

### PÉNÉTROMÉTRIE

### PENETROMETRY

## 2 Présentation des différents essais de pénétration dynamique

### Presentation of different Dynamic Penetratory Testing



DATC fabrique tout le matériel et le consommable utilisé pour les essais de pénétration dynamique répondant à la norme NF EN ISO 22476-2 et ses dérivés, et ceci aussi bien en matériel perdu qu'en matériel réutilisable (pointes).

DATC manufactures all consumables for dynamic penetration testing, according to norm NF EN ISO 22476-2.

→ **Système 22 PÉNÉTRO léger /**  
**System 22 PENETRO Light**



Voir page : 225  
See page : 225

→ **Système 32 PÉNÉTRO moyen et lourd /**  
**System 32 PENETRO Medium and Heavy**

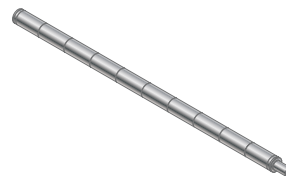
Norme PDB



Voir page 226  
See page 226

→ **Système 42 PÉNÉTRO très lourd /**  
**System 42 PENETRO Very Heavy**

Norme PDA



Voir page 227  
See page 227

→ **Battage par marteau automatique**  
**avec mouton 64 kgs /**  
**Automatic Hammer with Drop Weight 64 kgs**



Voir page 228  
See page 228

→ **Carottier SPT / SPT Core Barrel**

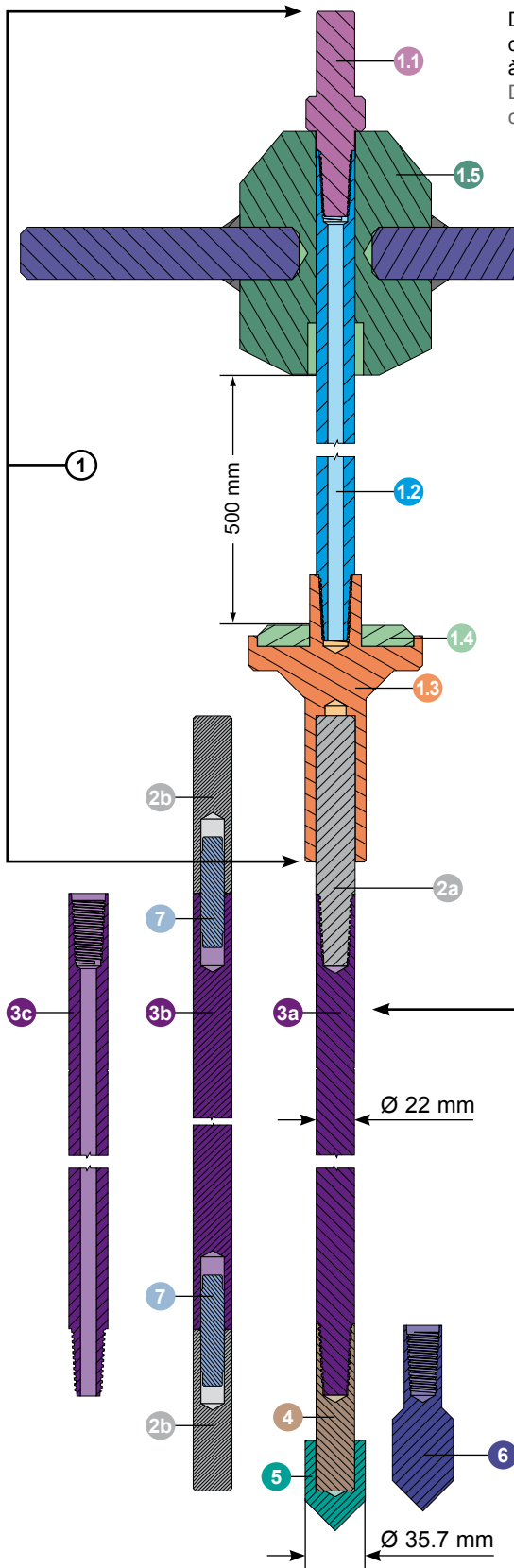


Voir page 229  
See page 229



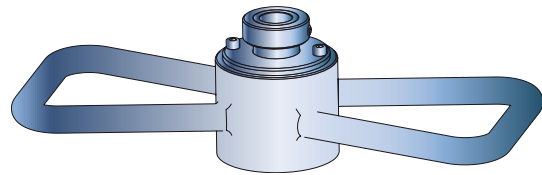
### 2.1a Pénétrométrie Système 22 Penetrometry System 22

## PÉNÉTROMÉTRIE PENETROMETRY



DATC fabrique l'ensemble de ses tiges de pénétrométrie graduées tous les 100 mm. Sur demande nous pouvons les graduer tous les 200 mm. La mention -1 sera alors ajoutée à la fin du n° article.

DATC manufactures all their penetrometry rods graduated every 100 mm. On request we can graduate every 200 mm. In this case '-1' is added to the end of part number.



| N° Article / Part No. | Description / Description                                   |
|-----------------------|-------------------------------------------------------------|
| ROD022MANBI           | Mandrin à billes pour tige 22 mm / Ball Chuck for Rod 22 mm |

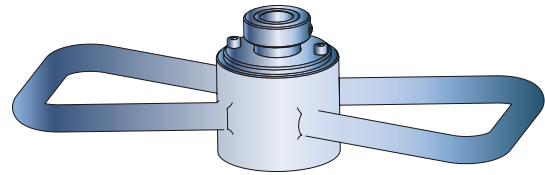
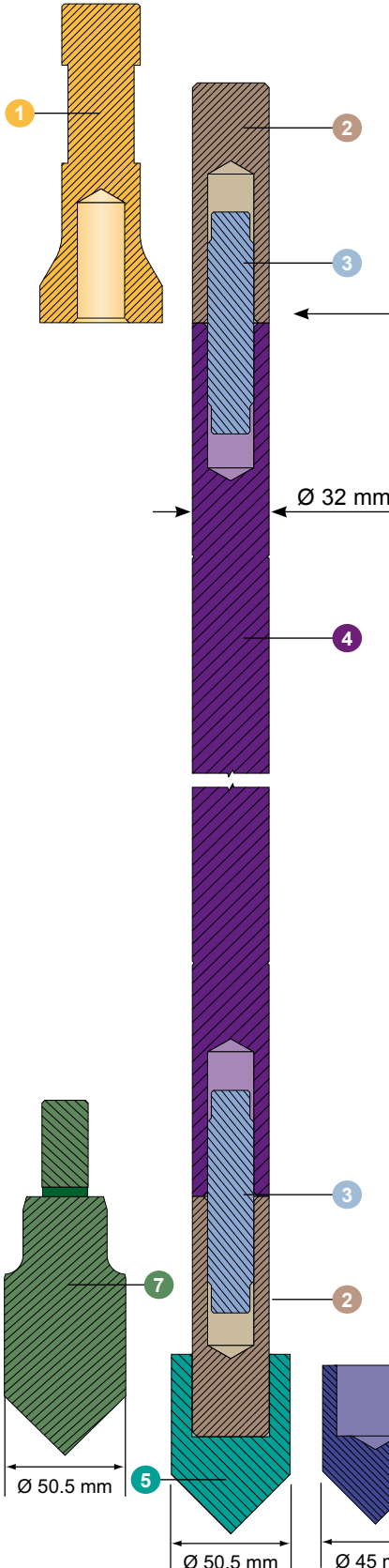
| N° / Item | N° Article / Part No. | Description / Description                                                                                         |
|-----------|-----------------------|-------------------------------------------------------------------------------------------------------------------|
| 1         | ROD022PNTLG           | Pénétromètre léger pour tige 22 mm / Light Penetrometer for Rod 22 mm                                             |
| 1.1       | ROD022PNTLG-1BLK      | Raccord supérieur / Upper Coupling                                                                                |
| 1.2       | ROD022PNTLG-2         | Tige guide longueur utile 500 mm / Guide Rod Make-up Length 500 mm                                                |
| 1.3       | ROD022PNTLG-5         | Enclume / Anvil                                                                                                   |
| 1.4       | ROD022PNTLG-6         | Butée en Delrin / Delrin Stop Ring                                                                                |
| 1.5       | ROD022PNTLG-M         | Mouton batteur 10 kg / Drop Weight 10 kg                                                                          |
| 2a        | ROD022PLFRP           | Tête de frappe pour tige 22 mm / Hammering Head for 22 mm Rod                                                     |
| 2b        | ROD022PLFRPM16        | Tête de frappe et porte pointe pour tige 22 mm filetage M16 / Hammering Head and Lost Cone Shoe for 22 mm Rod M16 |
| 3a        | ROD022PL050           | Tige pénétro Ø 22 mm pleine, long. 0.50 m / Full Rod Ø 22 mm, Length 0.50 m                                       |
|           | ROD022PL100           | Tige pénétro Ø 22 mm pleine, long. 1.00 m / Full Rod Ø 22 mm, Length 1.00 m                                       |
|           | ROD022PL150           | Tige pénétro Ø 22 mm pleine, long. 1.50 m / Full Rod Ø 22 mm, Length 1.50 m                                       |
| 3b        | ROD022PL050M16        | Tige pénétro Ø 22 mm pleine, long. 0.50 m, filet. M16 / Full Rod Ø 22 mm, Length 0.50 m, Thread M16               |
|           | ROD022PL100M16        | Tige pénétro Ø 22 mm pleine, long. 1.00 m, filet. M16 / Full Rod Ø 22 mm, Length 1.00 m, Thread M16               |
|           | ROD022PL150M16        | Tige pénétro Ø 22 mm pleine, long. 1.50 m, filet. M16 / Full Rod Ø 22 mm, Length 1.50 m, Thread M16               |
| 3c        | ROD022CR050           | Tige pénétro Ø 22 mm creuse, long. 0.50 m / Hollow Rod Ø 22 mm, Length 0.50 m                                     |
|           | ROD022CR100           | Tige pénétro Ø 22 mm creuse, long. 1.00 m / Hollow Rod Ø 22 mm, Length 1.00 m                                     |
|           | ROD022CR122           | Tige pénétro Ø 22 mm creuse, long. 1.22 m / Hollow Rod Ø 22 mm, Length 1.22 m                                     |
| 4         | ROD022PTP000          | Porte pointe perdue / Lost Cone Shoe                                                                              |
| 5         | ROD022PTP036          | Pointe perdue Ø 35.70 mm / Lost Cone Ø 35.70 mm                                                                   |
| 6         | ROD022PTR036          | Pointe récupérable Ø 35.70 mm / Retrievable Cone Ø 35.70 mm                                                       |
| 7         | ROD022PLGOUM16        | Goujon pour tige 22 filetage métrique M16 / Coupling for Rod 22, Metric Thread M16                                |



**PÉNÉTROMÉTRIE**  
**PENETROMETRY**

**2.1b Pénétrométrie Système 32**  
**Penetrometry System 32**

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| N° Article / Part No. | Description / Description                                   |
|-----------------------|-------------------------------------------------------------|
| ROD032MANBI           | Mandrin à billes pour tige 32 mm / Ball Chuck for Rod 32 mm |

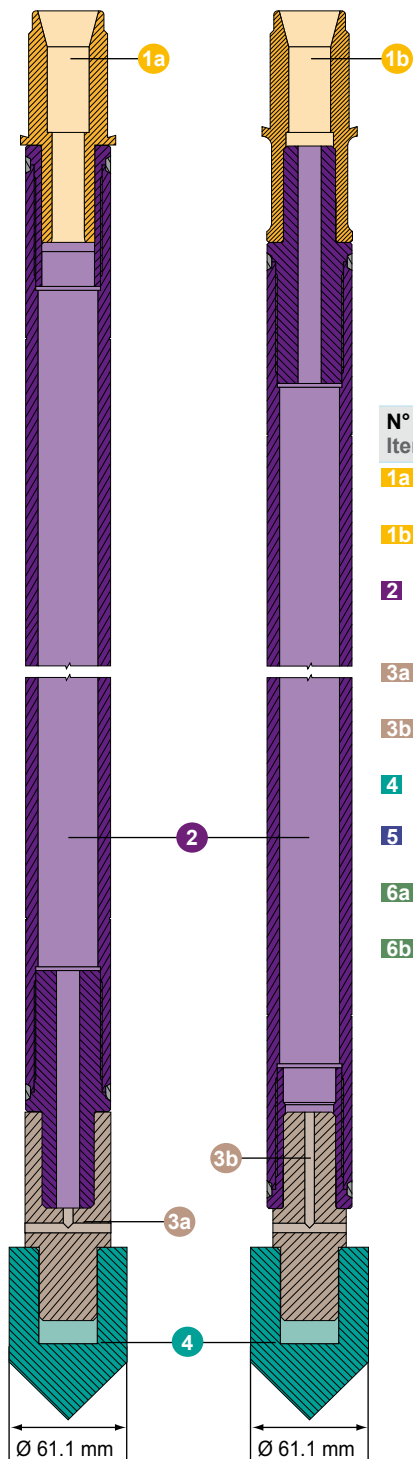
| N° / Item | N° Article / Part No. | Description / Description                                                                                                       |
|-----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1         | ROD032TETFRPEP        | Tête de frappe épaulée filetage femelle 7/8" UNC / Shouldered Hammering Head 7/8" UNC                                           |
| 2         | ROD032PTP000          | Porte pointe perdue et tête de frappe pour tige 32 filetage 7/8" UNC / Hammering Head and Lost Cone Shoe for 32 mm Rod 7/8" UNC |
| 2         | ROD032PTP000M20       | Porte pointe perdue et tête de frappe pour tige 32 filetage métrique M20 / Hammering Head and Lost Cone Shoe for 32 mm Rod M20  |
| 2         | ROD032PTP000M22       | Porte pointe perdue et tête de frappe pour tige 32 filetage métrique M22 / Hammering Head and Lost Cone Shoe for 32 mm Rod M22  |
| 3         | ROD032PLGOU           | Goujon pour tige 32 filetage 7/8" UNC / Coupling for Rod 32, Thread 7/8" UNC                                                    |
| 3         | ROD032PLGOU M20       | Goujon pour tige 32 filetage métrique M20 / Coupling for Rod 32, Metric Thread M20                                              |
| 3         | ROD032PLGOU M22       | Goujon pour tige 32 filetage métrique M22 / Coupling for Rod 32, Metric Thread M22                                              |
| 4         | ROD032PL050           | Tige Ø 32 mm pleine filetage 7/8" UNC, long. 0.50 m / Full Rod Ø 32 mm, Thread 7/8" UNC, long 0.50 m                            |
| 4         | ROD032PL050M20        | Tige Ø 32 mm pleine filetage métrique M20, 0.50 m / Full Rod Ø 32 mm, Metric Thread M20, long 0.50 m                            |
| 4         | ROD032PL050M22        | Tige Ø 32 mm pleine filetage métrique M22, 0.50 m / Full Rod Ø 32 mm, Metric Thread M22, long 0.50 m                            |
| 4         | ROD032CR100           | Tige Ø 32 mm creuse filetage 7/8" UNC, 1.00 m / Hollow Rod Ø 32 mm, Thread 7/8" UNC, long 1.00 m                                |
| 4         | ROD032CR100M20        | Tige Ø 32 mm creuse filetage métrique M20, 1.00 m / Hollow Rod Ø 32 mm, Metric Thread M20, long 1.00 m                          |
| 4         | ROD032CR100M22        | Tige Ø 32 mm creuse filetage métrique M22, 1.00 m / Hollow Rod Ø 32 mm, Metric Thread M22, long 1.00 m                          |
| 5         | ROD032PTP050          | Pointe perdue Ø 50.50 mm / Lost Cone Ø 50.50 mm                                                                                 |
| 6         | ROD032PTP045          | Pointe perdue Ø 45.00 mm / Lost Cone Ø 45.00 mm                                                                                 |
| 7         | ROD032PTR050          | Pointe récupérable Ø 50.50 mm filetage mâle / Retrievable Cone Ø 50.50 mm, Pin Thread                                           |



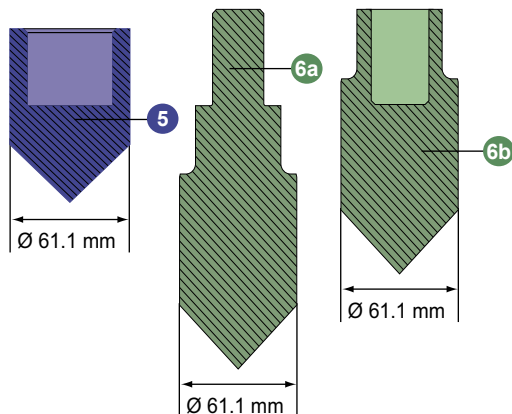
### 2.1c Pénétrométrie Système 42 Penetrometry System 42

## PÉNÉTROMÉTRIE PENETROMETRY

DATC fabrique l'ensemble de ses tiges de pénétrométrie graduées tous les 100 mm. Sur demande nous pouvons les graduer tous les 200 mm. La mention -1 sera alors ajoutée à la fin du n° article. All DATC penetrometry rods are graduated every 100 mm. On request we can graduate every 200 mm. In this case, -1 is added to the end of part number.



| N° / Item | N° Article / Part No.                           | Description / Description                                                                                                                                                                          |
|-----------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1a        | ROD042PLFR0C50P                                 | Tête de frappe CR50 Mâle x PDA 42 Mâle /<br>Hammering Head CR50 Pin x PDA 42 Pin                                                                                                                   |
| 1b        | ROD042BLFR0C50P                                 | Tête de frappe CR50 Mâle x PDA 42 Femelle /<br>Hammering Head CR50 Pin x PDA 42 Box                                                                                                                |
| 2         | ROD042PL050SD<br>ROD042PL100SD<br>ROD042PL150SD | Tige Ø 42 mm PDA, long. 0.50 m / Rod Ø 42 mm PDA, long. 0.50 m<br>Tige Ø 42 mm PDA, long. 1.00 m / Rod Ø 42 mm PDA, long. 1.00 m<br>Tige Ø 42 mm PDA, long. 1.50 m / Rod Ø 42 mm PDA, long. 1.50 m |
| 3a        | ROD042PTB000                                    | Porte pointe perdue filetage PDA 42 femelle /<br>Lost Cone Shoe PDA 42 Box Thread                                                                                                                  |
| 3b        | ROD042PTP000                                    | Porte pointe perdue filetage PDA 42 mâle /<br>Lost Cone Shoe PDA 42 Pin Thread                                                                                                                     |
| 4         | ROD042PTP060                                    | Pointe perdue Ø 61.1 mm avec perçage Ø 30.2 mm profondeur 50 mm /<br>Lost Cone Ø 61.10 mm with Hole Ø 30.2 mm Depth 50 mm                                                                          |
| 5         | ROD042PTP060-1                                  | Pointe perdue Ø 61.1 mm avec perçage Ø 42.6 mm profondeur 40 mm /<br>Lost Cone Ø 61.10 mm with Hole Ø 42.6 mm Depth 40 mm                                                                          |
| 6a        | ROD042PTR060                                    | Pointe récupérable Ø 61.1 mm filetage PDA 42 mâle /<br>Retrievable Cone Ø 61.1 mm PDA 42 Pin Thread                                                                                                |
| 6b        | ROD042PTR060B                                   | Pointe récupérable Ø 61.1 mm filetage PDA 42 femelle /<br>Retrievable Cone Ø 61.1 mm PDA 42 Box Thread                                                                                             |





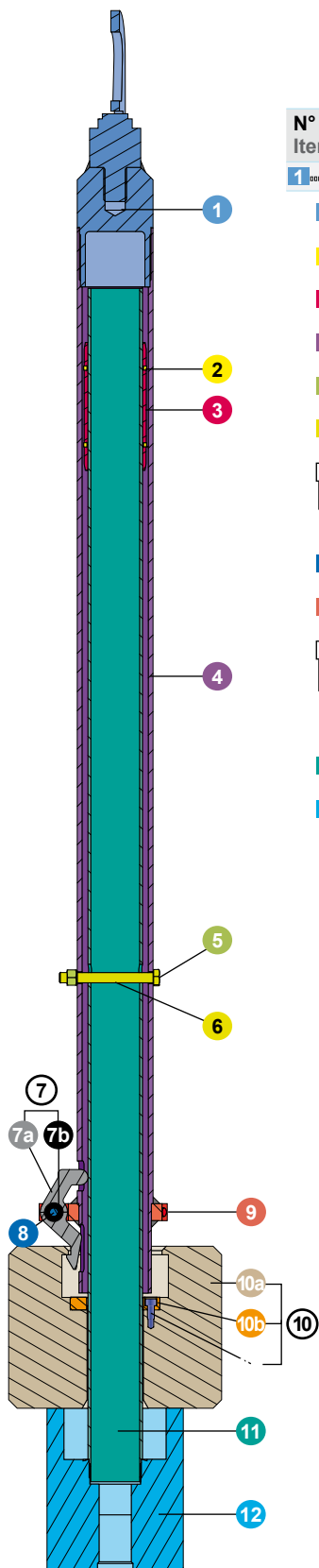
### PÉNÉTROMÉTRIE

### PENETROMETRY

2.2

### Marteau automatique

### Automatic Hammer

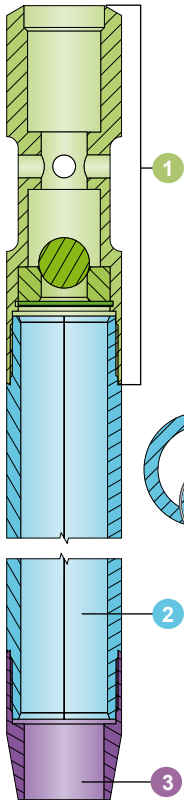


| N° / Item            | N° Article / Part No.     | Description / Description                  | Qté / Qty |
|----------------------|---------------------------|--------------------------------------------|-----------|
| <b>1</b> → <b>12</b> | <b>0SPT000CPLHAM0C50B</b> | <b>Marteau complet / Complete Hammer</b>   | -         |
| <b>1</b>             | HS0500CNWPLH              | Touret de levage rotatif / Hoisting Swivel | 1         |
| <b>2</b>             | VISSTHC00500005P          | Vis sans tête M5x5 / Screw HC M5x5         | 8         |
| <b>3</b>             | 0SPT000CPLHAM-04          | Came / Cam                                 | 1         |
| <b>4</b>             | 0SPT000CPLHAM-07          | Tube extérieur / Outer Tube                | 1         |
| <b>5</b>             | ENS00M120175              | Ecrou Nylstop / Nylstop Nut                | 1         |
| <b>6</b>             | VISM00H01200110           | Vis / Screw                                | 1         |
| <b>7</b>             | 0SPT000CPLHAM-05          | Loquet complet / Complete Latch            | 3         |
| <b>7a</b>            | 0SPT000CPLHAM-05-1        | Loquet seul / Latch                        | 1         |
| <b>7b</b>            | ARTELAS022010023          | Articulation élastique / Elastic Joint     | 1         |
| <b>8</b>             | GPC01000050               | Goupille cannelée / Grooved-Surface Pin    | 3         |
| <b>9</b>             | 0SPT000CPLHAM-06          | Bague support loquet / Latch Body Ring     | 1         |
| <b>10</b>            | 0SPT000CPLHAM-03          | Mouton / Drop Weight                       | 1         |
| <b>10a</b>           | 0SPT000CPLHAM-03-1        | Corps principal / Main Body                | 1         |
| <b>10b</b>           | 0SPT000CPLHAM-03-2        | Butée en Delrin / Delrin Stop Ring         | 1         |
|                      | VISMCHC00800016           | Vis CHC M8 x 16 / Screw CHC M8 x 16        | 3         |
| <b>11</b>            | 0SPT000CPLHAM-01          | Tube intérieur / Inner Tube                | 1         |
| <b>12</b>            | 0SPT000CPLHAM-02          | Enclume / Anvil                            | 1         |



### 2.3 Carottier SPT SPT Core Barrel

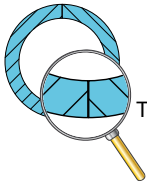
## PÉNÉTROMÉTRIE PENETROMETRY



| N° / Item | N° Article / Part No. | Description / Description                                                                                                |
|-----------|-----------------------|--------------------------------------------------------------------------------------------------------------------------|
| 1 → 3     | 0SPT050CBS050XXXXB    | Carottier SPT 50 complet, long. 0.50 m tube fendu simple / SPT 50 Complete Core Barrel, Length 0.50 m, Simple Split Tube |
| 1 → 3     | 0SPT050CBS060XXXXB    | Carottier SPT 50 complet, long. 0.60 m tube fendu simple / SPT 50 Complete Core Barrel, Length 0.60 m, Simple Split Tube |

- 1 0SPT050CBHEADXXXXB Tête de carottier SPT 50 / SPT 50 Core Barrel Head
- 2 0SPT050COS050 SPT 50 Tube acier fendu non emboîté long. 0.50 m / SPT 50 Not Fitted Split Steel Tube, long 0.50 m
- 2 0SPT050COS060 SPT 50 Tube acier fendu non emboîté long. 0.60 m / SPT 50 Not Fitted Split Steel Tube, long 0.60 m
- 3 0SPT050CTROCP SPT 50 Trousse coupante / SPT 50 Cutting Shoe

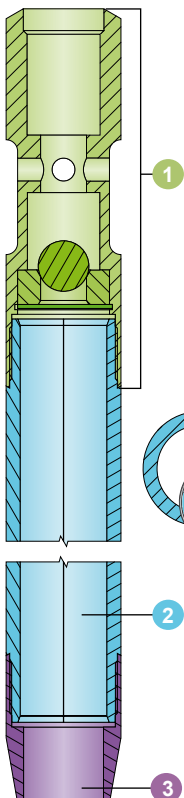
XXXX : Filetage AW, CR42, PDA ou RD40. Remplacer par 00AW ou 0C42 ou 0PDA ou R406.  
AW, CR42, PDA or RD40 Thread. Replace with 00AW or 0C42 or 0PDA or R406.



Tube acier fendu non emboîté / Not Fitted Split Steel Tube

#### Dimensions

| Taille / Size                    | Inch   | mm   |
|----------------------------------|--------|------|
| Diam. Ext / Outer diam.          | 2"     | 50.8 |
| Diam. Int / Inner diam.          | 1 3/8" | 34.8 |
| Long échantillon / Sample length |        | 500  |



| N° / Item | N° Article / Part No. | Description / Description                                                                                                 |
|-----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1 → 3     | 0SPT050CBC050XXXXB    | Carottier SPT 50 complet, long. 0.50 m tube fendu emboîté / SPT 50 Complete Core Barrel, Length 0.50 m, Fitted Split Tube |
| 1 → 3     | 0SPT050CBC060XXXXB    | Carottier SPT 50 complet, long. 0.60 m tube fendu emboîté / SPT 50 Complete Core Barrel, Length 0.60 m, Fitted Split Tube |

- 1 0SPT050CBHEADXXXXB Tête de carottier SPT 50 / SPT 50 Core Barrel Head
- 2 0SPT050COT050 SPT 50 Tube acier fendu emboîté long. 0.50 m / SPT 50 Fitted Split Steel Tube, long 0.50 m
- 2 0SPT050COT060 SPT 50 Tube acier fendu emboîté long. 0.60 m / SPT 50 Fitted Split Steel Tube, long 0.60 m
- 3 0SPT050CTROCP SPT 50 Trousse coupante / SPT 50 Cutting Shoe

XXXX : Filetage AW, CR42, PDA ou RD40. Remplacer par 00AW ou 0C42 ou 0PDA ou R406.  
AW, CR42, PDA or RD40 Thread. Replace with 00AW or 0C42 or 0PDA or R406.



Tube acier fendu emboîté / Fitted Split Steel Tube

#### Dimensions

| Taille / Size                    | Inch   | mm   |
|----------------------------------|--------|------|
| Diam. Ext / Outer diam.          | 2"     | 50.8 |
| Diam. Int / Inner diam.          | 1 3/8" | 34.8 |
| Long échantillon / Sample length |        | 600  |