470-.590	1.02	**79963**	**R335.18-04.00-0809N**	4.0	1.00	–	2.00	1.88	8	4	1.98	9400	LNK.08..
B FP	0.500	1.37	**21517**	**R335.18-05.00-0.50F-6N**	5.0	1.25	–	2.00	2.25	12	6	2.20	8400	LNK.08..
B adj	.470-.590	1.34	**79964**	**R335.18-05.00-0809N**	5.0	1.25	–	2.00	2.25	10	5	2.42	8400	LNK.08..
B adj	.470-.590	1.57	**79965**	**R335.18-06.00-0809N**	6.0	1.50	–	2.00	2.75	12	6	4.18	7500	LNK.08..
B adj	.470-.590	2.20	**79966**	**R335.18-08.00-0809N**	8.0	1.50	–	2.00	3.50	16	8	7.27	6700	LNK.08..
A FP	0.500	0.60	**21508**	**335.18-03.00-0.50F-4N**	3.0	1.00	0.625	–	1.55	8	4	0.66	10500	LNK.08..
A FP	0.500	1.10	**21509**	**335.18-04.00-0.50F-5N**	4.0	1.00	0.625	–	1.55	10	5	0.88	9400	LNK.08..
A FP	0.500	1.31	**21510**	**335.18-05.00-0.50F-6N**	5.0	1.50	0.625	–	2.25	12	6	1.54	8400	LNK.08..
A adj	.470-.590	1.30	**79932**	**335.18-05.00-0809N**	5.0	1.50	0.625	–	2.25	10	5	1.54	8400	LNK.08..
A FP	0.500	1.81	**21512**	**335.18-06.00-0.50F-7N**	6.0	1.50	0.625	–	2.25	14	7	2.64	7500	LNK.08..
A adj	.470-.590	1.81	**79933**	**335.18-06.00-0809N**	6.0	1.50	0.625	–	2.25	12	6	3.96	7500	LNK.08..
A adj	.470-.590	2.44	**79947**	**335.18-08.00-0809N**	8.0	2.00	0.625	–	3.00	16	8	4.62	6700	LNK.08..
A adj	.470-.590	3.38	**79948**	**335.18-10.00-0809N**	10.0	2.00	0.625	–	3.00	18	9	7.93	6000	LNK.08..

* Effective numer of teeth

DISC MILLING CUTTERS

(R) 335.18

Insert LNK

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_c.	lbs		Insert
					D_c	dm_m	E	l_1	$D5_m$					
B FP	0.625	0.56	**21518**	**R335.18-03.00-0.62F-3N**	3.0	1.00	–	2.00	1.88	9	3	1.30	10500	LNK.06..
B FP	0.625	1.06	**21519**	**R335.18-04.00-0.62F-3N**	4.0	1.00	–	2.00	1.88	9	3	1.98	9400	LNK.06..
B FP	0.625	1.37	**21520**	**R335.18-05.00-0.62F-4N**	5.0	1.25	–	2.00	2.25	12	4	2.40	8400	LNK.06..
A FP	0.625	1.31	**23020**	**335.18-05.00-0.62F-4N**	5.0	1.50	0.625	–	2.25	12	4	1.76	8400	LNK.06..
A FP	0.625	1.81	**23021**	**335.18-06.00-0.62F-5N**	6.0	1.50	0.625	–	2.25	15	5	3.30	7500	LNK.06..
B FP	0.750	0.56	**21521**	**R335.18-03.00-0.75F-3N**	3.0	1.00	–	2.00	1.88	9	3	1.30	10500	LNK.08..
B FP	0.750	1.06	**21522**	**R335.18-04.00-0.75F-3N**	4.0	1.00	–	2.00	1.88	9	3	1.98	9400	LNK.08..
B FP	0.750	1.37	**21523**	**R335.18-05.00-0.75F-4N**	5.0	1.25	–	2.00	2.25	12	4	3.30	8400	LNK.08..
A FP	0.750	1.31	**23022**	**335.18-05.00-0.75F-4N**	5.0	1.50	0.75	–	2.25	12	4	2.64	8400	LNK.08..
A FP	0.750	1.81	**23023**	**335.18-06.00-0.75F-5N**	6.0	1.50	0.75	–	2.25	15	5	5.07	7500	LNK.08..

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_c.	lbs		Insert
					D_c	dm_m	E	l_3	l_1	l_c/D_{5m}				
				Metric										
B FP	8	15	**29052**	**R335.18-063.08.22-3N**	63	22	–	28.9	50	40	6	3	1.12	12300	LNK..05
B FP	8	23.5	**29054**	**R335.18-080.08.22-4N**	80	22	–	28.9	50	40	8	4	1.12	10900	LNK..05
B adj	8-10	19.2	**64321**	**R335.18-080.0810.27-3N**	80	27	–	–	50	48	6	3	1.32	10900	LNK..05
A FP	8	19.2	**29047**	**335.18-080.08.27-4N**	80	27	15	–	–	41	8	4	0.66	10900	LNK..05
B FP	8	25	**29055**	**R335.18-100.08.27-5N**	100	27	–	–	50	48	10	5	1.76	9700	LNK..05
B adj	8-10	26	**32850**	**R335.18-100.0810.27-4N**	100	27	–	–	50	48	8	4	1.98	9400	LNK..05
A adj	8-10	27.5	**64316**	**335.18-100.0810.27-4N**	100	27	15	–	–	41	8	4	1.12	9400	LNK..05
A FP	8	27.9	**29049**	**335.18-100.08.27-5N**	100	27	15	–	–	41	10	5	0.66	9700	LNK..05
B FP	8	34	**29059**	**R335.18-125.08.32-6N**	125	32	–	–	50	58	12	6	2.25	8400	LNK..05
B adj	8-10	33	**32851**	**R335.18-125.0810.32-5N**	125	32	–	–	50	58	10	5	1.98	8400	LNK..05
A FP	8	33.4	**29050**	**335.18-125.08.40-6N**	125	40	15	–	–	55	12	6	1.54	8400	LNK..05
A adj	8-10	33	**32822**	**335.18-125.0810.40-5N**	125	40	15	–	–	55	10	5	1.12	8400	LNK..05
B adj	8-10	44	**32852**	**R335.18-160.0810.40-6N**	160	40	–	–	50	70	12	6	3.37	7500	LNK..05
A adj	8-10	50.5	**32823**	**335.18-160.0810.40-6N**	160	40	15	–	–	55	12	6	1.98	7500	LNK..05
B adj	8-10	53	**59036**	**R335.18-200.0810XL.40-7N**	200	40	–	–	50	90	14	7	5.73	6700	LNK..05
A adj	8-10	61	**58969**	**335.18-200.0810XL.50-7N**	200	50	15	–	–	69	14	7	3.86	6700	LNK..05
B adj	8-10	78	**59042**	**R335.18-250.0810XL.40-9N**	250	40	–	–	50	90	18	9	8.16	6000	LNK..05
A adj	8-10	86	**58975**	**335.18-250.0810XL.50-9N**	250	50	15	–	–	69	18	9	5.29	6000	LNK..05
A adj	8-10	118.5	**58981**	**335.18-315.0810XL.50-12N**	315	50	15	–	–	69	24	12	7.72	5300	LNK..05
B FP	10	15	**07852**	**R335.18-063.10.22-3N**	63	22	–	27	50	40	6	3	1.12	11900	LNK.06..
B FP	10	23.5	**07853**	**R335.18-080.10.22-4N**	80	22	–	27	50	40	8	4	1.32	10500	LNK.06..
B adj.	10–12	15	**18581**	**R335.18-080.1012.27-3N**	80	27	–	–	50	48	6	3	1.32	10500	LNK.06..
A FP	10	19	**18738**	**335.18-080.10.27-4N**	80	27	15	–	–	41	8	4	0.66	10500	LNK.06..
B FP	10	26	**07854**	**R335.18-100.10.27-5N**	100	27	–	–	50	48	10	5	1.98	9400	LNK.06..
B adj.	10–12	25	**18597**	**R335.18-100.1012.27-4N**	100	27	–	–	50	48	8	4	1.76	9400	LNK.06..
A FP	10	28	**18743**	**335.18-100.10.27-5N**	100	27	15	–	–	41	10	5	1.12	9400	LNK.06..
A adj.	10–12	26	**18408**	**335.18-100.1012.27-4N**	100	27	15	–	–	41	8	4	0.88	9400	LNK.06..
B FP	10	34	**18636**	**R335.18-125.10.32-6N**	125	32	–	–	50	58	12	6	2.43	8400	LNK.06..
B adj.	10–12	33	**18613**	**R335.18-125.1012.32-5N**	125	32	–	–	50	58	10	5	2.25	8400	LNK.06..
A FP	10	33	**18744**	**335.18-125.10.40-6N**	125	40	15	–	–	55	12	6	1.76	8400	LNK.06..
A adj.	10–12	32	**18417**	**335.18-125.1012.40-5N**	125	40	15	–	–	55	10	5	1.32	8400	LNK.06..
B adj.	10–12	44	**18641**	**R335.18-160.1012.40-6N**	160	40	–	–	50	70	12	6	3.53	7500	LNK.06..
A adj.	10–12	49	**18427**	**335.18-160.1012.40-6N**	160	40	15	–	–	55	12	6	2.43	7500	LNK.06..
B adj.	10–12	53	**59037**	**R335.18-200.1012XL.40-7N**	200	40	–	–	50	90	14	7	6.17	6700	LNK.06..
A adj.	10–12	61	**58970**	**335.18-200.1012XL.50-7N**	200	50	15	–	–	69	14	7	3.75	6700	LNK.06..
B adj.	10–12	78	**59043**	**R335.18-250.1012XL.40-9N**	250	40	–	–	50	90	18	9	9.48	6000	LNK.06..
A adj.	10–12	86	**58976**	**335.18-250.1012XL.50-9N**	250	50	15	–	–	69	18	9	6.39	6000	LNK.06..

* Effective numer of teeth

DISC MILLING CUTTERS

(R) 335.18

Insert LNK

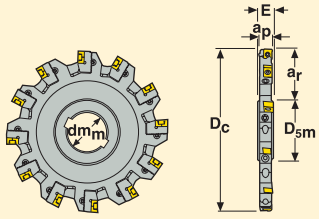
Type	a_p	a_r	EDP	Part No.	Dimensions in inch							Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_3	l_1	l_c/D_{5m}					
A adj.	10–12	118.5	**58982**	**335.18-315.1012XL.50-12N**	315	50	15	–	–	69	24	12	9.48	5300	LNK.06..
B FP	12	15	**07855**	**R335.18-063.12.22-3N**	63	22	–	25	50	40	6	3	1.12	11900	LNK.06..
B FP	12	23.5	**07856**	**R335.18-080.12.22-4N**	80	22	–	24.9	50	40	8	4	1.32	10500	LNK.06..
B adj.	12-15	15	**18712**	**R335.18-080.1215.27-3N**	80	27	–	–	50	48	6	3	1.32	10500	LNK.08..
A FP	12	19	**18745**	**335.18-080.12.27-4N**	80	27	15	–	–	41	8	4	0.88	10500	LNK.06..
B FP	12	26	**07857**	**R335.18-100.12.27-5N**	100	27	–	–	50	48	10	5	2.25	9400	LNK.06..
B adj.	12-15	25	**18734**	**R335.18-100.1215.27-4N**	100	27	–	–	50	48	8	4	1.76	9400	LNK.08..
A FP	12	28	**18748**	**335.18-100.12.27-5N**	100	27	15	–	–	41	10	5	1.12	9400	LNK.06..
A adj.	12-15	27	**18513**	**335.18-100.1215.27-4N**	100	27	15	–	–	41	8	4	0.88	9400	LNK.08..
B FP	12	33	**18637**	**R335.18-125.12.32-6N**	125	32	–	–	50	58	12	6	2.43	8400	LNK.06..
B adj.	12-15	33.5	**18763**	**R335.18-125.1215.32-5N**	125	32	–	–	50	58	10	5	2.43	8400	LNK.08..
A FP	12	33	**18749**	**335.18-125.12.40-6N**	125	40	15	–	–	55	12	6	1.76	8400	LNK.06..
A adj.	12-15	33	**18535**	**335.18-125.1215.40-5N**	125	40	15	–	–	55	10	5	1.54	8400	LNK.08..
B adj	12-15	44	**18782**	**R335.18-160.1215.40-6N**	160	40	–	–	50	70	12	6	3.97	7500	LNK.08..
A adj.	12-15	49	**18543**	**335.18-160.1215.40-6N**	160	40	15	–	–	55	12	6	2.65	7500	LNK.08..
B adj	12-15	53	**59038**	**R335.18-200.1215XL.40-7N**	200	40	–	–	50	90	14	7	6.83	6700	LNK.08..
A adj.	12-15	61	**58971**	**335.18-200.1215XL.50-7N**	200	50	15	–	–	69	14	7	4.49	6700	LNK.08..
B adj.	12-15	78	**59044**	**R335.18-250.1215XL.40-9N**	250	40	–	–	50	90	18	9	1.83	6000	LNK.08..
A adj.	12-15	86	**58977**	**335.18-250.1215XL.50-9N**	250	50	15	–	–	69	18	9	7.5	6000	LNK.08..
A adj.	12-15	118.5	**58983**	**335.18-315.1215XL.50-12N**	315	50	15	–	–	69	24	12	11.46	5300	LNK.08..
B FP	14	15	**07858**	**R335.18-063.14.22-3N**	63	22	–	23	50	40	6	3	1.32	11900	LNK.08..
B FP	14	23.5	**07859**	**R335.18-080.14.22-4N**	80	22	–	23	50	40	8	4	1.54	10500	LNK.08..
B FP	14	26	**07860**	**R335.18-100.14.27-5N**	100	27	–	–	50	48	10	5	2.25	9400	LNK.08..
B FP	14	34	**18638**	**R335.18-125.14.32-6N**	125	32	–	–	50	58	12	6	2.87	8400	LNK.08..
A FP	14	34	**18750**	**335.18-125.14.40-6N**	125	40	15	–	–	55	12	6	1.98	8400	LNK.08..
A FP	14	51	**18751**	**335.18-160.14.40-7N**	160	40	15	–	–	55	14	7	3.53	7500	LNK.08..
B FP	17	24	**21402**	**R335.18-080.17.22-3N**	80	22	–	20	50	40	9	3	1.54	10500	LNK.06..
B FP	17	26	**21403**	**R335.18-100.17.27-3N**	100	27	–	–	50	48	9	3	2.43	9400	LNK.06..
B FP	17	33.5	**21404**	**R335.18-125.17.32-4N**	125	32	–	–	50	58	12	4	3.37	8400	LNK.06..
B FP	17	45	**21405**	**R335.18-160.17.40-5N**	160	40	–	–	50	70	15	5	5.51	7500	LNK.06..
A FP	17	33	**21410**	**335.18-125.17.40-4N**	125	40	20	–	–	55	12	4	2.43	8400	LNK.06..
A FP	17	50.7	**21411**	**335.18-160.17.40-5N**	160	40	20	–	–	55	15	5	4.85	7500	LNK.06..
B FP	20	24	**21406**	**R335.18-080.20.22-4N**	80	22	–	17	50	40	12	4	1.54	10500	LNK.08..
B FP	20	26	**21407**	**R335.18-100.20.27-5N**	100	27	–	–	50	48	15	5	2.87	9400	LNK.08..
B FP	20	33.5	**21408**	**R335.18-125.20.32-6N**	125	32	–	–	50	58	18	6	3.75	8400	LNK.08..
B FP	20	45	**21409**	**R335.18-160.20.40-7N**	160	40	–	–	50	70	21	7	6.17	7500	LNK.08..
A FP	20	34	**21412**	**335.18-125.20.40-6N**	125	40	20	–	–	55	18	6	3.86	8400	LNK.08..
A FP	20	51.2	**21413**	**335.18-160.20.40-7N**	160	40	20	–	–	55	21	7	5.51	7500	LNK.08..

* Effective numer of teeth

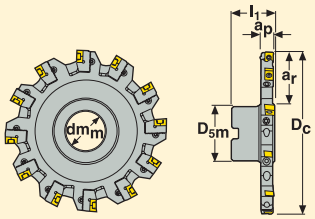
(R) 335.18

Insert LNK

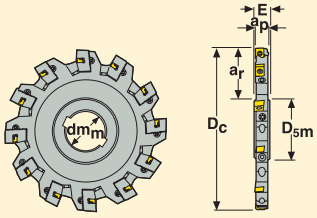
Half side - right hand type A



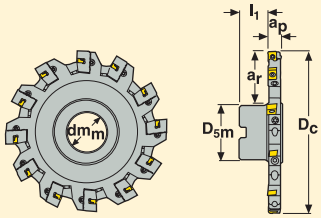
Half side - right hand type B



Half side - left hand type A



Half side - left hand type B



For insert selection and cutting data recommendations, see page 27

For insert program, see page 32

For spare parts see page 24

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_1	D_{5m}					
				Inch - Half Side - Right Hand										
B	0.197	1.06	**16755**	**R335.18-04.00-0506R**	4.0	1.00	–	2.00	1.88	8	8	1.76	9400	LNK.05..
B	0.197	1.37	**16765**	**R335.18-05.00-0506R**	5.0	1.25	–	2.00	2.25	10	10	2.20	8400	LNK.05..
B	0.197	1.62	**16768**	**R335.18-06.00-0506R**	6.0	1.50	–	2.00	2.75	12	12	3.74	7500	LNK.05..
A	0.197	1.08	**16644**	**335.18-04.00-0506R**	4.0	1.00	0.625	–	1.55	8	8	0.88	9400	LNK.05..
A	0.197	1.37	**16651**	**335.18-05.00-0506R**	5.0	1.50	0.625	–	2.25	10	10	1.32	8400	LNK.05..
A	0.197	1.87	**16652**	**335.18-06.00-0506R**	6.0	1.50	0.625	–	2.25	12	12	2.42	7500	LNK.05..
B	0.236	1.06	**21715**	**R335.18-04.00-0708R**	4.0	1.00	–	2.00	1.88	8	8	1.76	9400	LNK.06..
B	0.236	1.37	**79832**	**R335.18-05.00-0708R**	5.0	1.25	–	2.00	2.25	10	10	2.20	8400	LNK.06..
B	0.236	1.62	**79833**	**R335.18-06.00-0708R**	6.0	1.50	–	2.00	2.75	12	12	3.74	7500	LNK.06..
B	0.236	2.25	**79835**	**R335.18-08.00-0708R**	8.0	1.50	–	2.00	3.50	16	16	6.61	6700	LNK.06..
A	0.236	1.37	**79766**	**335.18-05.00-0708R**	5.0	1.50	0.625	–	2.25	10	10	1.32	8400	LNK.06..
A	0.236	1.87	**79767**	**335.18-06.00-0708R**	6.0	1.50	0.625	–	2.25	12	12	2.42	7500	LNK.06..
A	0.236	2.50	**79768**	**335.18-08.00-0708R**	8.0	2.00	0.625	–	3.00	16	16	3.96	6700	LNK.06..
A	0.236	3.50	**79770**	**335.18-10.00-0708R**	10.0	2.00	0.625	–	3.00	18	18	6.17	6000	LNK.06..
B	0.295	1.02	**79968**	**R335.18-04.00-0809R**	4.0	1.00	–	2.00	1.88	8	8	1.98	9400	LNK.08..
B	0.295	1.34	**79969**	**R335.18-05.00-0809R**	5.0	1.25	–	2.00	2.25	10	10	2.42	8400	LNK.08..
B	0.295	1.57	**79970**	**R335.18-06.00-0809R**	6.0	1.50	–	2.00	2.75	12	12	4.18	7500	LNK.08..
B	0.295	2.20	**79971**	**R335.18-08.00-0809R**	8.0	1.50	–	2.00	3.50	16	16	7.27	6700	LNK.08..
A	0.295	1.30	**79951**	**335.18-05.00-0809R**	5.0	1.50	0.625	–	2.25	10	10	1.54	8400	LNK.08..
A	0.295	1.81	**79952**	**335.18-06.00-0809R**	6.0	1.50	0.625	–	2.25	12	12	3.96	7500	LNK.08..
A	0.295	2.44	**79953**	**335.18-08.00-0809R**	8.0	2.00	0.625	–	3.00	16	16	4.62	6700	LNK.08..
A	0.295	3.38	**79954**	**335.18-10.00-0809R**	10.0	2.00	0.625	–	3.00	18	18	7.93	6000	LNK.08..
				Inch - Half Side - Left Hand										
B	0.197	1.06	**16787**	**R335.18-04.00-0506L**	4.0	1.00	–	2.00	1.88	8	8	1.76	9400	LNK.05..
B	0.197	1.37	**16809**	**R335.18-05.00-0506L**	5.0	1.25	–	2.00	2.25	10	10	2.20	8400	LNK.05..
B	0.197	1.62	**16848**	**R335.18-06.00-0506L**	6.0	1.50	–	2.00	2.75	12	12	3.74	7500	LNK.05..
A	0.197	1.08	**16682**	**335.18-04.00-0506L**	4.0	1.00	0.625	–	1.55	8	8	0.88	9400	LNK.05..
A	0.197	1.37	**16699**	**335.18-05.00-0506L**	5.0	1.50	0.625	–	2.25	10	10	1.32	8400	LNK.05..
A	0.197	1.87	**16707**	**335.18-06.00-0506L**	6.0	1.50	0.625	–	2.25	12	12	2.42	7500	LNK.05..
B	0.236	1.06	**79837**	**R335.18-04.00-0708L**	4.0	1.00	–	1.60	1.88	8	8	1.76	9400	LNK.06..
B	0.236	1.37	**79838**	**R335.18-05.00-0708L**	5.0	1.25	–	1.60	2.25	10	10	2.20	8400	LNK.06..
B	0.236	1.62	**79839**	**R335.18-06.00-0708L**	6.0	1.50	–	1.60	2.75	12	12	3.74	7500	LNK.06..
B	0.236	2.25	**79930**	**R335.18-08.00-0708L**	8.0	1.50	–	1.60	3.50	16	16	6.61	6700	LNK.06..
A	0.236	1.37	**79776**	**335.18-05.00-0708L**	5.0	1.50	0.625	–	2.25	10	10	1.32	8400	LNK.06..
A	0.236	1.87	**79777**	**335.18-06.00-0708L**	6.0	1.50	0.625	–	2.25	12	12	2.42	7500	LNK.06..
A	0.236	2.50	**79778**	**335.18-08.00-0708L**	8.0	2.00	0.625	–	3.00	16	16	3.96	6700	LNK.06..
A	0.236	3.50	**79779**	**335.18-10.00-0708L**	10.0	2.00	0.625	–	3.00	18	18	6.17	6000	LNK.06..
B	0.295	1.02	**79973**	**R335.18-04.00-0809L**	4.0	1.00	–	1.50	1.88	8	8	1.98	9400	LNK.08..
B	0.295	1.34	**79974**	**R335.18-05.00-0809L**	5.0	1.25	–	1.50	2.25	10	10	2.42	8400	LNK.08..
B	0.295	1.57	**79975**	**R335.18-06.00-0809L**	6.0	1.50	–	1.50	2.75	12	12	4.18	7500	LNK.08..
B	0.295	2.20	**79976**	**R335.18-08.00-0809L**	8.0	1.50	–	1.50	3.50	16	16	7.27	6700	LNK.08..

* Effective numer of teeth

DISC MILLING CUTTERS

(R) 335.18

Insert LNK

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_1	D_{5m}					
A	0.295	1.30	79957	335.18-05.00-0809L	5.0	1.50	0.625	–	2.25	10	10	1.54	8400	LNK.08..
A	0.295	1.81	79958	335.18-06.00-0809L	6.0	1.50	0.625	–	2.25	12	12	3.96	7500	LNK.08..
A	0.295	2.44	79959	335.18-08.00-0809L	8.0	2.00	0.625	–	3.00	16	16	4.62	6700	LNK.08..
A	0.295	3.38	79960	335.18-10.00-0809L	10.0	2.00	0.625	–	3.00	18	18	7.93	6000	LNK.08..

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_1	$D5_m$					
				Right Hand - Metric										
B	5	15.0	44243	R335.18-080.0810.27-6R	80	27	–	50	48	6	6	1.32	10500	LNK.05..
B	5	26.0	32858	R335.18-100.0810.27-8R	100	27	–	50	48	8	8	1.98	9400	LNK.05..
B	5	33.0	32859	R335.18-125.0810.32-10R	125	32	–	50	58	10	10	1.98	8400	LNK.05..
B	5	44.0	32860	R335.18-160.0810.40-12R	160	40	–	50	70	12	12	3.30	7500	LNK.05..
B	5	53.0	59048	R335.18-200.0810XL.40-14R	200	40	–	50	90	14	14	5.72	6700	LNK.05..
B	5	78.0	59054	R335.18-250.0810XL.40-18R	250	40	–	50	90	18	18	8.14	6000	LNK.05..
A	5	27.5	32828	335.18-100.0810.27-8R	100	27	15	–	41	8	8	1.10	9400	LNK.05..
A	5	33.0	32829	335.18-125.0810.40-10R	125	40	15	–	55	10	10	1.10	8400	LNK.05..
A	5	50.5	32830	335.18-160.0810.40-12R	160	40	15	–	55	12	12	1.98	7500	LNK.05..
A	5	61.0	25610	335.18-200.0810XL.50-14R	200	50	15	–	69	14	14	3.08	6700	LNK.05..
A	5	86.0	59002	335.18-250.0810XL.50-18R	250	50	15	–	69	18	18	5.28	6000	LNK.05..
A	5	118.5	59008	335.18-315.0810XL.50-24R	315	50	15	–	69	24	24	7.70	5300	LNK.05..
B	6	15.0	18584	R335.18-080.1012.27-6R	80	27	–	50	48	6	6	1.32	10500	LNK.06..
B	6	25.0	18603	R335.18-100.1012.27-8R	100	27	–	50	48	8	8	1.76	9400	LNK.06..
B	6	33.0	18618	R335.18-125.1012.32-10R	125	32	–	50	58	10	10	2.20	8400	LNK.06..
B	6	44.0	18674	R335.18-160.1012.40-12R	160	40	–	50	70	12	12	3.52	7500	LNK.06..
B	6	53.0	59049	R335.18-200.1012XL.40-14R	200	40	–	50	90	14	14	6.16	6700	LNK.06..
B	6	78.0	59055	R335.18-250.1012XL.40-18R	250	40	–	50	90	18	18	9.46	6000	LNK.06..
A	6	26.0	18409	335.18-100.1012.27-8R	100	27	15	–	41	8	8	0.88	9400	LNK.06..
A	6	32.0	18421	335.18-125.1012.40-10R	125	40	15	–	55	10	10	1.32	8400	LNK.06..
A	6	49.0	18431	335.18-160.1012.40-12R	160	40	15	–	55	12	12	2.42	7500	LNK.06..
A	6	61.0	25611	335.18-200.1012XL.50-14R	200	50	15	–	69	14	14	3.74	6700	LNK.06..
A	6	86.0	59003	335.18-250.1012XL.50-18R	250	50	15	–	69	18	18	6.38	6000	LNK.06..
A	6	118.5	59009	335.18-315.1012XL.50-24R	315	50	15	–	69	24	24	9.46	5300	LNK.06..
B	7.5	15.0	18723	R335.18-080.1215.27-6R	80	27	–	50	48	6	6	1.32	10500	LNK.08..
B	7.5	25.0	18754	R335.18-100.1215.27-8R	100	27	–	50	48	8	8	1.76	9400	LNK.08..
B	7.5	33.0	18766	R335.18-125.1215.32-10R	125	32	–	50	58	10	10	2.42	8400	LNK.08..
B	7.5	44.0	18784	R335.18-160.1215.40-12R	160	40	–	50	70	12	12	3.96	7500	LNK.08..
B	7.5	53.0	59050	R335.18-200.1215XL.40-14R	200	40	–	50	90	14	14	6.82	6700	LNK.08..
B	7.5	78.0	59056	R335.18-250.1215XL.40-18R	250	40	–	50	90	18	18	10.78	6000	LNK.08..
A	7.5	27.0	18515	335.18-100.1215.27-8R	100	27	15	–	41	8	8	0.88	9400	LNK.08..
A	7.5	33.0	18540	335.18-125.1215.40-10R	125	40	15	–	55	10	10	1.54	8400	LNK.08..
A	7.5	49.0	18546	335.18-160.1215.40-12R	160	40	15	–	55	12	12	2.64	7500	LNK.08..
A	7.5	61.0	25612	335.18-200.1215XL.50-14R	200	50	15	–	69	14	14	4.40	6700	LNK.08..
A	7.5	86.0	59004	335.18-250.1215XL.50-18R	250	50	15	–	69	18	18	7.48	6000	LNK.08..
A	7.5	118.5	59010	335.18-315.1215XL.50-24R	315	50	15	–	69	24	24	11.44	5300	LNK.08..
				Left Hand - Metric										
B	5	26.0	32862	R335.18-100.0810.27-8L	100	27	–	42	48	8	8	1.98	9400	LNK.05..
B	5	33.0	32863	R335.18-125.0810.32-10L	125	32	–	42	58	10	10	1.98	8400	LNK.05..
B	5	44.0	32864	R335.18-160.0810.40-12L	160	40	–	42	70	12	12	3.30	7500	LNK.05..
B	5	53.0	59060	R335.18-200.0810XL.40-14L	200	40		42	90	14	14	5.72	6700	LNK.05..
B	5	78.0	59066	R335.18-250.0810XL.40-18L	250	40	–	42	90	18	18	8.14	6000	LNK.05..
A	5	27.5	32833	335.18-100.0810.27-8L	100	27	15	–	41	8	8	1.10	9400	LNK.05..
A	5	33.0	32834	335.18-125.0810.40-10L	125	40	15	–	55	10	10	1.10	8400	LNK.05..
A	5	50.5	32835	335.18-160.0810.40-12L	160	40	15	–	55	12	12	1.98	7500	LNK.05..
A	5	61.0	59016	335.18-200.0810XL.50-14L	200	50	15	–	69	14	14	3.08	6700	LNK.05..
A	5	86.0	59023	335.18-250.0810XL.50-18L	250	50	15	–	69	18	18	5.28	6000	LNK.05..
A	5	118.5	59030	335.18-315.0810XL.50-24L	315	50	15	–	69	24	24	7.70	5300	LNK.05..
B	6	15.0	18592	R335.18-080.1012.27-6L	80	27	–	40	48	6	6	1.32	10500	LNK.06..
B	6	25.0	18612	R335.18-100.1012.27-8L	100	27	–	40	48	8	8	1.76	9400	LNK.06..
B	6	33.0	18624	R335.18-125.1012.32-10L	125	32	–	40	58	10	10	2.20	8400	LNK.06..
B	6	44.0	18687	R335.18-160.1012.40-12L	160	40	–	40	70	12	12	3.52	7500	LNK.06..
B	6	53.0	59061	R335.18-200.1012XL.40-14L	200	40	–	40	90	14	14	6.16	6700	LNK.06..
B	6	78.0	59067	R335.18-250.1012XL.40-18L	250	40	–	40	90	18	18	9.46	6000	LNK.06..

* Effective numer of teeth

DISC MILLING CUTTERS

(R) 335.18

Insert LNK

Type	a_p	a_r	EDP	Part No.	Dimensions in inch						Z_{c*}	lbs		Insert
					D_c	dm_m	E	l_1	$D5_m$					
A	6	26.0	**18412**	**335.18-100.1012.27-8L**	100	27	15	–	41	8	8	0.88	9400	LNK.06..
A	6	32.0	**18426**	**335.18-125.1012.40-10L**	125	40	15	–	55	10	10	1.32	8400	LNK.06..
A	6	49.0	**18439**	**335.18-160.1012.40-12L**	160	40	15	–	55	12	12	2.42	7500	LNK.06..
A	6	61.0	**59017**	**335.18-200.1012XL.50-14L**	200	50	15	–	69	14	14	3.74	6700	LNK.06..
A	6	86.0	**59024**	**335.18-250.1012XL.50-18L**	250	50	15	–	69	18	18	6.38	6000	LNK.06..
A	6	118.5	**59031**	**335.18-315.1012XL.50-24L**	315	50	15	–	69	24	24	9.46	5300	LNK.06..
B	7.5	15.0	**18729**	**R335.18-080.1215.27-6L**	80	27	–	38	48	6	6	1.32	10500	LNK.08..
B	7.5	25.0	**18756**	**R335.18-100.1215.27-8L**	100	27	–	38	48	8	8	1.76	9400	LNK.08..
B	7.5	33.0	**18777**	**R335.18-125.1215.32-10L**	125	32	–	38	58	10	10	2.42	8400	LNK.08..
B	7.5	44.0	**18788**	**R335.18-160.1215.40-12L**	160	40	–	38	70	12	12	3.96	7500	LNK.08..
B	7.5	53.0	**59062**	**R335.18-200.1215XL.40-14L**	200	40	–	38	90	14	14	6.82	6700	LNK.08..
B	7.5	78.0	**59068**	**R335.18-250.1215XL.40-18L**	250	40	–	38	90	18	18	10.78	6000	LNK.08..
A	7.5	27.0	**18530**	**335.18-100.1215.27-8L**	100	27	15	–	41	8	8	0.88	9400	LNK.08..
A	7.5	33.0	**18542**	**335.18-125.1215.40-10L**	125	40	15	–	55	10	10	1.54	8400	LNK.08..
A	7.5	49.0	**18548**	**335.18-160.1215.40-12L**	160	40	15	–	55	12	12	2.64	7500	LNK.08..
A	7.5	61.0	**59018**	**335.18-200.1215XL.50-14L**	200	50	15	–	69	14	14	4.40	6700	LNK.08..
A	7.5	86.0	**59026**	**335.18-250.1215XL.50-18L**	250	50	15	–	69	18	18	7.48	6000	LNK.08..
A	7.5	118.5	**59032**	**335.18-315.1215XL.50-24L**	315	50	15	–	69	24	24	11.44	5300	LNK.08..

* Effective numer of teeth

(R) 335.18

Spare parts

For cutter R335.18/29	Insert type	Locking screw	Key*	Wedge	Wedge screw	Key	Adjusting screw	Cassettes	
								Right	Left
								R335.18-..	L335.18-..
0810	LNK.05..	C02508-T08P 10.6 in/lbs (1.2 Nm)	T08P-3	335.18-607	LD5018F-T15P	T15P-3	SH6004-T09P	0810-05	0810-05
0810XL			T08P-3	335.18-XL607	LD5018F-T15P	T15P-3	SH6004-T09P	0810XL-05	0810XL-05
0708	LNK.06..	C73007-T09P 17.7 in/lbs (2.0 Nm)	T09P-3	335.18-609	LD6018F-T20P	T20P-4	SH6005-T09P	1012-06	1012-06
1012			T09P-3	335.18-609	LD6018F-T20P	T20P-4	SH6005-T09P	1012-06	1012-06
1012XL			T09P-3	335.18-XL609	LD6018F-T20P	T20P-4	SH6005-T09P	1012XL-06	1012XL-06
0809	LNK.08..	C73007-T09P 17.7 in/lbs (2.0 Nm)	T09P-3	335.18-611	LD6018F-T20P	T20P-4	SH6005-T09P	1215-08	1215-08
1215			T09P-3	335.18-611	LD6018F-T20P	T20P-4	SH6005-T09P	1215-08	1215-08
1215XL			T09P-3	335.18-XL611	LD6018F-T20P	T20P-4	SH6005-T09P	1215XL-08	1215XL-08

* Dynamomentic keys, See Machining Navigator.

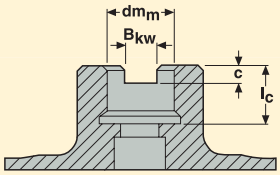
Keyway dimensions for "A" Type milling arbors

Dia. dm_m inch	Keyway width	Keyway depth
0.75	0.125	0.062
1.00	0.250	0.094
1.25	0.312	0.125
1.50	0.375	0.156
2.00	0.500	0.187

Keyway dimensions for "A" Type milling arbors

Dia. dm_m mm	Keyway width	Keyway depth
22	6	2.15
27	7	2.9
40	10	3.6
50	12	3.6

Mounting dimensions inch



For cutter	dm_m	B_{kw}	c	l_c
3.00	1.00	0.38	0.22	0.91
4.00	1.00	0.38	0.22	0.91
5.00	1.25	0.51	0.29	1.18
6.00	1.50	0.63	0.38	1.18
8.00	1.50	0.63	0.38	1.18
8.00	2.50	1.01	0.58	1.57
10.00	2.50	1.01	0.58	1.57
12.00	2.50	1.01	0.58	1.57

Mounting dimensions mm

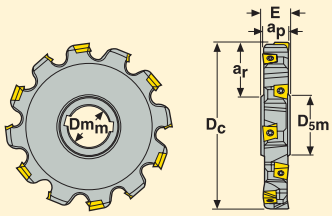
For cutter	dm_m	B_{kw}	c	l_c
80	22	10.4	6.3	20
80	27	12.4	7	22
100	27	12.4	7	22
125	32	14.4	8	25
125	40	16.4	9	30
160	40	16.4	9	30
200	40	16.4	9	28/30
200	60	25.7	14	32
250	60	25.7	14	32
315	60	25.7	14	32

DISC MILLING CUTTERS

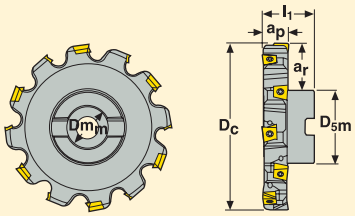
Cutter (R) 335.25

Insert XNHQ and LNHQ

A type for milling arbor – fixed pockets (Type A FP)



B type for stub arbor – fixed pockets (Type B FP)



For insert selection and cutting data recommendations, see pages 28-29

For insert program, see page 33

Type	a_p	a_r	EDP	Part No.	Dimensions in inch/mm D_c	dm_m	l_1	E	$D5_m$		Z_{c*}	lbs		First choice XNHQ..	Second choice LNHQ..
				Inch											
B FP	1.000	1.375	**10154**	**R335.25-05.00-1.000-5NA**	5.0	1.25	–	2.00	2.25	10	5	4.18	4900	XNHQ1407…	LNHQ1407…
B FP	1.000	1.625	**10155**	**R335.25-06.00-1.000-6NA**	6.0	1.50	–	2.00	2.75	12	6	6.82	4400	XNHQ1407…	LNHQ1407…
B FP	1.000	2.250	**10152**	**R335.25-08.00-1.000-7N**	8.0	1.50	–	2.00	3.50	14	7	11.66	3900	XNHQ1407…	LNHQ1407…
B FP	1.000	2.440	**10153**	**R335.25-10.00-1.000-9N**	10.0	2.50	–	2.00	5.12	19	9	18.48	3500	XNHQ1407…	LNHQ1407…
A FP	1.000	1.875	**14284**	**335.25-06.00-1.000-6N**	6.0	1.50	1.25	–	2.25	12	6	4.84	4400	XNHQ1407…	LNHQ1407…
A FP	1.000	2.500	**14360**	**335.25-08.00-1.000-7N**	8.0	2.00	1.25	–	3.00	14	7	8.80	3900	XNHQ1407…	LNHQ1407…
A FP	1.000	3.500	**14361**	**335.25-10.00-1.000-9N**	10.0	2.00	1.25	–	3.00	18	9	15.40	3500	XNHQ1407…	LNHQ1407…
				Metric											
B FP	25	33	**03487**	**R335.25-125.25.32-5NA**	125	32	–	50	58	10	5	4.18	4900	XNHQ1407…	LNHQ1407…
B FP	25	44.4	**03489**	**R335.25-160.25.40-6NA**	160	40	–	50	70	12	6	6.82	4400	XNHQ1407…	LNHQ1407…
B FP	25	54.5	**03490**	**R335.25-200.25.40-7N**	200	40	–	50	90	14	7	11.00	3900	XNHQ1407…	LNHQ1407…
B FP	25	59.5	**03491**	**R335.25-250.25.60-9N**	250	60	–	50	130	18	9	18.26	3500	XNHQ1407…	LNHQ1407…
A FP	25	50.7	**10139**	**335.25-160.25.40-6N**	160	40	32	–	55	12	6	4.84	4400	XNHQ1407…	LNHQ1407…
A FP	25	62.7	**10151**	**335.25-200.25.50-7N**	200	50	32	–	71	14	7	8.80	3900	XNHQ1407…	LNHQ1407…
A FP	25	87.7	**75724**	**335.25-250.25.50-9N**	250	50	32	–	71	18	9	16.06	3500	XNHQ1407…	LNHQ1407…

* Effective numer of teeth

Locking screw/key

For insert	Locking screw	Key*	Torque value
XNHQ1407..	C4013-T15P	T15P-3	44 in/lbs
LNHQ1407..	C4013-T15P	T15P-3	44 in/lbs

* Dynamomentic keys, See Machining Navigator.

Arbor screw for type B

For cutter dia. inch	Arbor screw
5.00	ULC6S 5/8 UNF X 1 1/2
6.00	ULC6S 3/4 UNF X 1 1/2

Arbor screw for type B

For cutter dia. mm	Arbor screw	dm_m
125	MLC6S 16 X 35	32
160	MLC6S 20 X 40	40

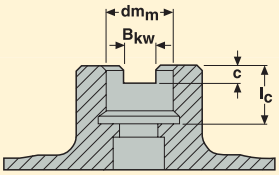
Keyway dimensions for “A” Type milling arbors

Dia. dm_m inch	Keyway width	Keyway depth
1.50	0.375	0.156
2.00	0.500	0.187

Keyway dimensions for “A” Type milling arbors

Dia. dm_m mm	Keyway width	Keyway depth
40	10	3.6
50	12	3.6

Mounting dimensions inch



For cutter	dm_m	B_{kw}	c	l_c
5.00	1.25	0.51	0.29	1.18
6.00	1.50	0.63	0.38	1.18
8.00	1.50	0.63	0.38	1.18
10.00	2.50	1.01	0.58	1.57

Mounting dimensions mm

For cutter	dm_m	B_{kw}	c	l_c
125	32	14.4	8	25
160	40	16.4	9	30
200	40	16.4	9	28/30
250	60	25.7	14	32

DISC MILLING CUTTING DATA

Insert selection – (R) 335.19

Universal insert: SNHQ…M07 F40M

Seco Material Group No.	f_z in/tooth a_e/D_c = 10%	First choice	Alternative	
1	.008–.015	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
2	.008–.015	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
3	.008–.013	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
4	.008–.013	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
5	.006–.012	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
6	.006–.010	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
7	.005–.008	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
8	.008–.015	SNHQ….-M07 F40M	SNHQ….-E05 F40M	
9	.008–.013	SNHQ….-M07 F40M	SNHQ….-E05 F40M	
10	.006–.010	SNHQ….-M07 F40M	SNHQ….-E05 F40M	
11	.006–.010	SNHQ….-M07 F40M	SNHQ….-E05 F40M	
12	.008–.015	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
13	.008–.013	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
14	.008–.012	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
15	.006–.010	SNHQ….-M07 F30M	SNHQ….-M07 F40M	
16	.008–.015	SNHQ….-E05 H25	SNHQ….-E05 F40M	
17	.008–.015	SNHQ….-E05 H25	SNHQ….-E05 F40M	
18	.008–.015	SNHQ….-E05 H25	SNHQ….-E05 F40M	
19	.008–.010	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
20	.008–.010	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
21	.005–.008	SNHQ….-M07 F40M	SNHQ….-M07 F30M	
22	.006–.010	SNHQ….-M07 F40M	SNHQ….-E05 F40M	

Cutting data - 10% engagement width (a_e/D_c = 10%)

Seco Material Group No.	Grades																						
	F30M			F40M			H25																
	Feed f_z in/tooth																						
	.005	.010	.015	.005	.010	.015	.005	.010	.015														
	Cutting speed, v_c (sfm)																						
1	1100	935	820	1050	885	785	–	–	–														
2	935	785	705	885	755	675	–	–	–														
3	770	655	575	740	625	560	–	–	–														
4	655	560	490	625	525	475	–	–	–														
5	540	460	410	525	445	395	–	–	–														
6	475	410	–	460	395	–	–	–	–														
7	130	110	–	125	105	–	–	–	–														
8	755	640	560	720	605	540	–	–	–														
9	590	510	445	560	475	425	–	–	–														
10	490	410	360	460	395	345	–	–	–														
11	360	310	–	345	295	–	–	–	–														
12	575	490	425	540	460	410	525	445	395														
13	510	425	375	475	410	360	460	395	345														
14	425	360	310	410	345	295	375	330	295														
15	345	295	–	330	280	–	310	260	–														
16	2855	2410	2135	2705	2295	2035	2575	2180	1935														
17	2295	1950	1720	2200	1855	1640	2085	1770	1560														
18	1755	1495	1310	1675	1410	1245	1590	1345	1180														
19	155	135	–	150	130	–	–	–	–														
20	130	110	–	120	100	–	–	–	–														
21	110	90	–	105	90	–	–	–	–														
22	170	150	–	160	140	–	–	–	–														

Cutting data - side milling

Operations	a_e/D_c	Recommended feed f_z in/tooth			Speed factor
Radial infeed	–	.002	.005	.007	0.65
Side milling	2%	.011	.022	.033	1.20
	5%	.007	.014	.021	1.10
	10%	.005	.010	.015	1.00
	20%	.003	.007	.011	0.90
	30%	.003	.006	.009	0.85
Average chip thickness h_m		.0016	.0031	.0047	–

Choose suitable feed. Multiply speed value from basic cutting data by speed factor.

Type of insert

Insert size	Max D.O.C. a_p
1102	.157
1103	.187
1204	.250
12045	.312
1205	.375
1207	.500

DISC MILLING CUTTING DATA

Insert selection – (R) 335.18

Universal insert: LNK.. -M06 F40M

Seco Material Group No.	f_z in/tooth a_e/D_c = 10%	First choice				Optimization – Stable operations			
		LNK.05		LNK.06/08		LNK.05		LNK.06/08	
1	.006–.014	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
2	.006–.014	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
3	.006–.014	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
4	.006–.014	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
5	.004–.012	-M06	MP3000	-M06	MP3000	-MD07	MP3000	-MD08	MP3000
6	.004–.008	-M06	MP3000	-M06	MP3000	-MD07	MP3000	-MD08	MP3000
7	.004–.006	-MD07	MP1500	-MD08	MP3000	-M06	MP3000	-M06	MP3000
8	.006–.012	-M06	F40M	-M06	F40M	-M06	MM4500	-M06	MM4500
9	.006–.012	-M06	F40M	-M06	F40M	-M06	MM4500	-M06	MM4500
10	.006–.010	-M06	F40M	-M06	F40M	-M06	MM4500	-M06	MM4500
11	.006–.008	-M06	F40M	-M06	F40M	-M06	MM4500	-M06	MM4500
12	.006–.014	-M06	MP3000	-M06	MK1500	-M06	T350M	-M06	MP3000
13	.006–.014	-M06	MP3000	-M06	MK1500	-M06	T350M	-M06	MP3000
14	.004–.012	-MD07	MP3000	-MD08	MK1500	-MD07	T350M	-MD08	MP3000
15	.004–.010	-MD07	MP3000	-MD08	MK1500	-MD07	T350M	-MD08	MP3000
16	.004–.010	-E05	H25	-E05	H25	-E05	F40M	-E05	H25
17	.004–.010	-E05	H25	-E05	H25	-E05	F40M	-E05	H25
18	.004–.010	-E05	H25	-E05	H25	-E05	F40M	-E05	H25
19	.004–.010	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
20	.004–.010	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
21	.004–.010	-M06	F40M	-M06	F40M	-M06	T350M	-M06	T350M
22	.004–.010	-M06	F40M	-M06	F40M	-M06	F40M	-M06	T350M

Cutting data - 10% engagement width (a_e/D_c = 10%)

Seco Material Group No.	Grades																				
	MM4500			MP2500			MP3000			T350M			F40M			MK1500			H25		
	Feed f_z in/tooth																				
	.005	.008	.013	.005	.008	.013	.005	.008	.013	.005	.008	.013	.005	.008	.013	.005	.008	.013	.005	.008	.013
	Cutting speed, v_c (sfm)																				
1	855	755	655	1395	1230	1065	1310	1165	1015	1215	1065	935	1050	935	820	–	–	–	–	–	–
2	720	640	560	1180	1035	900	1115	985	855	1015	900	785	885	785	690	–	–	–	–	–	–
3	590	525	460	970	855	755	920	820	705	855	755	655	740	655	575	–	–	–	–	–	–
4	510	445	395	820	740	640	785	690	605	720	640	560	625	560	490	–	–	–	–	–	–
5	425	375	330	690	605	540	655	575	510	605	525	460	525	460	410	–	–	–	–	–	–
6	375	330	–	605	540	–	575	510	–	525	460	–	460	410	–	–	–	–	–	–	–
7	–	–	–	150	135	–	150	130	–	145	130	–	125	110	–	–	–	–	–	–	–
8	625	540	475	855	755	655	835	740	640	785	705	605	720	640	560	–	–	–	–	–	–
9	490	425	375	675	590	510	655	575	510	625	540	475	560	490	445	–	–	–	–	–	–
10	395	345	310	540	475	425	540	475	410	510	445	395	460	410	360	–	–	–	–	–	–
11	295	260	230	410	360	310	395	345	310	375	330	295	345	295	260	–	–	–	–	–	–
12	395	345	295	720	640	560	690	605	525	625	560	490	540	475	425	1015	900	785	525	460	410
13	345	295	260	640	560	490	605	525	460	560	490	425	475	425	375	900	785	690	460	410	360
14	295	260	230	540	475	410	510	445	395	460	410	360	410	360	310	755	675	590	375	345	295
15	245	215	–	445	395	–	425	375	–	375	345	–	330	295	–	625	560	–	310	280	–
16	–	–	–	3595	3165	2770	3395	3000	2625	3135	2755	2410	2725	2395	2100	–	–	–	2575	2280	2000
17	–	–	–	2905	2560	2245	2740	2430	2115	2525	2230	1950	2200	1935	1705	–	–	–	2085	1835	1610
18	–	–	–	2215	1950	1705	2100	1855	1625	1920	1705	1495	1675	1475	1295	–	–	–	1590	1410	1230
19	105	95	–	180	165	–	180	155	–	165	150	–	150	135	–	–	–	–	80	70	–
20	85	75	–	150	130	–	140	125	–	135	120	–	120	110	–	–	–	–	65	60	–
21	70	65	–	130	115	–	120	110	–	115	100	–	105	90	–	–	–	–	60	50	–
22	120	100	–	200	180	–	190	170	–	180	160	–	160	150	–	–	–	–	90	80	–

Cutting data - side milling

Operations	a_e/D_c	Recommended feed f_z in/tooth			Speed factor
Radial infeed	–	.002	.004	.006	0.65
Side milling	2%	.010	.017	.028	1.20
	5%	.007	.011	.018	1.10
	10%	.005	.008	.013	1.00
	20%	.003	.005	.009	0.90
	30%	.003	.005	.007	0.85
Average chip thickness h_m		.0016	.0024	.0039	–

Choose suitable feed. Multiply speed value from basic cutting data by speed factor.

Type of insert

Insert size	Max D.O.C. a_p
05	.315-.394
06	.394-.472
08	.472-.590

DISC MILLING CUTTING DATA

Insert selection – (R) 335.25 XNHQ

Universal insert: XNHQ 1407..-M11 F40M

Seco Material Group No.	f_z in/tooth a_e/D_c = 10%	First choice	Difficult operations	
1	0.012–0.020	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
2	0.012–0.020	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
3	0.011–0.018	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
4	0.011–0.018	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
5	0.010–0.016	XNHQ140708TN4-M11MP2500	XNHQ140708TN4-M11F40M	
6	0.010–0.014	XNHQ140708TN4-M11MP2500	XNHQ140708TN4-M11F40M	
7	0.008–0.012	XNHQ140708TN4-M11MP2500	XNHQ140708TN4-M11F40M	
8	0.011–0.018	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
9	0.011–0.018	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
10	0.010–0.016	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
11	0.008–0.014	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
12	0.011–0.018	XNHQ140708TN4-M11MK2000	XNHQ140708TN4-M11MP2500	
13	0.011–0.018	XNHQ140708TN4-M11MK2000	XNHQ140708TN4-M11MP2500	
14	0.010–0.016	XNHQ140708TN4-M11MK2000	XNHQ140708TN4-M11MP2500	
15	0.010–0.014	XNHQ140708TN4-M11MK2000	XNHQ140708TN4-M11MP2500	
16	0.012–0.020	XNHQ140708TN4-E10H25	XNHQ140708TN4-E10F40M	
17	0.012–0.020	XNHQ140708TN4-E10H25	XNHQ140708TN4-E10F40M	
18	0.012–0.020	XNHQ140708TN4-E10H25	XNHQ140708TN4-E10F40M	
19	0.008–0.016	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
20	0.008–0.016	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
21	0.008–0.012	XNHQ140708TN4-M11F40M	XNHQ140708TN4-M11MP2500	
22	0.010–0.014	XNHQ140708TN4-M11F40M	XNHQ140708TN4-E10F40M	

Cutting data - 10% engagement width (a_e/D_c = 10%)

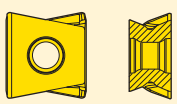
Seco Material Group No.	Grades																						
	F40M			MP2500			MK2000																
	Feed f_z in/tooth																						
	.005	.010	.015	.005	.010	.015	.005	.010	.015														
	Cutting speed, v_c (sfm)																						
1	920	820	710	1210	1080	920	–	–	–														
2	790	710	590	1030	920	790	–	–	–														
3	640	570	490	850	750	640	–	–	–														
4	560	490	410	720	660	560	–	–	–														
5	460	410	340	610	540	460	–	–	–														
6	410	360	–	530	480	–	–	–	–														
7	110	100	–	130	120	–	–	–	–														
8	640	560	480	740	670	560	–	–	–														
9	490	440	380	590	530	440	–	–	–														
10	410	360	310	480	430	360	–	–	–														
11	300	260	–	360	310	–	–	–	–														
12	480	430	360	640	570	480	620	560	480														
13	430	380	310	560	490	430	560	490	410														
14	360	310	260	480	430	360	460	410	340														
15	300	260	–	390	340	–	380	340	–														
16	2400	2130	1810	3150	2810	2380	–	–	–														
17	1940	1720	1460	2540	2260	1920	–	–	–														
18	1480	1310	1120	1940	1740	1460	–	–	–														
19	130	120	100	160	140	120	–	–	–														
20	110	100	80	130	120	100	–	–	–														
21	90	80	–	110	100	–	–	–	–														
22	210	200	–	280	250	–	–	–	–														

Cutting data - side milling

Operations	a_e/D_c	Recommended feed f_z in./tooth			Speed factor
Radial infeed	–	0.004	0.006	0.009	0.65
Side milling	2%	0.017	0.026	0.043	1.20
	5%	0.011	0.017	0.028	1.10
	10%	0.008	0.012	0.020	1.00
	20%	0.006	0.009	0.014	0.90
	30%	0.005	0.007	0.012	0.85
Average chip thickness h_m		0.002	0.004	0.006	–

Choose suitable feed. Multiply speed value from basic cutting data by speed factor.

Type of insert



Insert size	Max D.O.C. a_p
1407	1.00

DISC MILLING CUTTING DATA

Insert selection – (R) 335.25 LNHQ

Universal insert: LNHQ 1407..-M11 F40M

Seco Material Group No.	f_z in/tooth a_e/D_c = 10%	First choice	Difficult operations	
1	0.012–0.020	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
2	0.012–0.020	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
3	0.011–0.018	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
4	0.011–0.018	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
5	0.010–0.016	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
6	0.010–0.014	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
7	0.008–0.012	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
8	0.011–0.018	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
9	0.011–0.018	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
10	0.010–0.016	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
11	0.008–0.014	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
12	0.011–0.018	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
13	0.011–0.018	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
14	0.010–0.016	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
15	0.010–0.014	LNHQ140708TN4-M11MP2500	LNHQ140708TN4-M11F40M	
16	–	–	–	
17	–	–	–	
18	–	–	–	
19	0.008–0.016	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
20	0.008–0.016	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
21	0.008–0.012	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	
22	0.010–0.014	LNHQ140708TN4-M11F40M	LNHQ140708TN4-M11MP2500	

Cutting data - 10% engagement width (a_e/D_c = 10%)

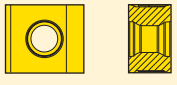
Seco Material Group No.	Grades																					
	F40M			MP2500																		
	Feed f_z in/tooth																					
	.008	.012	.020	.008	.012	.020																
	Cutting speed, v_c (sfm)																					
1	920	820	710	1210	1080	920																
2	790	710	590	1030	920	790																
3	640	570	490	850	750	640																
4	560	490	410	720	660	560																
5	460	410	340	610	540	460																
6	410	360	–	530	480	–																
7	110	100	–	130	120	–																
8	640	560	480	740	670	560																
9	490	440	380	590	530	440																
10	410	360	310	480	430	360																
11	300	260	–	360	310	–																
12	480	430	360	640	570	480																
13	430	380	310	560	490	430																
14	360	310	260	480	430	360																
15	300	260	–	390	340	–																
16	–	–	–	–	–	–																
17	–	–	–	–	–	–																
18	–	–	–	–	–	–																
19	130	120	100	160	140	120																
20	110	100	80	130	120	100																
21	90	80	–	110	100	–																
22	210	200	–	280	250	–																

Cutting data - side milling

Operations	a_e/D_c	Recommended feed f_z in./tooth			Speed factor
Radial infeed	–	0.004	0.006	0.009	0.65
Side milling	2%	0.017	0.026	0.043	1.20
	5%	0.011	0.017	0.028	1.10
	10%	0.008	0.012	0.020	1.00
	20%	0.006	0.009	0.014	0.90
	30%	0.005	0.007	0.012	0.85
Average chip thickness h_m		0.002	0.004	0.006	–

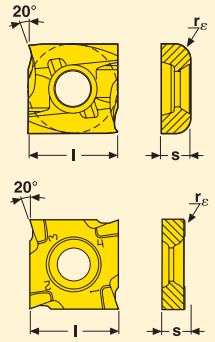
Choose suitable feed. Multiply speed value from basic cutting data by speed factor.

Type of insert



Insert size	Max D.O.C. a_p
1407	1.00

SNHQ

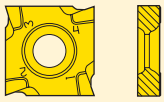


Tolerances ± inch

	l	s
SNHQ	.0005	.0004

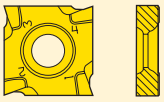
Size	Dimensions in inch	
	l	s
1102	.433	.092
1103	.433	.107
1203	.500	.127
1204	.500	.159
12045	.500	.178
1205	.500	.214
1207	.500	.277

SNHQ1102



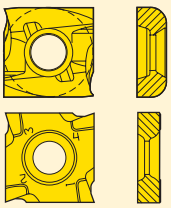
Hand	Geometry	Grade	Radius r_ε inch					
			0.008	0.016	0.031	0.047	0.063	0.079
LEFT	E05	F40M	30207					
		H25	26352					
RIGHT	E05	F40M	30210					
		H25	26353					
LEFT	M07	F40M	26078	30244	26286	26287	26288	
		F30M		26366	26367		26368	55250
		MM4500		66977	66979			
RIGHT	M07	F40M	26289	30246	26370	26291	26292	
		F30M		26369	26290		26371	55248
		MM4500		66976	66978			

SNHQ1103



Hand	Geometry	Grade	Radius r_ε inch					
			0.008	0.016	0.031	0.047	0.063	0.079
LEFT	E05	F40M	30211					
		H25	26354					
RIGHT	E05	F40M	30212					
		H25	26355					
LEFT	M07	F40M	26293	30247	26294	26295	26296	
		F30M		26372	26373		26375	55252
		MM4500		66981	66983			
RIGHT	M07	F40M	26297	30249	26298	26299	26300	
		F30M		26376	26377		26378	55251
		MM4500		66980	66982			

SNHQ1203

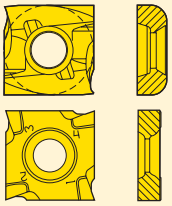


Hand	Geometry	Grade	Radius r_ε inch								
			0.008	0.016	0.031	0.040	0.047	0.063	0.079	0.094	0.118
LEFT	E05	F40M	30214								
		H25M	26356								
RIGHT	E05	F40M	30216								
		H25M	26357								
LEFT	M07	F40M	26301	30250	26302	57377	26303	26304	26305	11339	11353
		F30M		30250	26380			26381	26382		
		MM4500		66985	66987						
RIGHT	M07	F40M	26306	30252	26307	57378	26308	26309	26310	11400	11464
		F30M		26383	26384			26385	26386		
		MM4500		66984	66986						

Insert tables include EDP ordering numbers.

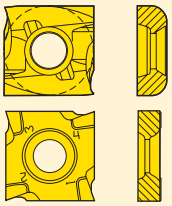
SNHQ

SNHQ1204



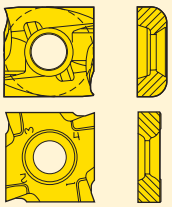
Hand	Geometry	Grade	Radius r_ε inch								
			0.008	0.016	0.031	0.047	0.063	0.079	0.094	0.118	0.136
LEFT	E05	F40M		30217							
		H25M		26358							
RIGHT	E05	F40M		30218							
		H25M		26359							
LEFT	M07	F40M	26311	30253	26312	26313	26314	26315	11474	11487	11616
		F30M		26387	26388		26389	26390			
		MM4500		66989	66992						
RIGHT	M07	F40M	26316	30254	26317	26318	26319	26320	11823	11831	11898
		F30M		26391	26392		26393	26394			
		MM4500		66988	66991						

SNHQ12045



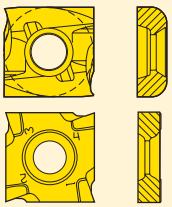
Hand	Geometry	Grade	Radius r_ε inch								
			0.008	0.016	0.031	0.047	0.063	0.079	0.094	0.122	0.157
LEFT	E05	F40M		30224							
		H25M		26360							
RIGHT	E05	F40M		30226							
		H25M		26361							
LEFT	M07	F40M	26321	30255	26322	26323	26324	26325	11930	11960	11962
		F30M		26395	26396		26397	26398			
		MM4500		66994	66997						
RIGHT	M07	F40M	26326	30256	26327	26328	26329	26330	14525	14967	14974
		F30M		26399	26400		26401	26402			
		MM4500		66993	66995						

SNHQ1205



Hand	Geometry	Grade	Radius r_ε inch										
			0.008	0.016	0.031	0.040	0.047	0.063	0.079	0.094	0.122	0.157	0.197
LEFT	E05	F40M		30228									
		H25M		26362									
RIGHT	E05	F40M		30229									
		H25M		26363									
LEFT	M07	F40M	26331	30257	26332	55247	26333	26335	26336	15081	15290	15985	16161
		F30M		26403	26404			26405	26406				
		MM4500		66999	67003								
RIGHT	M07	F40M	26337	30258	26338	55246	26339	26340	26341	16170	16328	16335	16366
		F30M		26407	26408			26409	26410				
		MM4500		67004	67006								

SNHQ1207

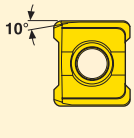


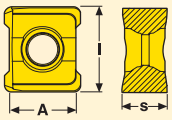
Hand	Geometry	Grade	Radius r_ε inch										
			0.008	0.016	0.031	0.040	0.047	0.063	0.079	0.094	0.122	0.157	0.197
LEFT	E05	F40M		30228									
		H25M		26362									
RIGHT	E05	F40M		30229									
		H25M		26363									
LEFT	M07	F40M	26331	30257	26332	55247	26333	26335	26336	15081	15290	15985	16161
		F30M		26403	26404			26405	26406				
		MM4500		66999	67003								
RIGHT	M07	F40M	26337	30258	26338	55246	26339	26340	26341	16170	16328	16335	16366
		F30M		26407	26408			26409	26410				
		MM4500		67004	67006								

Insert tables include EDP ordering numbers.

DISC MILLING INSERTS

LNKT



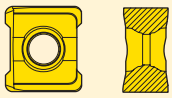


Tolerances ± inch

	I	s	A
LNK.05	.005	.001	.0005
LNK.06/08	.005	.001	.001

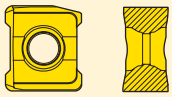
Size	Dimensions in inch		
	I	s	A
0504	.394	.185	.205
0605	.394	.197	.307
0805	.394	.197	.307

LNK. 05



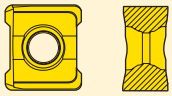
Geometry	Grade	Radius r_ε inch						
		.0157	**.0315**	**0.063**	**0.079**	**0.094**	**0.122**	**0.122**
E05	F40M	32790	32792					
E05	H25	32791	32793					
M06	F40M	32794	32776	32780	32783	32787	32788	32789
M06	MM4500	67033	67034					
M06	MP3000	44669	44670					
M06	T350M	32772	32777					
M06	F30M		32779					
MD07	MP3000	44673	44674					
MD07	T350M	32767	32769					
MD07	F30M		32771					

LNK.06



Geometry	Grade	Radius r_ε inch					
		.0157	**.0315**	**0.063**	**0.122**	**0.157**	**0.157**
E05	H25	30526	30527	30529	07510	23067	23068
M06	F40M	42894	13120	13123	07429		
M06	MM4500	67035	67036				
M06	MP3000	44675	44676				
M06	T350M	00094	00101				
M06	MP2500	31657	31658				
M06	MK1500		31366	31367			
MD08	F40M	01187					
MD08	MK1500	31373	31374				
MD08	MP2500		31661				
MD08	MP3000	44677	44678				

LNK.08

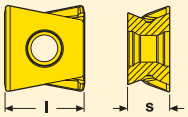


Geometry	Grade	Radius r_ε inch							
		.0157	**.0315**	**0.063**	**0.079**	**0.094**	**0.122**	**0.157**	**0.157**
E05	H25	30531	30532	30533	30534	30536	07512	23073	23074
M06	F40M	42898	13160	13392	13393	13394	07412	23069	23071
M06	MK1500		31368	31369	31370	31371	31372		
M06	MM4500	67037	67038						
M06	MP2500	31659	31660						
M06	MP3000	44679	44680						
M06	T350M	00100	39113						
MD08	F40M	00145							
MD08	MK1500	31375	31376						
MD08	MP2500		31662						
MD08	MP3000	44681	44682						

Insert tables include EDP ordering numbers.

DISC MILLING INSERTS

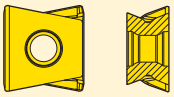
XNHQ



Tolerances ± inch	l	s
XNHQ14	.001	.0005

Size	Dimensions in inch	
	l	s
14	.551	.295

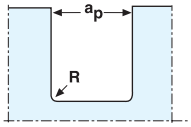
XNHQ1407



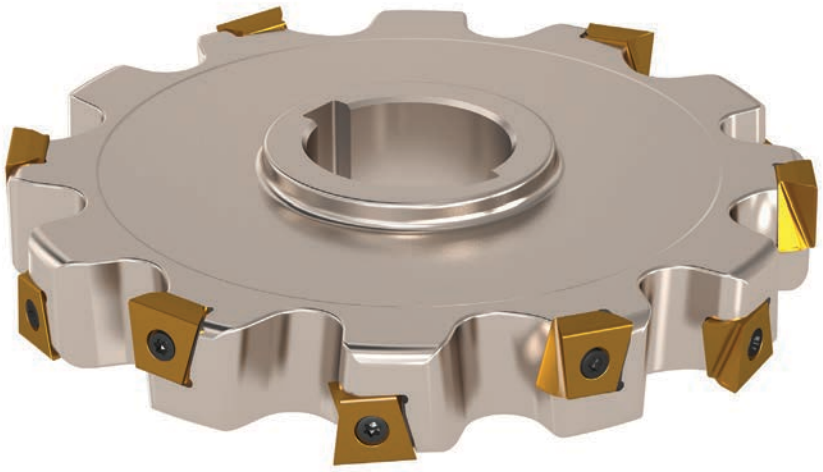
Geometry	Grade	Radius r_ε inch							
		0.008	**0.063**	**0.079**	**0.094**	**0.122**	**0.157**	**0.197**	**0.236**
E10	F40M	75691							
	H25	75685							
M11	F40M	10040	10050	10051	10054	10056	10059	75612	71612
	MP2500	10041	75578						
	MK2000*	10048							

* MK2000 available 3Q 2012

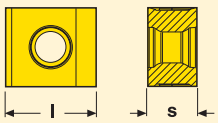
Width and profile generated by XNHQ insert



Insert corner radius inch (mm)	a_p generated inch (mm)
0.0315 (0.8)	1.0 (25)
0.063 (1.6)	1.0 (25)
0.079 (2)	1.0 (25)
0.094 (2.4)	1.0 (25)
0.122 (3.1)	1.0 (25)
0.157 (4)	1.0 (25)
0.197 (5)	0.989 (24.73)
0.236 (6)	0.979 (24.46)



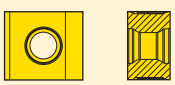
LNHQ



Tolerances ±inch	l	s
LNHQ14	.001	.0005

Size	Dimensions in inch	
	l	s
14	.551	.295

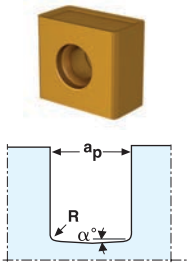
LNQH1407



Geometry	Grade	Radius r_ε inch				
		0.008	**0.122**	**0.157**	**0.197**	**0.236**
M11	F40M	75686	69480	69486	69487	69488
	MP2500	75687	75688	75689	75512	75690

*LNHQ is an insert intended for roughing in difficult conditions (this will not generate a flat bottom).

Width and profile generated by LNHQ* insert



Insert corner radius inch (mm)	a_p generated inch (mm)	angle α°
0.0135 (0.8)	1.007 (25.17)	2
0.122 (3.1)	1.001 (25.02)	2
0.157 (4)	0.997 (24.92)	2
0.197 (5)	0.992 (24.78)	2
0.236 (6)	0.986 (24.64)	2

Insert tables include EDP ordering numbers.

WORKPIECE MATERIALS - SECO MATERIAL GROUPS

Steel, ferritic and martensitic stainless steel

ISO	SMG No.	Representative material	Description	BHN	kc1.1 x 1000 lbf/in2	m_c
P	1	1010	Very soft carbon steels Purely ferritic steels	<135	196	0.21
	2	1140	Free-cutting steels	120 <210	218	0.22
	3	1045	Structural steels. Ordinary carbon steels with low to medium carbon content (<0,5%C)	135 <165	218	0.25
	4	4140	Carbon steels with high carbon content (>0,5%C) Medium hard steels for toughening. Ordinary low-alloy steels Ferritic and martensitic stainless steels	165 <210	247	0.24
	5	4340	Normal tool steels Harder steels for toughening Martensitic stainless steels	210 <270	276	0.24
	6	D2	Difficult tool steels High-alloy steels with high hardness Martensitic stainless steels	270 <360	290	0.24
H	7	A128 Grade A	Difficult high-strength steels with 42 to 56 HRC hardness Hardened steels from material group 3-6 Martensitic stainless steels	>360	421	0.22

Free-cutting, austenitic and duplex stainless steel

M	8	304	Easy-cutting stainless steels Free-cutting stainless steels Calcium-treated stainless steels		254	0.22
	9	316	Moderately difficult stainless steels Austenitic and duplex stainless steels		276	0.2
	10	310	Difficult stainless steels Austenitic and duplex stainless steels		297	0.2
	11	330	Very difficult stainless steels Austenitic and duplex stainless steels		312	0.2

Cast iron

K	12	60-40-18	Medium hard cast iron Grey cast iron		167	0.22
	13	A536 80-55-06	Low-alloy cast iron Malleable cast iron Nodular cast iron		178	0.25
	14	A536 100-70-03	Moderately difficult alloy cast iron Moderately difficult malleable cast iron Nodular cast iron		196	0.28
	15	A536 120-90-02	Difficult high-alloy cast iron Difficult malleable cast iron Nodular cast iron		213	0.3

Other materials

N	16	A380	Aluminum alloys: Low Si		101	0.25
	17	B390.0	Aluminum alloys: High Si		101	0.27
	18	CA937	Copper alloys			
S	19	Discalloy	Fe-based superalloys			
	20	Stellite 21	Co-based superalloys		377	0.24
	21	Inconel 718 (bar, forge, ring)	Ni-based superalloys		479	0.24
	22	Ti 6Al-4V (annealed)	Titanium alloys		210	0.23

k_c1.1-values with 0 degree effective cutting rake angle. For other rake angles, reduce the k_c1.1-value by 1% for every degree increase in the cutting rake angle and vice versa. Keep in mind that the BHN-value is only an aid in the selection of the material group when the material has been worked by rolling, drawing, heat treatment or other methods that increase the strength of the material.

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