



# DIPOSPENTA™

MILLING PRODUCTS



**Cutter Series (Depth of Cut):**

Hi-Feed: 1DP1C / DP6C (.06)

Hi-Feed: 1DP1P / DP6P (.11)

65° Lead: DM6C (.13)

65° Lead: DM6P (.25)

**Insert Series:**

PNCU05

PNCU10

**Diameter Range:**

.750" - 4.00"

**Lead Angles:**

25° & 65°

**Adaptions:**

Cylindrical, Top-On  
& Face Mill

**Materials:**

Cast Iron, Steel

## Hi-Feed & 65° Mills with 10-Edge Economy!

In response to the market's demand for Hi-Feed cutters with economical multi-corner inserts while adding further value to utilize the same insert for deeper facing applications, Ingersoll announces DiPosPenta. Available with two different insert sizes, DiPosPenta incorporates 2-Side-Technology with positive-geometry-performance in mind. Whereas the Hi-Feed cutters aim for .06 & .12 DOC's respectively, the 65° Face mills combine the chip thinning benefits of 45° with deeper depth of 75°.

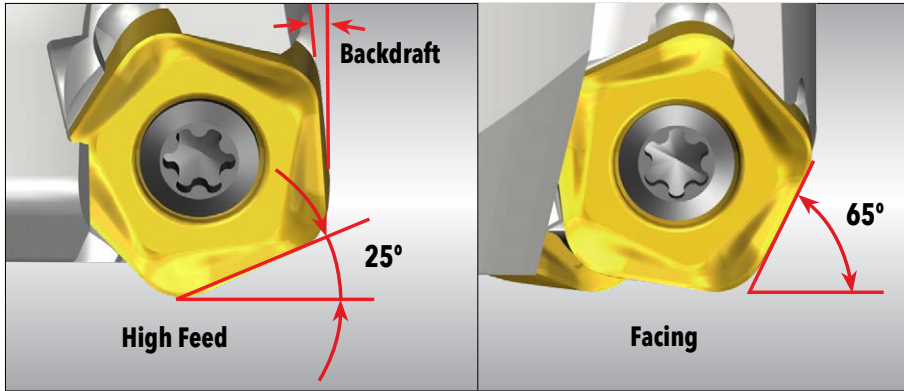
**Features & Benefits:**

- Same insert fits Hi-Feed & 65° mills
- Reinforced cutting edge boasts high feed rate potential
- Positive geometry promotes smooth machining
- Wide market range including Die/Mold and General Purpose!

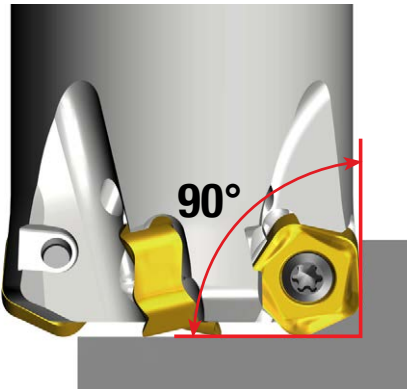


## FEATURES

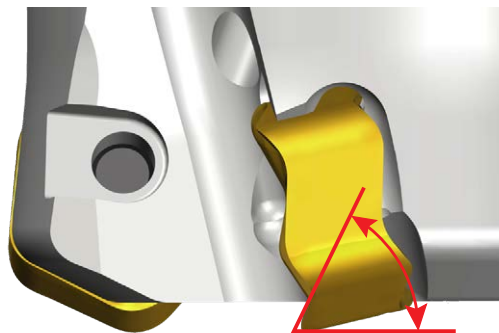
Same insert covers both high feed and facing applications



Lower cutting force in deep cavity machining (High Feed)

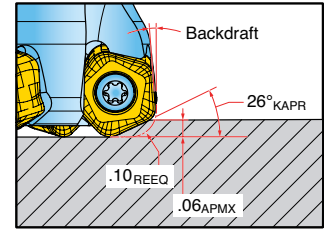
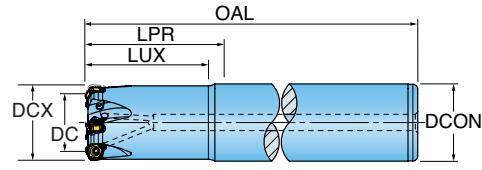
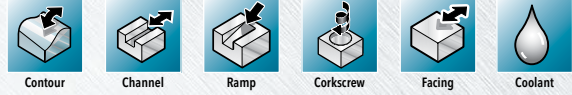


High positive rake angle for smooth machining (High Feed)



**DIPOSPENTA™ 05 SERIES 1DP1C (CYLINDRICAL SHANK STYLE)**

HI-FEED END MILL (5MM INSERT)

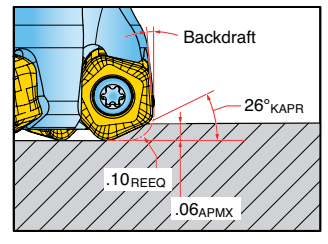
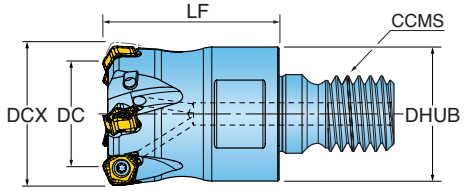
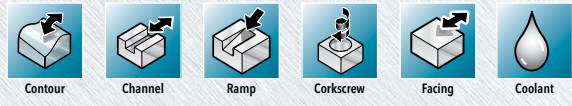


| Part Number      | DCX Cutting Dia. Max. | DC Cutting Dia. | LUX Usable Length Max. | LPR Protruding Length | OAL Overall Length | ZEFF Eff. Teeth | REEQ Program Radius Equivalent | DCON Shank Dia. | RMPX Ramp Angle Max. |
|------------------|-----------------------|-----------------|------------------------|-----------------------|--------------------|-----------------|--------------------------------|-----------------|----------------------|
| 1DP1C-07015S7R01 | 0.750                 | 0.431           | 1.50                   | 4.00                  | 6.00               | 3               | 0.100                          | 0.750           | 1.3                  |
| 1DP1C-10015S1R01 | 1.000                 | 0.677           | 1.50                   | 3.75                  | 6.00               | 4               | 0.100                          | 1.000           | 1.1                  |
| 1DP1C-12020S9R01 | 1.250                 | 0.927           | 2.00                   | 5.75                  | 8.00               | 5               | 0.100                          | 1.250           | 1                    |
| 1DP1C-15020S5R01 | 1.500                 | 1.177           | 2.00                   | 5.34                  | 8.00               | 6               | 0.100                          | 1.500           | 0.8                  |

\*Program like an end mill with .10" Corner Radius.

**DIPOSPENTA™ 05 SERIES 1DP1C (TOP-ON STYLE)**

HI-FEED MODULAR END MILL (5MM INSERT)



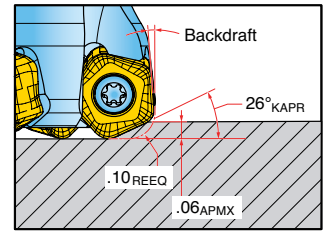
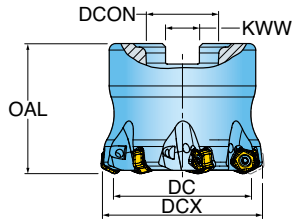
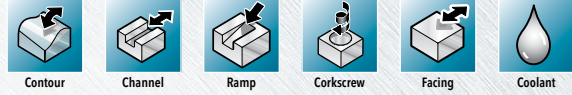
| Part Number      | DCX Cutting Dia. Max. | DC Cutting Diameter | LF Functional Length | ZEFF Effective Teeth | REEQ Program Radius Equivalent | CCMS Connection Code | RMPX Ramp Angle Max. |
|------------------|-----------------------|---------------------|----------------------|----------------------|--------------------------------|----------------------|----------------------|
| 1DP1C-07015X6R01 | 0.750                 | 0.431               | 1.50                 | 3                    | 0.100                          | TopOn M10            | 1.3                  |
| 1DP1C-10015X7R01 | 1.000                 | 0.677               | 1.50                 | 4                    | 0.100                          | TopOn M12            | 1.1                  |
| 1DP1C-12015X8R01 | 1.250                 | 0.927               | 1.50                 | 5                    | 0.100                          | TopOn M16            | 1                    |
| 1DP1C-15015X8R01 | 1.500                 | 1.177               | 1.50                 | 6                    | 0.100                          | TopOn M16            | 0.8                  |

\*Program like an end mill with .10" Corner Radius.



**DIOSPENTA™ 05 SERIES DP6C**

**HI-FEED FACE MILL (5MM INSERT)**

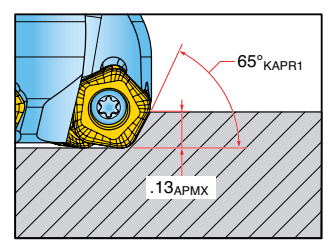
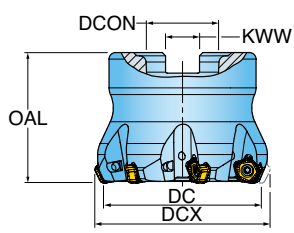
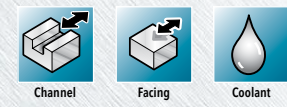


| Part Number | DCX Cutting Dia. Max. | DC Cutting Diameter | OAL Overall Length | ZEFF Effective Teeth | REEQ Program Radius Equivalent | DCON Bore Dia. | KWW Keyway | RMPX Ramp Angle Max. |
|-------------|-----------------------|---------------------|--------------------|----------------------|--------------------------------|----------------|------------|----------------------|
| DP6C-15R01  | 1.500                 | 1.177               | 1.57               | 6                    | 0.100                          | 0.500          | 0.25       | 0.8                  |
| DP6C-20R01  | 2.000                 | 1.677               | 1.57               | 7                    | 0.100                          | 0.750          | 0.31       | 0.7                  |
| DP6C-25R01  | 2.500                 | 2.177               | 1.57               | 8                    | 0.100                          | 0.750          | 0.31       | 0.6                  |

\*Programing Corner Radius: .10"R.

**DIOSPENTA™ 05 SERIES DM6C**

**65° FACE MILL (5MM INSERT)**



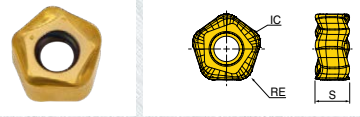
| Part Number | DCX Cutting Dia. Max. | DC Cutting Diameter | OAL Overall Length | ZEFF Effective Teeth | DCON Bore Dia. | KWW Keyway |
|-------------|-----------------------|---------------------|--------------------|----------------------|----------------|------------|
| DM6C-15R01  | 1.500                 | 1.65                | 1.570              | 6                    | 0.500          | 0.250      |
| DM6C-20R01  | 2.000                 | 2.15                | 1.570              | 7                    | 0.750          | 0.312      |
| DM6C-25R01  | 2.500                 | 2.65                | 1.570              | 8                    | 0.750          | 0.312      |
| DM6C-30R01  | 3.000                 | 3.15                | 1.750              | 9                    | 1.000          | 0.375      |



**DIOSPENTA™ 05 INSERT**



**PNCU05\_M**



| Part Number   | Application   | RE<br>Corner<br>Radius | IC<br>Inscribed<br>Circle Dia. | S<br>Thickness | NOI<br>Number of Indexes | IH<br>Insert<br>Hand | Grade | IN2505 | IN2530 |
|---------------|---------------|------------------------|--------------------------------|----------------|--------------------------|----------------------|-------|--------|--------|
| PNCU050315R-M | Multi-Purpose | 0.059                  | 0.279                          | 0.149          | 10                       | Right                |       | •      | •      |

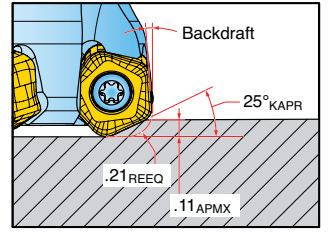
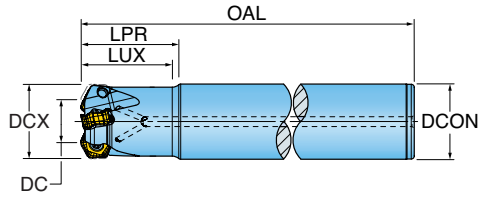
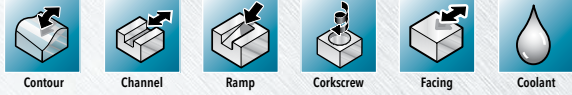
**DIOSPENTA™ 05 HARDWARE**

|                         | Screw       | Torx Driver | Retention Bolt | <b>**OPTIONAL**</b><br>Coolant Retention Bolt | <b>**OPTIONAL**</b><br>Torque Driver Handle | <b>**OPTIONAL**</b><br>Preset Torque Bit | <b>**OPTIONAL**</b><br>Torque Driver Bit | <b>**OPTIONAL**</b><br>Wrench |
|-------------------------|-------------|-------------|----------------|---|---|--|--|-------------------------------|
| <b>1DP1C-0701557R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>1DP1C-1001551R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>1DP1C-1202059R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>1DP1C-1502055R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>1DP1C-07015X6R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | 615MM                         |
| <b>1DP1C-10015X7R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | 617MM                         |
| <b>1DP1C-12015X8R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | 622MM                         |
| <b>1DP1C-15015X8R01</b> | SM25-060-90 | DS-TP07S    | -              | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | 622MM                         |
| <b>DP6C-15R01</b>       | SM25-060-90 | DS-TP07S    | SD-04-46       | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DP6C-20R01</b>       | SM25-060-90 | DS-TP07S    | SD-06-46       | SD-06-89                                      | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DP6C-25R01</b>       | SM25-060-90 | DS-TP07S    | SD-06-46       | SD-06-89                                      | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DM6C-15R01</b>       | SM25-060-90 | DS-TP07S    | SD-04-46       | -   | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DM6C-20R01</b>       | SM25-060-90 | DS-TP07S    | SD-06-46       | SD-06-89                                      | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DM6C-25R01</b>       | SM25-060-90 | DS-TP07S    | SD-06-46       | SD-06-89                                      | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |
| <b>DM6C-30R01</b>       | SM25-060-90 | DS-TP07S    | SD-08-46       | SD08-C9                                       | DS-A00-.25-S                                | DT-08-.25                                | DS-TP07B1                                | -                             |



**DIOSPENTA™ 10 SERIES 1DP1P (CYLINDRICAL SHANK STYLE)**

HI-FEED END MILL (10MM INSERT)

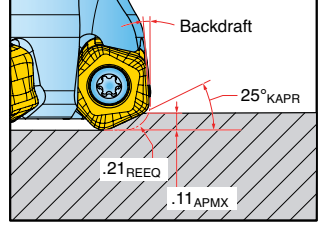
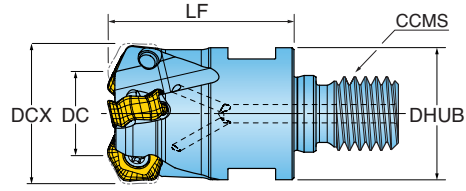
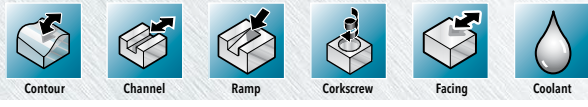


| Part Number      | DCX Cutting Dia. Max. | DC Cutting Dia. | APMX Depth of Cut Max. | LUX Usable Length Max. | LPR Protruding Length | OAL Overall Length | ZEFF Eff. Teeth | REEQ Program Radius Equivalent | DCON Shank Dia. | RMPX Ramp Angle Max. |
|------------------|-----------------------|-----------------|------------------------|------------------------|-----------------------|--------------------|-----------------|--------------------------------|-----------------|----------------------|
| 1DP1P-15020S5R01 | 1.500                 | 0.850           | 0.118                  | 2.00                   | 5.34                  | 8.00               | 3               | 0.210                          | 1.500           | 2.2                  |

\*Program like an end mill with .21" Corner Radius.

**DIOSPENTA™ 10 SERIES 1DP1P (TOP•ON STYLE)**

HI-FEED MODULAR END MILL (10MM INSERT)



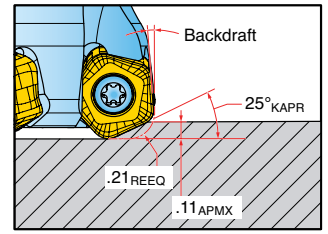
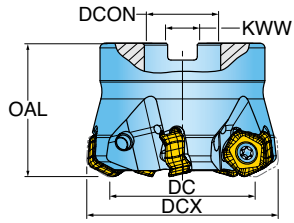
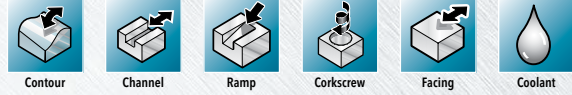
| Part Number      | DCX Cutting Dia. Max. | DC Cutting Dia. | APMX Depth of Cut Max. | LF Functional Length | ZEFF Eff. Teeth | REEQ Program Radius Equivalent | DHUB Hub Dia. | CCMS Connection Code | RMPX Ramp Angle Max. |
|------------------|-----------------------|-----------------|------------------------|----------------------|-----------------|--------------------------------|---------------|----------------------|----------------------|
| 1DP1P-15020X9R01 | 1.500                 | 0.850           | 0.118                  | 2.00                 | 3               | 0.210                          | 1.41          | TopOn M20            | 2.2                  |

\*Program like an end mill with .21" Corner Radius.



**DIOSPENTA™ 10 SERIES DP6P**

**HI-FEED FACE MILL (10MM INSERT)**

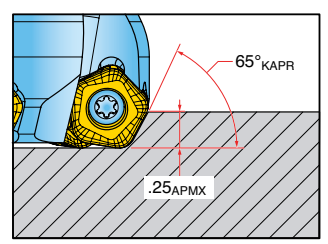
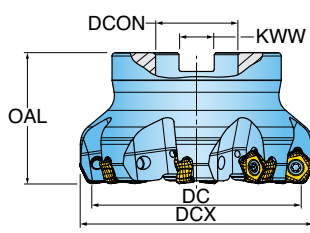


| Part Number | DCX Cutting Dia. Max. | DC Cutting Diameter | OAL Overall Length | ZEFF Effective Teeth | REEQ Program Radius Equivalent | DCON Bore Dia. | KWW Keyway | RMPX Ramp Angle Max. |
|-------------|-----------------------|---------------------|--------------------|----------------------|--------------------------------|----------------|------------|----------------------|
| DP6P-20R01  | 2.000                 | 1.350               | 1.57               | 4                    | 0.210                          | 0.750          | 0.31       | 2.5                  |
| DP6P-25R01  | 2.500                 | 1.850               | 1.75               | 5                    | 0.210                          | 1.000          | 0.38       | 1.6                  |
| DP6P-30R01  | 3.000                 | 2.350               | 1.75               | 6                    | 0.210                          | 1.000          | 0.38       | 1.2                  |

\* Programing Corner Radius: .21"R.

**DIOSPENTA™ 10 SERIES DM6P**

**65° FACE MILL (10MM INSERT)**



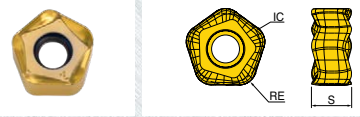
| Part Number | DC Cutting Diameter | DCX Cutting Dia. Max. | OAL Overall Length | ZEFF Effective Teeth | DCON Bore Dia. | KWW Keyway |
|-------------|---------------------|-----------------------|--------------------|----------------------|----------------|------------|
| DM6P-20R01  | 2.000               | 2.280                 | 1.750              | 4                    | 1.000          | 0.375      |
| DM6P-25R01  | 2.500               | 2.780                 | 1.750              | 5                    | 1.000          | 0.375      |
| DM6P-30R01  | 3.000               | 3.280                 | 1.750              | 6                    | 1.000          | 0.375      |
| DM6P-40R01  | 4.000               | 4.280                 | 2.375              | 8                    | 1.500          | 0.625      |



**DIOSPENTA™ 10 INSERT**



PNCU10\_M



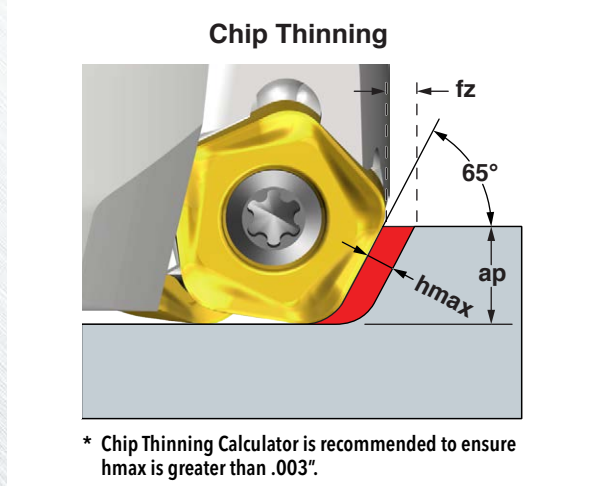
| Part Number   | Application   | RE<br>Corner<br>Radius | IC<br>Inscribed<br>Circle Dia. | S<br>Thickness | NOI<br>Number of Indexes | IH<br>Insert<br>Hand | Grade | IN2505 | IN2530 |
|---------------|---------------|------------------------|--------------------------------|----------------|--------------------------|----------------------|-------|--------|--------|
| PNCU100630R-M | Multi-Purpose | 0.118                  | 0.559                          | 0.303          | 10                       | Right                |       | •      | •      |

**DIOSPENTA™ 10 HARDWARE**

|                         | Screw       | Driver Handle | Torx Driver Blade | Retention Bolt | Retention Bolt | Torque Driver Handle | Preset Torque Bit | Torque Driver Bit | Wrench |
|-------------------------|-------------|---------------|-------------------|----------------|----------------|----------------------|-------------------|-------------------|--------|
| <b>1DP1P-15020S5R01</b> | SM50-127-10 | DS-A00T       | DS-T206B          | -              | -              | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>1DP1P-15020X9R01</b> | SM50-127-10 | DS-A00T       | DS-T206B          | -              | -              | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | 630MM  |
| <b>DP6P-20R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-06-46       | SD-06-89       | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DP6P-25R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-08-47       | SD08-C9        | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DP6P-30R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-08-47       | SD08-C9        | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DM6P-20R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-08-47       | SD08-C9        | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DM6P-25R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-08-47       | SD08-C9        | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DM6P-30R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-08-47       | SD08-C9        | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |
| <b>DM6P-40R01</b>       | SM50-127-10 | DS-A00T       | DS-T206B          | SD-12-82       | SD-12-99       | DS-A00-.25-T         | DT-44-.25         | DS-T20B1          | -      |



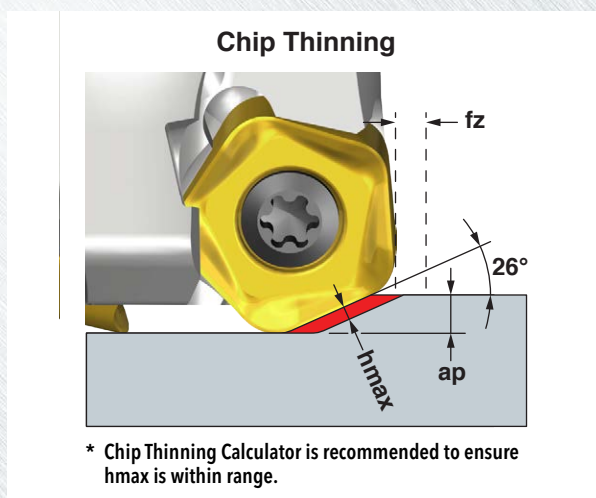
**DIOSPENTA™ 05 OPERATING GUIDELINES (65°)**



| Materials |                          |                   |                             | Vc<br>Cutting Speed<br>SFM | fz*<br>Feed/Tooth<br>(inch) | ap<br>Recommended<br>Axial Depth of<br>Cut (inch) | Harder ..... Tougher |        | Coolant |
|-----------|--------------------------|-------------------|-----------------------------|----------------------------|-----------------------------|---|----------------------|--------|---------|
| ISO       | Mat'l Group<br>#VDI 3323 | Type              | Examples                    |                            |                             |   | IN2505               | IN2530 |         |
| <b>P</b>  | 1 thru 5                 | Non-alloy Steel   | 1018, A36, 1045, A572, 1070 | 400-1000                   | .004-.008                   | .040-.120   | 2                    | 1      | No      |
|           | 6 thru 9                 | Low-alloy Steel   | 4140, 4340, P20, 8620, 300M | 350-700                    |                             |   |                      |        |         |
|           | 10, 11                   | High-alloy Steel  | H13, A2, D2, M2, T1         | 300-600                    |                             |   |                      |        |         |
| <b>K</b>  | 15 thru 16               | Gray Cast Iron    | CLS. 20, 30, 45             | 500-1000                   | .004-.008                   | .040-.120   | 1                    | 2      | No      |
|           | 17 thru 20               | Nodular Cast Iron | 60-40-18, 100-70-03         | 400-800                    |                             |   |                      |        |         |

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

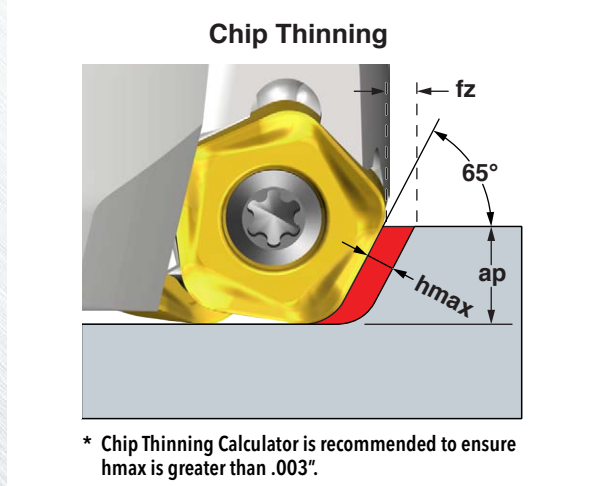
**DIOSPENTA™ 05 OPERATING GUIDELINES (HI-FEED)**



| ISO      | Materials                |                   |                             | Vc<br>Cutting<br>Speed<br>SFM | fz*<br>Feed/Tooth<br>(inch) | ap<br>Rec. Axial<br>Depth of Cut<br>(inch) | hmax*<br>Chip<br>Thickness<br>(inch) | Harder Tougher |        | Coolant |
|----------|--------------------------|-------------------|-----------------------------|-------------------------------|-----------------------------|--|--------------------------------------|----------------|--------|---------|
|          | Mat'l Group<br>#VDI 3323 | Type              | Examples                    |                               |                             |  |                                      | IN2505         | IN2530 |         |
| <b>P</b> | 1 thru 5                 | Non-alloy Steel   | 1018, A36, 1045, A572, 1070 | 400-1000                      | .008-.030                   | .008-.060                                  | .003-.013                            | 2              | 1      | No      |
|          | 6 thru 9                 | Low-alloy Steel   | 4140, 4340, P20, 8620, 300M | 350-700                       |                             |  |                                      |                |        |         |
|          | 10, 11                   | High-alloy Steel  | H13, A2, D2, M2, T1         | 300-600                       |                             |  |                                      |                |        |         |
| <b>K</b> | 15 thru 16               | Gray Cast Iron    | CLS. 20, 30, 45             | 500-1000                      | .008-.030                   | .008-.060                                  | .003-.013                            | 1              | 2      | No      |
|          | 17 thru 20               | Nodular Cast Iron | 60-40-18, 100-70-03         | 400-800                       |                             |  |                                      |                |        |         |

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

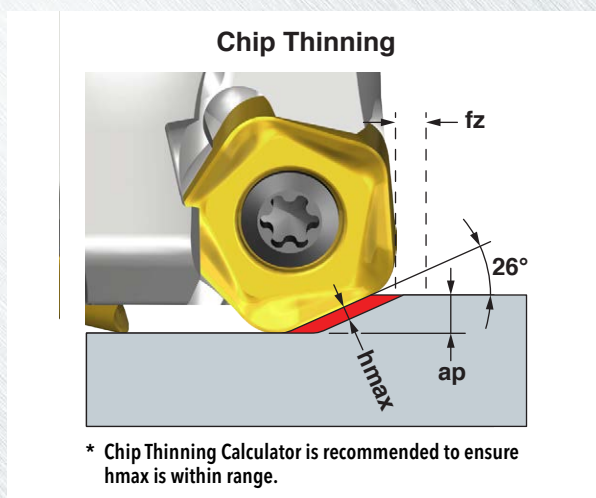
**DIOSPENTA™ 10 OPERATING GUIDELINES (65°)**



| Materials |                          |                   |                             | Vc<br>Cutting Speed<br>SFM | fz*<br>Feed/Tooth<br>(inch) | ap<br>Recommended<br>Axial Depth of<br>Cut (inch) | Harder ..... Tougher |        | Coolant |
|-----------|--------------------------|-------------------|-----------------------------|----------------------------|-----------------------------|---|----------------------|--------|---------|
| ISO       | Mat'l Group<br>#VDI 3323 | Type              | Examples                    |                            |                             |   | IN2505               | IN2530 |         |
| <b>P</b>  | 1 thru 5                 | Non-alloy Steel   | 1018, A36, 1045, A572, 1070 | 400-1000                   | .004-.010                   | .060-.200   | 2                    | 1      | No      |
|           | 6 thru 9                 | Low-alloy Steel   | 4140, 4340, P20, 8620, 300M | 350-700                    |                             |   |                      |        |         |
|           | 10, 11                   | High-alloy Steel  | H13, A2, D2, M2, T1         | 300-600                    |                             |   |                      |        |         |
| <b>K</b>  | 15 thru 16               | Gray Cast Iron    | CLS. 20, 30, 45             | 500-1000                   | .004-.010                   | .060-.200   | 1                    | 2      | No      |
|           | 17 thru 20               | Nodular Cast Iron | 60-40-18, 100-70-03         | 400-800                    |                             |   |                      |        |         |

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

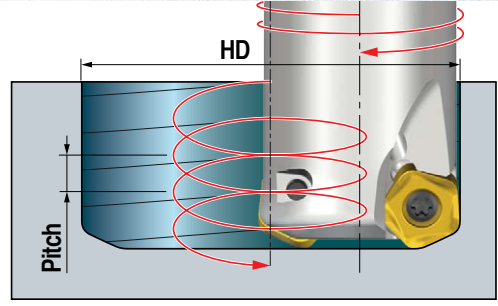
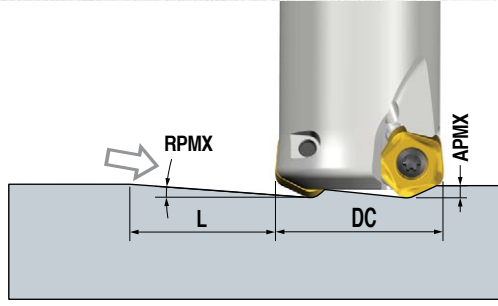
**DIOSPENTA™ 10 OPERATING GUIDELINES (HI-FEED)**



| ISO      | Materials                |                   |                             | Vc<br>Cutting<br>Speed<br>SFM | fz*<br>Feed/Tooth<br>(inch) | ap<br>Rec. Axial<br>Depth of Cut<br>(inch) | hmax*<br>Chip<br>Thickness<br>(inch) | Harder Tougher |        | Coolant |
|----------|--------------------------|-------------------|-----------------------------|-------------------------------|-----------------------------|--|--------------------------------------|----------------|--------|---------|
|          | Mat'l Group<br>#VDI 3323 | Type              | Examples                    |                               |                             |  |                                      | IN2505         | IN2530 |         |
| <b>P</b> | 1 thru 5                 | Non-alloy Steel   | 1018, A36, 1045, A572, 1070 | 400-1000                      | .008-.035                   | .008-.080                                  | .003-.015                            | 2              | 1      | No      |
|          | 6 thru 9                 | Low-alloy Steel   | 4140, 4340, P20, 8620, 300M | 350-700                       |                             |  |                                      |                |        |         |
|          | 10, 11                   | High-alloy Steel  | H13, A2, D2, M2, T1         | 300-600                       |                             |  |                                      |                |        |         |
| <b>K</b> | 15 thru 16               | Gray Cast Iron    | CLS. 20, 30, 45             | 500-1000                      | .008-.035                   | .008-.080                                  | .003-.015                            | 1              | 2      | No      |
|          | 17 thru 20               | Nodular Cast Iron | 60-40-18, 100-70-03         | 400-800                       |                             |  |                                      |                |        |         |

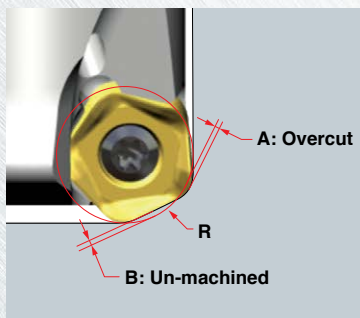
Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

**DIOSPENTA™ 05 RAMP DATA USING SERIES PNCU05 (HI-FEED)**



| DC Cutter Diameter | Straight Ramp        |                        |                    | Helical Ramp          |                       |            |
|--------------------|----------------------|------------------------|--------------------|-----------------------|-----------------------|------------|
|                    | RMPX Ramp Angle Max. | APMX Depth of Cut Max. | L Ramp Length Min. | HD Hole Diameter Min. | HD Hole Diameter Max. | Pitch Max. |
| 0.750              | 1.2                  | .060                   | 2.5                | 1.23                  | 1.50                  | .027       |
|                    |                      |                        |                    |                       |                       | .035       |
| 1.000              | 1.0                  | .060                   | 3.3                | 1.73                  | 2.00                  | .031       |
|                    |                      |                        |                    |                       |                       | .035       |
| 1.250              | 1.0                  | .060                   | 3.3                | 2.23                  | 2.50                  | .039       |
|                    |                      |                        |                    |                       |                       | .043       |
| 1.500              | 0.8                  | .060                   | 3.9                | 2.73                  | 3.00                  | .043       |
|                    |                      |                        |                    |                       |                       | .047       |
| 2.000              | 0.7                  | .060                   | 4.8                | 3.73                  | 4.00                  | .047       |
|                    |                      |                        |                    |                       |                       | .051       |
| 2.500              | 0.6                  | .060                   | 5.1                | 4.73                  | 5.00                  | .051       |
|                    |                      |                        |                    |                       |                       | .055       |

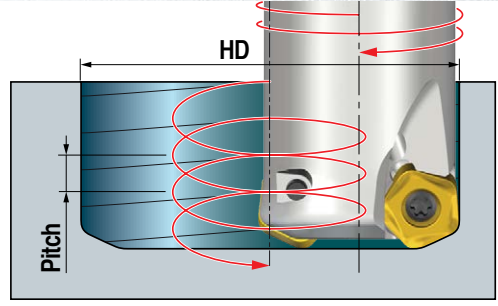
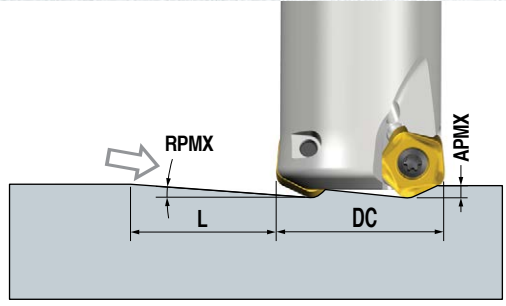
**DIOSPENTA™ 05 PROGRAMMING DATA: PNCU05 (HI-FEED)**



| Insert Number | R Program | A Over cut | B Un-machined |
|---------------|-----------|------------|---------------|
| PNCU 05       | .100      | 0          | .032          |
|               | .106      | 0          | .030          |
|               | .118      | .001       | .026          |

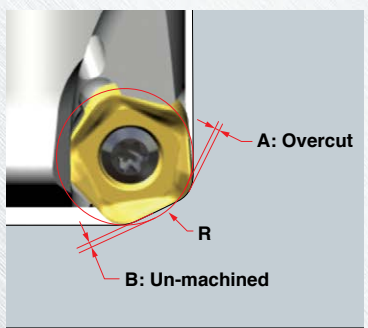
**Yellow background: Recommended program 'R'**

**DIOSPENTA™ 10 RAMP DATA USING SERIES PNCU10 (HI-FEED)**



| DC Cutter Diameter | Straight Ramp        |                        |                    | Helical Ramp          |                       |            |
|--------------------|----------------------|------------------------|--------------------|-----------------------|-----------------------|------------|
|                    | RMPX Ramp Angle Max. | APMX Depth of Cut Max. | L Ramp Length Min. | HD Hole Diameter Min. | HD Hole Diameter Max. | Pitch Max. |
| 1.500              | 1.5                  | .118                   | 4.3                | 2.33                  | 3.00                  | .067       |
|                    |                      |                        |                    |                       |                       | .086       |
| 2.000              | 1.9                  | .118                   | 3.4                | 3.33                  | 4.00                  | .110       |
|                    |                      |                        |                    |                       |                       | .118       |
| 2.500              | 1.7                  | .118                   | 3.9                | 4.33                  | 5.00                  | .118       |
|                    |                      |                        |                    |                       |                       | .118       |
| 3.000              | 1.5                  | .118                   | 4.5                | 5.33                  | 6.00                  | .118       |
|                    |                      |                        |                    |                       |                       | .118       |

**DIOSPENTA™ 10 PROGRAMMING DATA: PNCU10 (HI-FEED)**



| Insert Number | R Program | A Over cut | B Un-machined |
|---------------|-----------|------------|---------------|
| PNCU 10       | .216      | 0          | .057          |
|               | .236      | .003       | .050          |
|               | .256      | .008       | .044          |

**Yellow background**: Recommended program 'R'