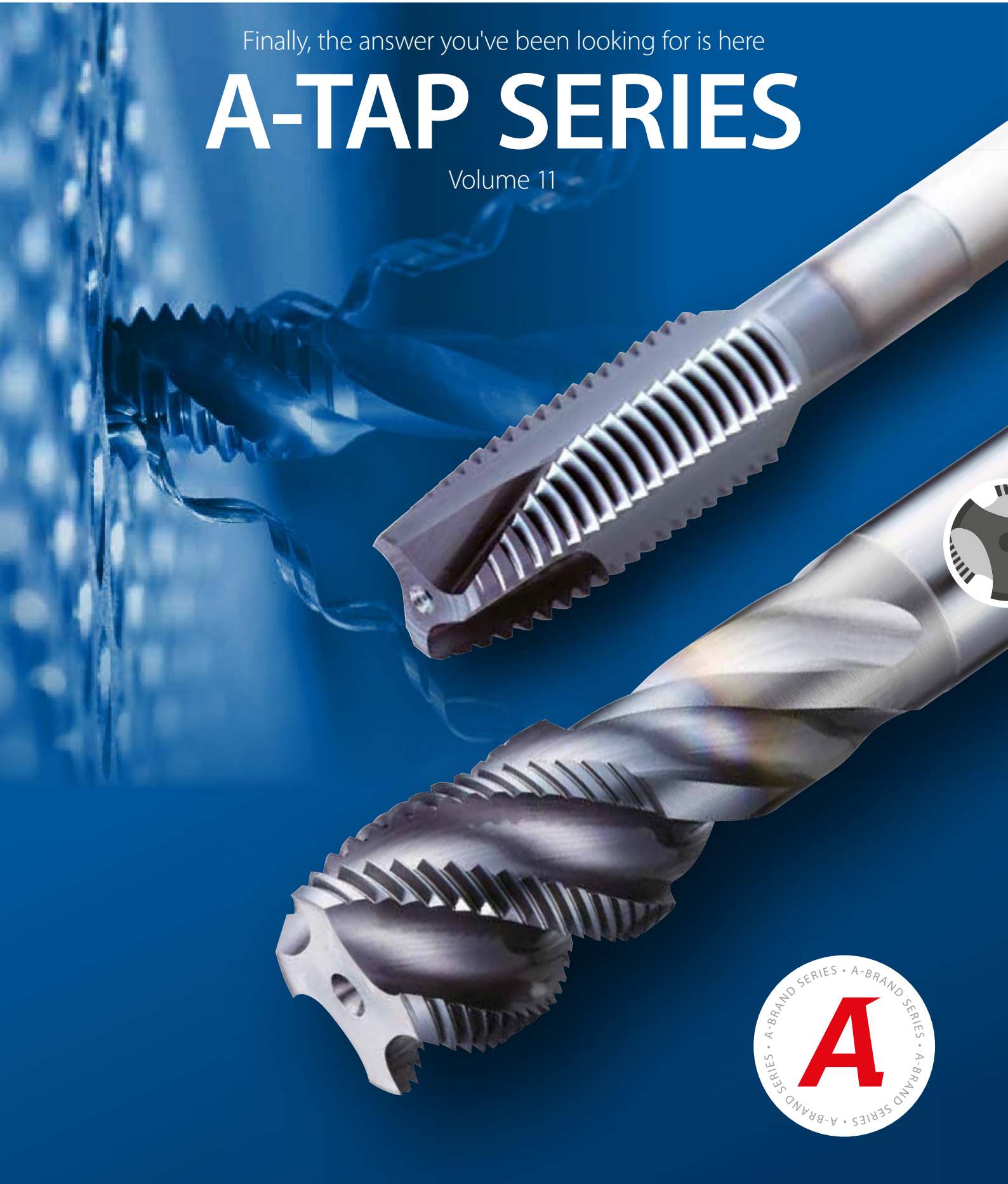




Finally, the answer you've been looking for is here

# A-TAP SERIES

Volume 11



# INDEX

---

## Blind Hole

### Metric

|                              |         |
|------------------------------|---------|
| A-SFT .....                  | PAGE 8  |
| A-OIL-SFT .....              | PAGE 9  |
| A-SFT-6GX .....              | PAGE 10 |
| A-SFT-7GX .....              | PAGE 11 |
| A-SFT FORM E NEW SIZES ..... | PAGE 12 |
| A-SFT + 0.1 .....            | PAGE 13 |
| A-LT-SFT .....               | PAGE 14 |
| A-SFT-LH .....               | PAGE 15 |
| A-SFT-HB Weldon Shank .....  | PAGE 16 |

### Metric Fine

|                        |         |
|------------------------|---------|
| A-SFT .....            | PAGE 17 |
| A-OIL-SFT .....        | PAGE 18 |
| A-SFT-6GX .....        | PAGE 19 |
| A-SFT FORM E NEW ..... | PAGE 20 |

### UNC

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 21 |
|-------------|---------|

### UNF

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 22 |
|-------------|---------|

### G (BSP)

|                      |         |
|----------------------|---------|
| A-SFT NEW SIZE ..... | PAGE 23 |
|----------------------|---------|

### Rp (BSPP)

|                        |         |
|------------------------|---------|
| A-SFT FORM E NEW ..... | PAGE 24 |
|------------------------|---------|

### BSW

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 25 |
|-------------|---------|

### BSF

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 26 |
|-------------|---------|

### BA

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 27 |
|-------------|---------|

### Rc (BSPT)

|             |         |
|-------------|---------|
| A-TPT ..... | PAGE 28 |
|-------------|---------|

### Rc (ISO)

|                |         |
|----------------|---------|
| A-SFT Rc ..... | PAGE 29 |
|----------------|---------|

### NPT

|             |         |
|-------------|---------|
| A-SFT ..... | PAGE 30 |
|-------------|---------|

### NPSF

|                    |         |
|--------------------|---------|
| A-SFT FORM E ..... | PAGE 31 |
|--------------------|---------|

---

## Through Hole

### Metric

|                             |         |
|-----------------------------|---------|
| A-POT .....                 | PAGE 32 |
| A-OIL-POT .....             | PAGE 33 |
| A-POT-6GX .....             | PAGE 34 |
| A-POT-7GX .....             | PAGE 35 |
| A-POT + 0.1 .....           | PAGE 36 |
| A-LT-POT .....              | PAGE 37 |
| A-POT-LH .....              | PAGE 38 |
| A-POT-HB Weldon Shank ..... | PAGE 39 |

### Metric Fine

|                 |         |
|-----------------|---------|
| A-POT .....     | PAGE 40 |
| A-OIL-POT ..... | PAGE 41 |
| A-POT-6GX ..... | PAGE 42 |

### UNC

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 43 |
|-------------|---------|

### UNF

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 44 |
|-------------|---------|

### G (BSP)

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 45 |
|-------------|---------|

### BSW

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 46 |
|-------------|---------|

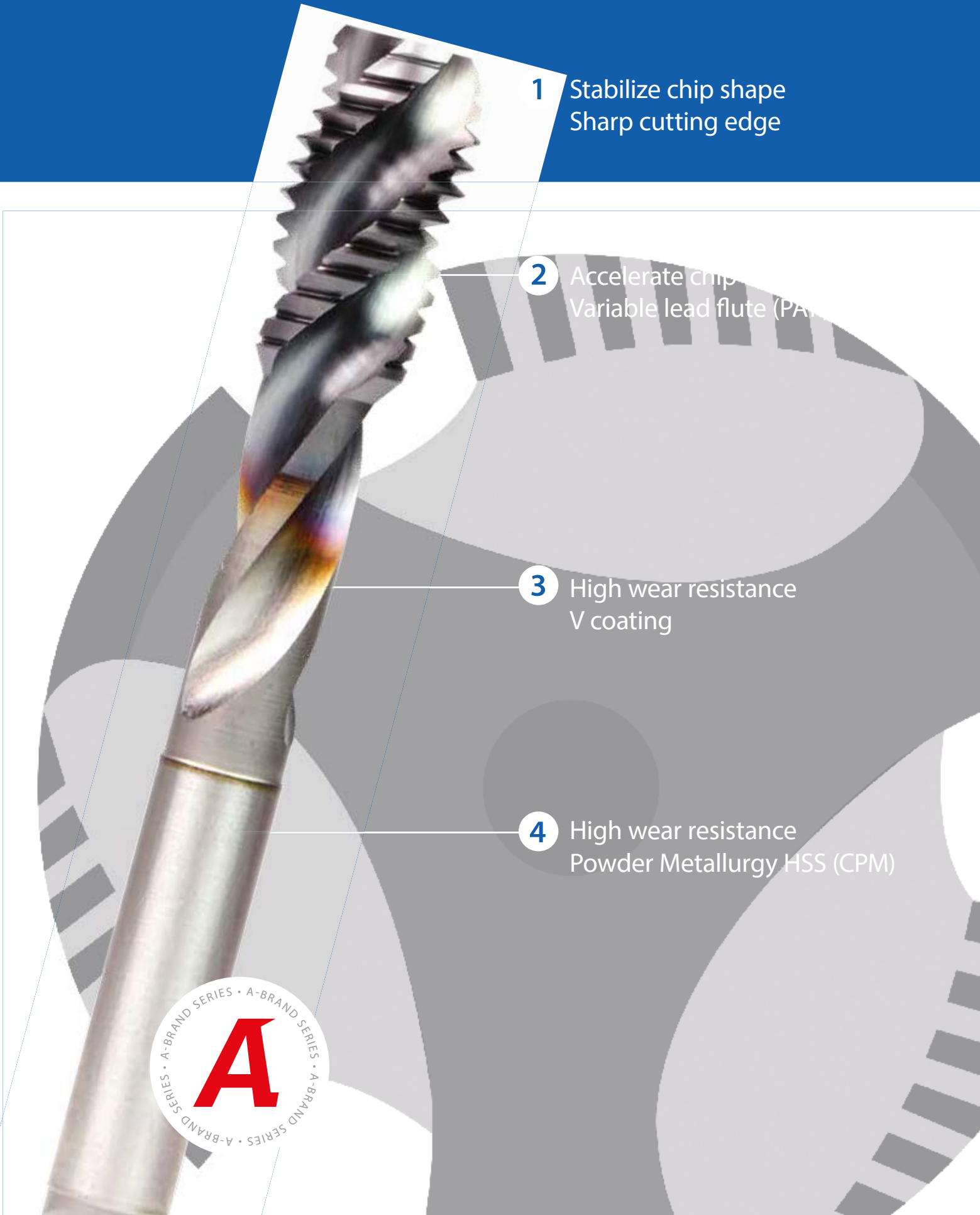
### BSF

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 47 |
|-------------|---------|

### BA

|             |         |
|-------------|---------|
| A-POT ..... | PAGE 48 |
|-------------|---------|

Finally, the answer you've been looking for is here...



1 Stabilize chip shape  
Sharp cutting edge

2 Accelerate chip  
Variable lead flute (PA)

3 High wear resistance  
V coating

4 High wear resistance  
Powder Metallurgy HSS (CPM)



# OSG'S NEW PREMIUM BRAND "A-TAP SERIES"

## The answer for your troubles lies here

Most of tapping troubles are caused by unstable chip evacuation.

A-TAP Series resolve such troubles and apply to a wide range of work materials and cutting speed.

### Tapping Troubles

|                           |             |
|---------------------------|-------------|
| N°1 breakage and chipping | <b>26 %</b> |
| N°2 dimensional error     | <b>17 %</b> |
| N°3 galling               | <b>14 %</b> |
| Others                    | <b>43 %</b> |

### Main factor is chip packing

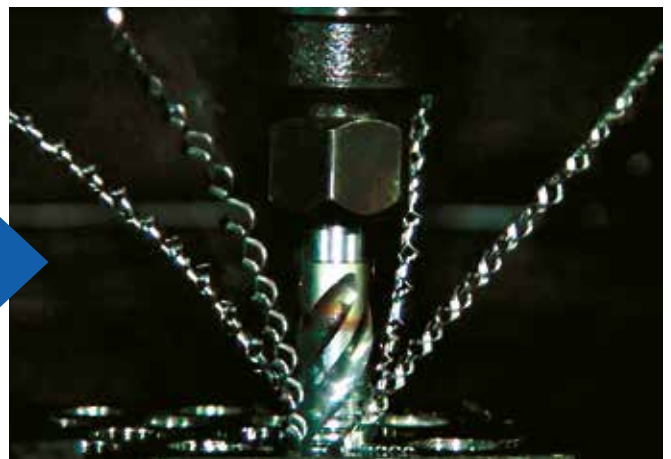


The biggest advantage of A-TAP Series:

## THE BEST CHIP EVACUATION



Conventional Tap



A-SFT

# KEY FEATURES A-TAP SERIES

## Applies to a wide variety of work materials

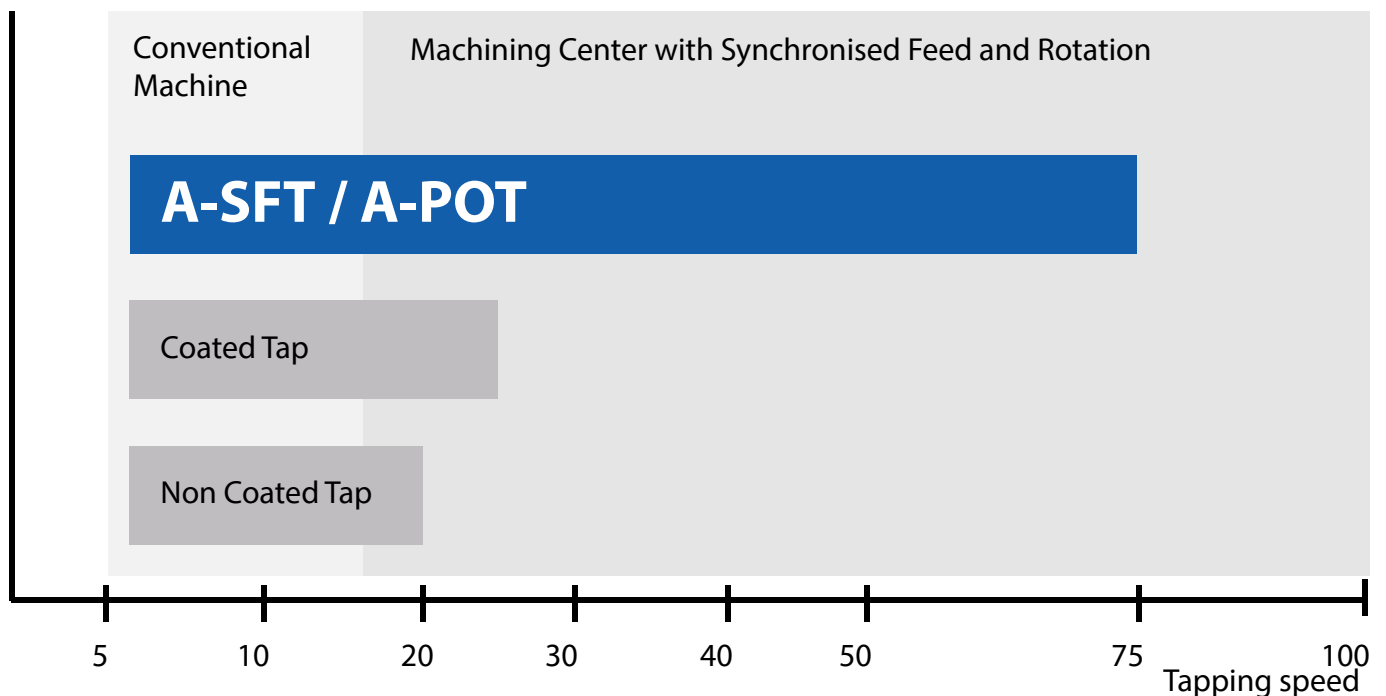
Even to mild steel and stainless steel



## High performance in machining center

Applies to a wide cutting range

Long



- It is a image of tapping in medium and high carbon steel with water soluble coolant.
- Machining center with synchronized feed and rotation is recommended for more than 15m/min.
- As the best speed varies by tapping condition, please find it by trials.

SUS304

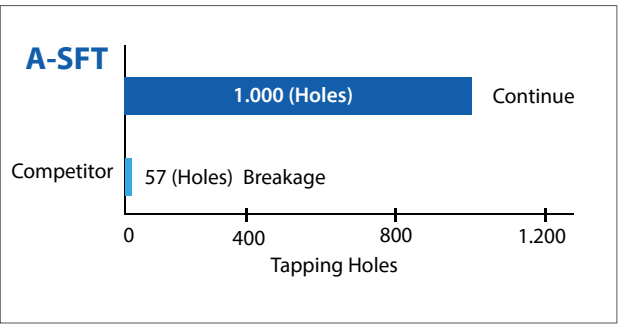
Deep Hole Tapping (2D) in stainless steel

High performance achieved in stainless steel with water soluble oil



Cutting edge after 1.000 holes tapping

|                |                                        |
|----------------|----------------------------------------|
| Tool           | A-SFT M8x1,25                          |
| Work Material  | SUS304                                 |
| Hole Size      | Ø6,8x22mm (Blind)                      |
| Tapping Length | 16mm (2D)                              |
| Tapping Speed  | 10m/min (398min <sup>-1</sup> )        |
| Coolant        | Water Soluble Chlorine-Free (10%)      |
| Machine        | Vertical Synchronized Machining Center |

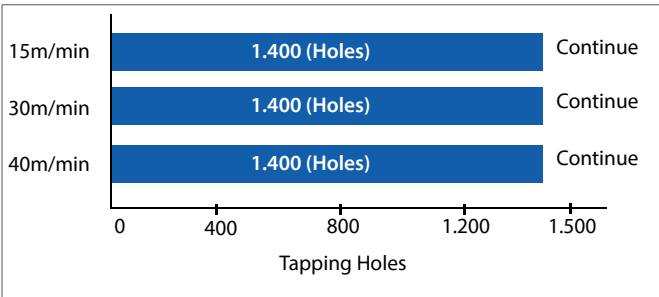


S45C

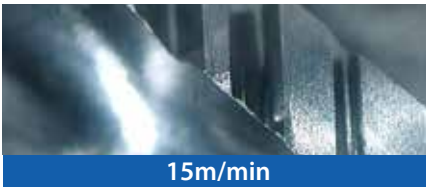
High speed tapping by machining center

Tapping operation in 15,30,40m/min are all stable

|                |                                        |
|----------------|----------------------------------------|
| Tool           | A-SFT M6x1                             |
| Work Material  | S45C                                   |
| Hole Size      | Ø5x16mm (Blind)                        |
| Tapping Length | 12mm (2D)                              |
| Coolant        | Water Soluble Chlorine-Free (10%)      |
| Machine        | Vertical Synchronized Machining Center |



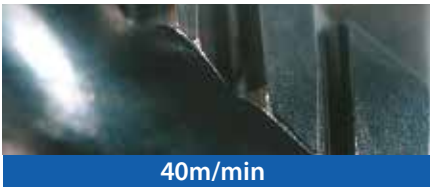
Cutting edge after 1.400 holes Tapping



15m/min



30m/min

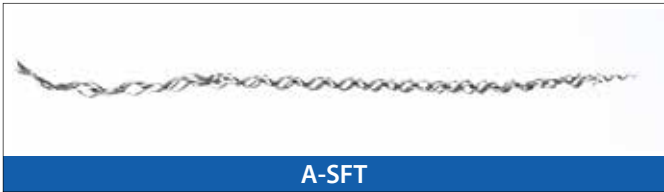


40m/min

Chip generated in 40m/min



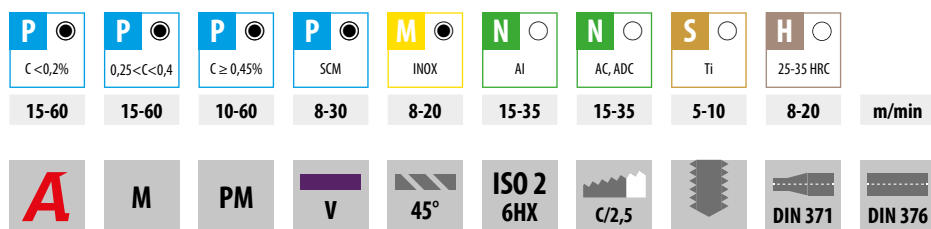
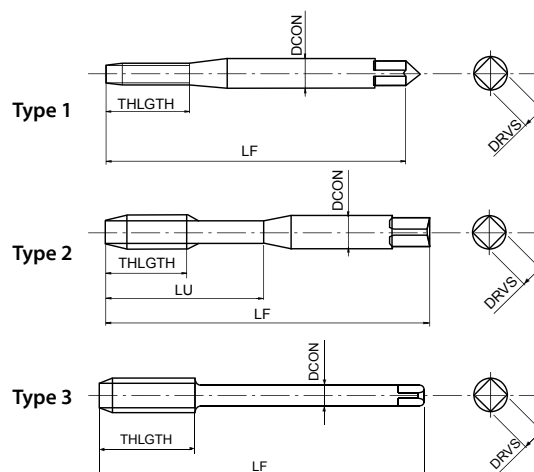
Conventional Tap



A-SFT

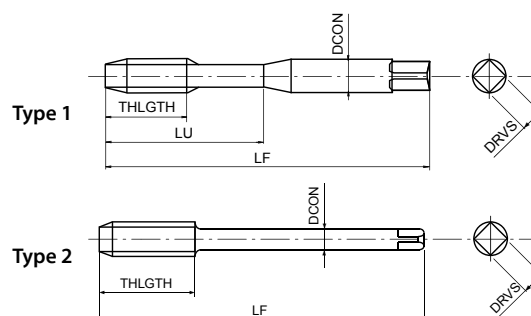


- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels



\*Tolerance 5 HX

[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Centre through coolant

|                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |       |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |       |
| C < 0,2%                                                                                   | 0,25 < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | Al, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |       |
| 15-60                                                                                      | 15-60                                                                                      | 10-60                                                                                      | 8-30                                                                                       | 8-20                                                                                       | 15-35                                                                                      | 15-35                                                                                      | 5-10                                                                                       | 8-20                                                                                       | m/min |





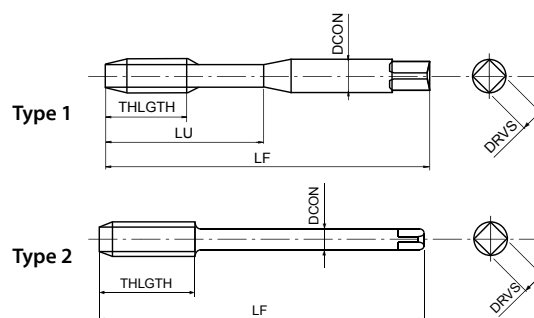




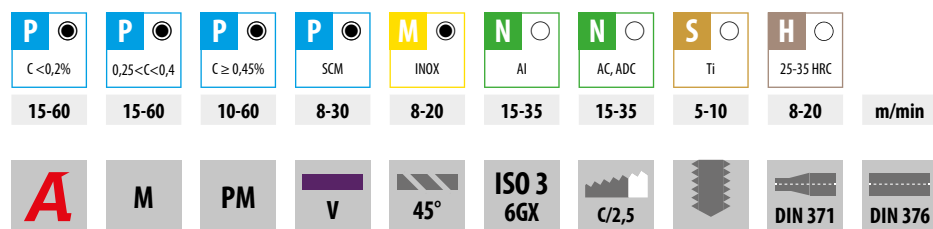


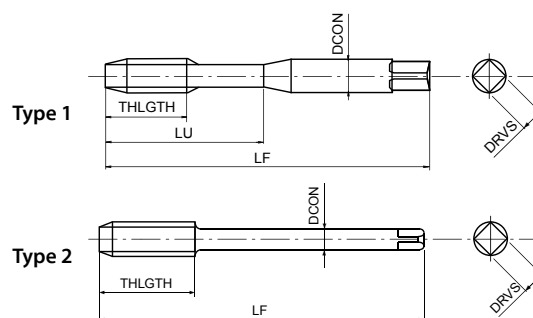


[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 6G internal thread tolerance

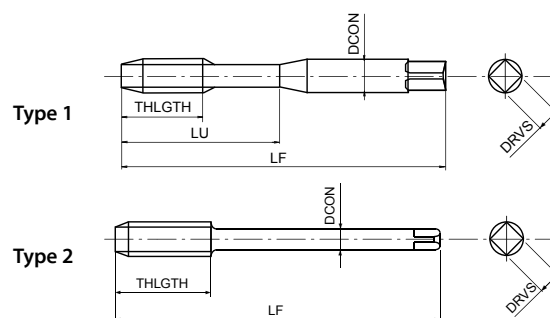
[illegible]



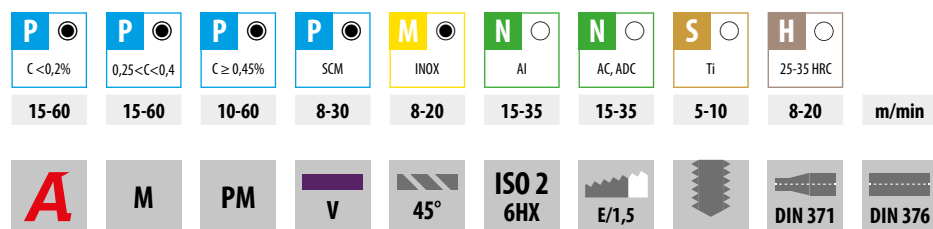
- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 7G internal thread tolerance

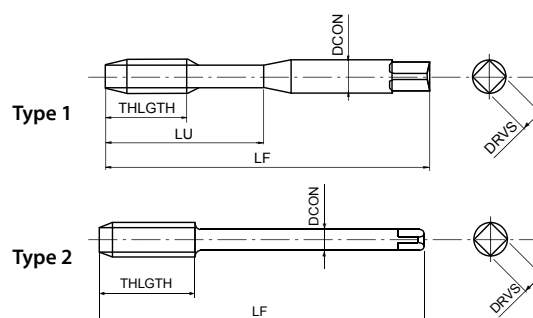
|                                                                                               |                                                                                                     |                                                                                                |                                                                                          |                                                                                           |                                                                                         |                                                                                              |                                                                                         |                                                                                                 |  |       |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|-------|
| <br>C < 0,2% | <br>0,25 < C < 0,4 | <br>C ≥ 0,45% | <br>SCM | <br>INOX | <br>Al | <br>AC, ADC | <br>Ti | <br>25-35 HRC |  |       |
| 15-60                                                                                         | 15-60                                                                                               | 10-60                                                                                          | 8-30                                                                                     | 8-20                                                                                      | 15-35                                                                                   | 15-35                                                                                        | 5-10                                                                                    | 8-20                                                                                            |  | m/min |
|              |                    |               |         |          |        |             |        |               |  |       |

[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Chamfer Form E

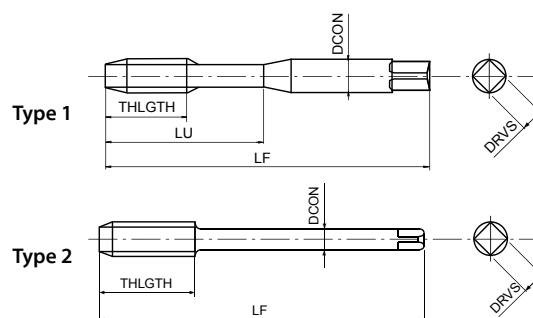
[illegible]



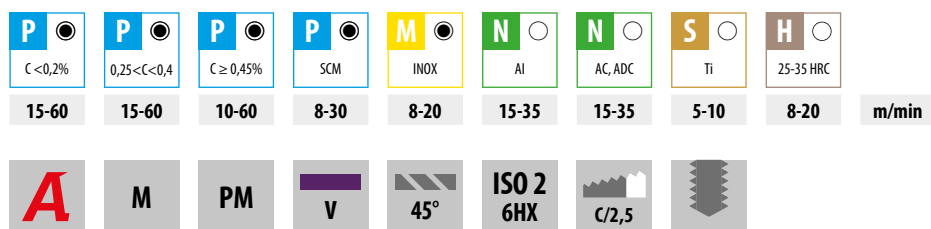
- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Oversized tap for 6H +0,1mm thread tolerance

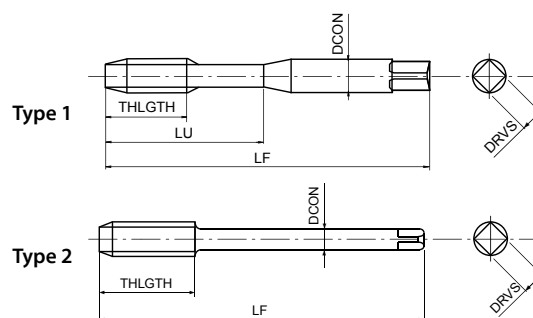
|                                                                                               |                                                                                                     |                                                                                                |                                                                                          |                                                                                           |                                                                                         |                                                                                              |                                                                                         |                                                                                                 |                                                                                    |         |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------|
| <br>C < 0,2% | <br>0,25 < C < 0,4 | <br>C ≥ 0,45% | <br>SCM | <br>INOX | <br>Al | <br>AC, ADC | <br>Ti | <br>25-35 HRC |                                                                                    | m/min   |
| 15-60                                                                                         | 15-60                                                                                               | 10-60                                                                                          | 8-30                                                                                     | 8-20                                                                                      | 15-35                                                                                   | 15-35                                                                                        | 5-10                                                                                    | 8-20                                                                                            |                                                                                    |         |
|              | M                                                                                                   | PM                                                                                             | V                                                                                        | 45°                                                                                       | 6H<br>+0.1                                                                              | C/2,5                                                                                        |        | DIN 371                                                                                         |  | DIN 376 |

[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- With long shank for long reach threading

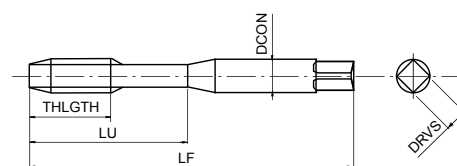
[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For left-hand threads

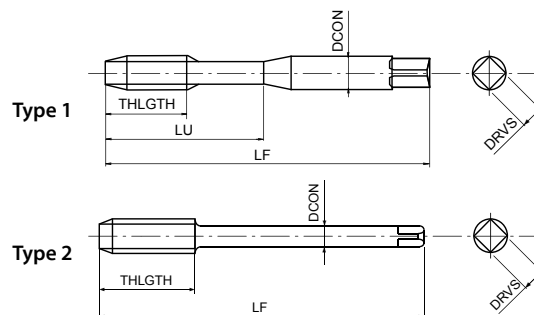
|                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |
| C < 0,2%                                                                                   | 0,25 < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | Al, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |
| 15-60                                                                                      | 15-60                                                                                      | 10-60                                                                                      | 8-30                                                                                       | 8-20                                                                                       | 15-35                                                                                      | 15-35                                                                                      | 5-10                                                                                       | 8-20                                                                                       |
| <b>m/min</b>                                                                               |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |

[illegible]



- ## Threading | Cutting taps

Metric



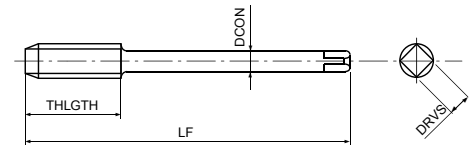
- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

|          |                |           |          |            |                  |              |                |                |       |  |
|----------|----------------|-----------|----------|------------|------------------|--------------|----------------|----------------|-------|--|
| <b>P</b> | <b>P</b>       | <b>P</b>  | <b>P</b> | <b>M</b>   | <b>N</b>         | <b>N</b>     | <b>S</b>       | <b>H</b>       |       |  |
| C < 0,2% | 0,25 < C < 0,4 | C ≥ 0,45% | SCM      | INOX       | Al               | AC, ADC      | Ti             | 25-35 HRC      |       |  |
| 15-60    | 15-60          | 10-60     | 8-30     | 8-20       | 15-35            | 15-35        | 5-10           | 8-20           | m/min |  |
| <b>A</b> | <b>MF</b>      | <b>PM</b> | <b>V</b> | <b>45°</b> | <b>ISO 2 6HX</b> | <b>C/2,5</b> |                |                |       |  |
|          |                |           |          |            |                  |              | <b>DIN 371</b> | <b>DIN 374</b> |       |  |

| EDP      | TD  | TP   | LF  | THLGTH | LU | DCON | DRVS | NOF | Type | DIN |
|----------|-----|------|-----|--------|----|------|------|-----|------|-----|
| 48139135 | 2,5 | 0,35 | 50  | 3,6    | 13 | 2,8  | 2,1  | 2   | 1    | 371 |
| 48139137 | 2,6 | 0,35 | 50  | 3,6    | 13 | 2,8  | 2,1  | 2   | 1    | 371 |
| 48139141 | 3   | 0,35 | 56  | 4      | 18 | 3,5  | 2,7  | 3   | 1    | 371 |
| 48139143 | 3,5 | 0,35 | 56  | 4,8    | 20 | 4    | 3    | 3   | 1    | 371 |
| 48139146 | 4   | 0,35 | 63  | 5,6    | 21 | 4,5  | 3,4  | 3   | 1    | 371 |
| 48139145 | 4   | 0,5  | 63  | 5,6    | 21 | 4,5  | 3,4  | 3   | 1    | 371 |
| 48139148 | 4,5 | 0,5  | 70  | 6      | 25 | 6    | 4,9  | 3   | 1    | 371 |
| 48139151 | 5   | 0,5  | 70  | 6,4    | 25 | 6    | 4,9  | 3   | 1    | 371 |
| 48139602 | 6   | 0,5  | 80  | 8      | 30 | 6    | 4,9  | 3   | 1    | 371 |
| 48139601 | 6   | 0,75 | 80  | 8      | 30 | 6    | 4,9  | 3   | 1    | 371 |
| 48139160 | 7   | 0,75 | 80  | 8      | 30 | 7    | 5,5  | 3   | 1    | 371 |
| 48139604 | 8   | 0,75 | 80  | 10     | 35 | 8    | 6,2  | 3   | 1    | 371 |
| 48139603 | 8   | 1    | 90  | 10     | 35 | 8    | 6,2  | 3   | 1    | 371 |
| 48139605 | 9   | 1    | 90  | 10     | 35 | 9    | 7    | 3   | 1    | 371 |
| 48139608 | 10  | 0,75 | 90  | 12     | 35 | 10   | 8    | 3   | 1    | 371 |
| 48139607 | 10  | 1    | 90  | 12     | 35 | 10   | 8    | 3   | 1    | 371 |
| 48139606 | 10  | 1,25 | 100 | 12     | 39 | 10   | 8    | 3   | 1    | 371 |
| 48139157 | 6   | 0,5  | 80  | 8      | -  | 4,5  | 3,4  | 3   | 2    | 374 |
| 48139156 | 6   | 0,75 | 80  | 8      | -  | 4,5  | 3,4  | 3   | 2    | 374 |
| 48139163 | 8   | 0,75 | 80  | 8      | -  | 6    | 4,9  | 3   | 2    | 374 |
| 48139162 | 8   | 1    | 90  | 10     | -  | 6    | 4,9  | 3   | 2    | 374 |
| 48139167 | 9   | 1    | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48139172 | 10  | 0,75 | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48139171 | 10  | 1    | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48139170 | 10  | 1,25 | 100 | 12     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48139176 | 11  | 1    | 90  | 12     | -  | 8    | 6,2  | 3   | 2    | 374 |
| 48139182 | 12  | 1    | 100 | 12     | -  | 9    | 7    | 3   | 2    | 374 |
| 48139181 | 12  | 1,25 | 100 | 12     | -  | 9    | 7    | 3   | 2    | 374 |
| 48139180 | 12  | 1,5  | 100 | 14     | -  | 9    | 7    | 3   | 2    | 374 |
| 48139194 | 14  | 1    | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48139193 | 14  | 1,25 | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48139192 | 14  | 1,5  | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48139204 | 16  | 1    | 100 | 16     | -  | 12   | 9    | 3   | 2    | 374 |
| 48139203 | 16  | 1,5  | 100 | 16     | -  | 12   | 9    | 3   | 2    | 374 |
| 48139218 | 18  | 1    | 110 | 16     | -  | 14   | 11   | 4   | 2    | 374 |
| 48139216 | 18  | 1,5  | 110 | 16     | -  | 14   | 11   | 4   | 2    | 374 |
| 48139232 | 20  | 1    | 125 | 16     | -  | 16   | 12   | 4   | 2    | 374 |
| 48139230 | 20  | 1,5  | 125 | 16     | -  | 16   | 12   | 4   | 2    | 374 |
| 48139220 | 20  | 2    | 140 | 25     | -  | 16   | 12   | 4   | 2    | 374 |
| 48139241 | 22  | 1    | 125 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48139240 | 22  | 1,5  | 125 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48139239 | 22  | 2    | 140 | 25     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48139251 | 24  | 1    | 140 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48139250 | 24  | 1,5  | 140 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48139249 | 24  | 2    | 140 | 30     | -  | 18   | 14,5 | 4   | 2    | 374 |







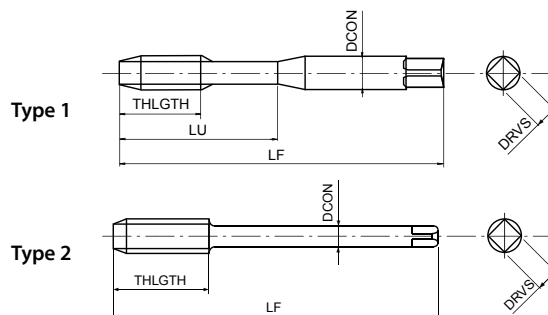
- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 6G internal thread tolerance

|                                                                                                        |                                                                                                              |                                                                                                         |                                                                                                   |                                                                                                    |                                                                                                  |                                                                                                       |                                                                                                  |                                                                                                         |  |              |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--|--------------|
|  <b>P</b><br>C < 0,2% |  <b>P</b><br>0,25 < C < 0,4 |  <b>P</b><br>C ≥ 0,45% |  <b>P</b><br>SCM |  <b>M</b><br>INOX |  <b>N</b><br>Al |  <b>N</b><br>AC, ADC |  <b>S</b><br>Ti |  <b>H</b><br>25-35 HRC |  | <b>m/min</b> |
| <b>15-60</b>                                                                                           | <b>15-60</b>                                                                                                 | <b>10-60</b>                                                                                            | <b>8-30</b>                                                                                       | <b>8-20</b>                                                                                        | <b>15-35</b>                                                                                     | <b>15-35</b>                                                                                          | <b>5-10</b>                                                                                      | <b>8-20</b>                                                                                             |  |              |
|  <b>A</b>             | <b>MF</b>                                                                                                    | <b>PM</b>                                                                                               |  <b>V</b>        |  <b>45°</b>       | <b>ISO 3<br/>6GX</b>                                                                             |  <b>C/2,5</b>        |                 | <b>DIN 374</b>                                                                                          |  |              |

[illegible]

# A-SFT FORM E NEW

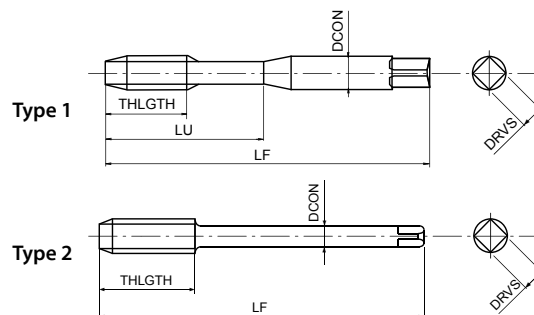
Threading | Cutting taps | Metric Fine



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Chamfer Form E

|          |                |           |          |            |                  |              |                |                |       |
|----------|----------------|-----------|----------|------------|------------------|--------------|----------------|----------------|-------|
| <b>P</b> | <b>P</b>       | <b>P</b>  | <b>P</b> | <b>M</b>   | <b>N</b>         | <b>N</b>     | <b>S</b>       | <b>H</b>       |       |
| C < 0,2% | 0,25 < C < 0,4 | C ≥ 0,45% | SCM      | INOX       | Al               | AC, ADC      | Ti             | 25-35 HRC      |       |
| 15-60    | 15-60          | 10-60     | 8-30     | 8-20       | 15-35            | 15-35        | 5-10           | 8-20           | m/min |
| <b>A</b> | <b>MF</b>      | <b>PM</b> | <b>V</b> | <b>45°</b> | <b>ISO 2 6HX</b> | <b>E/1,5</b> | <b>DIN 371</b> | <b>DIN 374</b> |       |

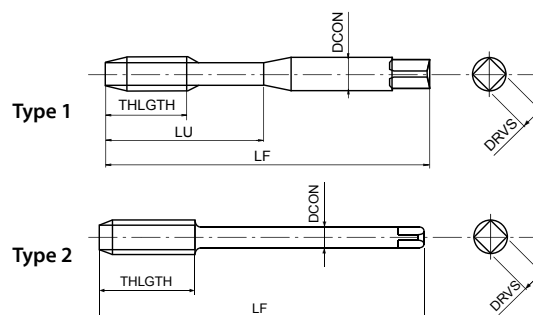
| EDP      | TD  | TP   | LF  | THLGTH | LU | DCON | DRVS | NOF | Type | DIN |
|----------|-----|------|-----|--------|----|------|------|-----|------|-----|
| 48203135 | 2,5 | 0,35 | 50  | 3,6    | 13 | 2,8  | 2,1  | 2   | 1    | 371 |
| 48203137 | 2,6 | 0,35 | 50  | 3,6    | 13 | 2,8  | 2,1  | 2   | 1    | 371 |
| 48203141 | 3   | 0,35 | 56  | 4      | 18 | 3,5  | 2,7  | 3   | 1    | 371 |
| 48203143 | 3,5 | 0,35 | 56  | 4,8    | 20 | 4    | 3    | 3   | 1    | 371 |
| 48203146 | 4   | 0,35 | 63  | 5,6    | 21 | 4,5  | 3,4  | 3   | 1    | 371 |
| 48203145 | 4   | 0,5  | 63  | 5,6    | 21 | 4,5  | 3,4  | 3   | 1    | 371 |
| 48203148 | 4,5 | 0,5  | 70  | 6      | 25 | 6    | 4,9  | 3   | 1    | 371 |
| 48203151 | 5   | 0,5  | 70  | 6,4    | 25 | 6    | 4,9  | 3   | 1    | 371 |
| 48203602 | 6   | 0,5  | 80  | 8      | 30 | 6    | 4,9  | 3   | 1    | 371 |
| 48203601 | 6   | 0,75 | 80  | 8      | 30 | 6    | 4,9  | 3   | 1    | 371 |
| 48203160 | 7   | 0,75 | 80  | 8      | 30 | 7    | 5,5  | 3   | 1    | 371 |
| 48203604 | 8   | 0,75 | 80  | 10     | 35 | 8    | 6,2  | 3   | 1    | 371 |
| 48203603 | 8   | 1    | 90  | 10     | 35 | 8    | 6,2  | 3   | 1    | 371 |
| 48203605 | 9   | 1    | 90  | 10     | 35 | 9    | 7    | 3   | 1    | 371 |
| 48203608 | 10  | 0,75 | 90  | 12     | 35 | 10   | 8    | 3   | 1    | 371 |
| 48203607 | 10  | 1    | 90  | 12     | 35 | 10   | 8    | 3   | 1    | 371 |
| 48203606 | 10  | 1,25 | 100 | 12     | 39 | 10   | 8    | 3   | 1    | 371 |
| 48203157 | 6   | 0,5  | 80  | 8      | -  | 4,5  | 3,4  | 3   | 2    | 374 |
| 48203156 | 6   | 0,75 | 80  | 8      | -  | 4,5  | 3,4  | 3   | 2    | 374 |
| 48203163 | 8   | 0,75 | 80  | 8      | -  | 6    | 4,9  | 3   | 2    | 374 |
| 48203162 | 8   | 1    | 90  | 10     | -  | 6    | 4,9  | 3   | 2    | 374 |
| 48203167 | 9   | 1    | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48203172 | 10  | 0,75 | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48203171 | 10  | 1    | 90  | 10     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48203170 | 10  | 1,25 | 100 | 12     | -  | 7    | 5,5  | 3   | 2    | 374 |
| 48203176 | 11  | 1    | 90  | 12     | -  | 8    | 6,2  | 3   | 2    | 374 |
| 48203182 | 12  | 1    | 100 | 12     | -  | 9    | 7    | 3   | 2    | 374 |
| 48203181 | 12  | 1,25 | 100 | 12     | -  | 9    | 7    | 3   | 2    | 374 |
| 48203180 | 12  | 1,5  | 100 | 14     | -  | 9    | 7    | 3   | 2    | 374 |
| 48203194 | 14  | 1    | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48203193 | 14  | 1,25 | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48203192 | 14  | 1,5  | 100 | 16     | -  | 11   | 9    | 3   | 2    | 374 |
| 48203204 | 16  | 1    | 100 | 16     | -  | 12   | 9    | 3   | 2    | 374 |
| 48203203 | 16  | 1,5  | 100 | 16     | -  | 12   | 9    | 3   | 2    | 374 |
| 48203218 | 18  | 1    | 110 | 16     | -  | 14   | 11   | 4   | 2    | 374 |
| 48203216 | 18  | 1,5  | 110 | 16     | -  | 14   | 11   | 4   | 2    | 374 |
| 48203232 | 20  | 1    | 125 | 16     | -  | 16   | 12   | 4   | 2    | 374 |
| 48203230 | 20  | 1,5  | 125 | 16     | -  | 16   | 12   | 4   | 2    | 374 |
| 48203220 | 20  | 2    | 140 | 25     | -  | 16   | 12   | 4   | 2    | 374 |
| 48203241 | 22  | 1    | 125 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48203240 | 22  | 1,5  | 125 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48203239 | 22  | 2    | 140 | 25     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48203251 | 24  | 1    | 140 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48203250 | 24  | 1,5  | 140 | 16     | -  | 18   | 14,5 | 4   | 2    | 374 |
| 48203249 | 24  | 2    | 140 | 30     | -  | 18   | 14,5 | 4   | 2    | 374 |



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

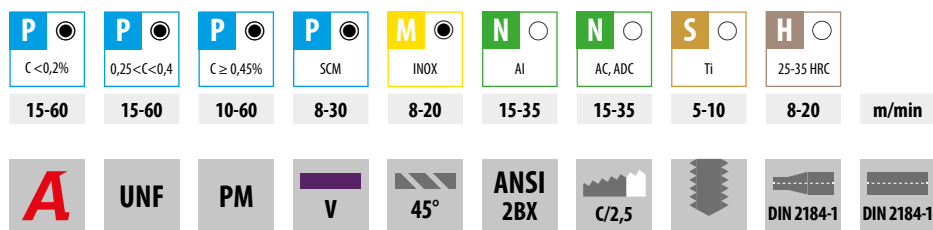
|                                                                                               |                                                                                                     |                                                                                                |                                                                                          |                                                                                           |                                                                                         |                                                                                              |                                                                                         |                                                                                                |                                                                                      |       |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| <br>C < 0,2% | <br>0,25 < C < 0,4 | <br>C ≥ 0,45% | <br>SCM | <br>INOX | <br>Al | <br>AC, ADC | <br>Ti | <br>25-35 HRC |                                                                                      |       |
| 15-60                                                                                         | 15-60                                                                                               | 10-60                                                                                          | 8-30                                                                                     | 8-20                                                                                      | 15-35                                                                                   | 15-35                                                                                        | 5-10                                                                                    | 8-20                                                                                           |                                                                                      | m/min |
|            | UNC                                                                                                 | PM                                                                                             |       |        | ANSI<br>2BX                                                                             |           |      |             |  |       |
|                                                                                               |                                                                                                     |                                                                                                | V                                                                                        | 45°                                                                                       |                                                                                         | C/2,5                                                                                        |                                                                                         | DIN 2184-1                                                                                     | DIN 2184-1                                                                           |       |

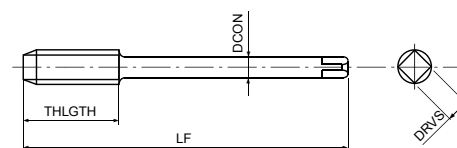
[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

## Threading | Cutting taps

[illegible]

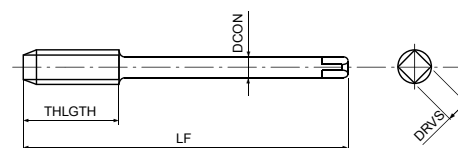


- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

|                                                                                                                                            |                                                                                                                                                     |                                                                                                                                          |                                                                                                                                    |                                                                                                                                     |                                                                                                                                   |                                                                                                                                        |                                                                                                                                   |                                                                                                                                          |       |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <div><div>P</div><div></div></div> <div>C &lt; 0,2%</div> | <div><div>P</div><div></div></div> <div>0,25 &lt; C &lt; 0,4</div> | <div><div>P</div><div></div></div> <div>C ≥ 0,45%</div> | <div><div>P</div><div></div></div> <div>SCM</div> | <div><div>M</div><div></div></div> <div>INOX</div> | <div><div>N</div><div></div></div> <div>Al</div> | <div><div>N</div><div></div></div> <div>AC, ADC</div> | <div><div>S</div><div></div></div> <div>Ti</div> | <div><div>H</div><div></div></div> <div>25-35 HRC</div> |       |
| 15-60                                                                                                                                      | 15-60                                                                                                                                               | 10-60                                                                                                                                    | 8-30                                                                                                                               | 8-20                                                                                                                                | 15-35                                                                                                                             | 15-35                                                                                                                                  | 5-10                                                                                                                              | 8-20                                                                                                                                     | m/min |

**A** **G** **PM** **V** **45°** **C/2,5** **DIN 5156**

[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Chamfer Form E

## Threading | Cutting taps



15-60



15-60



10-60



8-30



8-20



15-35



15-35



5-10



8-20

m/min



**Rp**

**PM**



**V**



45°

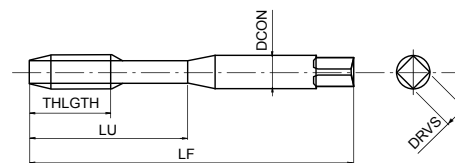


F/15



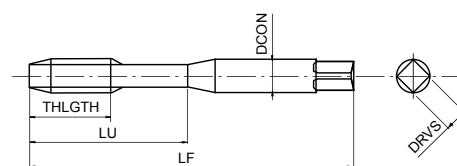
DIN 5156

[illegible]



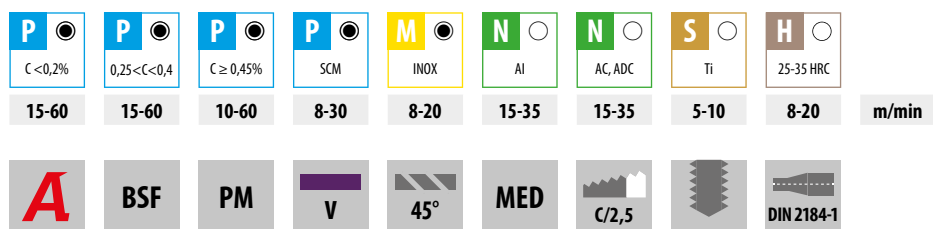
- |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |       |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |       |
| $C < 0,2\%$                                                                                | $0,25 < C < 0,4$                                                                           | $C \geq 0,45\%$                                                                            | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | Al, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |       |
| 15-60                                                                                      | 15-60                                                                                      | 10-60                                                                                      | 8-30                                                                                       | 8-20                                                                                       | 15-35                                                                                      | 15-35                                                                                      | 5-10                                                                                       | 8-20                                                                                       | m/min |

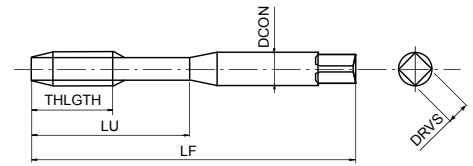
[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

## Threading | Cutting taps

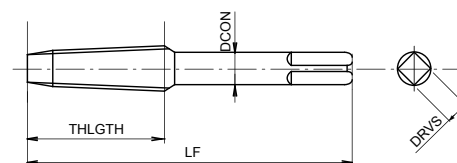
[illegible]



- First choice in quality and performance
- Powder metal spiral-fluted cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

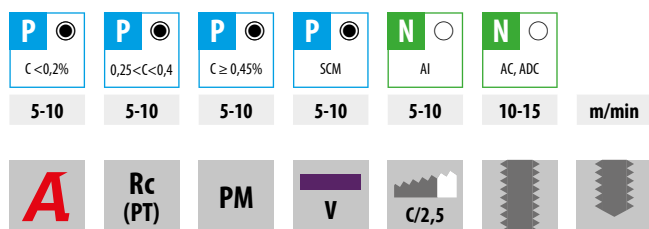
|                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |              |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |              |
| C < 0,2%                                                                                   | 0,25 < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | AC, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |              |
| <b>15-60</b>                                                                               | <b>15-60</b>                                                                               | <b>10-60</b>                                                                               | <b>8-30</b>                                                                                | <b>8-20</b>                                                                                | <b>15-35</b>                                                                               | <b>15-35</b>                                                                               | <b>5-10</b>                                                                                | <b>8-20</b>                                                                                | <b>m/min</b> |

[illegible]



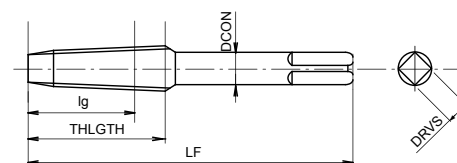
- First choice in quality and performance
- Powder metal straight flute cutting tap for through and blind holes
- Multilayer TiCN coating
- High speed tapping in general steels and aluminium
- RC (BSPT) tapered 1:16

## Threading | Cutting taps



RC (BSPT)

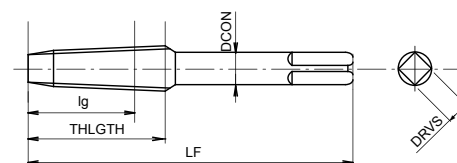
[illegible]



- First choice in quality and performance
- Powder metal spiral flute cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels and aluminium
- RC (BSPT) tapered 1:16

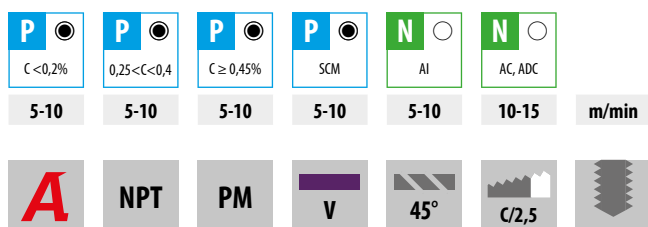
|                                                                                                                 |                                                                                                                      |                                                                                                                     |                                                                                                         |                                                                                                        |                                                                                                              |                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <br>$C < 0,2\%$<br><b>5-10</b> | <br>$0,25 < C < 0,4$<br><b>5-10</b> | <br>$C \geq 0,45\%$<br><b>5-10</b> | <br>SCM<br><b>5-10</b> | <br>AI<br><b>5-10</b> | <br>AC, ADC<br><b>10-15</b> | <b>m/min</b>                                                                       |
|                               |                                    |                                   |                       |                      |                            |  |

[illegible]

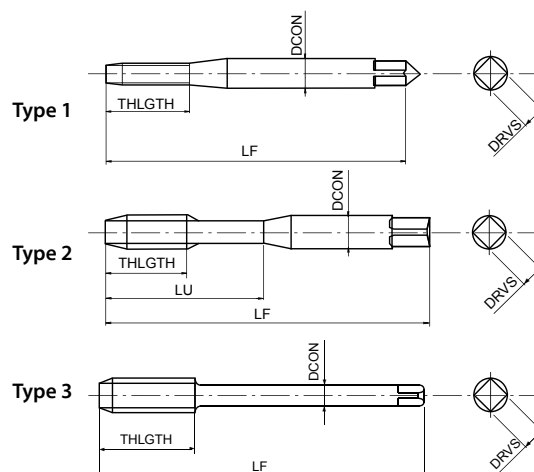


- First choice in quality and performance
- Powder metal spiral flute cutting tap for blind holes
- Multilayer TiCN coating
- High speed tapping in general steels and aluminium
- NPT tapered 1:16

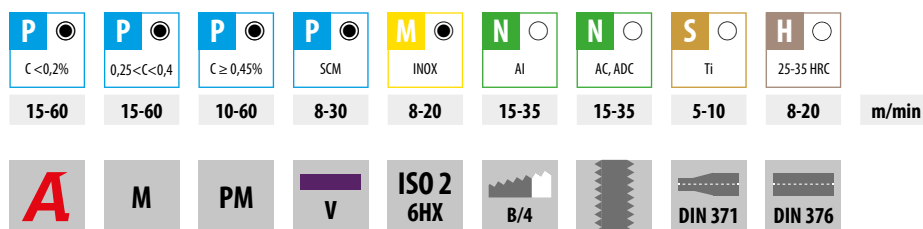
## Threading | Cutting taps

[illegible]



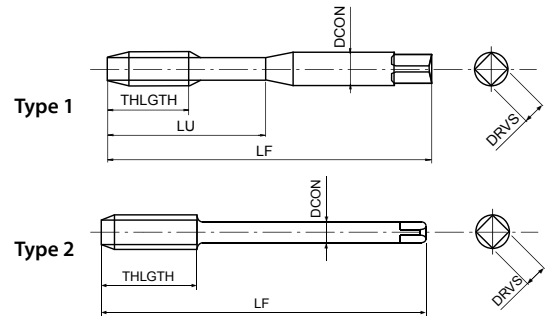


- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels



\*Tolerance 5 HX

[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Side through coolant

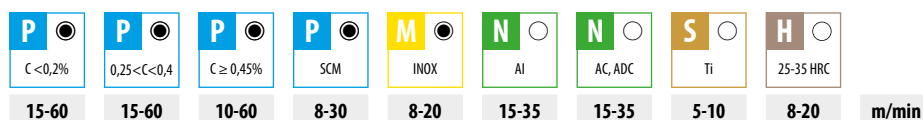
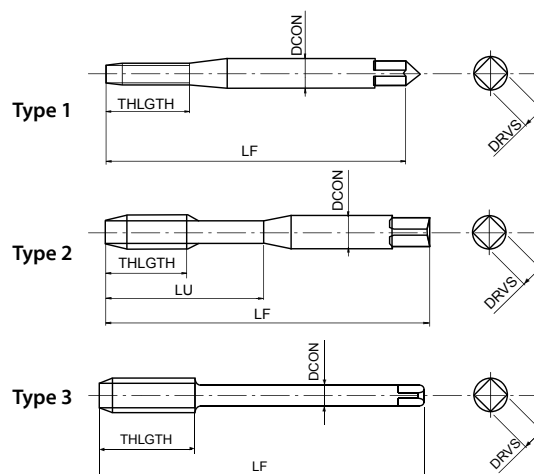
|                                                                                                        |                                                                                                              |                                                                                                         |                                                                                                   |                                                                                                    |                                                                                                  |                                                                                                       |                                                                                                  |                                                                                                         |  |       |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--|-------|
| <b>P</b> <br>C < 0,2% | <b>P</b> <br>0,25 < C < 0,4 | <b>P</b> <br>C ≥ 0,45% | <b>P</b> <br>SCM | <b>M</b> <br>INOX | <b>N</b> <br>Al | <b>N</b> <br>AC, ADC | <b>S</b> <br>Ti | <b>H</b> <br>25-35 HRC |  | m/min |
| 15-60                                                                                                  | 15-60                                                                                                        | 10-60                                                                                                   | 8-30                                                                                              | 8-20                                                                                               | 15-35                                                                                            | 15-35                                                                                                 | 5-10                                                                                             | 8-20                                                                                                    |  |       |

|                                                                                     |   |    |                                                                                     |              |                                                                                     |                                                                                     |                                                                                     |         |         |
|-------------------------------------------------------------------------------------|---|----|-------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|---------|
|  | M | PM |  | ISO 2<br>6HX |  |  |  | DIN 371 | DIN 376 |
|                                                                                     |   |    |                                                                                     |              | B/4                                                                                 |                                                                                     |                                                                                     |         |         |

[illegible]

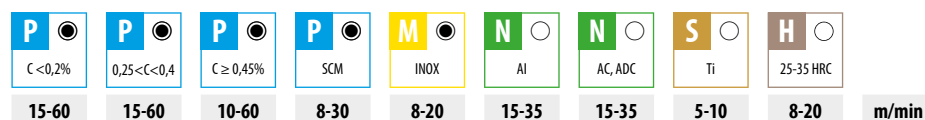
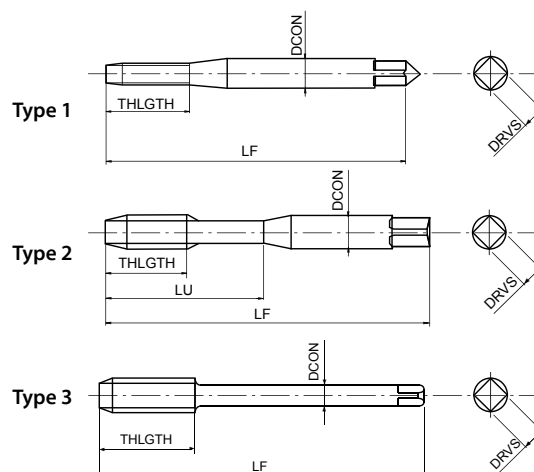


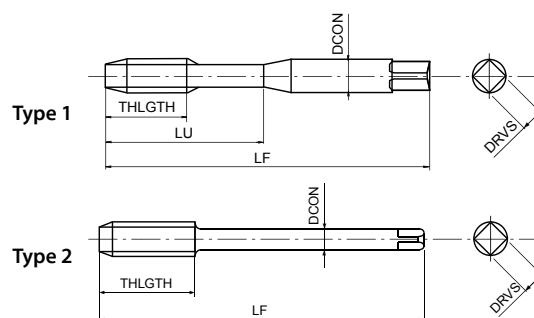
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 6G internal thread tolerance

[illegible]

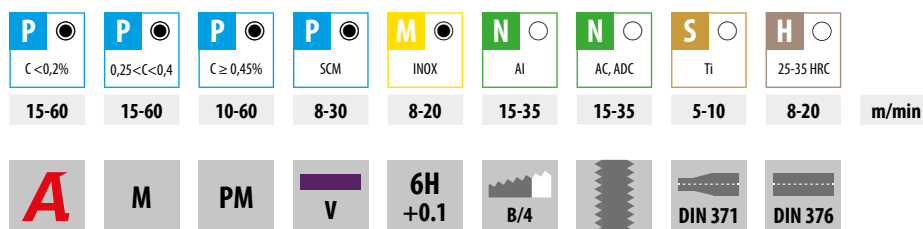


- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 7G internal thread tolerance

[illegible]

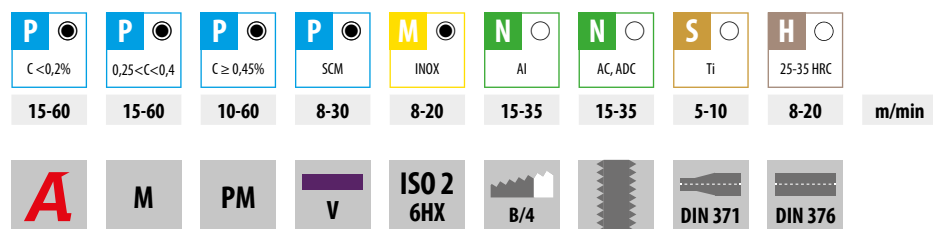
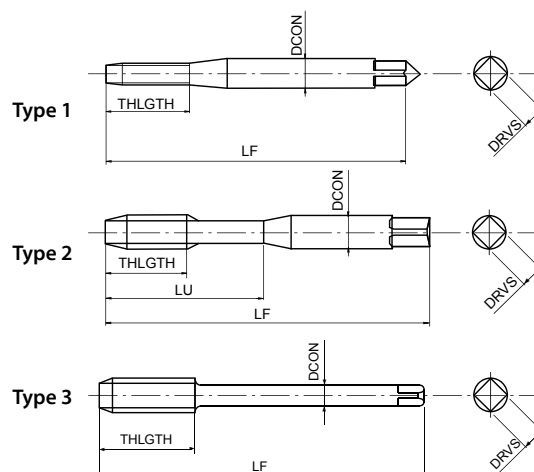


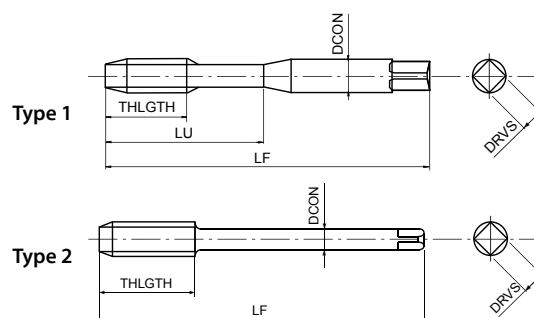
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Oversized tap for 6H +0,1mm thread tolerance

[illegible]

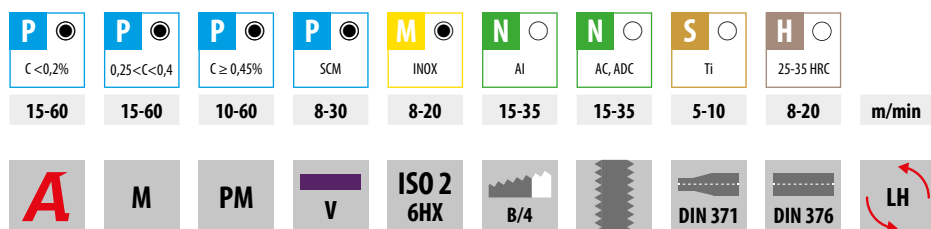


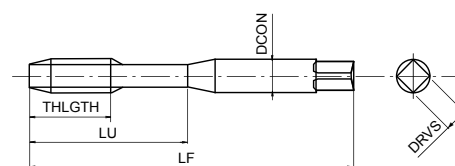
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- With long shank for long reach threading

[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For left-hand threads

[illegible]



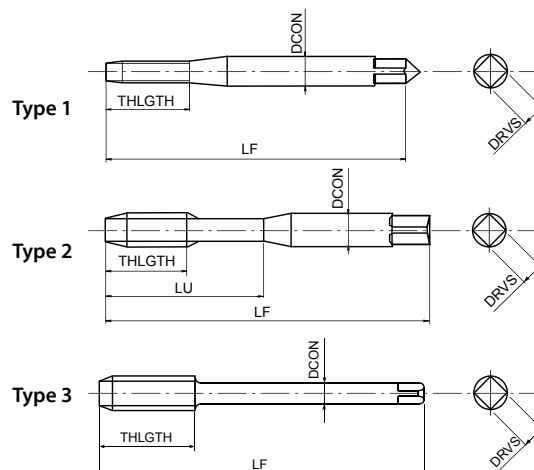
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- With Weldon shank

|                                                                                               |                                                                                                     |                                                                                                |                                                                                          |                                                                                           |                                                                                         |                                                                                              |                                                                                         |                                                                                                 |       |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------|
| <br>C < 0,2% | <br>0,25 < C < 0,4 | <br>C ≥ 0,45% | <br>SCM | <br>INOX | <br>AI | <br>AC, ADC | <br>Ti | <br>25-35 HRC | m/min |
| 15-60                                                                                         | 15-60                                                                                               | 10-60                                                                                          | 8-30                                                                                     | 8-20                                                                                      | 15-35                                                                                   | 15-35                                                                                        | 5-10                                                                                    | 8-20                                                                                            |       |
|              |                    |               |         |          |        |             |        |               |       |

[illegible]



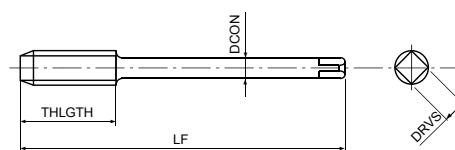
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels



|                      |                            |                       |                 |                  |                |                     |                |                       |       |
|----------------------|----------------------------|-----------------------|-----------------|------------------|----------------|---------------------|----------------|-----------------------|-------|
| <b>P</b><br>C < 0,2% | <b>P</b><br>0,25 < C < 0,4 | <b>P</b><br>C ≥ 0,45% | <b>P</b><br>SCM | <b>M</b><br>INOX | <b>N</b><br>Al | <b>N</b><br>AC, ADC | <b>S</b><br>Ti | <b>H</b><br>25-35 HRC | m/min |
| 15-60                | 15-60                      | 10-60                 | 8-30            | 8-20             | 15-35          | 15-35               | 5-10           | 8-20                  |       |

|          |           |           |          |                  |            |                |                |
|----------|-----------|-----------|----------|------------------|------------|----------------|----------------|
| <b>A</b> | <b>MF</b> | <b>PM</b> | <b>V</b> | <b>ISO 2 6HX</b> | <b>B/4</b> | <b>DIN 371</b> | <b>DIN 374</b> |
|----------|-----------|-----------|----------|------------------|------------|----------------|----------------|

| EDP      | TD  | TP   | LF  | THLGTH | LU | DCON | DRVS | NOF | Type | DIN |
|----------|-----|------|-----|--------|----|------|------|-----|------|-----|
| 48145135 | 2,5 | 0,35 | 50  | -      | 9  | 2,8  | 2,1  | 2   | 1    | 371 |
| 48145137 | 2,6 | 0,35 | 50  | -      | 9  | 2,8  | 2,1  | 2   | 1    | 371 |
| 48145141 | 3   | 0,35 | 56  | 8      | 18 | 3,5  | 2,7  | 3   | 2    | 371 |
| 48145143 | 3,5 | 0,35 | 56  | 9      | 20 | 4    | 3    | 3   | 2    | 371 |
| 48145146 | 4   | 0,35 | 63  | 10     | 21 | 4,5  | 3,4  | 3   | 2    | 371 |
| 48145145 | 4   | 0,5  | 63  | 10     | 21 | 4,5  | 3,4  | 3   | 2    | 371 |
| 48145148 | 4,5 | 0,5  | 70  | 12     | 25 | 6    | 4,9  | 3   | 2    | 371 |
| 48145151 | 5   | 0,5  | 70  | 12     | 25 | 6    | 4,9  | 3   | 2    | 371 |
| 48145602 | 6   | 0,5  | 80  | 14     | 30 | 6    | 4,9  | 3   | 2    | 371 |
| 48145601 | 6   | 0,75 | 80  | 14     | 30 | 6    | 4,9  | 3   | 2    | 371 |
| 48145160 | 7   | 0,75 | 80  | 14     | 30 | 7    | 5,5  | 3   | 2    | 371 |
| 48145604 | 8   | 0,75 | 80  | 18     | 30 | 8    | 6,2  | 3   | 2    | 371 |
| 48145603 | 8   | 1    | 90  | 22     | 35 | 8    | 6,2  | 3   | 2    | 371 |
| 48145605 | 9   | 1    | 90  | 22     | 35 | 9    | 7    | 3   | 2    | 371 |
| 48145608 | 10  | 0,75 | 90  | 20     | 35 | 10   | 8    | 3   | 2    | 371 |
| 48145607 | 10  | 1    | 90  | 20     | 35 | 10   | 8    | 3   | 2    | 371 |
| 48145606 | 10  | 1,25 | 100 | 24     | 39 | 10   | 8    | 3   | 2    | 371 |
| 48145157 | 6   | 0,5  | 80  | 14     | -  | 4,5  | 3,4  | 3   | 3    | 374 |
| 48145156 | 6   | 0,75 | 80  | 14     | -  | 4,5  | 3,4  | 3   | 3    | 374 |
| 48145163 | 8   | 0,75 | 80  | 18     | -  | 6    | 4,9  | 3   | 3    | 374 |
| 48145162 | 8   | 1    | 90  | 22     | -  | 6    | 4,9  | 3   | 3    | 374 |
| 48145167 | 9   | 1    | 90  | 22     | -  | 7    | 5,5  | 3   | 3    | 374 |
| 48145172 | 10  | 0,75 | 90  | 20     | -  | 7    | 5,5  | 3   | 3    | 374 |
| 48145171 | 10  | 1    | 90  | 20     | -  | 7    | 5,5  | 3   | 3    | 374 |
| 48145170 | 10  | 1,25 | 100 | 24     | -  | 7    | 5,5  | 3   | 3    | 374 |
| 48145176 | 11  | 1    | 90  | 20     | -  | 8    | 6,2  | 3   | 3    | 374 |
| 48145182 | 12  | 1    | 100 | 22     | -  | 9    | 7    | 3   | 3    | 374 |
| 48145181 | 12  | 1,25 | 100 | 22     | -  | 9    | 7    | 3   | 3    | 374 |
| 48145180 | 12  | 1,5  | 100 | 22     | -  | 9    | 7    | 3   | 3    | 374 |
| 48145194 | 14  | 1    | 100 | 22     | -  | 11   | 9    | 4   | 3    | 374 |
| 48145193 | 14  | 1,25 | 100 | 22     | -  | 11   | 9    | 4   | 3    | 374 |
| 48145192 | 14  | 1,5  | 100 | 22     | -  | 11   | 9    | 4   | 3    | 374 |
| 48145204 | 16  | 1    | 100 | 22     | -  | 12   | 9    | 4   | 3    | 374 |
| 48145203 | 16  | 1,5  | 100 | 22     | -  | 12   | 9    | 4   | 3    | 374 |
| 48145218 | 18  | 1    | 110 | 25     | -  | 14   | 11   | 4   | 3    | 374 |
| 48145216 | 18  | 1,5  | 110 | 25     | -  | 14   | 11   | 4   | 3    | 374 |
| 48145232 | 20  | 1    | 125 | 25     | -  | 16   | 12   | 4   | 3    | 374 |
| 48145230 | 20  | 1,5  | 125 | 25     | -  | 16   | 12   | 4   | 3    | 374 |
| 48145220 | 20  | 2    | 140 | 34     | -  | 16   | 12   | 4   | 3    | 374 |
| 48145241 | 22  | 1    | 125 | 25     | -  | 18   | 14,5 | 4   | 3    | 374 |
| 48145240 | 22  | 1,5  | 125 | 25     | -  | 18   | 14,5 | 4   | 3    | 374 |
| 48145239 | 22  | 2    | 140 | 34     | -  | 18   | 14,5 | 4   | 3    | 374 |
| 48145251 | 24  | 1    | 140 | 28     | -  | 18   | 14,5 | 4   | 3    | 374 |
| 48145250 | 24  | 1,5  | 140 | 28     | -  | 18   | 14,5 | 4   | 3    | 374 |
| 48145249 | 24  | 2    | 140 | 28     | -  | 18   | 14,5 | 4   | 3    | 374 |

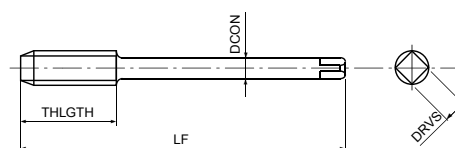


- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- Side through coolant

|                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |       |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |       |
| C < 0,2%                                                                                   | 0,2% < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | Al, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |       |
| 15-60                                                                                      | 15-60                                                                                      | 10-60                                                                                      | 8-30                                                                                       | 8-20                                                                                       | 15-35                                                                                      | 15-35                                                                                      | 5-10                                                                                       | 8-20                                                                                       | m/min |

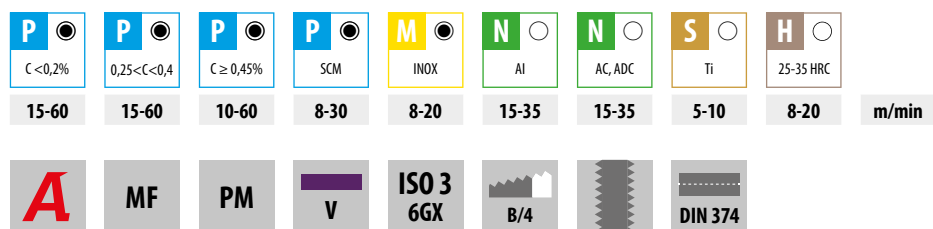
**A** **MF** **PM** **V** **ISO 2 6HX** **B/4** **DIN 374**

[illegible]



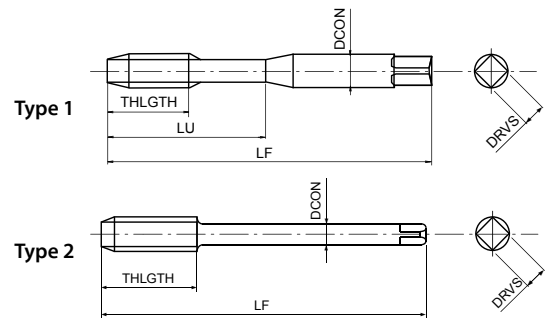
- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels
- For 6G internal thread tolerance

## Threading | Cutting taps



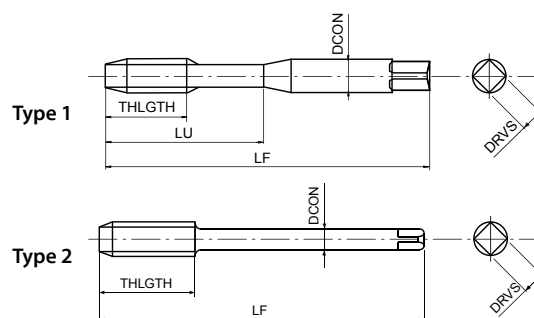
Metric Fine

[illegible]



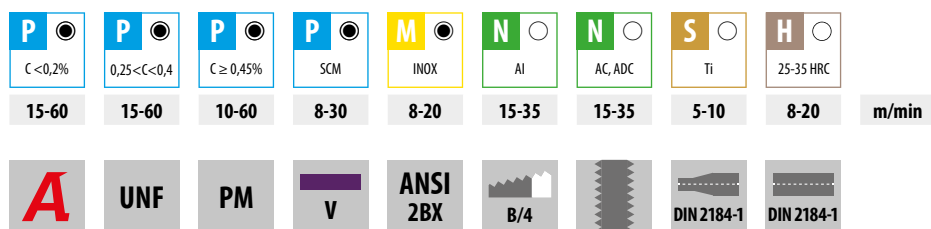
- |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |              |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |              |
| C < 0,2%                                                                                   | 0,25 < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | AC, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |              |
| <b>15-60</b>                                                                               | <b>15-60</b>                                                                               | <b>10-60</b>                                                                               | <b>8-30</b>                                                                                | <b>8-20</b>                                                                                | <b>15-35</b>                                                                               | <b>15-35</b>                                                                               | <b>5-10</b>                                                                                | <b>8-20</b>                                                                                | <b>m/min</b> |

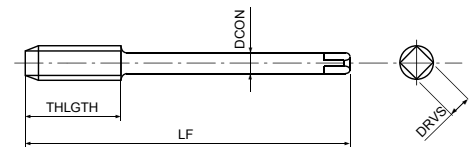
[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

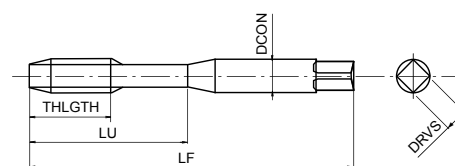
## Threading | Cutting taps

[illegible]



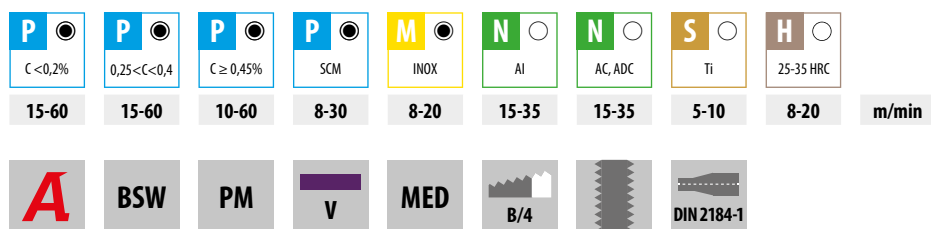
- |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |                                                                                            |              |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------|
| <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>P</b>  | <b>M</b>  | <b>N</b>  | <b>N</b>  | <b>S</b>  | <b>H</b>  |              |
| C < 0,2%                                                                                   | 0,25 < C < 0,4                                                                             | C ≥ 0,45%                                                                                  | SCM                                                                                        | INOX                                                                                       | Al                                                                                         | AC, ADC                                                                                    | Ti                                                                                         | 25-35 HRC                                                                                  |              |
| <b>15-60</b>                                                                               | <b>15-60</b>                                                                               | <b>10-60</b>                                                                               | <b>8-30</b>                                                                                | <b>8-20</b>                                                                                | <b>15-35</b>                                                                               | <b>15-35</b>                                                                               | <b>5-10</b>                                                                                | <b>8-20</b>                                                                                | <b>m/min</b> |

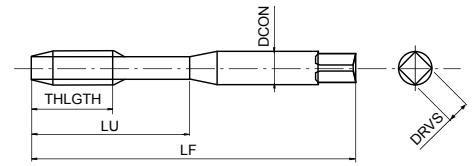
[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

## Threading | Cutting taps

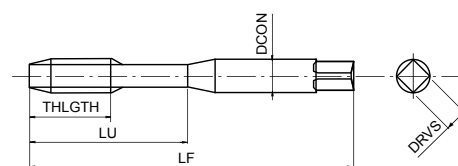
[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

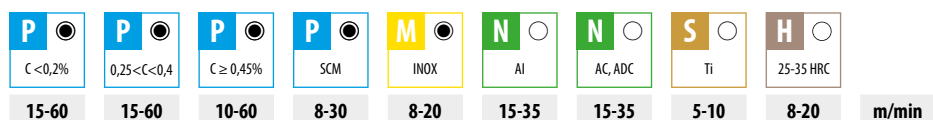
|                                                                                                        |                                                                                                              |                                                                                                         |                                                                                                   |                                                                                                    |                                                                                                  |                                                                                                       |                                                                                                  |                                                                                                         |              |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------|
| <b>P</b> <br>C < 0,2% | <b>P</b> <br>0,25 < C < 0,4 | <b>P</b> <br>C ≥ 0,45% | <b>P</b> <br>SCM | <b>M</b> <br>INOX | <b>N</b> <br>Al | <b>N</b> <br>AC, ADC | <b>S</b> <br>Ti | <b>H</b> <br>25-35 HRC |              |
| <b>15-60</b>                                                                                           | <b>15-60</b>                                                                                                 | <b>10-60</b>                                                                                            | <b>8-30</b>                                                                                       | <b>8-20</b>                                                                                        | <b>15-35</b>                                                                                     | <b>15-35</b>                                                                                          | <b>5-10</b>                                                                                      | <b>8-20</b>                                                                                             | <b>m/min</b> |

[illegible]



- First choice in quality and performance
- Powder metal spiral-point cutting tap for through holes
- Multilayer TiCN coating
- High speed tapping in general steels, aluminium, stainless steels

## Threading | Cutting taps

[illegible]

[www.osgeurope.com](http://www.osgeurope.com)



## SWEDEN

Branch office of OSG SCANDINAVIA  
Singelgatan 7  
212 28 Malmö  
Sweden  
Tel: +46 40 41 22 55  
osg@osg-scandinavia.com

## OSG SCANDINAVIA

(For Scandinavian countries)  
Langebjergvaenget 16  
4000 Roskilde  
Denmark  
Tel: +45 46 75 65 55  
osg@osg-scandinavia.com

## OSG NETHERLANDS

Bedrijfsweg 5  
3481 MG Harmelen  
The Netherlands  
Tel: +31 348 44 2764  
info@osg-nl.com

## OSG UK

Kelsey Close, Attleborough Fields Ind Est,  
CV11 6RS, Nuneaton  
United Kingdom  
Tel: +44 (0) 1827 720 013  
uk\_sales@osg-uk.com

## OSG EUROPE LOGISTICS

Avenue Lavoisier 1  
B-1300 Z.I. Wavre - Nord  
Belgium  
Tel: +32 10 23 05 07  
info@osgeurope.com

## OSG BELUX

Avenue Lavoisier 1  
B-1300 Z.I. Wavre - Nord  
Belgium  
Tel: +32 10 23 05 11  
info@osg-belgium.com

## OSG IBÉRICA

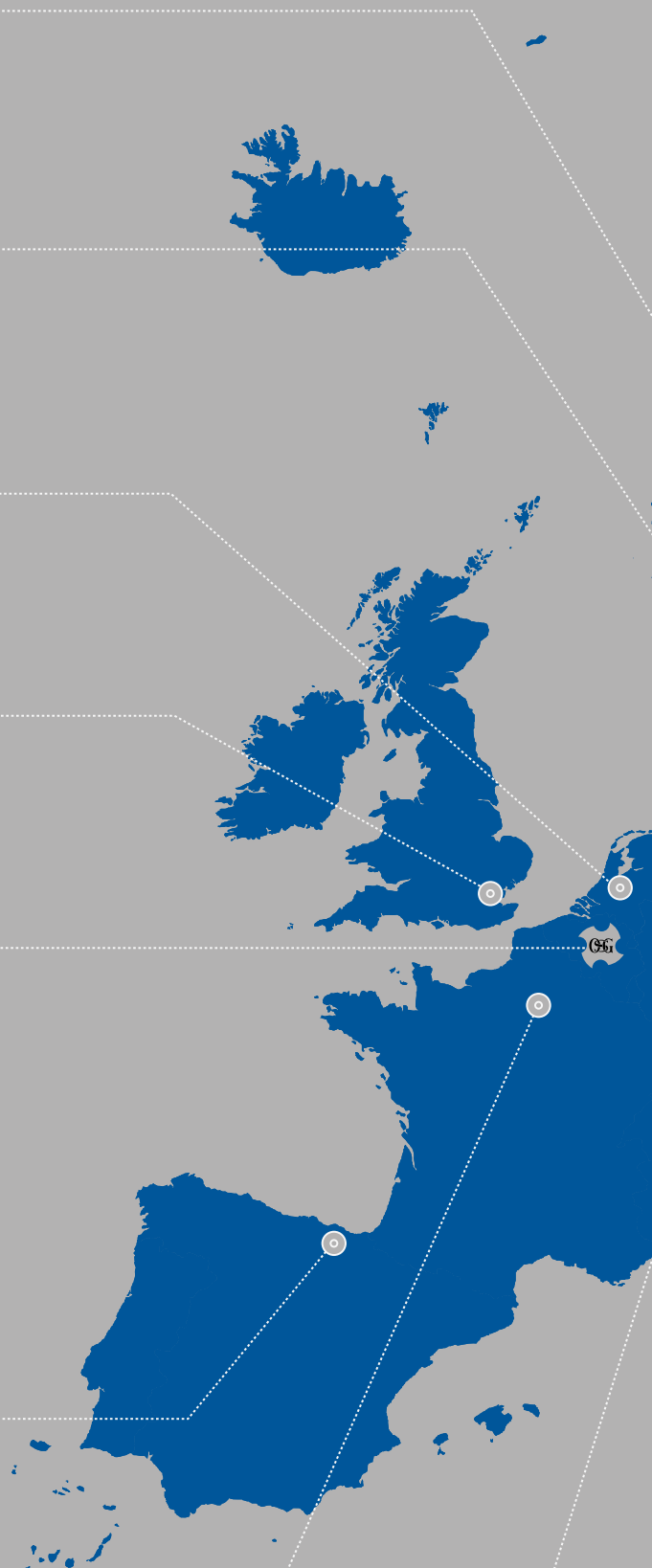
Bekolarra 4  
E - 01010 Vitoria-Gasteiz  
Spain  
Tel: +34 945 242 400  
osg.iberica@osg-ib.com

## OSG FRANCE

Parc Icade, Paris Nord 2  
Immeuble "Le Rimbaud"  
22 Avenue des Nations  
CS66191 - 93420 Villepinte  
France  
Tel: +33 1 49 90 10 10  
sales@osg-france.com

## OSG ITALY

Via Ferrero, 65 A/B  
I - 10098 Rivoli  
Italy  
Tel: +39 0117705211  
info@osg-italia.it



# OSG IN EUROPE

## CZECH REPUBLIC, SLOVAKIA, HUNGARY

OSG Europe Logistics S.A.  
Slovakia, organizačná zložka  
Račianska 22/A, Bratislava 831 02  
Slovakia  
Tel.: +421 24 32 91 295  
info@osgeurope.com

## OSG POLAND

ul. Spółdzielcza 57  
05-074 Halinów  
Polska  
Tel: +22 760 82 71  
Mob. +48 570 677 711  
osg@osg-poland.com

## OSG ROMANIA SRL

25C, Bucuresti-Magurele Street (Sector 5)  
051431 Bucuresti  
România  
Tel: +40 21 322 07 47  
info@osgromania.ro

## OSG TURKEY

Rami Kışla Cad.No:56 Eyüp  
Istanbul 34056  
Turkey  
Tel: +90 212 565 24 00  
Fax: +90 212 565 44 00  
info@osg-turkey.com

## Vischer & Bolli AG

Machining and Workholding  
Im Schossacher 17  
CH-8600 Dübendorf  
Switzerland  
Tel.: +41 44 802 15 15  
info@vb-tools.com

## OSG GERMANY

Karl-Ehmann-Str. 25  
D - 73037 Göppingen  
Germany  
Tel: +49 7161 6064 - 0  
Fax: +49 7161 6064 - 444  
info@osg-germany.de



*shaping your dreams*

#### **OSG EUROPE LOGISTICS**

Avenue Lavoisier 1  
B-1300 Z.I. Wavre - Nord - Belgium  
Tel: +32 10 23 05 07  
info@osgeurope.com

#### **OSG POLAND Sp. z o.o.**

Spółdzielcza 57  
05-074 Halinów - Poland  
Tel: +22 760 82 71  
osg@osg-poland.com

#### **OSG ROMANIA SRL**

25C, Bucuresti-Magurele Street (Sector 5)  
051431 Bucuresti - România  
Tel: +40 21 322 07 47  
info@osgromania.ro

057 Göppingen - Germany  
Tel: +49 7161 6064 - 0  
+49 7161 6064 - 444  
osg@osg-germany.de

A - e  
Tel: +49 7161  
info@osg-germany.de

#### **OSG SCANDINAVIA**

(Scandinavian countries)  
Engelbjergvaenget 16  
4000 Roskilde - Denmark  
Tel: +45 46 75 65 55  
osg@osg-scandinavia.com

#### **OSG ITALIA**

Via Ferrero, 65 A/B3  
I - 10098 Rivoli - Italy  
Tel: +39 0117705211  
info@osg-italia.it

#### **OSG NETHERLANDS**

Bedrijfsweg 5 - 3481 MG Harmelen  
Tel: +31 348 44 2764  
info@osg-nl.com

#### **SWEDEN**

Branch office of OSG SCANDINAVIA  
Singelgatan 7  
212 28 Malmö - Sweden  
Tel: +46 40 41 22 55  
osg@osg-scandinavia.com

#### **Vischer & Bolli AG**

Machining and Workholding  
Im Schossacher 17  
CH-8600 Dübendorf  
T +41 44 802 15 15  
info@vb-tools.com

#### **OSG UK**

Kelsey Close, Attleborough Fields Ind Est,  
CV11 6RS, Nuneaton, United Kingdom.  
Tel: +44 1827 720 013  
uk\_sales@osg-uk.com

#### **OSG IBERICA**

Bekolarra 4  
E - 01010 Vitoria-Gasteiz - Spain  
Tel: +34 945 242 400  
osg.iberica@osg-ib.com

#### **CZECH, SLOVAKIA, HUNGARY**

OSG Europe Logistics S.A.  
Slovakia organizacna zlozka  
Racianská 22/A, SK-83102 Bratislava  
Slovakia  
Tel. +421 24 32 91 295  
Orders-osgsvk@osgeurope.com

#### **OSG TURKEY**

Rami Kışla Cad.No:56 Eyüp  
İstanbul 34056 - Turkey  
Tel+90 212 565 24 00  
Fax: +90 212 565 44 00  
info@osg-turkey.com

**OSG EUROPE LOGISTICS S.A.**

08/2024 - All rights reserved. © OSG Europe 2024

The contents of this catalogue are provided to you for viewing only. They are not intended for reproduction either in part or in whole in this or other medium. They may not be copied, used to create derivation work or used for any reason, by means of any electronic or mechanical method, without the express, written permission of the copyright owner. If prices are stated, they are net prices and any eventual tax(es) have to be added. The company is not responsible for any printing error in technical price and/or any other data.

Prices are subject to change

OSG Europe