



**DEEPTRIOMC™ & DEEPTRIOGD™**

**OPERATING PARAMETERS - DT\* CHIP BREAKER**

\*NOTE: DT-P inserts available ONLY for N (non-ferrous) ISO category; DT inserts available for all categories noted below.

| ISO | Material | Condition                          | Speed (SFM) | Feed (inch/rev) Drill Diameter (inch) |                                |                          |                              |                               |                                |
|-----|----------|------------------------------------|-------------|---------------------------------------|--------------------------------|--------------------------|------------------------------|-------------------------------|--------------------------------|
|     |          |                                    |             | .394-.465"<br>(10-11.8 mm)            | .466-.551"<br>(11.81-13.99 mm) | .552-.709"<br>(14-18 mm) | .710-1.260"<br>(18.01-32 mm) | 1.261-1.575"<br>(32.01-40 mm) |                                |
| P   | 1        | Low Carbon Steels (C <0.3)         | 262-459     | .002-.003                             | .002-.004                      | .002-.005                | .003-.006                    | .004-.010                     |                                |
|     | 2        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 3        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 4        | Carbon Steels (C >0.3)             |             | .002-.006                             | .002-.006                      | .003-.007                | .003-.008                    | .004-.012                     |                                |
|     | 5        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 6        | Low Alloy Steels                   |             | .002-.003                             | .002-.004                      | .002-.005                | .003-.006                    | .004-.010                     |                                |
|     | 7        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 8        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 9        |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 10       | Alloy Steels                       |             | .002-.006                             | .002-.006                      | .003-.007                | .003-.008                    | .004-.012                     |                                |
|     | 11       |                                    |             |                                       |                                |                          |                              |                               |                                |
| M   | 12       | Stainless Steels (Ferritic)        | 197-328     | .002-.003                             | .002-.004                      | .002-.004                | .002-.005                    | .004-.006                     |                                |
|     | 13       | Stainless Steels (Martensitic)     |             |                                       |                                |                          |                              |                               |                                |
|     | 14       | Stainless Steels (Austenitic)      |             |                                       |                                |                          |                              |                               |                                |
| K   | 15       | Grey Cast Iron                     | 262-459     | .002-.008                             | .002-.010                      | .002-.010                | .002-.010                    | .002-.012                     |                                |
|     | 16       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 17       | Nodular Cast Iron                  |             |                                       |                                |                          |                              |                               |                                |
|     | 18       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 19       | Malleable Cast Iron                |             |                                       |                                |                          |                              |                               |                                |
| 20  |          |                                    |             |                                       |                                |                          |                              |                               |                                |
| N*  | 21       | Aluminum Alloy Forging             | 328-656     | .002-.007                             | .002-.008                      | .003-.009                | .003-.009                    | .004-.012                     |                                |
|     | 22       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 23       | Aluminum Alloy Casting             |             |                                       |                                |                          |                              |                               |                                |
|     | 24       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 25       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 26       | Copper Alloy                       |             |                                       |                                |                          |                              |                               |                                |
|     | 27       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 28       | Non-Metallic                       |             |                                       |                                |                          |                              |                               |                                |
|     | 29       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 30       |                                    |             |                                       |                                |                          |                              |                               |                                |
| S   | 31       | High Temp Alloy, Inconel 718, etc. | 66-164      | .002-.003                             | .002-.003                      | .002-.003                | .002-.004                    | .002-.005                     |                                |
|     | 32       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 33       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 34       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 35       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 36       |                                    |             |                                       |                                |                          |                              |                               | Titanium Alloy, Ti-Al-4V, etc. |
|     | 37       |                                    |             |                                       |                                |                          |                              |                               |                                |
| H   | 38       | Hardened Steel >40HRC              | 164-328     | .002-.003                             | .002-.003                      | .002-.003                | .002-.004                    | .002-.005                     |                                |
|     | 39       |                                    |             |                                       |                                |                          |                              |                               |                                |
|     | 40       |                                    |             |                                       |                                |                          |                              |                               | Chilled Cast Iron              |
|     | 41       |                                    |             |                                       |                                |                          |                              |                               | Cast Iron-Hardened             |



**DEEPTRIOMC™ & DEEPTRIOGD™**

**OPERATING PARAMETERS - ML CHIP BREAKER**

| ISO      | Material | Condition                          | Speed (SFM) | Feed (inch/rev) Drill Diameter (inch) |                             |                       |                           |                            |                                |
|----------|----------|------------------------------------|-------------|---------------------------------------|-----------------------------|-----------------------|---------------------------|----------------------------|--------------------------------|
|          |          |                                    |             | .394-.465" (10-11.8 mm)               | .466-.551" (11.81-13.99 mm) | .552-.709" (14-18 mm) | .710-1.260" (18.01-32 mm) | 1.261-1.575" (32.01-40 mm) |                                |
| <b>P</b> | 1        | Low Carbon Steels (C <0.3)         | 164-328     | NA                                    | NA                          | .001-.004             | .001-.004                 | .001-.004                  |                                |
|          | 2        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 3        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 4        | Carbon Steels (C>0.3)              |             | NA                                    | NA                          | .001-.004             | .001-.005                 | .001-.005                  |                                |
|          | 5        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 6        | Low Alloy Steels                   |             | NA                                    | NA                          | .001-.005             | .003-.004                 | .001-.004                  |                                |
|          | 7        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 8        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 9        |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 10       | Alloy Steels                       |             | NA                                    | NA                          | .001-.004             | .001-.005                 | .001-.005                  |                                |
|          | 11       |                                    |             |                                       |                             |                       |                           |                            |                                |
| <b>M</b> | 12       | Stainless Steels (Ferritic)        | 164-328     | NA                                    | NA                          | .001-.002             | .001-.002                 | .001-.004                  |                                |
|          | 13       | Stainless Steels (Martensitic)     |             |                                       |                             |                       |                           |                            |                                |
|          | 14       | Stainless Steels (Austenitic)      |             |                                       |                             |                       |                           |                            |                                |
| <b>K</b> | 15       | Grey Cast Iron                     | 164-328     | NA                                    | NA                          | .001-.006             | .002-.005                 | .001-.006                  |                                |
|          | 16       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 17       | Nodular Cast Iron                  |             |                                       |                             |                       |                           |                            |                                |
|          | 18       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 19       | Malleable Cast Iron                |             |                                       |                             |                       |                           |                            |                                |
| 20       |          |                                    |             |                                       |                             |                       |                           |                            |                                |
| <b>N</b> | 21       | Aluminum Alloy Forging             | 262-525     | NA                                    | NA                          | .001-.006             | .001-.006                 | .001-.008                  |                                |
|          | 22       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 23       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 24       | Aluminum Alloy Casting             |             |                                       |                             |                       |                           |                            |                                |
|          | 25       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 26       | Copper Alloy                       |             |                                       |                             |                       |                           |                            |                                |
|          | 27       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 28       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 29       | Non-Metallic                       |             |                                       |                             |                       |                           |                            |                                |
|          | 30       |                                    |             |                                       |                             |                       |                           |                            |                                |
| <b>S</b> | 31       | High Temp Alloy, Inconel 718, etc. | 66-164      | NA                                    | NA                          | .001-.002             | .001-.003                 | .001-.003                  |                                |
|          | 32       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 33       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 34       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 35       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 36       |                                    |             |                                       |                             |                       |                           |                            | Titanium Alloy, Ti-Al-4V, etc. |
| 37       |          |                                    |             |                                       |                             |                       |                           |                            |                                |
| <b>H</b> | 38       | Hardened Steel >40HRC              | 131-328     | NA                                    | NA                          | .001-.003             | .001-.003                 | .001-.004                  |                                |
|          | 39       |                                    |             |                                       |                             |                       |                           |                            |                                |
|          | 40       |                                    |             |                                       |                             |                       |                           |                            | Chilled Cast Iron              |
|          | 41       |                                    |             |                                       |                             |                       |                           |                            |                                |