



**Cutter Styles:**  
Face Mill - DE6H  
End Mill - 1DE1H  
Top-on - 1DE1H

**Insert Styles:**  
RNLU1205MON-M  
RNLU1205MON-S

**Grades:**  
IN2505  
IN2530  
IN6530

**Applications:**  
Die & Mold  
Aero Space  
General Purpose



## Economical Double Sided Insert For Die & Mold

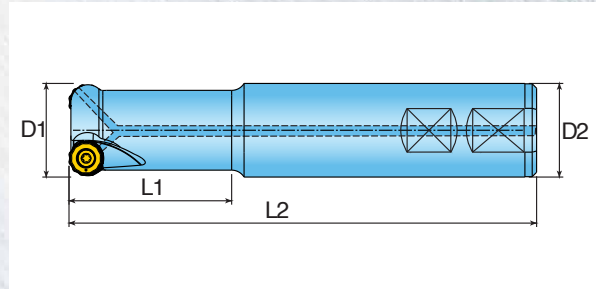
### Features and Benefits

- Anti-Rotation Insert Clamping System
- Two Different Double sided Insert Designs
  - Round
  - Serrated
- Free Cutting Geometry
- Serrated Style Insert for:
  - Extended Reach Applications
  - High Temperature Alloys
  - Increased Stability
  - Chip Management
- Through The Tool Coolant
- Maximum Recommend DOC 6mm



# FORMMASTER<sup>®</sup> PROFILE SERIES 1DE1H

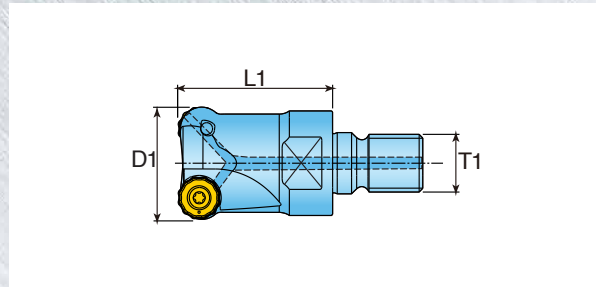
## BUTTON ENDMILL WITH 8-16 INDEXES



| Cutter Number    | D1<br>Nominal<br>Diameter | L1<br>Extension<br>Length | Number<br>of Inserts | L2<br>Overall<br>Length | D2<br>Shank<br>Size/Style |
|------------------|---------------------------|---------------------------|----------------------|-------------------------|---------------------------|
| 1DE1H-1202781R01 | 1.250                     | 2.750                     | 3                    | 5.000                   | 1.250 Weldon              |
| 1DE1H-1202259R01 | 1.250                     | 2.250                     | 3                    | 6.000                   | 1.250 Cylindrical         |
| 1DE1H-1202059R01 | 1.250                     | 2.000                     | 3                    | 9.000                   | 1.250 Cylindrical         |
| 1DE1H-1502786R01 | 1.500                     | 2.750                     | 4                    | 5.410                   | 1.500 Weldon              |
| 1DE1H-1502255R01 | 1.500                     | 2.250                     | 4                    | 6.000                   | 1.500 Cylindrical         |
| 1DE1H-1502055R01 | 1.500                     | 2.000                     | 4                    | 9.000                   | 1.500 Cylindrical         |

# FORMMASTER<sup>®</sup> PROFILE SERIES 1DE1H (TOP•ON STYLE)

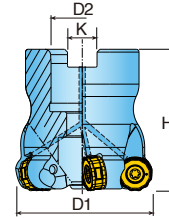
## BUTTON ENDMILL WITH 8-16 INDEXES



| Cutter Number    | D1<br>Nom. Dia. | L1<br>Extension<br>Length | T1<br>Thread<br>Size | Number<br>of Inserts |
|------------------|-----------------|---------------------------|----------------------|----------------------|
| 1DE1H-12015X8R01 | 1.250           | 1.500                     | M16                  | 3                    |
| 1DE1H-15015X8R01 | 1.500           | 1.500                     | M16                  | 4                    |

# FORMMASTER<sup>®</sup> PROFILE SERIES DE6H

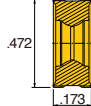
## BUTTON FACEMILL WITH 8-16 INDEXES



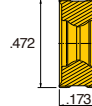
| Cutter Number | D1<br>Nominal<br>Diameter | Number<br>of Inserts | H<br>Height | D2<br>Bore<br>Diameter | K<br>Keyway |
|---------------|---------------------------|----------------------|-------------|------------------------|-------------|
| DE6H-20R01    | 2.000                     | 5                    | 1.750       | 0.750                  | 0.312       |
| DE6H-25R01    | 2.500                     | 6                    | 1.750       | 0.750                  | 0.312       |
| DE6H-30R01    | 3.000                     | 7                    | 1.750       | 1.000                  | 0.375       |

## INSERTS

### RNLU1205MON-M



### RNLU1205MON-S



| Part Number     | Applications          | Grade | Grade  |        |        |  |  |  |  |  |
|-----------------|-----------------------|-------|--------|--------|--------|--|--|--|--|--|
|                 |                       |       | IN6530 | IN2530 | IN2505 |  |  |  |  |  |
| RNLU1205MON-M*  | Standard - 6.000 mm R |       | X      | X      | X      |  |  |  |  |  |
| RNLU1205MON-S** | Serrated - 6.000 mm R |       | X      | X      | X      |  |  |  |  |  |

\*16 Indexes (Achieved with DOC .070" or less.)

\*\*8 Indexes

## HARDWARE



Screw



Driver

SM40-110-00

DS-T15T



| FormMaster R - Series 1DE1H, DE6H |                                       |           |                | Feed per Insert |             | IN2505 | IN6530 | IN2530 | Coolant |
|-----------------------------------|---------------------------------------|-----------|----------------|-----------------|-------------|--------|--------|--------|---------|
| Material                          | Brinnell Hardness                     | SFM       | RNLU1205 MON-S | RNLU1205 MON-M  |             |        |        |        |         |
| Cast Iron                         | Gray                                  | 150 - 250 | 500 - 800      | .007 - .020     | .015 - .035 | 2      | 1      |        | No      |
|                                   | Nodular                               |           | 450 - 800      |                 |             |        |        |        |         |
| Steel                             | Low Carbon 1018, 8620                 | 150 - 250 | 500 - 700      | .007 - .020     | .015 - .035 | 1      | 3      | 2      | No      |
|                                   | High Carbon F-6180                    | 250 - 400 | 450 - 500      |                 |             |        |        |        |         |
|                                   | Alloyed Steel 4140                    | 150 - 300 |                |                 |             |        |        |        |         |
|                                   | Tool Steel P20 - H13                  | Up to 300 |                |                 |             |        |        |        |         |
| Stainless Steel                   | 300 Series, 304, 316                  | Up to 320 | 250 - 500      | .005 - .015     | .010 - .020 | 2      | 3      | 1      | Yes     |
|                                   | 400 Series 15-5 PH, 17-4 PH           |           |                |                 |             |        |        |        |         |
|                                   | 13-8 PH                               |           |                |                 |             |        |        |        |         |
| Nickel Alloys                     | Inconel 600, 706, 718, 903, Hastelloy | -         | 50 - 250       | .003 - .015     | .003 - .012 | 2      | 3      | 1      | Yes     |
| Titanium                          | 6AL-4V                                | -         | 50 - 250       | .003 - .008     | .003 - .008 | 2      |        | 1      | Yes     |

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.

