

INNOFIT™

Heavy-Duty Modular Tooling System

- Strong drive pin design with three-point clamping and self centering connections
- Change cutter heads right on the spindle
- Resists bending forces uniformly
- Transmits axial forces from cut-to-spindle

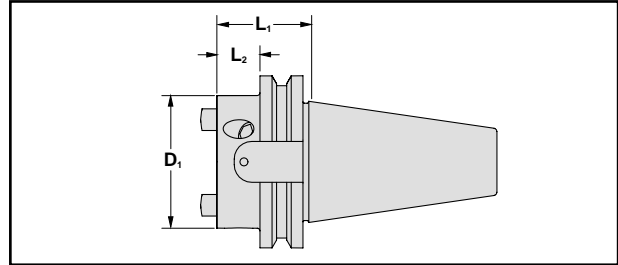
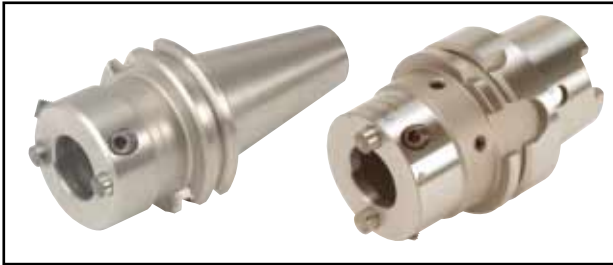


Ingersoll
CHASE
line

Member IMC Group
Ingersoll
Cutting Tools

SPINDLE ADAPTOR

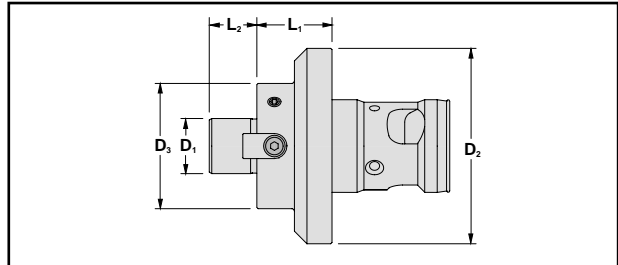
Diameters
1.93" and 3.07"



| D ₁ Nominal Diameter | Adaption | New Cutter Number | Old Cutter Number | Innofit Adaption | L ₁ Extension Length | L ₂ Projection Length |
|---------------------------------------|----------|-------------------------|-------------------------|---------------------|---------------------------------------|--|
| 1.93 | CAT 40 | C40Z4SA-13 | NEW | Z4 | 1.375 | .625 |
| 1.93 | CAT 40 | C40Z4SA-21 | NEW | Z4 | 2.125 | 1.375 |
| 1.93 | HSK63A | HSKA63Z45A062 | NEW | Z4 | 2.441 | 1.375 |
| 3.07 | CAT 50 | C50Z5SA-21 | NEW | Z5 | 2.125 | 1.375 |

FACE MILL ADAPTOR

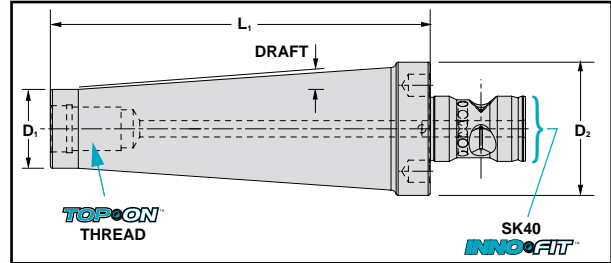
Pilot Diameters
.500"-1.500"



| D ₁ Nominal Diameter | Adaption | New Cutter Number | Old Cutter Number | D ₂ Flange Diameter | L ₁ Extension Length | L ₂ Pilot Height | Keys | D ₃ |
|---------------------------------------|----------|-------------------------|-------------------------|--------------------------------------|---------------------------------------|-----------------------------------|------|----------------|
| .500 | SK40 | Z4SM05SA-10 | NEW | 1.93 | 1.00 | .56 | .250 | 1.44 |
| .750 | SK40 | Z4SM07SA-10 | NEW | 1.93 | 1.00 | .68 | .312 | 1.75 |
| 1.000 | SK40 | Z4SM10SA-12 | NEW | 1.93 | 1.25 | .68 | .375 | 2.75 |
| .750 | SK50 | Z5SM07SA-12 | NEW | 3.07 | 1.25 | .68 | .312 | 1.75 |
| 1.000 | SK50 | Z5SM10SA-12 | NEW | 3.07 | 1.25 | .68 | .375 | 2.75 |
| 1.250 | SK50 | Z5SM12SA-12 | NEW | 3.07 | 1.25 | .68 | .500 | 2.75 |
| 1.500 | SK50 | Z5SM15SA-12 | NEW | 3.07 | 1.25 | .94 | .625 | 3.81 |

TOPON™ TO INNOFIT™ ADAPTOR

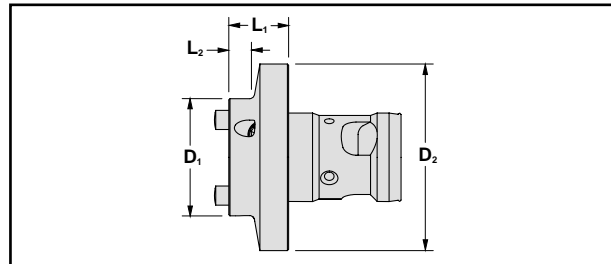
Diameter
1.93"



| Cutter Number | D ₁ Diameter | D ₂ Diameter | Thread Size | L Length | Possible Draft Angle |
|---------------|-------------------------|-------------------------|-------------|----------|----------------------|
| Z4MOD12SK-25 | 0.83 | 1.93 | M12 | 2.50 | 5.0° |
| Z4MOD16SK-45 | 0.83 | 1.93 | M12 | 4.50 | 7.0° |
| Z4MOD12SK-55 | 0.83 | 1.93 | M12 | 5.50 | 5.0° |
| Z4MOD16SK-25 | 1.14 | 1.93 | M16 | 2.50 | 7.0° |
| Z4MOD16SK-45 | 1.14 | 1.93 | M16 | 4.50 | 6.5° |
| Z4MOD16SK-55 | 1.14 | 1.93 | M16 | 5.50 | 3.5° |

REDUCER

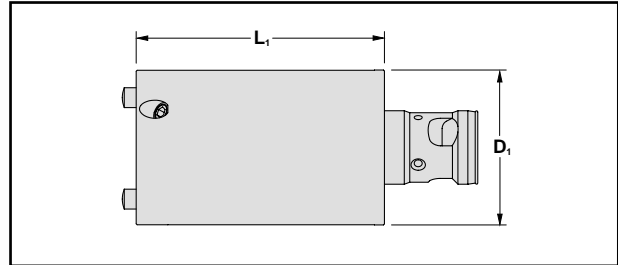
Diameter
1.93"



| D ₁ Nominal Diameter | Adaption | New Cutter Number | Old Cutter Number | L ₁ Extension Length | L ₂ Projection Length | D ₂ Flange Diameter |
|---------------------------------|------------|-------------------|-------------------|---------------------------------|----------------------------------|--------------------------------|
| 1.93 | SK40, SK50 | Z5Z4 SA025 | NEW | .985 | .355 | 3.07 |
| 1.93 | SK40, SK50 | Z5Z4 SA050 | NEW | 1.970 | 1.340 | 3.07 |
| 1.93 | SK40, SK50 | Z5Z4 SA075 | NEW | 2.955 | 2.320 | 3.07 |
| 1.93 | SK40, SK50 | Z5Z4 SA100 | NEW | 3.940 | 3.310 | 3.07 |

EXTENSION

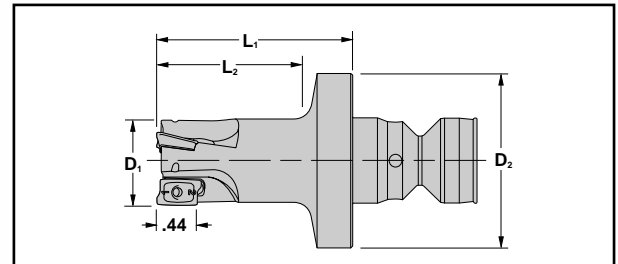
Diameters
1.93" and 3.07"



| D ₁ Nominal Diameter | Adaption | New Cutter Number | Old Cutter Number | L ₁ Extension Length |
|---------------------------------------|----------|-------------------------|-------------------------|---------------------------------------|
| 1.93 | SK40 | Z4Z4 SA050 | NEW | 1.970 |
| 1.93 | SK40 | Z4Z4 SA075 | NEW | 2.950 |
| 1.93 | SK40 | Z4Z4 SA100 | NEW | 3.940 |
| 3.07 | SK50 | Z5Z5 SA075 | NEW | 2.950 |
| 3.07 | SK50 | Z5Z5 SA100 | NEW | 3.940 |
| 3.07 | SK50 | Z5Z5 SA125 | NEW | 4.925 |

END MILL SERIES 12J1F

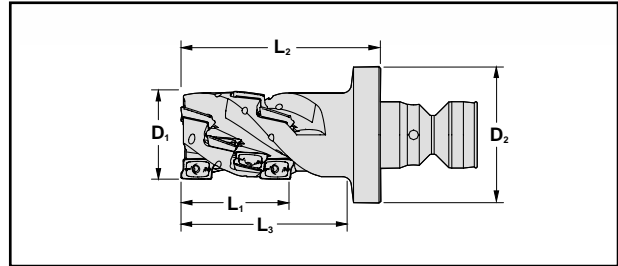
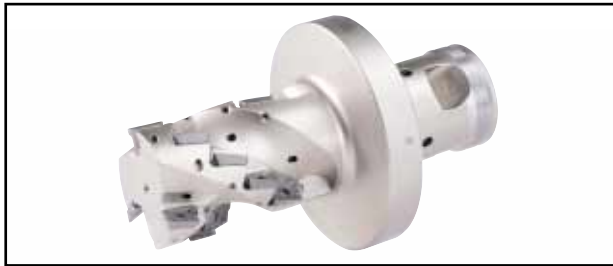
Diameters .750"-1.250"
Cutting Edge Length .44"
Insert Corner .015", .031", .062" and .125"R



| D ₁ Nominal Diameter | Adaption | New Cutter Number | Old Cutter Number | L ₁ Extension Length | L ₂ Projection Length | D ₂ Flange Diameter | Number of Inserts |
|---------------------------------------|----------|-------------------------|-------------------------|---------------------------------------|--|--------------------------------------|----------------------|
| .750 | SK 40 | 12J1F-07030Z4R01 | NEW | 3.0 | 2.40 | 1.93 | 2 |
| 1.000 | SK 40 | 12J1F-10040Z4R01 | NEW | 4.0 | 3.40 | 1.93 | 2 |
| 1.000 | SK 40 | 12J1F-10030Z4R01 | NEW | 3.0 | 2.40 | 1.93 | 3 |
| 1.250 | SK 40 | 12J1F-12030Z4R01 | NEW | 3.0 | 2.40 | 1.93 | 4 |
| 1.250 | SK 40 | 12J1F-12045Z4R01 | NEW | 4.5 | 3.90 | 1.93 | 3 |

■ EXTENDED FLUTE END MILL SERIES 22J3F

Diameters 1.102"-1.500" **Cutting Edge Length** 1.10" to 3.00" **Insert Corner** .015", .031", .062", and .125"r

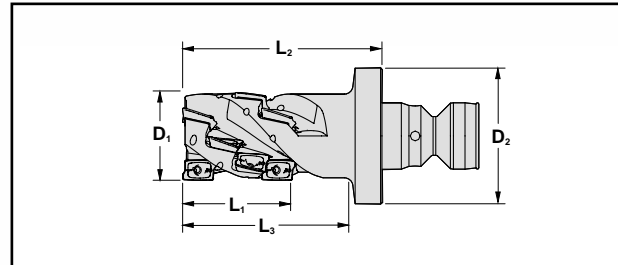


| D ₁ Nominal Dia. | Adaption | New Cutter Number | Old Cutter Number | L ₁ Max. Depth of Cut | L ₂ Extension Length | L ₃ Projection Length | D ₂ Flange Diameter | No. of Flutes Effective | Number of Inserts |
|-----------------------------------|----------|-------------------------|-------------------------|--|---------------------------------------|--|--------------------------------------|-------------------------------|-------------------------|
| 1.102 | SK40 | 22J3F-1102224R01 | NEW | 1.10 | 2.25 | 1.65 | 1.93 | 2 | 6 |
| 1.250 | SK40 | 22J3F-1202724R01 | NEW | 1.54 | 2.75 | 2.15 | 1.93 | 3 | 12 |
| 1.500 | SK40 | 22J3F-1503724R01 | NEW | 2.60 | 3.75 | 3.15 | 1.93 | 4 | 28 |

In side stations, use only .015"r to ensure overlap

■ EXTENDED FLUTE END MILL SERIES 22J3X

Diameters 1.000"-2.500" **Cutting Edge Length** 1.00" to 4.00" **Insert Corner** .015", .031", .062", and .125"r

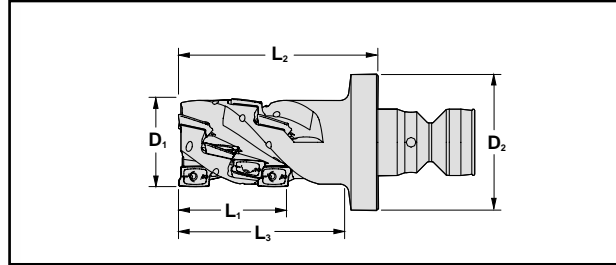


| D ₁ Nominal Dia. | Adaption | New Cutter Number | Old Cutter Number | L ₁ Max. Depth of Cut | L ₂ Extension Length | L ₃ Projection Length | D ₂ Flange Diameter | No. of Flutes Effective | Number of Inserts |
|-----------------------------------|----------|-------------------------|-------------------------|--|---------------------------------------|--|--------------------------------------|-------------------------------|-------------------------|
| 1.000* | SK40 | 22J3X-1002024R01 | NEW | 1.000 | 2.012 | 1.500 | 1.93 | 2 | 4 |
| 1.000 | SK40 | 22J3X-1002324R01 | NEW | 1.500 | 2.387 | 1.875 | 1.93 | 2 | 6 |
| 1.250 | SK40 | 22J3X-1202024R01 | NEW | 1.000 | 2.012 | 1.500 | 1.93 | 2 | 4 |
| 1.250 | SK40 | 22J3X-1202824R01 | NEW | 2.000 | 2.875 | 2.375 | 1.93 | 3 | 12 |
| 1.500 | SK40 | 22J3X-1502524R01 | NEW | 1.500 | 2.512 | 2.000 | 1.93 | 3 | 9 |
| 1.500 | SK40 | 22J3X-1502824R01 | NEW | 2.000 | 2.887 | 2.375 | 1.93 | 3 | 12 |
| 1.500* | SK50 | 22J3X-1503125R01 | NEW | 2.000 | 3.125 | 2.500 | 3.07 | 3 | 12 |
| 1.500 | SK40 | 22J3X-1503324R01 | NEW | 2.500 | 3.387 | 2.875 | 1.93 | 4 | 20 |
| 1.500 | SK50 | 22J3X-1504125R01 | NEW | 3.000 | 4.125 | 3.500 | 3.07 | 4 | 24 |
| 2.000 | SK40 | 22J3X-2002524R01 | NEW | 1.500 | 2.512 | 2.000 | 1.93 | 3 | 9 |
| 2.000 | SK40 | 22J3X-2003125R01 | NEW | 1.500 | 3.125 | 2.500 | 1.93 | 3 | 9 |
| 2.000 | SK50 | 22J3X-2004824R01 | NEW | 4.000 | 4.887 | 4.375 | 3.07 | 4 | 32 |
| 2.000 | SK40 | 22J3X-2005125R01 | NEW | 4.000 | 5.125 | 4.500 | 1.93 | 4 | 32 |
| 2.000 | SK40 | 22J3X-2003824R01 | NEW | 3.000 | 3.887 | 3.375 | 1.93 | 5 | 30 |
| 2.000* | SK50 | 22J3X-2005125R01 | NEW | 4.000 | 5.125 | 4.500 | 3.07 | 5 | 40 |
| 2.500* | SK50 | 22J3X-2503125R01 | NEW | 2.000 | 3.125 | 2.500 | 3.07 | 4 | 16 |
| 2.500 | SK50 | 22J3X-2504125R01 | NEW | 3.000 | 4.125 | 3.500 | 3.07 | 4 | 24 |
| 2.500 | SK50 | 22J3X-2504125R02 | NEW | 3.000 | 4.125 | 3.500 | 3.07 | 5 | 30 |

* Call for availability

■ EXTENDED FLUTE FULL EFFECTIVE END MILL SERIES 22J3E

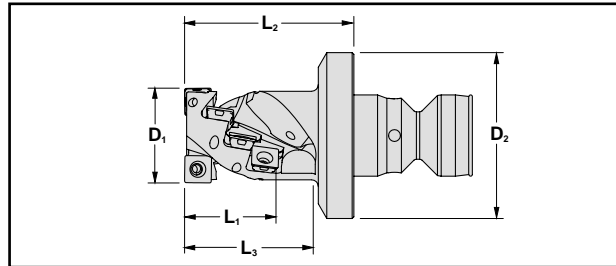
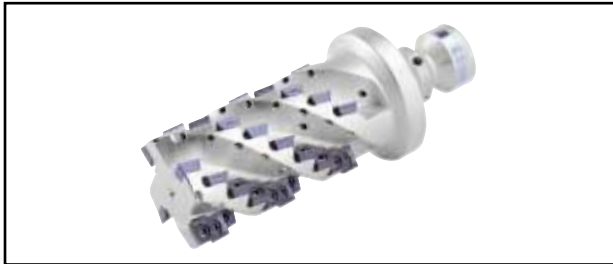
Diameters 1.500" to 3.000"
Max. Depth of Cut 2.26" to 4.42"
Insert Corner .031", .062", .093", .125"R



| D ₁ Nominal Diameter | New Cutter Number | Old Cutter Number | L ₁ Max. Depth of Cut | L ₂ Extension Length | L ₃ Projection Length | D ₂ Flange Diameter | No. of Flutes Effective | No. of Flutes Total | Number of Inserts |
|---------------------------------------|-------------------------|-------------------------|--|---------------------------------------|--|--------------------------------------|-------------------------------|---------------------------|-------------------------|
| 1.500 | 22J3E-15035Z5R01 | NEW | 2.26 | 3.55 | 2.85 | 3.07 | 2 | 2 | 8 |
| 2.000 | 22J3E-20035Z5R01 | NEW | 2.26 | 3.55 | 2.85 | 3.07 | 3 | 3 | 12 |
| 2.500 | 22J3E-25055Z5R01 | NEW | 4.42 | 5.55 | 4.85 | 3.07 | 4 | 4 | 32 |

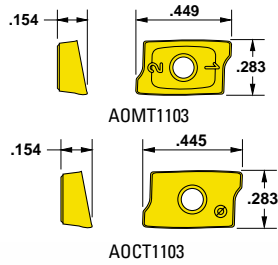
■ EXTENDED FLUTE FULL-EFFECTIVE END MILL SERIES 25J3E

Diameters 1.102" to 1.500"
Max. Depth of Cut 1.10" to 2.66"
Insert Corner .020"R



| D ₁ Nominal Diameter | New Cutter Number | Old Cutter Number | L ₁ Max. Depth of Cut | L ₂ Extension | L ₃ Projection Length | D ₂ Flange Diameter | No. of Flutes Effective | Number of Inserts |
|---------------------------------------|-------------------------|-------------------------|--|-----------------------------|--|--------------------------------------|-------------------------------|-------------------------|
| 1.102 | 25J3E-11020Z4R01 | NEW | 1.10 | 2.00 | 2.60 | 1.93 | 2 | 8 |
| 1.250 | 25J3E-12021Z4R02 | NEW | 1.34 | 2.12 | 2.72 | 1.93 | 3 | 15 |
| 1.500 | 25J3E-15036Z4R02 | NEW | 2.66 | 3.60 | 4.20 | 1.93 | 4 | 40 |

| INSERTS | Insert Number | Application | Corner | Grades | | | | | |
|---------|---------------|-------------|--------|--------|-----|------|------|------|------|
| | | | | IN | 30M | 2005 | 2030 | 2015 | 2040 |

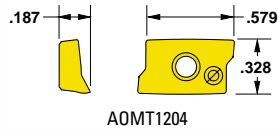


FOR 12J1F SERIES

| | | | | | | | | |
|----------------|------------------|-------|---|---|---|---|---|---|
| AOMT110304R | Helical positive | .015R | | ■ | ■ | ■ | ■ | ■ |
| AOCT110304FR-P | Ground/Polished | .015R | ■ | | | | | |
| AOMT110308R | Helical positive | .031R | | ■ | ■ | ■ | ■ | ■ |
| AOCT110308FR-P | Ground/Polished | .031R | ■ | | | | | |
| AOMT110316R | Helical positive | .062R | | ■ | ■ | ■ | ■ | ■ |
| AOMT110332R | Helical positive | .125R | | ■ | ■ | ■ | ■ | ■ |

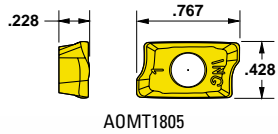
FOR 22J3F SERIES

| | | | | | | | | |
|----------------|------------------|--------|---|---|---|---|---|---|
| AOMT110304R | Helical positive | .015R | | ■ | ■ | ■ | ■ | ■ |
| AOCT110304FR-P | Ground/Polished | .015R | ■ | | | | | |
| AOMT110308R | Helical positive | .031R | | ■ | ■ | ■ | ■ | ■ |
| AOCT110308FR-P | Ground/Polished | .031R | ■ | | | | | |
| AOMT110316R | Helical positive | .062R | | ■ | ■ | ■ | ■ | ■ |
| AOMT110332R | Helical positive | .125R* | | ■ | ■ | ■ | ■ | ■ |



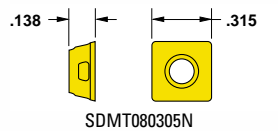
FOR 22J3X SERIES

| | | | | | | | | |
|--------------|------------------|-------|--|---|---|---|---|---|
| AOMT120408FR | Helical positive | .031R | | ■ | ■ | | | |
| AOMT120408R | Helical positive | .031R | | ■ | ■ | ■ | ■ | ■ |
| AOMT120416R | Helical positive | .062R | | ■ | ■ | | ■ | ■ |
| AOMT120432R | Helical positive | .125R | | ■ | ■ | | ■ | ■ |



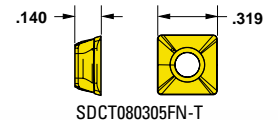
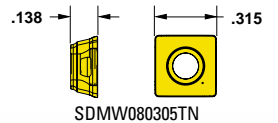
FOR 22J3E SERIES

| | | | | | | | | |
|-------------|------------------|-------|--|---|---|---|---|---|
| AOMT180508R | Helical positive | .031R | | ■ | ■ | ■ | ■ | ■ |
| AOMT180516R | Helical positive | .062R | | ■ | ■ | ■ | ■ | ■ |
| AOMT180524R | Helical positive | .093R | | ■ | | | ■ | ■ |
| AOMT180532R | Helical positive | .125R | | ■ | ■ | ■ | ■ | ■ |
| AOMT180564R | Helical positive | .250R | | ■ | | | ■ | ■ |



FOR 25J3E SERIES

| | | | | | | | | |
|----------------|-----------------|-------|---|---|---|---|---|---|
| SDMT080305N | Multi-purpose | .020R | | ■ | ■ | ■ | ■ | ■ |
| SDMW080305TN | Flat top | .020R | | ■ | ■ | ■ | ■ | ■ |
| SDCT080305FN-P | Ground/Polished | .020R | ■ | | | | | |



* Cutter body must be relieved to accept .125"r insert

Ingersoll Cutting Tools for the Americas

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