



offerta speciale

# TYPHOON

16A

## Punte in metallo duro ad alto rendimento

- substrato di metallo duro di alta qualità
- rivestimenti specifici per tipo di applicazione
- geometrie ottimizzate per uso generico, acciaio inossidabile, alluminio e acciaio temprato
- con o senza fori di refrigerazione interna
- 3xD, 5xD, 8xD

# OFFERTA SPECIALE TYPHOON/16A

## Typhoon drills

**P** ACCIAIO    **M** ACCIAIO INOSSIDABILE    **K** GHISA    **N** ALLUMINIO    **S** SUPERLEGHE    **H** ACCIAIO TEMPRATO

|                       |                                                                                   |        |        |        |        |         |                                                                                   |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------|--------|--------|--------|--------|---------|-----------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| APPLICAZIONE PRIMARIA |  |        |        |        |        |         |  |        |  |  |  |  |
|                       |  |        |        |        |        |         |  |        |  |  |  |  |
|                       | <b>TA PV200</b>                                                                   |        |        |        |        |         | <b>HTA PV200</b>                                                                  |        | <b>4HTA</b>                                                                       | <b>SUH PV300 LAPPATO</b>                                                           | <b>ALH LAPPATO</b>                                                                  | <b>HRC</b>                                                                          |
|                       | <b>P</b> <b>K</b>                                                                 |        |        |        |        |         | <b>M</b>                                                                          |        | <b>N</b>                                                                          |                                                                                    | <b>H</b>                                                                            |                                                                                     |
| ALTRE APPLICAZIONI    | <b>M</b> <b>N</b> <b>S</b>                                                        |        |        |        |        |         | <b>P</b> <b>K</b> <b>S</b>                                                        |        |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| TIPO                  | 3xD                                                                               | 3xD    | 5xD    | 3xD    | 5xD    | 8xD     | 3xD                                                                               | 5xD    | 3xD                                                                               | 5xD                                                                                | 3xD                                                                                 |                                                                                     |
| ART. NR.              | 343TA                                                                             | 353TA  | 355TA  | 353HTA | 355HTA | 3584HTA | 353SUH                                                                            | 355SUH | 353ALH                                                                            | 355ALH                                                                             | 353HRC                                                                              |                                                                                     |
| DIN                   | D6539                                                                             | D6537K | D6537L | D6537K | D6537L | OSW     | D6537K                                                                            | D6537L | D6537K                                                                            | D6537L                                                                             | D6537K                                                                              |                                                                                     |
|                       | €                                                                                 | €      | €      | €      | €      | €       | €                                                                                 | €      | €                                                                                 | €                                                                                  | €                                                                                   | €                                                                                   |
| mm. 3                 | 9,65                                                                              | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 3.1                   | 9,79                                                                              | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 3.2                   | 9,79                                                                              | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 3.3                   | 10,41                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 3.4                   | 10,41                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 3.5                   | 10,41                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 3.6                   | 10,80                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 3.7                   | 10,80                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    | 24,44                                                                               |                                                                                     |
| 3.8                   | 11,33                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 3.9                   | 11,33                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 4                     | 11,33                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 4.1                   | 11,69                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    | 24,44                                                                               |                                                                                     |
| 4.2                   | 11,69                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 4.3                   | 12,25                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 4.4                   | 12,25                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 4.5                   | 12,25                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 4.6                   | 12,25                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    | 24,44                                                                               |                                                                                     |
| 4.7                   | 12,84                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 4.8                   | 13,04                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 4.9                   | 13,04                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 5                     | 13,04                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 5.1                   | 13,04                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 5.2                   | 15,42                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 5.3                   | 15,42                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    | 24,44                                                                               |                                                                                     |
| 5.4                   | 15,42                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 5.5                   | 15,42                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 5.6                   | 16,12                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    | 24,44                                                                               |                                                                                     |
| 5.7                   | 16,12                                                                             | 19,60  | 22,43  | 28,51  | 36,07  |         | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 5.8                   | 16,12                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 5.9                   | 16,12                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 6                     | 16,12                                                                             | 19,60  | 22,43  | 28,51  | 36,07  | 72,67   | 32,93                                                                             | 42,28  | 32,19                                                                             | 41,29                                                                              | 24,44                                                                               |                                                                                     |
| 6.1                   | 17,91                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    | 34,22                                                                               |                                                                                     |
| 6.2                   | 17,91                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |
| 6.3                   | 17,91                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 6.4                   | 17,91                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 6.5                   | 19,78                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |
| 6.6                   | 22,66                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 6.7                   | 22,66                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 6.8                   | 22,72                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |
| 6.9                   | 22,72                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    | 34,22                                                                               |                                                                                     |
| 7                     | 22,55                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |
| 7.1                   | 26,02                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 7.2                   | 26,02                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 7.3                   | 26,02                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 7.4                   | 26,02                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    | 34,22                                                                               |                                                                                     |
| 7.5                   | 25,91                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |
| 7.6                   | 28,54                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 7.7                   | 28,54                                                                             | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72                                                                             | 46,67  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 7.8                   | 28,54                                                                             | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72                                                                             | 46,67  | 43,69                                                                             | 45,60                                                                              | 34,22                                                                               |                                                                                     |

**P** ACCIAIO    **M** ACCIAIO INOSSIDABILE    **K** GHISA    **N** ALLUMINIO    **S** SUPERLEGHE    **H** ACCIAIO TEMPRATO



**TA PV200**



**HTA PV200**



**4HTA**



**SUH PV300 LAPPATO**



**ALH LAPPATO**



**HRC**

APPLICAZIONE  
PRIMARIA

**P**

**K**

**M**

**N**

**H**

ALTRE  
APPLICAZIONI

**M**

**N**

**S**

**P**

**K**

**S**

| TIPO     | 3xD   | 3xD    | 5xD    | 3xD    | 5xD    | 8xD     | 3xD    | 5xD    | 3xD    | 5xD    | 3xD    |
|----------|-------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| ART. NR. | 343TA | 353TA  | 355TA  | 353HTA | 355HTA | 3584HTA | 353SUH | 355SUH | 353ALH | 355ALH | 353HRC |
| DIN      | D6539 | D6537K | D6537L | D6537K | D6537L | OSW     | D6537K | D6537L | D6537K | D6537L | D6537K |
|          | €     | €      | €      | €      | €      | €       | €      | €      | €      | €      | €      |
| mm. 7.9  | 28,54 | 24,48  | 27,07  | 38,70  | 39,83  |         | 44,72  | 46,67  |        |        |        |
| 8        | 28,54 | 24,48  | 27,07  | 38,70  | 39,83  | 80,46   | 44,72  | 46,67  | 43,69  | 45,60  | 34,22  |
| 8.1      | 31,56 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        | 45,38  |
| 8.2      | 31,56 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 8.3      | 31,56 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        |        |
| 8.4      | 31,56 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 8.5      | 32,40 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 8.6      | 34,16 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        | 45,38  |
| 8.7      | 34,16 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        | 45,38  |
| 8.8      | 34,16 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 8.9      | 34,16 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 9        | 32,68 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 9.1      | 36,76 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        |        |
| 9.2      | 36,76 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        |        |
| 9.3      | 36,76 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        | 45,38  |
| 9.4      | 36,76 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 9.5      | 35,56 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 9.6      | 37,83 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 9.7      | 37,83 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 9.8      | 37,83 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  |        |        | 45,38  |
| 9.9      | 37,83 | 29,93  | 34,01  | 43,41  | 48,01  |         | 50,14  | 56,80  |        |        |        |
| 10       | 36,43 | 29,93  | 34,01  | 43,41  | 48,01  | 120,24  | 50,14  | 56,80  | 49,01  | 55,51  | 45,38  |
| 10.2     | 40,23 | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  | 70,13  | 80,19  | 67,63  |
| 10.3     |       | 39,50  | 51,95  | 61,54  | 69,37  |         | 71,77  | 82,07  |        |        | 67,63  |
| 10.5     | 40,85 | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  | 70,13  | 80,19  | 67,63  |
| 10.8     |       | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  |        |        | 67,63  |
| 11       | 44,57 | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  | 70,13  | 80,19  | 67,63  |
| 11.2     |       | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  |        |        | 67,63  |
| 11.5     | 45,77 | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  | 70,13  | 80,19  | 67,63  |
| 11.8     |       | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  |        |        | 67,63  |
| 12       | 45,83 | 39,50  | 51,95  | 61,54  | 69,37  | 174,48  | 71,77  | 82,07  | 70,13  | 80,19  | 67,63  |
| 12.2     |       |        |        | 85,98  | 91,77  | 244,52  | 100,29 | 108,58 |        |        | 82,77  |
| 12.5     | 63,59 | 56,20  | 65,53  | 85,98  | 91,77  | 244,52  | 100,29 | 108,58 |        |        |        |
| 13       | 63,59 | 56,20  | 65,53  | 85,98  | 91,77  | 244,52  | 100,29 | 108,58 |        |        |        |
| 13.5     | 66,89 | 56,20  | 65,53  | 85,98  | 91,77  | 244,52  | 100,29 | 108,58 |        |        |        |
| 14       | 68,35 | 56,20  | 65,53  | 85,98  | 91,77  | 244,52  | 100,29 | 108,58 |        |        |        |
| 14.2     |       |        |        |        | 117,49 |         | 100,29 | 139,02 |        |        | 137,76 |
| 14.5     | 77,64 | 70,90  | 82,49  | 99,08  | 117,49 | 308,38  | 115,55 | 139,02 |        |        |        |
| 15       | 79,48 | 70,90  | 82,49  | 99,08  | 117,49 | 308,38  | 115,55 | 139,02 |        |        |        |
| 15.5     | 82,03 | 70,90  | 82,49  | 99,08  | 117,49 | 308,38  | 115,55 | 139,02 |        |        |        |
| 16       | 83,85 | 70,90  | 82,49  | 99,08  | 117,49 | 308,38  | 115,55 | 139,02 |        |        |        |
| 16.5     |       |        |        | 168,94 | 181,24 |         | 197,05 | 214,43 |        |        |        |
| 17       |       |        |        | 168,94 | 181,24 |         | 197,05 | 214,43 |        |        |        |
| 17.5     |       |        |        | 168,94 | 181,24 |         | 197,05 | 214,43 |        |        |        |
| 18       |       |        |        | 168,94 | 181,24 |         | 197,05 | 214,43 |        |        |        |
| 18.5     |       |        |        | 184,88 | 211,18 |         | 215,64 | 249,86 |        |        |        |
| 19       |       |        |        | 184,88 | 211,18 |         | 215,64 | 249,86 |        |        |        |
| 20       |       |        |        | 184,88 | 211,18 |         | 215,64 | 249,86 |        |        |        |

## Parametri

| TYPHOON DRILLS - VELOCITÀ DI TAGLIO |     |           |            |        |        |        |         |        |         |        |        |         |        |         |  |
|-------------------------------------|-----|-----------|------------|--------|--------|--------|---------|--------|---------|--------|--------|---------|--------|---------|--|
| GRUPPI MATERIALI                    | ISO | N/mm²     | 3XD        |        |        |        |         | 5XD    |         |        |        |         | 8XD    |         |  |
|                                     |     |           | 343TA      | 353TA  | 353HTA | 353SUH | 353ALH  | 353HRC | 355TA   | 355HTA | 355SUH | 355ALH  | 355HRC | 3584HTA |  |
|                                     |     |           | Vc (m/min) |        |        |        |         |        |         |        |        |         |        |         |  |
| 1 2 3 4                             | P   | ~700      | 80~100     | 90~110 | 80~120 | 90~130 |         |        | 70~100  | 80~110 | 80~120 |         |        | 70~90   |  |
| 3 4 5                               |     | 700~1000  |            | 75~95  | 85~105 | 75~115 |         |        | 75~95   | 75~105 | 75~105 |         |        | 65~105  |  |
| 6                                   |     | 1000~1300 |            | 70~90  | 80~100 | 70~110 |         |        | 70~90   | 70~100 | 70~100 |         |        | 60~80   |  |
| 7                                   |     | 40~45HRC  |            | 15~25  | 15~25  | 15~25  |         |        | 10~20   | 10~20  | 10~20  |         |        | 10~15   |  |
| 8                                   | H   | 45~50HRC  |            |        |        |        |         | 15~25  |         |        |        |         | 10~20  |         |  |
| 8                                   |     | 50~55HRC  |            |        |        |        |         | 10~16  |         |        |        |         | 8~13   |         |  |
| 8                                   |     | 55~62HRC  |            |        |        |        |         | 8~14   |         |        |        |         | 7~12   |         |  |
| 9 10                                | M   |           |            | 25~50  |        | 30~60  |         |        | 20~40   |        | 25~55  |         |        | 20~40   |  |
| 11                                  |     |           |            | 20~45  |        | 25~55  |         |        | 15~35   |        | 20~50  |         |        | 20~40   |  |
| 12                                  |     |           |            | 20~45  |        | 25~55  |         |        | 15~35   |        | 20~50  |         |        | 20~40   |  |
| 13                                  | K   |           |            | 70~110 | 80~120 | 90~130 |         |        | 60~100  | 70~110 | 80~120 |         |        | 40~90   |  |
| 14                                  |     |           |            | 60~100 | 70~110 | 80~120 |         |        | 50~90   | 60~100 | 70~110 |         |        | 30~80   |  |
| 15                                  | N   |           | 200~270    |        |        |        | 220~290 |        | 180~250 |        |        | 200~250 |        | 150~220 |  |
| 16                                  |     |           | 180~250    |        |        |        | 200~270 |        | 160~230 |        |        | 180~230 |        | 130~200 |  |
| 22                                  | S   | <35HRC    |            | 20~40  | 25~45  | 30~50  |         |        | 20~35   | 20~40  | 25~45  |         |        | 15~30   |  |
| 23                                  |     | >35HRC    |            | 10~30  | 15~35  | 20~40  |         |        | 10~25   | 10~30  | 15~35  |         |        | 10~25   |  |
| 26                                  |     |           |            | 20~40  | 25~45  | 30~50  |         |        | 20~35   | 20~40  | 25~45  |         |        | 15~30   |  |

| TYPHOON DRILLS - AVANZAMENTI 3xD<br>(5xD: fn 3xD x 0.85 - 8xD: fn 3xD x 0.8) |          |           |             |             |             |             |             |             |             |             |             |
|------------------------------------------------------------------------------|----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| GRUPPI MATERIALI                                                             | ISO      | N/mm²     | ART. NR.    | Ø 3~4       | Ø 4~6       | Ø 6~8       | Ø 8~10      | Ø 10~12     | Ø 12~14     | Ø 14~17     | Ø 17~20     |
|                                                                              |          |           |             | fn (mm/rev) |             |             |             |             |             |             |             |
| 1 2 3 4                                                                      | P        | ~700      | 343TA       | 0.082~0.101 | 0.101~0.138 | 0.138~0.176 | 0.176~0.213 | 0.213~0.250 | 0.250~0.288 | 0.288~0.344 | 0.344~0.400 |
|                                                                              |          |           | 353TA       | 0.086~0.106 | 0.106~0.145 | 0.145~0.185 | 0.185~0.224 | 0.224~0.263 | 0.263~0.302 | 0.302~0.361 | 0.361~0.420 |
|                                                                              |          |           | 353HTA      | 0.108~0.128 | 0.128~0.167 | 0.167~0.206 | 0.206~0.246 | 0.246~0.285 | 0.285~0.323 | 0.323~0.382 | 0.382~0.441 |
|                                                                              |          |           | 353SUH      | 0.113~0.134 | 0.134~0.175 | 0.175~0.216 | 0.216~0.257 | 0.257~0.298 | 0.298~0.339 | 0.339~0.400 | 0.400~0.462 |
| 3 4 5                                                                        |          | 700~1000  | 353TA       | 0.082~0.101 | 0.101~0.138 | 0.145~0.185 | 0.185~0.224 | 0.224~0.263 | 0.263~0.302 | 0.302~0.361 | 0.361~0.420 |
|                                                                              |          |           | 353HTA      | 0.096~0.117 | 0.117~0.159 | 0.167~0.206 | 0.206~0.246 | 0.246~0.285 | 0.285~0.323 | 0.323~0.382 | 0.382~0.441 |
|                                                                              |          |           | 353SUH      | 0.101~0.123 | 0.123~0.167 | 0.175~0.216 | 0.216~0.257 | 0.257~0.298 | 0.298~0.339 | 0.339~0.400 | 0.400~0.462 |
|                                                                              |          |           | 353TA       | 0.069~0.083 | 0.083~0.110 | 0.110~0.137 | 0.137~0.164 | 0.164~0.191 | 0.191~0.219 | 0.219~0.259 | 0.259~0.300 |
| 6                                                                            |          | 1000~1300 | 353HTA      | 0.073~0.087 | 0.087~0.116 | 0.116~0.144 | 0.144~0.173 | 0.173~0.201 | 0.201~0.230 | 0.230~0.272 | 0.272~0.315 |
|                                                                              |          |           | 353SUH      | 0.077~0.091 | 0.091~0.122 | 0.122~0.151 | 0.151~0.182 | 0.182~0.211 | 0.211~0.242 | 0.242~0.286 | 0.286~0.331 |
|                                                                              |          |           | 353TA       | 0.024~0.029 | 0.029~0.038 | 0.038~0.047 | 0.047~0.055 | 0.055~0.064 | 0.064~0.073 | 0.073~0.087 | 0.087~0.100 |
|                                                                              |          |           | 353HTA      | 0.026~0.032 | 0.032~0.042 | 0.042~0.052 | 0.052~0.061 | 0.061~0.070 | 0.070~0.080 | 0.080~0.096 | 0.096~0.110 |
| 7                                                                            | 40~45HRC | 353SUH    | 0.024~0.029 | 0.029~0.038 | 0.038~0.047 | 0.047~0.055 | 0.055~0.064 | 0.064~0.073 | 0.073~0.087 | 0.087~0.100 |             |
|                                                                              |          | 353TA     | 0.024~0.029 | 0.029~0.038 | 0.038~0.047 | 0.047~0.055 | 0.055~0.064 | 0.064~0.073 | 0.073~0.087 | 0.087~0.100 |             |
| 8                                                                            | H        | 45~50HRC  | 353HRC      | 0.024~0.050 | 0.030~0.080 | 0.050~0.100 | 0.060~0.120 | 0.080~0.140 | 0.100~0.150 | 0.120~0.160 | 0.140~0.180 |
|                                                                              |          | 50~55HRC  | 353HRC      | 0.022~0.025 | 0.025~0.032 | 0.032~0.039 | 0.039~0.046 | 0.046~0.053 | 0.053~0.059 | 0.059~0.070 | 0.070~0.080 |
|                                                                              |          | 55~62HRC  | 353HRC      | 0.018~0.021 | 0.021~0.027 | 0.027~0.033 | 0.033~0.039 | 0.039~0.045 | 0.045~0.052 | 0.052~0.061 | 0.061~0.070 |
| 9 10                                                                         | M        | 353TA     | 0.074~0.088 | 0.088~0.114 | 0.114~0.141 | 0.141~0.167 | 0.167~0.194 | 0.194~0.220 | 0.220~0.260 | 0.260~0.300 |             |
|                                                                              |          | 353SUH    | 0.078~0.092 | 0.092~0.120 | 0.120~0.148 | 0.148~0.175 | 0.175~0.204 | 0.204~0.231 | 0.231~0.273 | 0.273~0.315 |             |
| 11                                                                           |          | 353TA     | 0.074~0.088 | 0.088~0.114 | 0.114~0.141 | 0.141~0.167 | 0.167~0.194 | 0.194~0.220 | 0.220~0.260 | 0.260~0.300 |             |
|                                                                              |          | 353SUH    | 0.078~0.092 | 0.092~0.120 | 0.120~0.148 | 0.148~0.175 | 0.175~0.204 | 0.204~0.231 | 0.231~0.273 | 0.273~0.315 |             |
| 12                                                                           |          | 353TA     | 0.056~0.067 | 0.067~0.090 | 0.090~0.113 | 0.113~0.136 | 0.136~0.159 | 0.159~0.181 | 0.181~0.216 | 0.216~0.250 |             |
|                                                                              |          | 353SUH    | 0.059~0.070 | 0.070~0.095 | 0.095~0.119 | 0.119~0.143 | 0.143~0.167 | 0.167~0.190 | 0.190~0.227 | 0.227~0.263 |             |
| 13                                                                           | K        | 353TA     | 0.076~0.095 | 0.095~0.133 | 0.133~0.171 | 0.171~0.209 | 0.209~0.248 | 0.248~0.286 | 0.286~0.343 | 0.343~0.400 |             |
|                                                                              |          | 353HTA    | 0.101~0.125 | 0.125~0.172 | 0.172~0.219 | 0.219~0.266 | 0.266~0.312 | 0.312~0.359 | 0.359~0.430 | 0.430~0.500 |             |
|                                                                              |          | 353SUH    | 0.106~0.131 | 0.131~0.181 | 0.181~0.230 | 0.230~0.279 | 0.279~0.328 | 0.328~0.377 | 0.377~0.452 | 0.452~0.525 |             |
|                                                                              |          | 353TA     | 0.072~0.090 | 0.090~0.127 | 0.127~0.163 | 0.163~0.199 | 0.199~0.235 | 0.235~0.271 | 0.271~0.326 | 0.326~0.380 |             |
| 14                                                                           |          | 353HTA    | 0.096~0.119 | 0.119~0.163 | 0.163~0.208 | 0.208~0.252 | 0.252~0.297 | 0.297~0.341 | 0.341~0.408 | 0.408~0.475 |             |
|                                                                              |          | 353SUH    | 0.101~0.125 | 0.125~0.171 | 0.171~0.218 | 0.218~0.265 | 0.265~0.312 | 0.312~0.358 | 0.358~0.428 | 0.428~0.499 |             |
| 15                                                                           | N        | 343TA     | 0.129~0.155 | 0.155~0.207 | 0.207~0.259 | 0.259~0.311 | 0.311~0.363 | 0.363~0.414 | 0.414~0.492 | 0.492~0.570 |             |
|                                                                              |          | 353ALH    | 0.152~0.182 | 0.182~0.242 | 0.242~0.301 | 0.301~0.361 | 0.361~0.422 | 0.422~0.482 | 0.482~0.571 | 0.571~0.662 |             |
| 16                                                                           | S        | 343TA     | 0.132~0.162 | 0.162~0.223 | 0.223~0.284 | 0.284~0.345 | 0.345~0.406 | 0.406~0.467 | 0.467~0.559 | 0.559~0.650 |             |
|                                                                              |          | 353ALH    | 0.155~0.189 | 0.189~0.257 | 0.257~0.326 | 0.326~0.394 | 0.394~0.462 | 0.462~0.530 | 0.530~0.633 | 0.633~0.735 |             |
| 22                                                                           |          | <35HRC    | 353TA       | 0.038~0.046 | 0.046~0.063 | 0.063~0.080 | 0.080~0.097 | 0.097~0.113 | 0.113~0.130 | 0.130~0.155 | 0.155~0.180 |
|                                                                              |          |           | 353HTA      | 0.046~0.055 | 0.055~0.073 | 0.073~0.091 | 0.091~0.110 | 0.110~0.128 | 0.128~0.146 | 0.146~0.173 | 0.173~0.200 |
|                                                                              |          |           | 353SUH      | 0.048~0.058 | 0.058~0.077 | 0.077~0.096 | 0.096~0.116 | 0.116~0.134 | 0.134~0.153 | 0.153~0.182 | 0.182~0.210 |
|                                                                              |          |           | 353TA       | 0.034~0.042 | 0.042~0.060 | 0.060~0.077 | 0.077~0.094 | 0.094~0.111 | 0.111~0.128 | 0.128~0.154 | 0.154~0.180 |
| 23                                                                           | >35HRC   | 353HTA    | 0.040~0.050 | 0.050~0.068 | 0.068~0.087 | 0.087~0.106 | 0.106~0.125 | 0.125~0.144 | 0.144~0.172 | 0.172~0.200 |             |
|                                                                              |          | 353SUH    | 0.042~0.053 | 0.053~0.071 | 0.071~0.091 | 0.091~0.111 | 0.111~0.131 | 0.131~0.151 | 0.151~0.181 | 0.181~0.210 |             |
|                                                                              |          | 353TA     | 0.054~0.064 | 0.064~0.085 | 0.085~0.106 | 0.106~0.126 | 0.126~0.147 | 0.147~0.168 | 0.168~0.199 | 0.199~0.230 |             |
| 26                                                                           |          | 353HTA    | 0.057~0.069 | 0.069~0.091 | 0.091~0.114 | 0.114~0.137 | 0.137~0.159 | 0.159~0.182 | 0.182~0.216 | 0.216~0.250 |             |
|                                                                              |          | 353SUH    | 0.060~0.072 | 0.072~0.096 | 0.096~0.120 | 0.120~0.144 | 0.144~0.167 | 0.167~0.191 | 0.191~0.227 | 0.227~0.263 |             |

## Materiali

**1** <550 N/mm<sup>2</sup>  
ACCIAI A BASSO TENORE DI CARBONIO ED AUTOMATICI

**11**  
ACCIAI INOSSIDABILI AUSTENITICI (V4A)

**2** 450-700 N/mm<sup>2</sup>  
ACCIAI A MEDIO TENORE DI CARBONIO

**12**  
DUPLEX

**3** 550-850 N/mm<sup>2</sup>  
ACCIAI AD ELEVATO TENORE DI CARBONIO

**13**  
GHISA GRIGIA

**4** 600-900 N/mm<sup>2</sup>  
ACCIAI DEBOLMENTE LEGATI

**14**  
GRIGIA SFEROIDALE

**5** 700-1000 N/mm<sup>2</sup>  
ACCIAI LEGATI

**15**  
ALLUMINIO LAMINATO

**6** 900-1200 N/mm<sup>2</sup>  
ACCIAI DA UTENSILI E ALTO LEGATI

**16**  
ALLUMINIO PRESSOFUSO (SI<12%)

**7** 1200-1500 N/mm<sup>2</sup> (35-45HRC)  
ACCIAI AD ELEVATA RESISTENZA

**22** <35HRC  
LEGHE DI NICHEL

**8** 45-63HRC  
ACCIAI TEMPRATI

**23** >35HRC  
LEGHE DI NICHEL

**9**  
ACCIAI INOSSIDABILI MARTENSITICI E FERRITICI

**26**  
LEGHE DI TITANIO

**10**  
ACCIAI INOSSIDABILI AUSTENITICI (V2A)



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