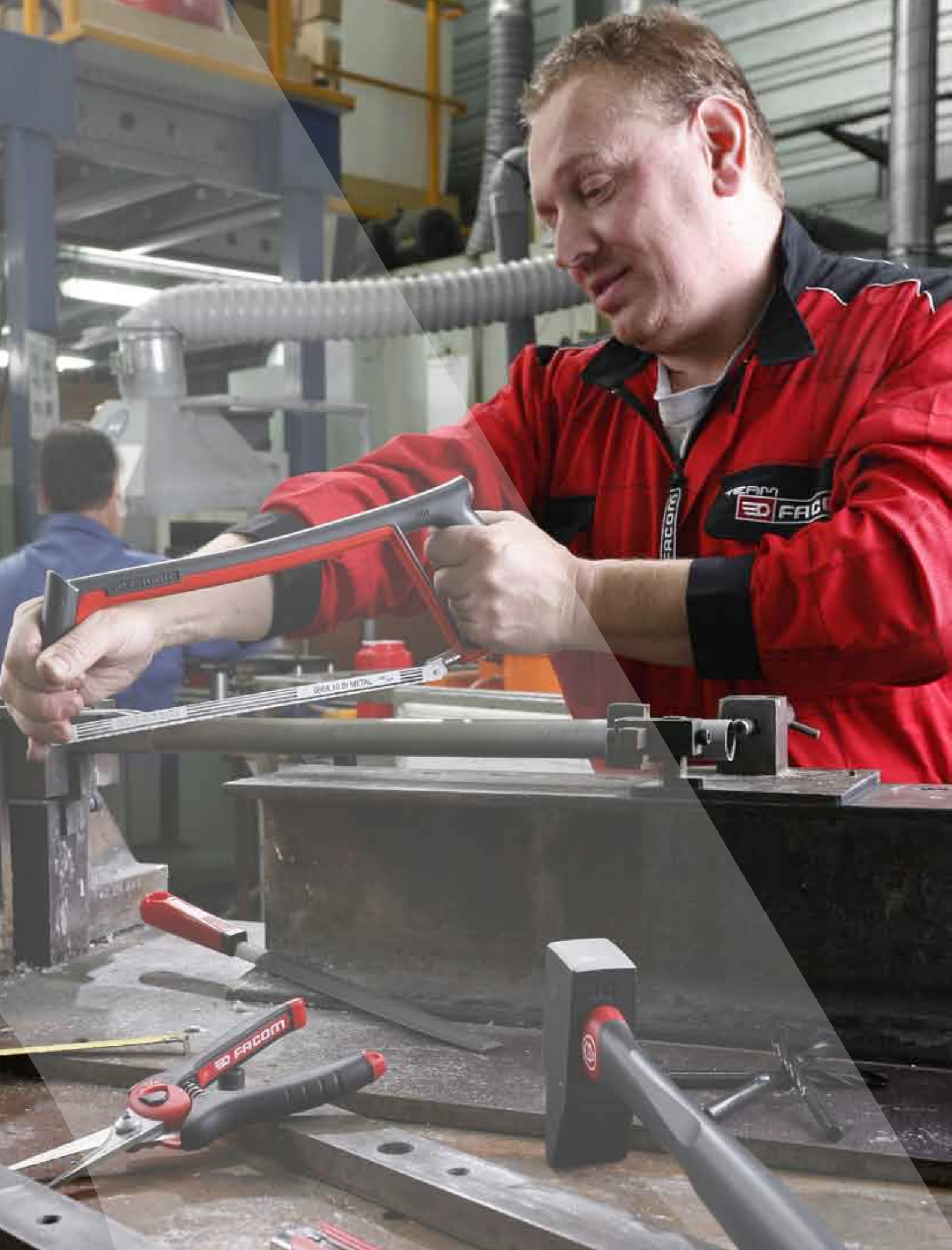




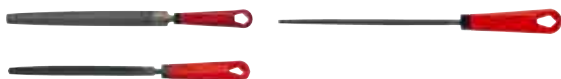
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*Safety for professional applications***Advantages**

- **UTILITY KNIFE 844.S18**

- ▶ Ergonomic handle
- ▶ Stainless steel blade guide
- ▶ 6-blade loader for automatic blade change



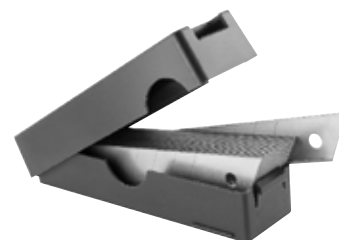
- **SAFETY KNIFE 844.D**

- ▶ Maximum safety: blade automatically retracts after use
- ▶ Used with trapezoid blades



- **SNAP-OFF BLADES**

- ▶ 7 to 12 segments
- ▶ Ideal for all everyday cutting tasks



- **TRAPEZOID BLADES**

- ▶ High strength
- ▶ Clean cut
- ▶ Intensive use





*For an effortless, clean cut*

### Advantages

- ▶ Precision blades
- ▶ 2 opening positions to adjust to the size of your hand
- ▶ Locks in closed position
- ▶ Comfortable bi-material handle



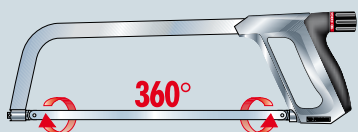
N 510

## ► Hacksaw frame

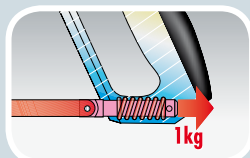


### Workshop hacksaw frame 603E

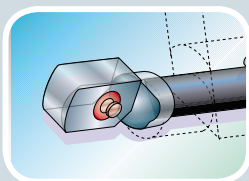
#### OPTIMUM BLADE USAGE



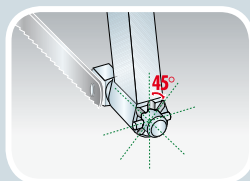
Blade rotation through 360° without removal.



Spring pre-tensioning for easy blade fitting and adjustment.



Machined and shouldered pins for secure blade retention.



45° cutting angle increments.



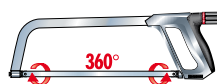
### Hacksaw frame

#### 603E

► DIN 6473, NF E 73-073.

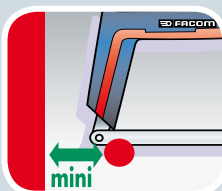
- Tension : in excess of 100 kg ; 20, 000 PSI.
- Metal bow takes 300 mm blade
- 429 x 137 mm.

ΔΔ : 760 g.

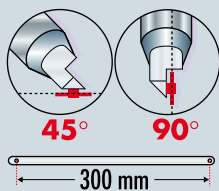


### "Travelling" hacksaw frame 601

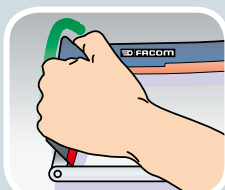
#### PRACTICAL AND COMPACT



Minimum clearance to start cutting.



2 blade positions on machined and shouldered pins.



Left-hand rest.



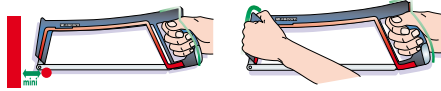
Compact: stored in a 5-compartment box and in roller-cabinet modules.



## Hacksaw frame

### 601

- Impact-resistant steel/resin construction.
- Blade tension 80 kg
- 385 x 145 mm.
- ΔΔ : 590 g.



## Saw, tape measure and files module

### MOD.601

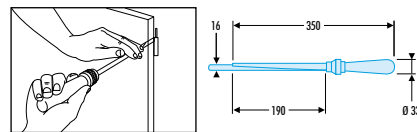
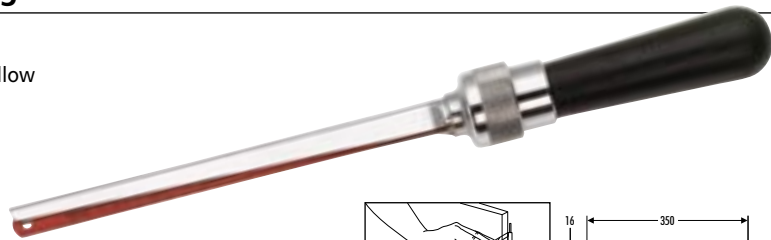
- Comprising :
  - 601 : Hacksaw frame
  - 660A.10 : 10 hacksaw blades.
  - 234.5 : Scriber
  - 803-300M : Rule.
  - 5 files with handle : PAM.B300EM; DRD.MD250EM; CAR.MD200EM; TRI.MD200EM; RD.M200EM.
  - 1712 : Tape measure.
- Tray PL.335 (complete drawer).
- ΔΔ : 2.3 kg.



## Straight frame with blade backing

### 606A

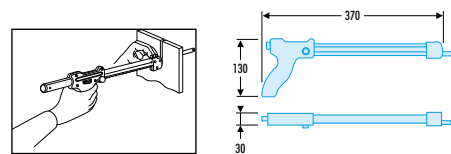
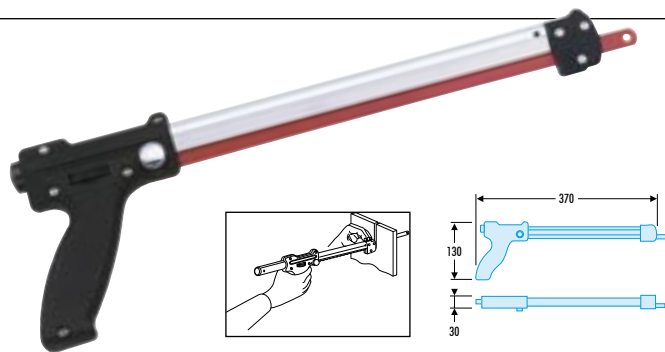
- Blade can be set to protrude beyond the backing to allow insertion into narrow gaps.
- ΔΔ : 410 g.



## Revolver frame with sliding blade-guide

### 605.B

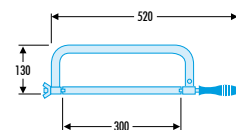
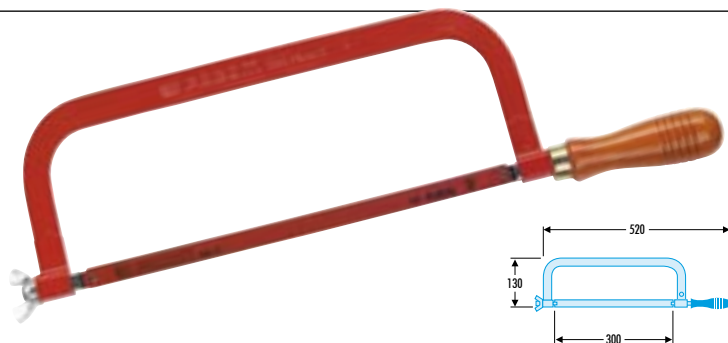
- Sliding guide steadies blade throughout cutting stroke.
- A thumbscrew can lock the guide to keep blade end clear.
- Takes 300 mm blade.
- ΔΔ : 780 g.



## Hacksaw frame

### 599

- ▷ NF E 73-073, DIN 6473.
- Flat bow.
- Wood handle.
- Takes 300 mm blade.
- ΔΔ : 600 g.



## ► Hacksaw blades

### 660A. Bimetal blades

► ISO 2336-1, DIN 6494, NF 73-072.

- High-alloy HSS teeth with spring-steel back. Flexibility and tooth hardness combine to ensure long service in a variety of applications and where difficult access prevents steadying the workpiece.
  - Blade length 300 mm.
  - Available in multiples of 10 blades. E.g. : 20 x 660A. 10 = 20 blades.
- ΔΔ : 2.5 kg.

|                | Teeth/cm | Teeth/inch |
|----------------|----------|------------|
| <b>660A.8</b>  | 8        | 18         |
| <b>660A.10</b> | 10       | 24         |
| <b>660A.12</b> | 12       | 32         |



### 666A Super HSS blades

► ISO 2336-1, DIN 6494, NF 73-072.

- Recommended for a wide range of heavy-duty applications such as die, tool and stainless steel.
  - Blade length 300 mm.
  - Available in multiples of 10.
- E.g. : 20 x 666A. 10 = 20 blades.
- ΔΔ : 2.5 kg.

|                | Teeth/cm | Teeth/inch |
|----------------|----------|------------|
| <b>666A.8</b>  | 8        | 18         |
| <b>666A.10</b> | 10       | 24         |
| <b>666A.12</b> | 12       | 32         |



## Files



### File selection guide

#### FACOM technical specifications.

- Made from high carbon-content steels.
- Optimum heat treatment for each application.
  - 64 to 66 HRC for engineers files.
  - 53 to 56 HRC for rasps.
  - 65 to 67 HRC for sharpening files.

#### File selection recommendations.

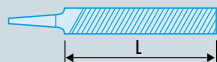
Four criteria apply :

1. Shape or cross-section.
2. Pattern according to material.
3. Grade according to operation.

- Standard files :
  - B Bastard cut for rough filing,
  - MD Second cut for general purpose,
  - D Smooth cut for finishing.
- Precision files :
  - T0 Bastard cut for rough filing,
  - T2 for normal smooth filing
  - T4 for finishing.

4. File length.

- Lengths quoted are always without tang.



#### MAIN SHAPES

|                 |                         |                   |
|-----------------|-------------------------|-------------------|
| FLAT<br>PAM<br> | HALF ROUND<br>DRD<br>   | ROUND<br>RD<br>   |
| KNIFE<br>CT<br> | THREE-SQUARE<br>TRI<br> | SQUARE<br>CAR<br> |



| PATTERN SELECTION<br>ACCORDING TO<br>MATERIAL                                                |  | Steel | Cast Iron | Brass | Hard plastics,<br>wood etc. | Aluminium<br>and soft<br>materials |
|----------------------------------------------------------------------------------------------|--|-------|-----------|-------|-----------------------------|------------------------------------|
| Double cut for steel and metals.                                                             |  | ●     | ●         | ●     | ●                           |                                    |
| Single cut for good surface finish, sharpening saws, lathe filing and fitters' requirements. |  | ●     |           |       |                             |                                    |
| Dreadnaught, for soft materials, sheet metal, etc. Leaves a smooth finish.                   |  | ●     |           | ●     | ●                           | ●                                  |
| Rasp for soft materials and wood. Produces a rough surface.                                  |  |       |           |       | ●                           | ●                                  |



## Handles for files and rasps

MAN : Varnished wood handles with nickel-plated steel ferrule.

Supplied in boxes of 12.

MP : Plastic handles. Supplied singly.



|              | Files                                                                                     | Length files<br>mm |
|--------------|-------------------------------------------------------------------------------------------|--------------------|
| <b>MAN.0</b> | Flat, half-round, round                                                                   | 300                |
| <b>MAN.1</b> | Three square straight                                                                     | 175                |
|              | Three square straight                                                                     | 200                |
|              | Flat, half-round, flat warding, cant, pillar, three-square straight                       | 250                |
|              | Square, three-square                                                                      | 300                |
| <b>MAN.2</b> | Flat warding, cant, pillar, knife, three-point square                                     | 150                |
|              | Three-square tapered                                                                      | 175                |
|              | Flat, half-round, three-square, flat warding, cant, pillar, knife                         | 200                |
|              | Round                                                                                     | 250                |
| <b>MAN.3</b> | Flat, half-round, flat warding, cant, pillar, knife                                       | 100                |
|              | Flat, half-round, three-square                                                            | 150                |
|              | Square, round                                                                             | 200                |
|              | Square, round three-square tapered                                                        | 100                |
| <b>MAN.4</b> | Round, three-square tapered                                                               | 125                |
|              | Round, three-square tapered                                                               | 150                |
|              | Three square straight                                                                     | 250                |
|              | Flat half-round aluminium, flat, half-round, square, round, three-square, Milled, turners | 300                |
| <b>MP.0</b>  | Three square, three-square straight                                                       | 200                |
| <b>MP.1</b>  | Flat, half-round, round, flat warding, cant, pillar, knife, Turners                       | 250                |
| <b>MP.2</b>  | Three square straight                                                                     | 175                |
|              | Flat, half-round, flat warding, cant, pillar, knife                                       | 200                |
| <b>MP.3</b>  | Flat, half-round, three-square, flat warding, cant, pillar, knife, three-square straight  | 150                |
|              | Square, round                                                                             | 200                |
| <b>MP.4</b>  | Flat, half-round, flat warding, cant, pillar, knife                                       | 100                |
|              | Round, Round for chainsaws                                                                | 150                |
|              | Round for chainsaws                                                                       | 200                |

## File card

### 270.A

- For cleaning electrodes and threads.
- Integral thickness gauge (5/10mm).
- 185 x 30 x 25 mm.

ΔΔ : 42 g.

|              | Description |
|--------------|-------------|
| <b>270.C</b> | Spare card  |



## File sets

### Set of 5 files

#### STG

- Set of 5 files with varnished wood handles, for general engineering and automotive applications.
- Comprising :
  - PAM.B 300.
  - DRD.MD 250.
  - CAR.MD 200.
  - TRI.MD 200.
  - RD.MD 200.
- Supplied in grey hammer-finish wall-rack CKS.35A.

ΔΔ : 1.265 kg.





## Set of 9 files

### STU

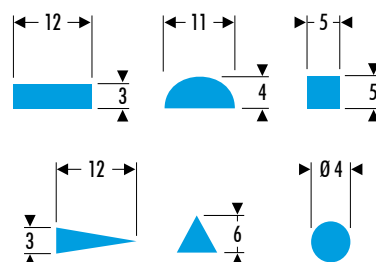
- Set of 9 files and rasps for engineering and industrial maintenance.
- Comprising :
  - PAM.B300.
  - PAM.MD200.
  - DRD.B300.
  - DRD.MD200.
  - RD.MD200.
  - CAR.MD200.
  - TRI.MD150.
  - PDE.MD125.
  - RAB.DRDMD250.
- Supplied in grey hammer-finish wall-rack CKS.35A.
- ΔΔ : 2.146 kg.



## CLE Sets of 6 locksmiths files

### CLE

- ▷ NFE 75-001, NFE 75-002
- Geneva pattern with wooden handle.
- Available in 3 different cuts.
  - CLE.BAM100 (6 bastard cut files).
  - CLE.MDAM100 (6 second cut files).
  - CLE.DAM100 (6 smooth cut files).
- In plastic wallet : 200 x 105 x 11 mm.
- ΔΔ : 205 g.



## AS.RI Set of rifflers

- ▷ NFE 75-001, NFE 75-002
- Ideal for mould makers and jewellers.

|              | Number of rifflers | Cut | Length mm | ΔΔ g |
|--------------|--------------------|-----|-----------|------|
| AS.12RI180T0 | 12                 | 0   | 180       | 341  |
| AS.12RI180T2 | 12                 | 2   | 180       | 338  |
| AS.6RI180T0  | 6                  | 0   | 180       | 182  |
| AS.6RI180T2  | 6                  | 2   | 180       | 170  |



## Module of 5 files 200 mm long with handle

### MOD.LIMPB

- Flat, half-round, round, square, three-square.
- PAM.B200EM flat.
- DRD.MD200EM half-round.
- CAR.MD200EM square.
- TRI.MD200EM three-square.
- RD.MD200EM round.
- Tray PL.606.
- ΔΔ : 950 g.

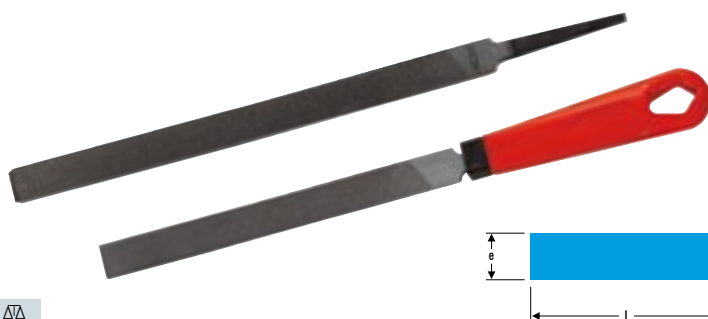


## ► Engineers files

### PAM - PAM.EM Flat files

► NFE 75-001, NFE 75-002

- PAM : Flat files.
- PAM.EM : Flat files with handle.
- 1 safe edge.
- 1 single-cut edge.



|  | File type  | l x e<br>mm | Length<br>mm |  | ΔΔ<br>g |
|---------------------------------------------------------------------------------|------------|-------------|--------------|-----------------------------------------------------------------------------------|---------|
| PAM.MD100                                                                       | Second cut | 12 x 3      | 100          | 12                                                                                | 29      |
| PAM.MD200                                                                       | Second cut | 20 x 5      | 200          | 12                                                                                | 163     |
| PAM.MD300                                                                       | Second cut | 30 x 7      | 300          | 6                                                                                 | 454     |
| PAM.MD150EM                                                                     | Second cut | 15 x 3,5    | 150          | 6                                                                                 | 118     |
| PAM.MD200EM                                                                     | Second cut | 20 x 5      | 200          | 6                                                                                 | 209     |
| PAM.MD250EM                                                                     | Second cut | 25 x 6      | 250          | 6                                                                                 | 351     |
| PAM.D100                                                                        | Smooth cut | 12 x 3      | 100          | 12                                                                                | 29      |
| PAM.D200                                                                        | Smooth cut | 20 x 5      | 200          | 12                                                                                | 163     |
| PAM.D300                                                                        | Smooth cut | 30 x 7      | 300          | 6                                                                                 | 454     |
| PAM.D200EM                                                                      | Smooth cut | 20 x 5      | 200          | 6                                                                                 | 209     |

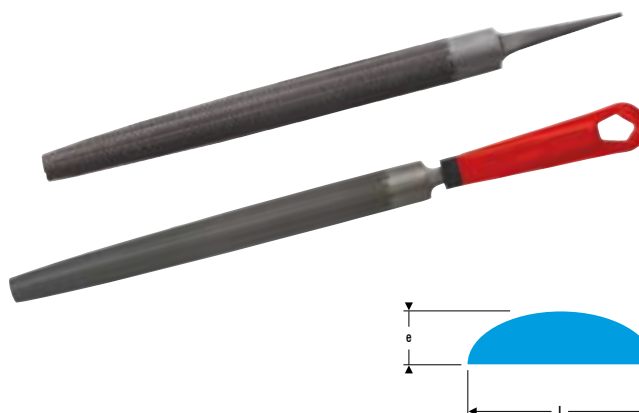
|  | File type   | l x e<br>mm | Length<br>mm |  | ΔΔ<br>g |
|-----------------------------------------------------------------------------------|-------------|-------------|--------------|-------------------------------------------------------------------------------------|---------|
| <b>PAM.B100</b>                                                                   | Bastard cut | 12 x 3      | 100          | 12                                                                                  | 29      |
| <b>PAM.B200</b>                                                                   | Bastard cut | 20 x 5      | 200          | 12                                                                                  | 163     |
| <b>PAM.B300</b>                                                                   | Bastard cut | 30 x 7      | 300          | 6                                                                                   | 454     |
| <b>PAM.B200EM</b>                                                                 | Bastard cut | 20 x 5      | 200          | 6                                                                                   | 209     |
| <b>PAM.B250EM</b>                                                                 | Bastard cut | 25 x 6      | 250          | 6                                                                                   | 351     |
| <b>PAM.B300EM</b>                                                                 | Bastard cut | 30 x 7      | 300          | 6                                                                                   | 528     |

### DRD - DRD.EM Half-round files

► NFE 75-001, NFE 75-002

- DRD : Half-round files.
- DRD.EM : Half-round files with handle.

|  | File type   | l x e<br>mm | Length<br>mm |  | ΔΔ<br>g |
|-----------------------------------------------------------------------------------|-------------|-------------|--------------|-------------------------------------------------------------------------------------|---------|
| <b>DRD.B200</b>                                                                   | Bastard cut | 21 x 6      | 200          | 12                                                                                  | 133     |
| <b>DRD.B300</b>                                                                   | Bastard cut | 30 x 8,5    | 300          | 6                                                                                   | 445     |
| <b>DRD.B200EM</b>                                                                 | Bastard cut | 21 x 6      | 200          | 6                                                                                   | 186     |
| <b>DRD.B300EM</b>                                                                 | Bastard cut | 30 x 8,5    | 300          | 6                                                                                   | 466     |
| <b>DRD.MD100</b>                                                                  | Second cut  | 11 x 3,5    | 100          | 12                                                                                  | 26      |
| <b>DRD.MD200</b>                                                                  | Second cut  | 21 x 6      | 200          | 12                                                                                  | 133     |
| <b>DRD.MD300</b>                                                                  | Second cut  | 30 x 8,5    | 300          | 6                                                                                   | 445     |
| <b>DRD.MD200EM</b>                                                                | Second cut  | 21 x 6      | 200          | 6                                                                                   | 186     |
| <b>DRD.MD250EM</b>                                                                | Second cut  | 25 x 7      | 250          | 6                                                                                   | 293     |
| <b>DRD.D200</b>                                                                   | Smooth cut  | 21 x 6      | 200          | 12                                                                                  | 133     |
| <b>DRD.D300</b>                                                                   | Smooth cut  | 30 x 8,5    | 300          | 6                                                                                   | 445     |

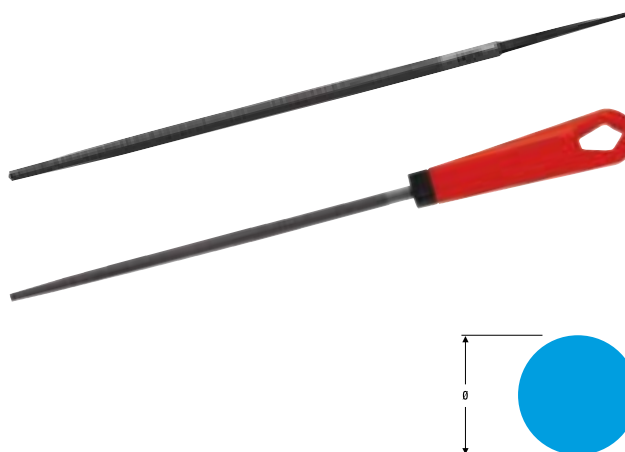


### RD - RD.EM Round files

► NFE 75-001, NFE 75-002

- RD : Round files.
- RD.EM : Round files with handle.

|  | File type   | Length<br>mm | Ø<br>mm |  | ΔΔ<br>g |
|-----------------------------------------------------------------------------------|-------------|--------------|---------|-------------------------------------------------------------------------------------|---------|
| <b>RD.B100</b>                                                                    | Bastard cut | 100          | 4       | 12                                                                                  | 11      |
| <b>RD.B125</b>                                                                    | Bastard cut | 125          | 5       | 12                                                                                  | 20      |
| <b>RD.B200</b>                                                                    | Bastard cut | 200          | 8       | 12                                                                                  | 62      |
| <b>RD.B250</b>                                                                    | Bastard cut | 250          | 10      | 12                                                                                  | 143     |
| <b>RD.B300</b>                                                                    | Bastard cut | 300          | 12      | 6                                                                                   | 231     |
| <b>RD.B250EM</b>                                                                  | Bastard cut | 250          | 10      | 6                                                                                   | 156     |
| <b>RD.MD100</b>                                                                   | Second cut  | 100          | 4       | 12                                                                                  | 11      |
| <b>RD.MD125</b>                                                                   | Second cut  | 125          | 5       | 12                                                                                  | 20      |
| <b>RD.MD200</b>                                                                   | Second cut  | 200          | 8       | 12                                                                                  | 62      |
| <b>RD.MD300</b>                                                                   | Second cut  | 300          | 12      | 6                                                                                   | 231     |
| <b>RD.MD150EM</b>                                                                 | Second cut  | 150          | 6       | 6                                                                                   | 56      |
| <b>RD.MD200EM</b>                                                                 | Second cut  | 200          | 8       | 6                                                                                   | 101     |
| <b>RD.D100</b>                                                                    | Smooth cut  | 100          | 4       | 12                                                                                  | 11      |
| <b>RD.D200</b>                                                                    | Smooth cut  | 200          | 8       | 12                                                                                  | 62      |

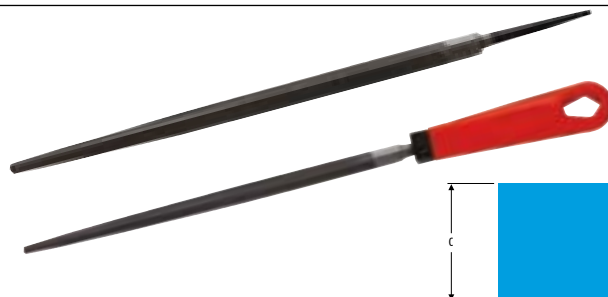


## CAR - CAR.EM Square files

▷ NFE 75-001, NFE 75-002

- CAR : Square files.
- CAR.EM : Square files with handle.

|  | File type   | c x c<br>mm | Length<br>mm |  | $\Delta\Delta$<br>g |
|-----------------------------------------------------------------------------------|-------------|-------------|--------------|-----------------------------------------------------------------------------------|---------------------|
| CAR.B200                                                                          | Bastard cut | 8 x 8       | 200          | 12                                                                                | 87                  |
| CAR.B300                                                                          | Bastard cut | 12 x 12     | 300          | 6                                                                                 | 318                 |
| CAR.MD200                                                                         | Second cut  | 8 x 8       | 200          | 12                                                                                | 87                  |
| CAR.MD300                                                                         | Second cut  | 12 x 12     | 300          | 6                                                                                 | 318                 |
| CAR.MD200EM                                                                       | Second cut  | 8 x 8       | 200          | 6                                                                                 | 129                 |
| CAR.D200                                                                          | Smooth cut  | 8 x 8       | 200          | 12                                                                                | 87                  |

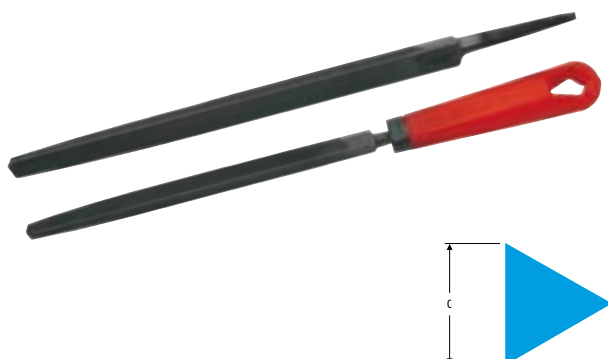


## TRI - TRI.EM Three-square files

▷ NFE 75-001, NFE 75-002.

- TRI : Three-square files.
- TRI.EM : Three-square files with handle.

|  | File type   | Length<br>mm | c<br>mm |  | $\Delta\Delta$<br>g |
|-----------------------------------------------------------------------------------|-------------|--------------|---------|-----------------------------------------------------------------------------------|---------------------|
| TRI.B150                                                                          | Bastard cut | 150          | 11      | 12                                                                                | 78                  |
| TRI.B200                                                                          | Bastard cut | 200          | 15      | 12                                                                                | 159                 |
| TRI.B300                                                                          | Bastard cut | 300          | 21      | 6                                                                                 | 431                 |
| TRI.MD150                                                                         | Second cut  | 150          | 11      | 12                                                                                | 78                  |
| TRI.MD200                                                                         | Second cut  | 200          | 15      | 12                                                                                | 159                 |
| TRI.MD300                                                                         | Second cut  | 300          | 21      | 6                                                                                 | 431                 |
| TRI.MD150EM                                                                       | Second cut  | 150          | 11      | 6                                                                                 | 114                 |
| TRI.MD200EM                                                                       | Second cut  | 200          | 15      | 6                                                                                 | 208                 |
| TRI.D150                                                                          | Smooth cut  | 150          | 11      | 12                                                                                | 78                  |
| TRI.D200                                                                          | Smooth cut  | 200          | 15      | 12                                                                                | 159                 |



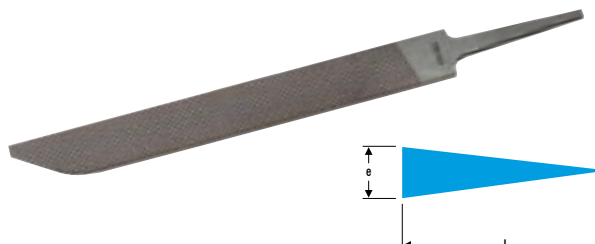
## Knife file

### CT.MD250

▷ NFE 75-001, NFE 75-002

- Single-cut knife edge.
- Safe edge.

|  | File type  | l x e<br>mm | L<br>mm |  | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|------------|-------------|---------|-------------------------------------------------------------------------------------|---------------------|
| CT.MD250                                                                            | Second cut | 26 x 6      | 250     | 12                                                                                  | 186                 |



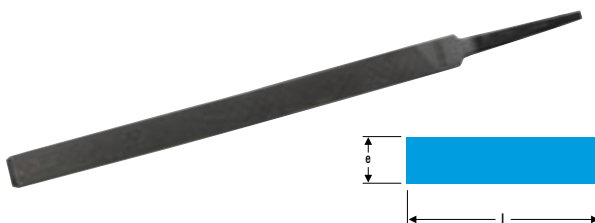
## Pillar file

### PIL.MD200

▷ NFE 75-001, NFE 75-002

- 1 safe edge.
- 1 single-cut edge.

|  | File type  | l x e<br>mm | L<br>mm |  | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|------------|-------------|---------|-------------------------------------------------------------------------------------|---------------------|
| <b>PIL.MD200</b>                                                                    | Second cut | 14 x 7      | 200     | 12                                                                                  | 150                 |

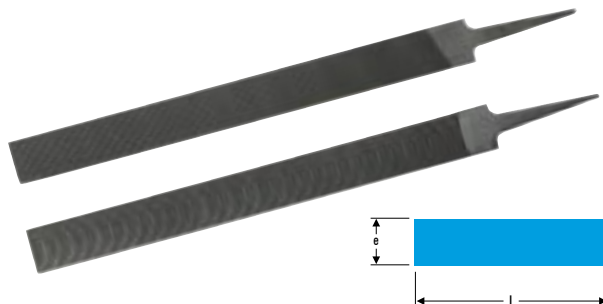


## ► Milled files

### FR Milled files

- FR.C : Rigid dreadnought files.
- FR.O : Rigid millenicut files.
- Designed for non-ferrous metals, bronze, brass, laminates and plastics.
- 2 safe edge.

|  | File type   | l x e<br>mm | Teeth per<br>cm | Length<br>mm |  | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|-------------|-------------|-----------------|--------------|-------------------------------------------------------------------------------------|---------------------|
| <b>FRC.B300</b>                                                                     | Bastard cut | 30 x 7,5    | 3,5             | 300          | 6                                                                                   | 377                 |
| <b>FRC.MD300</b>                                                                    | Second cut  | 30 x 7,5    | 4,7             | 300          | 6                                                                                   | 393                 |
| <b>FRO.B300</b>                                                                     | Bastard cut | 30 x 7,5    | 3,5             | 300          | 6                                                                                   | 375                 |
| <b>FRO.MD300</b>                                                                    | Second cut  | 30 x 7,5    | 4,7             | 300          | 6                                                                                   | 382                 |





## ► Saw files

### Round file for chainsaws with handle

#### TRO.5,6EM

► NFE 75-001, NFE 75-002.

- Double-cut.

|           | File type  | Length<br>mm | Ø<br>mm | Ø<br>mm | g | ΔΔ<br>g |
|-----------|------------|--------------|---------|---------|---|---------|
| TRO.5,6EM | Smooth cut | 200          | 7/32    | 5,6     | 6 | 69      |



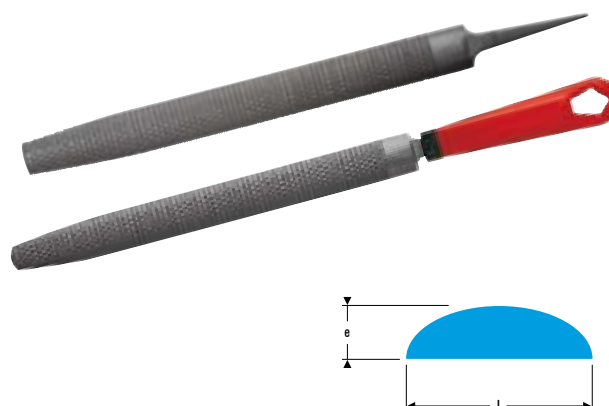
## ► Wood rasps

### RAB.DRD - RAB.DRDEM Half-round rasps

► NFE 75-001, NFE 75-002

- RAB.DRD : Half-round rasps.
- RAB.DRDEM : Half-round rasps with handle.

|                | File type   | l x e<br>mm | Length<br>mm | g  | ΔΔ<br>g |
|----------------|-------------|-------------|--------------|----|---------|
| RAB.DRDB250    | Bastard cut | 25 x 7      | 250          | 12 | 256     |
| RAB.DRDB300EM  | Bastard cut | 30 x 8,5    | 300          | 6  | 480     |
| RAB.DRDMD250   | Second cut  | 25 x 7      | 250          | 12 | 256     |
| RAB.DRDMD300   | Second cut  | 30 x 8,5    | 300          | 6  | 447     |
| RAB.DRDMD250EM | Second cut  | 25 x 7      | 250          | 6  | 315     |
| RAB.DRDD250    | Smooth cut  | 25 x 7      | 250          | 12 | 256     |



### RAB.RD - RAB.RDEM Round rasps

- RAB.RD : round rasp.
- RAB.RDEM : round rasp with handle.

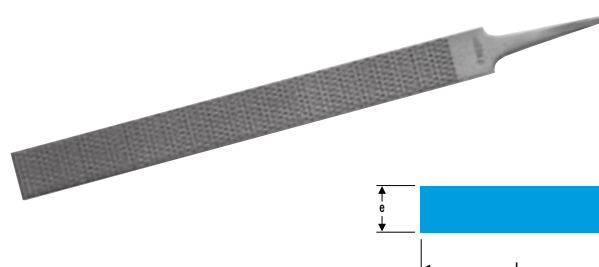
|             | Length<br>mm | Ø<br>mm | g  | ΔΔ<br>g |
|-------------|--------------|---------|----|---------|
| RAB.RD250   | 250          | 10      | 12 | 168     |
| RAB.RD250EM | 250          | 10      | 6  | 204     |



### RAB.P Flat rasps

► NFE 75-001, NFE 75-002

|            | File type   | l x e<br>mm | Length<br>mm | g  | ΔΔ<br>g |
|------------|-------------|-------------|--------------|----|---------|
| RAB.PB250  | Bastard cut | 25 x 6      | 250          | 12 | 316     |
| RAB.PB300  | Bastard cut | 30 x 7      | 300          | 6  | 503     |
| RAB.PMD250 | Second cut  | 25 x 6      | 250          | 12 | 316     |
| RAB.PMD300 | Second cut  | 30 x 7      | 300          | 6  | 503     |



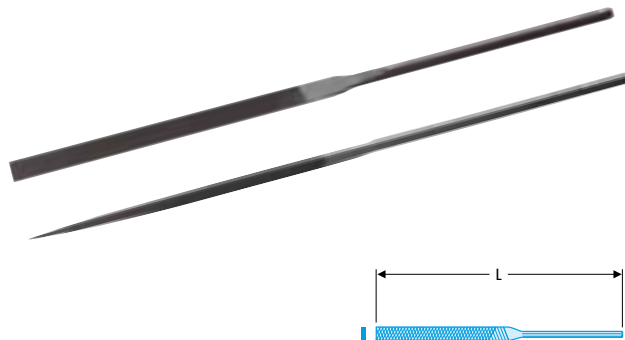
## Precision files

### AIG Round shank needle files

▷ NFE 75-001, NFE 75-002

- 3 styles.
- Available with T2 cut for precision work.
- Choice of 3 lengths : 140, 160, 180 mm.
- In boxes of 12.

|  | File type    | Length<br>mm | $\Delta\Delta$<br>g |
|-----------------------------------------------------------------------------------|--------------|--------------|---------------------|
| <b>AIG.RD160T2</b>                                                                | Round        | 160          | 90                  |
| <b>AIG.RD180T2</b>                                                                | Round        | 180          | 135                 |
| <b>AIG.PAM140T2</b>                                                               | Square       | 140          | 90                  |
| <b>AIG.PAM160T2</b>                                                               | Square       | 160          | 110                 |
| <b>AIG.PAM180T2</b>                                                               | Square       | 180          | 147                 |
| <b>AIG.TRI180T2</b>                                                               | Three-square | 180          | 147                 |



### Selections of needle files

▷ NFE 75-001, NFE 75-002

- AS.6L : 6 needle files (RD.DRD.DPE.CAR.TRI.PAM).
- AS.12L : 12 needle files (RD, DED, PDE, FS, CT, CAR, TRI, PAM, BAR, PAMBR, CRO, OV).
- T0 for rough filing, T2 for precision filing, T4 for finishing.
- Packaging : BC : cardboard box; BP : plastic box; TP : plastic wallet.

|  | File type | Packaging | Length<br>mm | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|-----------|-----------|--------------|---------------------|
| <b>AS.12LBC100T0</b>                                                                | T0        | BC        | 100          | 41                  |
| <b>AS.12LBC100T2</b>                                                                | T2        | BC        | 100          | 42                  |
| <b>AS.12LBP140T0</b>                                                                | T0        | BP        | 140          | 114                 |
| <b>AS.12LBP140T2</b>                                                                | T2        | BP        | 140          | 108                 |
| <b>AS.12LBP140T4</b>                                                                | T4        | BP        | 140          | 109                 |
| <b>AS.6L140T0</b>                                                                   | T0        | TP        | 140          | 86                  |
| <b>AS.6L140T2</b>                                                                   | T2        | TP        | 140          | 85                  |
| <b>AS.12LBP160T0</b>                                                                | T0        | BP        | 160          | 136                 |
| <b>AS.12LBP160T2</b>                                                                | T2        | BP        | 160          | 135                 |
| <b>AS.12LBP160T4</b>                                                                | T4        | BP        | 160          | 134                 |
| <b>AS.6L160T0</b>                                                                   | T0        | TP        | 160          | 99                  |
| <b>AS.6L160T2</b>                                                                   | T2        | TP        | 160          | 98                  |
| <b>AS.12LTP180T0</b>                                                                | T0        | TP        | 180          | 236                 |
| <b>AS.12LTP180T2</b>                                                                | T2        | TP        | 180          | 233                 |
| <b>AS.12LTP180T4</b>                                                                | T4        | TP        | 180          | 232                 |
| <b>AS.6L180T2</b>                                                                   | T2        | TP        | 180          | 115                 |

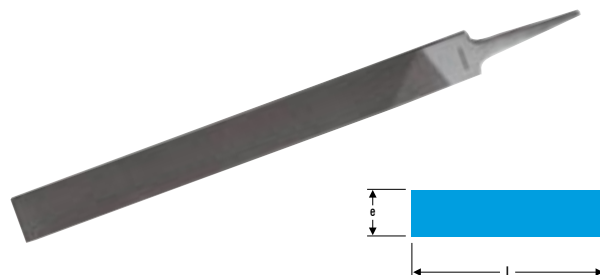


### ALP and ALDRD Second-cut files for aluminium

▷ NFE 75-001, NFE 75-002

- 2 double-cut faces :
- 1 double-cut edge.
- 1 safe edge.

|  | l x e<br>mm | Length<br>mm |  | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|-------------|--------------|-------------------------------------------------------------------------------------|---------------------|
| <b>ALP.300</b>                                                                      | 30 x 7      | 300          | 6                                                                                   | 437                 |
| <b>ALDRD.300</b>                                                                    | 30 x 8,5    | 300          | 6                                                                                   | 475                 |

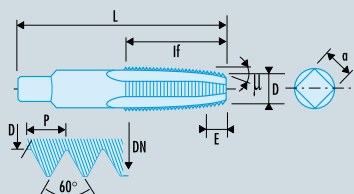


# Workshop drill bits, taps and dies

## Taps



### Tap selection guide



- Ground-thread backed-off taps.
- ISO metric RH thread.
- 6H machining.
- Set of 2 (ref. T2) for soft metals : 1 taper tap, 1 bottoming tap.
- Set of 3 (ref. T3) for hard metals : 1 taper tap, 1 second tap, 1 bottoming tap.

Max. hardness : 70 daN/mm<sup>2</sup> :  
 - for taps 227 and 80 daN/mm<sup>2</sup>  
 - for taps 227.S.

| Types                | D       | E   |
|----------------------|---------|-----|
| Second               | = 6 P   | 6°  |
| Bottoming DN - 1.2p. | = 3.5 P | 9°  |
| Bottoming 18°        | = 2 P   | 18° |

### 227 Standard taps

▷ ISO 2857, ISO 529; NF ISO 529, NF EN 22857.

227.T3 Set of 3 taps : taper, second and bottoming.

227.T2 Set of 2 taps : taper and bottoming.

• HSS steel.

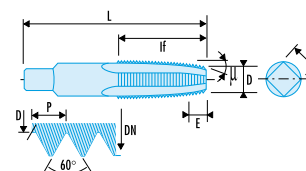
|              | Taps | DN<br>mm | a<br>mm | P<br>mm | L<br>mm | ΔΔ<br>g |
|--------------|------|----------|---------|---------|---------|---------|
| 227.3X50T3   | x3   | 3        | 2,50    | 0,50    | 48      | 17      |
| 227.4X70T3   | x3   | 4        | 3,15    | 0,70    | 53      | 23      |
| 227.5X80T3   | x3   | 5        | 4       | 0,80    | 58      | 37      |
| 227.6X100T3  | x3   | 6        | 5       | 1       | 66      | 50      |
| 227.7X100T3  | x3   | 7        | 5,6     | 1       | 66      | 61      |
| 227.8X125T3  | x3   | 8        | 6,3     | 1,25    | 72      | 83      |
| 227.9X125T3  | x3   | 9        | 7,1     | 1,25    | 72      | 98      |
| 227.10X150T3 | x3   | 10       | 8       | 1,50    | 80      | 137     |
| 227.12X175T3 | x3   | 12       | 7,1     | 1,75    | 89      | 147     |
| 227.14X200T3 | x3   | 14       | 9       | 2       | 95      | 242     |
| 227.16X200T3 | x3   | 16       | 10      | 2       | 102     | 306     |
| 227.3X50T2   | x2   | 3        | 2,5     | 0,50    | 48      | 5       |
| 227.4X70T2   | x2   | 4        | 3,15    | 0,70    | 53      | 8       |
| 227.5X80T2   | x2   | 5        | 4       | 0,80    | 58      | 15      |
| 227.6X100T2  | x2   | 6        | 5       | 1       | 66      | 23      |
| 227.8X125T2  | x2   | 8        | 6,3     | 1,25    | 72      | 42      |
| 227.10X150T2 | x2   | 10       | 8       | 1,50    | 80      | 72      |
| 227.12X175T2 | x2   | 12       | 7,1     | 1,75    | 89      | 79      |



227.T3



227.T2



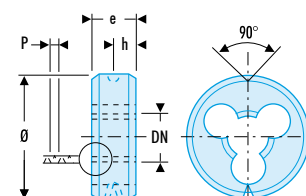
## Dies

### 221 Split dies

▷ ISO 261, DIN ISO 261, NF ISO 261.

- ISO metric RH thread.
- Chrome-vanadium HSS hardened to 62/64 HRC (234 daN/mm<sup>2</sup>).
- Tapered adjusting screw

|            | DN<br>mm | e<br>mm | P<br>mm | Ø<br>mm | h<br>mm | ΔΔ<br>g |
|------------|----------|---------|---------|---------|---------|---------|
| 221.4X70   | 4        | 8       | 0,70    | 25,4    | 3,5     | 27      |
| 221.5X80   | 5        | 8       | 0,80    | 25,4    | 3,5     | 29      |
| 221.6X100  | 6        | 9       | 1       | 25,4    | 3,5     | 29      |
| 221.8X125  | 8        | 9       | 1,25    | 25,4    | 3,5     | 30      |
| 221.9X125  | 9        | 9       | 1,25    | 25,4    | 3,5     | 30      |
| 221.10X150 | 10       | 13      | 1,50    | 38,1    | 6       | 79      |
| 221.12X175 | 12       | 13      | 1,75    | 38,1    | 6       | 89      |
| 221.14X200 | 14       | 13      | 2       | 38,1    | 6       | 79      |
| 221.16X200 | 16       | 13      | 2       | 38,1    | 6       | 74      |
| 221.18X250 | 18       | 15      | 2,50    | 38,1    | 8       | 75      |



## ► Threading and tapping tool sets

### Tap and die sets

- For threads  $\varnothing$  3 - 12 and  $\varnothing$  3 to 18 mm.
- Sets 221.227SJ1 and 221.227SJ2 include cobalt steel taps 227.S.

|                   | mm             | x      |    |   |   |  | $\varnothing$ mm | $\Delta\Delta$ kg |
|-------------------|----------------|--------|----|---|---|--|------------------|-------------------|
| <b>221.227J1</b>  | 470 x 195 x 53 | 9 x 2  | 9  | 2 | 2 |  | M3-M12           | 3,1               |
| <b>221.227SJ1</b> | 470 x 195 x 53 | 9 x 2  | 9  | 2 | 2 |  | M3-M12           | 3,1               |
| <b>221.227J2</b>  | 540 x 284 x 58 | 12 x 2 | 12 | 2 | 3 |  | M3-M18           | 5,7               |
| <b>221.227SJ2</b> | 540 x 284 x 58 | 12 x 2 | 12 | 2 | 3 |  | M3-M18           | 5,7               |

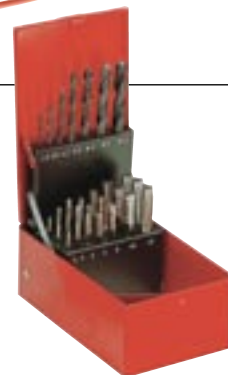


221.227J1

### Tap and drill-bit sets

- Each set includes 3 taps (taper, second, bottoming) and equivalent drill bit 222A.T.
- Set 227.SJ2A includes cobalt-steel taps 227.S.

|                 | x     | $\varnothing$ | mm                         | mm             | $\Delta\Delta$ kg |
|-----------------|-------|---------------|----------------------------|----------------|-------------------|
| <b>227.J2A</b>  | 3 x 7 | M3→M12        | 2,5-3,3,4,2-5-6,8-8,5-10,2 | 172 x 105 x 57 | 1,1               |
| <b>227.SJ2A</b> | 3 x 7 | M3→M12        | 2,5-3,3,4,2-5-6,8-8,5-10,2 | 172 x 105 x 57 | 1,1               |



### Tap set

- Each set includes 3 taps (taper, second, bottoming).
- Set 227.SJ1 includes cobalt-steel taps 227.S.

|                | x     | mm             | $\varnothing$ mm | $\Delta\Delta$ g |
|----------------|-------|----------------|------------------|------------------|
| <b>227.J1</b>  | 3 x 7 | 118 x 118 x 31 | M3→M12           | 720              |
| <b>227.SJ1</b> | 3 x 7 | 118 x 118 x 31 | M3→M12           | 720              |

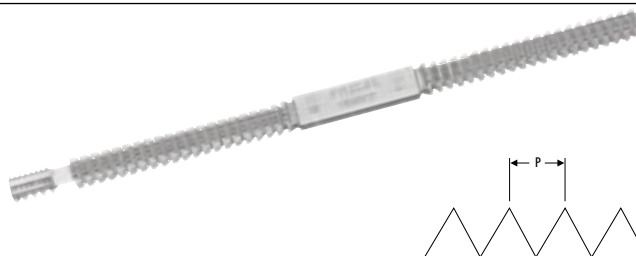


## ► Thread restoring tools

### 237 Thread restoring tools

- For female and male threads.

|              | P                               | Length mm | Thread pattern | $\Delta\Delta$ g |
|--------------|---------------------------------|-----------|----------------|------------------|
| <b>237.A</b> | 75-100-125-150-175-200-250-300  | 230       | SI             | 119              |
| <b>237.B</b> | 80-100-125-150-175-200-250-300  | 230       | ISO            | 123              |
| <b>237.C</b> | 10F-11F-12F-14F-16F-18F-20F-24F | 230       | WHITWORTH      | 125              |



## ► Tools for taps and dies

### 830A.L Long ratcheting tap wrenches

- Ideal for cutting threads in tight recesses.
- Two-way ratchet.
- Ratchet lock.
- Polished chrome finish.

|                 | max mm |     | Length mm | $\Delta\Delta$ g |
|-----------------|--------|-----|-----------|------------------|
| <b>830A.5L</b>  | 5      | M6  | 250       | 230              |
| <b>830A.10L</b> | 8      | M12 | 300       | 413              |





# Workshop drill bits, taps and dies

## 830A Short ratcheting tap wrenches

- Two-way ratchet.
- Ratchet lock.
- Polished chrome finish.

|                | □ max<br>mm |  | Length<br>mm | ΔΔ<br>g |
|----------------|-------------|-----------------------------------------------------------------------------------|--------------|---------|
| <b>830A.5</b>  | 5           | M6                                                                                | 85           | 164     |
| <b>830A.10</b> | 8           | M12                                                                               | 105          | 316     |



## 830A.RN Repair kits

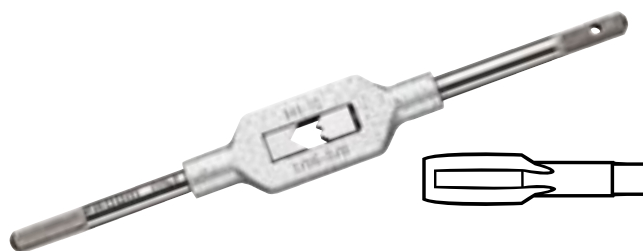
- Comprising chuck and spring.

|                  | For              | ΔΔ<br>g |
|------------------|------------------|---------|
| <b>830A.5RN</b>  | 830A.5/830A.5L   | 13      |
| <b>830A.10RN</b> | 830A.10/830A.10L | 13      |

## 831 Adjustable tap wrenches

- Pressure-cast Zamak body. Machined and hardened clamp.
- Grey hammered finish.

|              | □ min - max |  | Length<br>mm | ΔΔ<br>g |
|--------------|-------------|-----------------------------------------------------------------------------------|--------------|---------|
| <b>831.1</b> | 2 - 8       | M3→M7                                                                             | 180          | 96      |
| <b>831.2</b> | 4 - 11      | M5→M12                                                                            | 300          | 296     |
| <b>831.3</b> | 5 - 16      | M6→M20                                                                            | 385          | 703     |



## 832 Die stocks

- Pressure-cast Zamak body for accurate centring of the die.
- Grey hammered finish.

|                  | For □         | Length<br>mm | Ø<br>mm | Ø<br>" | ΔΔ<br>g |
|------------------|---------------|--------------|---------|--------|---------|
| <b>832.1'</b>    | 3x50→9x125    | 220          | 25,4    | 1      | 116     |
| <b>832.1'1/2</b> | 10x150→18x250 | 325          | 38,1    | 1-1/2  | 408     |



## Workshop drill bits

### 222A.TJ Sets of ground twist drills

▷ ISO 235, DIN 338, NF ISO 235.

- For steel up to 700 MPa, stainless steel, grey cast-iron and aluminium alloy.

|                  | x  | Ø min - max<br>mm | x<br>mm |  mm | ΔΔ<br>kg |
|------------------|---------------------------------------------------------------------------------------|-------------------|---------|----------------------------------------------------------------------------------------|----------|
| <b>222A.TJ19</b> | 19                                                                                    | 1 - 10            | 0,5     | 165 x 110<br>x 35                                                                      | 0,73     |
| <b>222A.TJ25</b> | 25                                                                                    | 1 - 13            | 0,5     | 190 x 110<br>x 54                                                                      | 1,39     |
| <b>222A.TJ50</b> | 50                                                                                    | 1 - 5,9           | 0,1     | 135 x 120<br>x 35                                                                      | 0,76     |
| <b>222A.TJ81</b> | 81                                                                                    | 2 - 10            | 0,1     | 235 x 210 x<br>145                                                                     | 3,7      |

### Set of ground twist drills

#### 222A.TJ32

- For steel up to 700 MPa, stainless steel, grey cast-iron and aluminium alloy.
- 20 drill bits 222A.T Ø 1 to 10.5 mm in 1/2 mm increments.
- 12 drill bits, tapping and riveting dimensions :  
- Ø d1.9-2.1-2.6-2.9-3.2-3.3-3.8-4.2-5.1-6.8-7.9- 10.2 mm.
- Dimensions : 170 x 110 x 50 mm.

ΔΔ : 1.17 kg.



## Ground twist drills

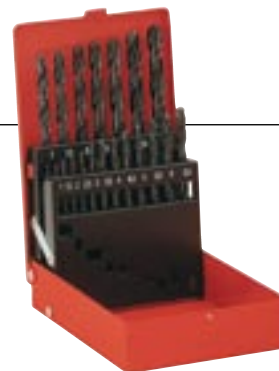
- For steel up to 700 MPa, stainless steel, grey cast-iron and aluminium alloy.
  - Available in the following sizes :  
- Ø 1 to Ø 13 mm : in 1/2 mm increments
- Ordering information : For a 6.5 mm drill bit  
quote reference 222A.T6.5.



## 222.J Drill bit sets

- Hot-rolled high-speed steel drills for steels up to 400 MPa hardness.

|                | x  | Ø min - max<br>mm | x<br>mm | <br>mm            | ΔΔ<br>kg |
|----------------|----|-------------------|---------|-------------------|----------|
| <b>222.J19</b> | 19 | 1 - 10            | 0,5     | 165 x 110<br>x 68 | 0,73     |
| <b>222.J25</b> | 25 | 1 - 13            | 0,5     | 190 x 110<br>x 54 | 1,36     |



## Drill bits

### 222

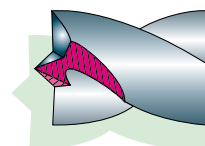
- For steel up to 400 MPa.
  - Available in the following sizes :  
- Ø 1 to Ø 13 mm : in 1/2 mm increments
- Δ Ordering information : For a drill bit. Ø 6.5 mm :  
quote reference 222.6,5.



## Set of drill bits for sheet metal

### 222.TLJ10

- Comprising :  
- 10 drill bits Ø 3-3.5-4-4.2-4.5-5-5.5-6-8-10.
  - Ground in high-speed steel.
  - For thin gauges
  - Service case 155 x 110 x 35 mm.
- ΔΔ : 150 g.



## Set of 3 reaming bits

### 229A.J3

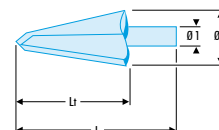
- Capacity : Ø 3 to 30.5 mm.
  - In a steel case : 120 x 100 x 38 mm.
  - Supplied with lubricant.
- ΔΔ : 555 g.



## 229A Reaming bits

- HSS for drilling, deburring and reaming thin sheet steel and non-ferrous metals.
- Max. recommended thickness 4 mm.

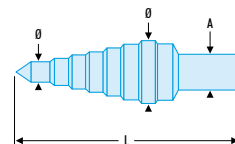
|               | Ø 2 min - max<br>mm | Ø1<br>mm | Lt<br>mm | L<br>mm | ΔΔ<br>g |
|---------------|---------------------|----------|----------|---------|---------|
| <b>229A.1</b> | 3 - 14              | 6        | 37       | 59      | 21      |
| <b>229A.2</b> | 5 - 20              | 8        | 41       | 71      | 45      |
| <b>229A.3</b> | 16 - 30,5           | 9        | 48       | 76      | 131     |



- Complies with the standards.
- For precision-drilling straight bores in all materials.
- Split point : no pilot hole required.
- More aggressive cut for easier drilling and no burrs.
- Better shaving removal.
- Less vibration, quieter operation.
- Parallel shank with 3 flats for positive rotation.
- Laser-engraved diameter markings in a groove.
- 678006 : Special ISO gland.
- 678014 : PG size step drill.
- Shank diameter 10 mm.



|  | Ø min - max<br>mm                                  | A<br>mm | L<br>mm | ΔΔ<br>g |
|---------------------------------------------------------------------------------|----------------------------------------------------|---------|---------|---------|
| <b>229A.ST0</b>                                                                 | 4-5-6-7-8-9-10-11-12                               | 6       | 65      | 25      |
| <b>229A.ST1</b>                                                                 | 4-6-8-10-12-14-16-18-20                            | 8       | 75      | 65      |
| <b>229A.ST2</b>                                                                 | 4-6-9-12-15-18-21-24-27-30-33-36-39                | 10      | 107     | 315     |
| <b>229A.ST3</b>                                                                 | 6-9-13-16-19-21-23-26-29-32-35-38                  | 10      | 100     | 320     |
| <b>678006</b>                                                                   | 6,5-8,5-10,5-12,5-16,5-20,5-25,5-29-32,5-36,5-40,5 | 10      | 96      | 310     |
| <b>678014</b>                                                                   | 6-9-12-5-15-2-18-6-20-4-22-5-26-28-3-30-5-34-37    | 10      | 100     | 300     |



## ► Bits for impact machinery

## 223.MHJ7

- SDS plus shank profile.
  - Tungsten carbide tip insert.
  - Comprising :
    - 3 drills : 110 mm long, Ø 5 - 6 - 8 mm.
    - 4 drills : 160 mm long, Ø 6 - 8 - 10 - 12 mm
  - In a steel case : 185 x 100 x 25 mm.
- ΔΔ : 507 q.



## 223.MJ6

- For carbide-chuck machinery Ø 13 mm.
  - Machined bit with ground spiral and sharpened carbide insert
  - Ø 4 - 5 - 6 - 7- 8 - 10 mm.
  - In a plastic case : 140 x 70 x 20 mm.
- △△ : 175 q.



## ► Bits for hammer drills

**223.SJ7**

- Sharpened carbide tip inserts.
  - Ground from stock with L-groove.
  - Ø 4 - 5 - 6 - 7 - 8 - 10 - 12 mm.
  - In a steel case : 155 x 100 x 30 mm.
-  : 355 g.

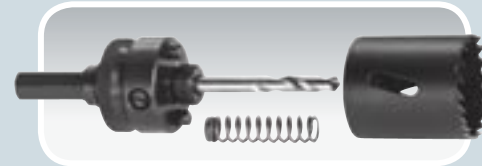




## Bimetal HSS holesaw

For cutting holes through standard materials and metals used in mechanical engineering, sheet-metalworking and plumbing.

- High-speed steel teeth, hardness > 63 HRC.
- Holesaw back in thick sheet steel to minimise vibration.
- Side slots and holes for chip removal.
- Spring helps eject cut-out pieces.



Quick assembly : chuck, pilot drill, spring, blade.

## Variable pitch holesaw

### 609A Variable pitch holesaw

- Variable pitch 4 to 6 mm (4/6T).
- Softer cut and reduced vibration. Cutting depth 34 mm.

| Ø       | mm | L<br>mm | ΔΔ<br>g |
|---------|----|---------|---------|
| 609A.16 | 16 | 51      | 27      |
| 609A.19 | 19 | 51      | 31      |
| 609A.22 | 22 | 51      | 43      |
| 609A.24 | 24 | 51      | 52      |
| 609A.25 | 25 | 51      | 57      |
| 609A.27 | 27 | 51      | 66      |
| 609A.29 | 29 | 51      | 77      |
| 609A.32 | 32 | 51      | 92      |
| 609A.35 | 35 | 51      | 100     |
| 609A.38 | 38 | 51      | 74      |
| 609A.40 | 40 | 45      | 82      |
| 609A.44 | 44 | 45      | 102     |
| 609A.51 | 51 | 45      | 125     |
| 609A.54 | 54 | 45      | 140     |
| 609A.57 | 57 | 45      | 152     |
| 609A.60 | 60 | 45      | 167     |
| 609A.64 | 64 | 45      | 185     |
| 609A.65 | 65 | 45      | 192     |
| 609A.67 | 67 | 45      | 195     |
| 609A.68 | 68 | 45      | 205     |



| Ø        | mm  | L<br>mm | ΔΔ<br>g |
|----------|-----|---------|---------|
| 609A.70  | 70  | 45      | 217     |
| 609A.76  | 76  | 45      | 250     |
| 609A.79  | 79  | 45      | 267     |
| 609A.80  | 80  | 45      | 270     |
| 609A.83  | 83  | 45      | 291     |
| 609A.86  | 86  | 45      | 300     |
| 609A.102 | 102 | 45      | 419     |

| Ø       | Description                                |
|---------|--------------------------------------------|
| 609A.M1 | Chuck and drill for holesaws → 22 to 29 mm |
| 609A.M2 | Chuck and drill for holesaws → > 29 mm     |

## Holesaw sets

### 609A Set of variable-pitch holesaws with chucks

| Ø       | mm             | Ø<br>mm                                    | ΔΔ<br>kg |
|---------|----------------|--------------------------------------------|----------|
| 609A.J1 | 322 x 136 x 53 | 22 - 29 - 35 - 44 - 51 - 64                | 1,8      |
| 609A.J3 | 322 x 136 x 53 | 19 - 22 - 29 - 35 - 38 - 44 - 51 - 57 - 64 | 2,1      |



### Case set of 5 holesaws

#### 693898

- Comprising :
  - Holesaws Ø 38, 40, 65, 67 and 68 mm.
  - 1 chuck fitted with a pilot drill.
  - 1 spring.
- Supplied in a shockproof polypropylene case BP.115 and tray PL.643.
- Case dimensions : 325 x 135 x 55 mm.
- Special electricians set (Recess boxes, etc.).





# Mills, scrapers

## VFA Cutters

- Tungsten carbide.
- Right-hand spiral.

|  | no. | Ø x H<br>mm | max<br>rpm | ΔΔ<br>g |
|----------------------------------------------------------------------------------|-----|-------------|------------|---------|
| VFA.600                                                                          | 1   | 6 x 18      | 50000      | 24      |
| VFA.602                                                                          | 2   | 6 x 18      | 50000      | 24      |
| VFA.604                                                                          | 3   | 6 x 18      | 50000      | 24      |
| VFA.606                                                                          | 4   | 6 x 18      | 50000      | 22      |
| VFA.608                                                                          | 5   | 6 x 18      | 50000      | 20      |
| VFA.610                                                                          | 6   | 6 x 15      | 50000      | 20      |
| VFA.1200                                                                         | 1   | 12 x 25     | 20000      | 52      |
| VFA.1202                                                                         | 2   | 12 x 25     | 20000      | 52      |
| VFA.1204                                                                         | 3   | 12 x 25     | 20000      | 50      |
| VFA.1206                                                                         | 4   | 12 x 25     | 20000      | 30      |
| VFA.1208                                                                         | 5   | 12 x 25     | 20000      | 35      |
| VFA.1210                                                                         | 6   | 12 x 20     | 20000      | 38      |



## Set of 90° cone bits

### 229.TTJ4

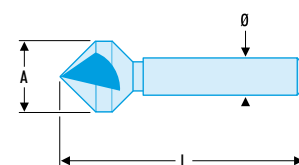
- Comprising :  
- 4 bits 229.TT2 to 229.TT5 and lubricant.
  - In a steel case 120 x 100 x 38 mm.
- ΔΔ : 450 g.



## 229.TT 90° cone bits

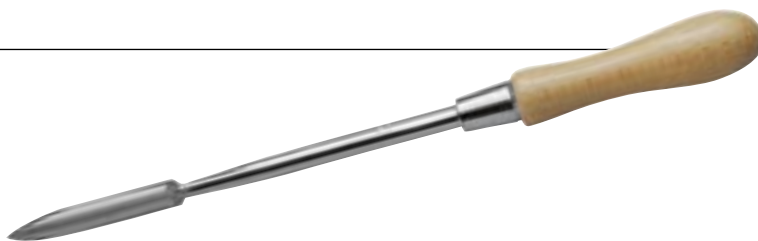
- 3 HSS cutting edges for countersunk screw holes.

|  | A<br>mm | Ø<br>mm | L<br>mm | ΔΔ<br>g |
|------------------------------------------------------------------------------------|---------|---------|---------|---------|
| 229.TT2                                                                            | 10,4    | 6       | 50      | 11      |
| 229.TT3                                                                            | 16,5    | 10      | 60      | 30      |
| 229.TT4                                                                            | 20,5    | 10      | 63      | 48      |
| 229.TT5                                                                            | 25,0    | 10      | 67      | 66      |



**Three-square scraper****231**

- High quality steel blade, polished chrome finish.
  - Varnished wood handle.
  - Shank length : 200 mm.
- ΔΔ : 180 g.

**Half-round curved scraper****232**

- Polished chrome blade.
  - Varnished wood handle.
  - Blade length 200 mm.
- ΔΔ : 180 g.

**Flat scraper****329**

- Polished chrome blade.
  - Varnished wood handle.
  - Blade length 200 mm.
- ΔΔ : 185 g.

**Set of 3 stainless steel scrapers****235.J1**

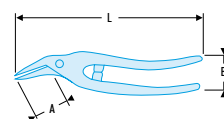
- Dimensions :
- Length : 215mm.  
Width : 32mm straight, 32mm angled and 50mm straight.  
Weight of set 427 g.

**Set of 3 flexible spatulas****237.J1**

- Dimensions :
- Length : 215mm.  
Width : 32mm, 50mm and 75mm.  
Weight of set 273 g.

**Metal shears****883 Scroll shears**

- Specially-shaped nose for accurately following detailed patterns.
  - Steel end stops.
- 883B.G Left-cut scroll shears.  
883B Right-cut scroll shears.  
883.32 Right cut large-capacity scroll shears.  
• Epoxy paint finish.

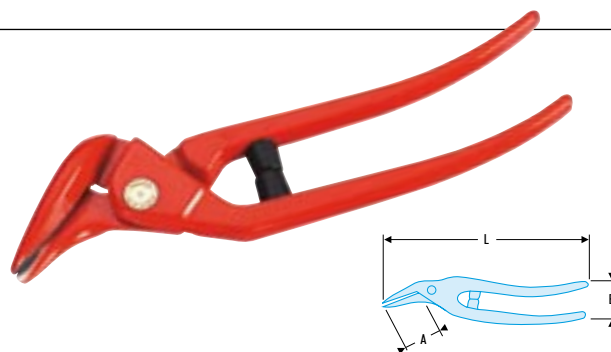


|               | Capacity in mm<br>Stainless 80<br>kg/mm <sup>2</sup> | Capacity in<br>mm | L<br>mm | A<br>mm | B min<br>- max<br>mm | ΔΔ<br>g |
|---------------|------------------------------------------------------|-------------------|---------|---------|----------------------|---------|
| <b>883B.G</b> | 0,8                                                  | 1                 | 260     | 46      | 43 - 170             | 535     |
| <b>883B</b>   | 0,8                                                  | 1                 | 260     | 50      | 43 - 170             | 527     |
| <b>883.32</b> | 0,9                                                  | 1,2               | 320     | 73      | 47 - 170             | 763     |

## 884 Panel shears

- The bottom-blade clearance makes these shears ideal for continuous straight cuts in large panels, leaving clean edges.
- End stop.
- Epoxy paint finish.

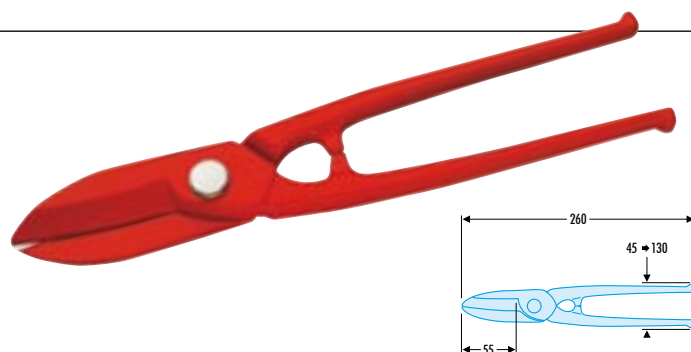
|               | Capacity in mm<br>Stainless 80<br>kg/mm <sup>2</sup> | Capacity in<br>mm | L<br>mm | A<br>mm | B min - max<br>mm | ΔΔ<br>g |
|---------------|------------------------------------------------------|-------------------|---------|---------|-------------------|---------|
| <b>884B</b>   | 0,8                                                  | 1                 | 260     | 40      | 43 - 130          | 670     |
| <b>884.30</b> | 0,9                                                  | 1,2               | 300     | 52      | 45 - 150          | 840     |



## General-purpose shears

### 880

- 2 wide blades.
  - Capacity :  
- Stainless 80 kg/mm<sup>2</sup> : 0.5 mm.
  - Semi-hard steel : 0.8 mm.
  - Forged steel end stop.
  - Epoxy paint finish.
- ΔΔ : 520 g.



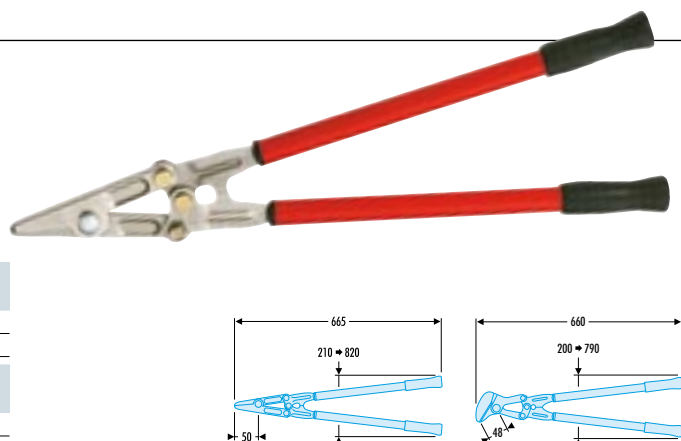
## 882A-884A Two-hand shears

- Very high demultiplication.
- Forged steel end stop.
- Cutting capacity for blued sheet 120 kg/mm<sup>2</sup> : 2.0 mm (882A.65) and 2.5 mm (884A.65).
- Zinc-coated blades, tubular handles with neoprene grips.

|                | ΔΔ<br>kg |
|----------------|----------|
| <b>882A.65</b> | 2,134    |
| <b>884A.65</b> | 2,406    |

|                 | Description  | ΔΔ<br>kg |
|-----------------|--------------|----------|
| <b>882A.L65</b> | Spare blades | 0,767    |
| <b>884A.L65</b> | Spare blades | 1,06     |

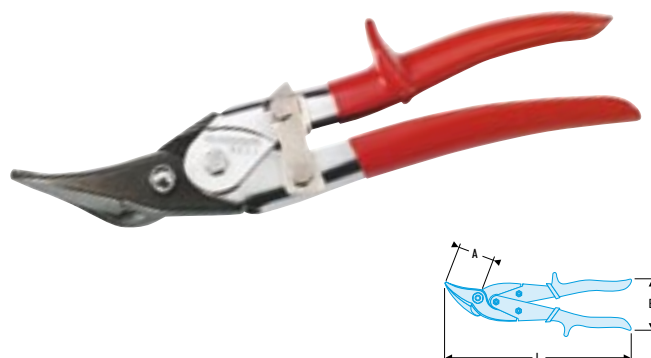


## Right-cut universal scroll shears

### 882A

- Compound joint for easy action.
- Forged, hardened and burnished blades.
- Red sheathed grips with guard.
- Inset opening spring.
- Lock-closed catch.
- Cutting capacity  
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 0.8 mm.

|             | L<br>mm | A<br>mm | B min - max<br>mm | ΔΔ<br>g |
|-------------|---------|---------|-------------------|---------|
| <b>882A</b> | 250     | 32      | 45 - 130          | 474     |



## 982 Compound scroll shears

- Comply with ASME B 107.16M - 1998.
- Panel-type shears with slightly serrated cutting edges to prevent workpiece slip.
- Good demultiplication and inset opening spring.
- Forged chrome molybdenum blades.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.
- Red = left cut.
- Green = Right cut.
- Jaw lock catch.
- Cutting capacity.
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1.2 mm.

|  | L<br>mm | B min - max<br>mm | A<br>mm | $\Delta\Delta$<br>g |
|-----------------------------------------------------------------------------------|---------|-------------------|---------|---------------------|
| <b>982</b>                                                                        | 245     | 65 - 190          | 45      | 378                 |
| <b>982.G</b>                                                                      | 245     | 65 - 190          | 45      | 382                 |



## 985 "Aircraft" shears

- Forged chrome molybdenum blades.
- High demultiplication allows long runs without effort.
- Good demultiplication and inset opening spring.
- Slightly serrated cutting edges prevent workpiece slip.
- Ergonomic non-slip bi-material grips.
- Colour-coded according to direction of cut.
- Left cut = Red (985LE).
- Right cut = Green (985RI).
- Straight cut = Yellow (985ST).
- Jaw lock catch.
- Cutting capacity.
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1.2 mm.

|  | L<br>mm | B min - max<br>mm | A<br>mm | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|---------|-------------------|---------|---------------------|
| <b>985.LE</b>                                                                       | 255     | 60 - 150          | 55      | 399                 |
| <b>985.RI</b>                                                                       | 255     | 60 - 150          | 55      | 400                 |
| <b>985.ST</b>                                                                       | 255     | 65 - 165          | 55      | 390                 |



## Nibblers

### 887A

- Inset opening spring and high demultiplication allow effortless cutting along intricate patterns, removing a strip 2.8 mm wide.
- Die and blade system severs the strip at end of run.
- Top blades cut wire up to 2 mm in semi-hard steel and 2.5 mm in mild steel.
- Lock-closed catch.
- Cutting capacity
- Stainless 80 kg/mm<sup>2</sup> : 0.8 mm.
- Semi-hard steel : 1 mm.

|  | L<br>mm     | B min - maxi<br>mm | A<br>mm  | $\Delta\Delta$<br>g |
|-------------------------------------------------------------------------------------|-------------|--------------------|----------|---------------------|
| <b>887A</b>                                                                         | 260         | 7                  | 45 - 110 | 520                 |
|  | Description |                    |          | $\Delta\Delta$<br>g |
| <b>887A.L1</b>                                                                      | Spare blade |                    |          | 20                  |





# Bolt croppers and cable cutters

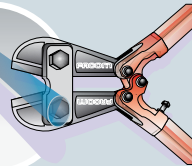


## 990.B Bolt croppers

### Powerful

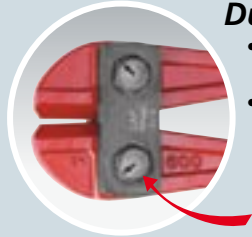
- Increased steel-cutting capacity up to 160 kg/mm<sup>2</sup>.

160 kg/mm<sup>2</sup>



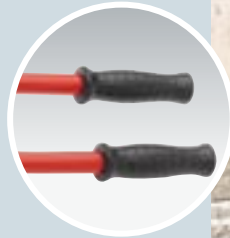
### Durable

- Harder blades for a more durable cut.
- Body specially treated to reduce play to a minimum.
- High performance chrome blades.
- Eccentric screw adjustment of play between blades.



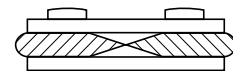
### Efficient

- Minimum cutting effort.
- Handgrip with guard for greater comfort



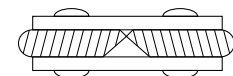
## 990.B Axial cut bolt croppers

|        | no. | Ø max mm              |                        | Length |    | 160 kg/mm <sup>2</sup> |       |
|--------|-----|-----------------------|------------------------|--------|----|------------------------|-------|
|        |     | 60 kg/mm <sup>2</sup> | 140 kg/mm <sup>2</sup> | mm     | "  | 160 kg/mm <sup>2</sup> | ΔΔ kg |
| 990.B0 | 0   | 7                     | 6                      | 450    | 18 | 5,5                    | 1,7   |
| 990.B1 | 1   | 10                    | 8                      | 600    | 24 | 7                      | 2,8   |
| 990.B2 | 2   | 13                    | 9                      | 750    | 30 | 8                      | 4,2   |
| 990.B3 | 3   | 16                    | 10                     | 900    | 35 | 9                      | 6,4   |
| 990.B4 | 4   | 18                    | 11                     | 1050   | 41 | 10                     | 8,6   |



## 990.RB Flush-cut bolt croppers

|          | no. | Ø max mm              |                        | Length |    | 160 kg/mm <sup>2</sup> |       |
|----------|-----|-----------------------|------------------------|--------|----|------------------------|-------|
|          |     | 60 kg/mm <sup>2</sup> | 140 kg/mm <sup>2</sup> | mm     | "  | 160 kg/mm <sup>2</sup> | ΔΔ kg |
| 990.RB00 | 00  | 6                     | 5                      | 350    | 12 | 5                      | 1     |
| 990.RB0  | 0   | 7                     | 6                      | 450    | 18 | 5,5                    | 1,7   |



## 990.LB Replacement blades for series 990.B (with screws)

- Bolt-cropper blades are consumables and subject to normal wear. Facom guarantees their conformity to dimensional standards and suitability for recommended applications.
- Actual service life is dependent on conditions of use.

|           | For axial cut |               | ΔΔ kg |
|-----------|---------------|---------------|-------|
|           | bolt croppers | bolt croppers |       |
| 990.LB0   | 990.B0        |               | 0,65  |
| 990.LB1   | 990.B1        |               | 1,05  |
| 990.LB2   | 990.B2        |               | 1,65  |
| 990.LB3   | 990.B3        |               | 2,4   |
| 990.LB4   | 990.B4        |               | 3,4   |
| 990.LRB00 |               | 990.RB00      | 0,45  |
| 990.LRB0  |               | 990.RB0       | 0,65  |



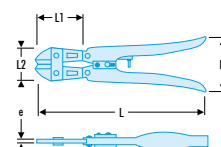
## ► Mini croppers and wire cutters

### Small bolt cropper

#### 997A.20

- Forged, hardened blades.
- Cutting capacity :
  - Max. Piano wire Ø 2mm at 200kg/mm<sup>2</sup>.
  - Soft wire Ø 4mm at 60 kg/mm<sup>2</sup>.
- Compact, lightweight tool with demultiplication system designed to cut hard and semi-hard wire, piano wire, bolts, rivets, pins and nails, etc.
- Ergonomic hardened pressed-steel handles with adjustable, shock-absorbing end stop.
- Spring-assisted opening.
- Blades lock in closed position.
- Bronzed blades, painted grips.

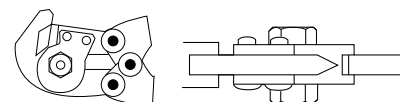
|         | E<br>mm | H<br>mm | L<br>mm | L1<br>mm | L2<br>mm | ΔΔ<br>g |
|---------|---------|---------|---------|----------|----------|---------|
| 997A.20 | 4,5     | 57      | 210     | 54,5     | 40       | 275     |



### "Parrot nose" steel wire cutter

#### 997A.P22

- For cutting hard wire up to 200 kg/mm<sup>2</sup> : Ø 2 mm using one hand.
  - Maximum capacity : Ø 8 mm.
  - Blades hardened to 240 kg/mm<sup>2</sup>.
  - 235 x 80 mm.
- ΔΔ : 400 g.



## ► Copper and aluminium cable cutters

### 412 Cable cutters

412B.10 "Compact" cable cutters, capacity 10 mm.

- Integral opening spring.
- Lock closed catch.
- Cross proof design.

412.16 "Compact" cable cutters, capacity 16 mm.

- Heavy-duty head, cross proof design.
- Safety stop.

412.30-412.42 □ Heavy-duty cable cutters.

- Powerful action, cuts without crushing electric cables.
- Safety stop.

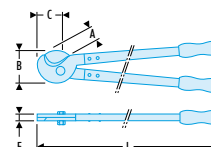
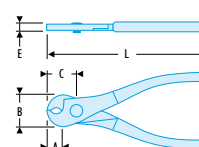
|         | D min - max<br>mm | ⊘ max<br>mm <sup>2</sup> | ⊘ max<br>mm <sup>2</sup> | E<br>mm | L<br>mm | A<br>mm | B<br>mm | C<br>mm | Ø<br>mm | ΔΔ<br>g |
|---------|-------------------|--------------------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|
| 412B.10 | 53 - 190          | 45                       | 50                       | 10      | 170     | 21      | 28      | 40      | 10      | 225     |
| 412.16  | 80 - 370          | 75                       | 85                       | 14      | 290     | 28      | 54      | 45      | 16      | 670     |
| 412.30  | 155 - 1000        | 185                      | 210                      | 16      | 600     | 40      | 70      | 60      | 32      | 2458    |
| 412.42  | 200 - 1300        | 400                      | 430                      | 16      | 800     | 70      | 115     | 90      | 42      | 3695    |

|         | Description              |
|---------|--------------------------|
| 412.L30 | Set of blades for 412.30 |
| 412.L42 | Set of blades for 412.42 |

412.30



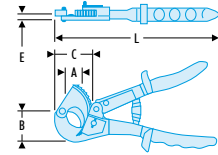
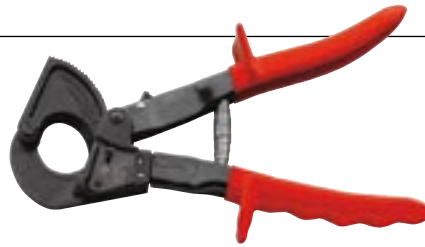
412B.10



# Cable cutters

## 413 Ratchet cable cutters

- Capacities 32 and 52 mm.
- Ratchet-blade system for easy cut through thick gauge cables.
- Particularly useful in confined spaces.
- Non-slip grips with guards.

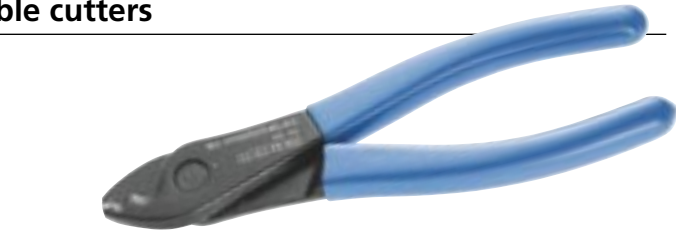


|                | max             | E   | A   | B  | C  | Ø  | L  | ΔΔ  |
|----------------|-----------------|-----|-----|----|----|----|----|-----|
|                | mm <sup>2</sup> | mm  | mm  | mm | mm | mm | mm | g   |
| <b>413A.32</b> | 190             | 210 | 7,8 | 34 | 58 | 65 | 32 | 255 |
| <b>413.52</b>  | 250             | 400 | 8,0 | 53 | 80 | 75 | 52 | 275 |

## Manual 10 mm dia. copper/aluminium cable cutters

### 985912

- Notched end for stripping wires
- For single and multi-strand cables.

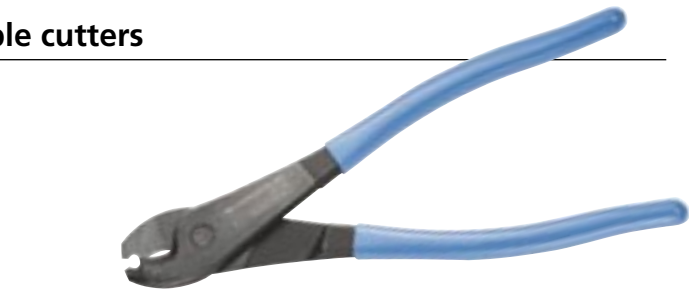


|               | Capacity Ø mm      | Capacity Ø mm | L  | ΔΔ  |
|---------------|--------------------|---------------|----|-----|
|               | Multi-strand cable | single strand | mm | g   |
| <b>985912</b> | 10                 | 8             | 6  | 165 |

## Manual 18mm dia. copper/aluminium cable cutters

### 985925

- Notched end for stripping wires
- For single and multi-strand cables.



|               | Capacity Ø mm      | Capacity Ø mm | L  | ΔΔ  |
|---------------|--------------------|---------------|----|-----|
|               | Multi-strand cable | copper        | mm | g   |
| <b>985925</b> | 18                 | 15            | 10 | 231 |

## Steel cable cutters

### 996 Cable cutters

996.5 "Compact" cable cutters, capacity 5 mm.

- Lightweight tool with blades and cutting angle designed for cutting solid materials and multi-strand cables.
- Push catch to lock closed, simply squeeze handles to release.
- Blades hardened to 60-62 HRC.

996.8 "Standard" cable cutters, capacity 8 mm.

- Blade inserts in high-performance steel.
- Compact and powerful with ergonomic grips.

996A.12 : Capacity 12 mm.

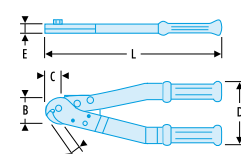
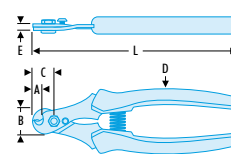
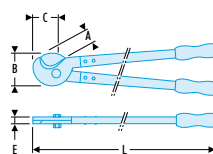
996.16 : Capacity 16 mm.

- Forged blades in high-performance steel.
- Cross proof design.



|                | D min - max mm | ● Mild steel 60-100 kg/mm <sup>2</sup> | ● Hard steel 120-150 kg/mm <sup>2</sup> | ● Hard steel 130-160 kg/mm <sup>2</sup> | ● Rod 60 kg/mm <sup>2</sup> | ● Rod 60-80 kg/mm <sup>2</sup> | E mm | A mm | B mm | C mm | L mm | ΔΔ kg |
|----------------|----------------|----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------|--------------------------------|------|------|------|------|------|-------|
| <b>996.5</b>   | 50 - 125       | 5                                      | -                                       | 4                                       | 3                           | -                              | 8    | 7    | 21   | 12   | 165  | 0,165 |
| <b>996.8</b>   | 115 - 470      | 8                                      | -                                       | 7                                       | 6                           | -                              | 16   | 12   | 42   | 21   | 340  | 0,89  |
| <b>996A.12</b> | -              | 12                                     | 10                                      | -                                       | -                           | 8                              | 16   | 20   | 73   | 50   | 600  | 2,73  |
| <b>996.16</b>  | -              | 16                                     | 13                                      | -                                       | -                           | 10                             | 16   | 28   | 115  | 55   | 800  | 4,95  |

|                 | Description              |
|-----------------|--------------------------|
| <b>996.L8</b>   | Spare blades for 996.8   |
| <b>996A.L12</b> | Spare blades for 996A.12 |
| <b>996.L16</b>  | Spare blades for 996.16  |



844

## The new utility knife range

A NEW RANGE OF CUTTING TOOLS, DESIGNED FOR PROFESSIONALS

## Uncompromising safety for Professional applications.

- Recommended by the Health and Safety Committees (CHSCT)..
- Avoids the risk of cuts as a result of handling the blade, or blade slippage.
- Automatic reload model.
- Blade lock feature



844.S18

## Productivity and efficiency.

- In-handle blade storage allows easy blade changes.
- Time-saving and safe.

## Especially designed for intensive and daily use.

- Stainless steel blade guide providing perfect torsion resistance.
- Ergonomic handle for a more comfortable grip.
- Soft finish to avoid slippage.

## Rigorous quality.

- Dynamic endurance tested for mechanism lifetime
- Load tested for blade-locking.
- Torsion tested to ensure blade retention.
- Tested for resistance to workshop chemicals.



844.D



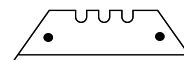
New

## Safety knife with retractable blade

## 844.D

- Safety knife.
- Blade automatically retracts after use.
- Zamak body.
- ABS cursor, front or side thumb control.
- Supplied with 3 blades (1 factory-mounted and 2 in the body).

ΔΔ : 185 g.



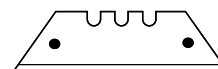
|       | H min - max<br>mm | L<br>mm   | E mini maxi<br>mm |
|-------|-------------------|-----------|-------------------|
| 844.D | 176               | 40,5 - 44 | 21,5 - 27         |

## Retractable utility knife with interchangeable blades

## 844.R

- Choice of 3 blade settings.
- Moulded handle housing 5 blades :
- Zamak body.
- Zinc alloy slide-button.

ΔΔ : 190 g.



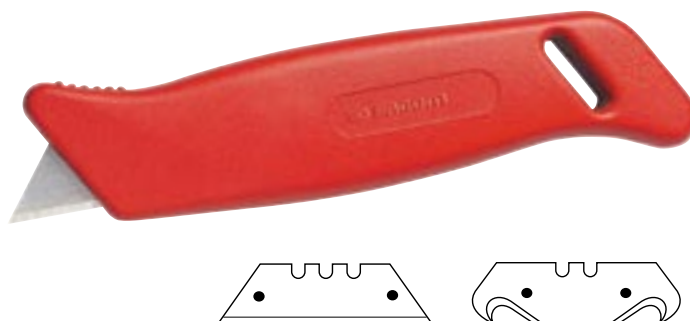


## Utility knife with interchangeable blades

### 844C

- Moulded handle housing 5 blades.
- Supplied in plastic case.
- Zamak body.

ΔΔ : 145 g.



**New**

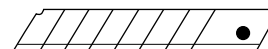
## 18 mm automatically reloading utility knife

### 844.S18

Productivity, accessibility, safety

- Automatically reloading snap-off blades.
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Blade lock knob.
- 6-blade cartridge.

ΔΔ : 85 g.

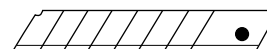


|                 | L<br>mm | Hauteur<br>mm | Epaisseur<br>mm |
|-----------------|---------|---------------|-----------------|
| <b>844.SE18</b> | 176     | 47            | 23              |

## Cutter with 18 mm snap-off blades

### 844.SE18

- Snap-off blades
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2 spare blades.
- Integral blade snapper.



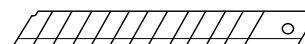
|                 | L<br>mm | Hauteur<br>mm | Epaisseur<br>mm | ΔΔ<br>g |
|-----------------|---------|---------------|-----------------|---------|
| <b>844.SE18</b> | 47      | 47            | 172             | 98      |

## Cutter with 9 mm snap-off blades

### 844.S9

- Snap-off blades
- Ergonomic soft ABS handle.
- Stainless steel blade guide.
- Automatic blade lock.
- 2 spare blades.
- Integral blade snapper.

ΔΔ : 19 g.



|                 | L<br>mm | Height<br>mm | Epaisseur<br>mm | ΔΔ<br>g |
|-----------------|---------|--------------|-----------------|---------|
| <b>844.SE18</b> | 149     | 47           | 17              | 47      |

844

## Blade selection guide

## OUR CUTTING TOOL EXPERIENCE AT THE SERVICE OF PROFESSIONALS

**A perfectly cutting blade guarantees your safety.**

- A neat, clean cut
- Does not damage the material to be cut.
- Effortless cutting without the risk of blade slippage or pull-out.
- Saves time.

**A choice of packaging**

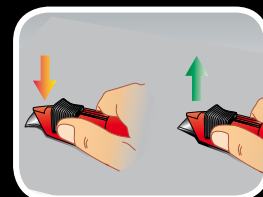
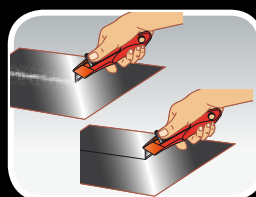
- 10 blade dispenser for roller cabinets.
- 100 blade dispenser for wall mounting.

**Choosing the right blade.**

- What material is being cut ? Material, thickness.
- On what backing surface will cutting be performed ? (Does it need protecting ? )
- Is there a risk of slipping ? (uneven surface)
- What is the working material ?
- What is the frequency of use ?
- What is the desired durability ?

**A blade is a compromise between :**

- **Hardness** : For a strong cutting section and good stress resistance.
- **Flexibility** : For stress resistance as well as allowing the blade to twist without deforming for a neat cut.
- **Cutting angle** : to guarantee an optimum cut according to the material.



New

**High strength perforated trapezoidal blade**

- High strength blade.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting :
  - Thick cardboard. - Hoses. - Plastic. - Resilient foam. - Heat-shrinkable tubing.
  - Nylon strip. - Plastic tubes. - Seals.
- Supplied in a 10 or 100 blade dispenser.

|                   | Length<br>mm | Height<br>mm | Thickness<br>mm | ΔΔ<br>kg |
|-------------------|--------------|--------------|-----------------|----------|
| <b>844.TTL10</b>  | 60           | 19           | 0,65            | 0,05     |
| <b>844.TTL100</b> | 60           | 19           | 0,65            | 0,35     |



10 blades



100 blades

**Standard trapezoidal blade**

- Trapezoidal blade for everyday tasks.
- Designed to produce a perfect cut in normal applications.
- Ideal for cutting :
  - Thin cardboard. - Plastic film. - Heat-shrinkable tubing. - Wrapping paper.
- Supplied in a 10 or 100 blade dispenser.

|                   | Length<br>mm | Height<br>mm | Thickness<br>mm | ΔΔ<br>kg |
|-------------------|--------------|--------------|-----------------|----------|
| <b>844.TSL10</b>  | 50           | 19           | 0,45            | 0,05     |
| <b>844.TSL100</b> | 50           | 19           | 0,45            | 0,35     |



10 blades



100 blades

**New**

## High performance safety trapezoidal blade

- High performance trapezoidal blade.
- Rounded corner to avoid risk of accidental cutting.
- Designed to produce a perfect cut in intensive applications.
- Ideal for cutting :
  - Thick cardboard.
  - Hoses.
  - Plastic.
  - Resilient foam.
  - Heat-shrinkable tubing.
  - Nylon strip.
  - Plastic tubes.

|                   | Length<br>mm | Height<br>mm | Thickness<br>mm | ΔΔ<br>kg |
|-------------------|--------------|--------------|-----------------|----------|
| <b>844.TRL10</b>  | 60           | 19           | 0,65            | 0,05     |
| <b>844.TRL100</b> | 60           | 19           | 0,65            | 0,35     |



10 blades



100 blades

## High strength hook blade

- High strength hook blade.
- Specially designed to protect the backing during cutting.
- Ideal for cutting :
  - Floor finishes, e.g. carpet, lino, PVC or other laid material.
  - Straps and thick fabric.
- Supplied in a 10 or 100 blade dispenser.

|                   | Length<br>mm | Height<br>mm | Thickness<br>mm | ΔΔ<br>kg |
|-------------------|--------------|--------------|-----------------|----------|
| <b>844.TCL10</b>  | 50           | 19           | 0,65            | 0,05     |
| <b>844.TCL100</b> | 50           | 19           | 0,65            | 0,35     |



10 blades

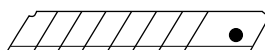


100 blades

## 844.S18L 18 mm snap-off blades

- Snap-off blade.
- Ideal for all everyday cutting applications.
- For cutting :
  - Thick cardboard - Hoses - Plastic - Resilient foam - Heat-shrinkable tubing.
  - Nylon strip - Plastic tubes - Seals.
- Warning, snap-off blades are not designed to withstand excessive torsion forces.
- Supplied in a 10 or 50 blade dispenser.

|                   | Length<br>mm | Height<br>mm | Thickness<br>mm | Number<br>of blades | Number of<br>segments on<br>the blade | ΔΔ<br>kg |
|-------------------|--------------|--------------|-----------------|---------------------|---------------------------------------|----------|
| <b>844.S18L10</b> | 110          | 18           | 0,53            | 10                  | 7                                     | 0,089    |
| <b>844.S18L50</b> | 110          | 18           | 0,53            | 50                  | 7                                     | 0,365    |

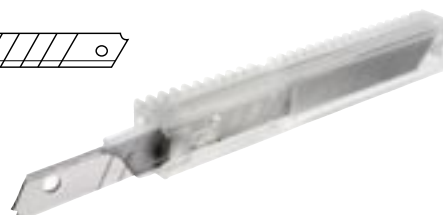
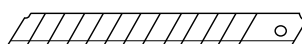


## Pack of ten 9 mm snap-off blades

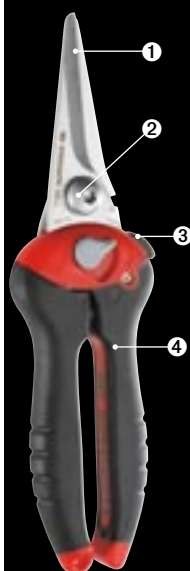
### 844.S9L10

- 9 mm snap-off blade

|                  | Length<br>mm | Height<br>mm | Thickness<br>mm | Number<br>of blades | Number of<br>segments on<br>the blade | ΔΔ<br>kg |
|------------------|--------------|--------------|-----------------|---------------------|---------------------------------------|----------|
| <b>844.S9L10</b> | 84           | 9,5          | 0,43            | 10                  | 12                                    | 0,027    |



980

**"Cut All" general-purpose shears****AN EFFORTLESS CLEAN CUT EVERY TIME**

Aluminium sheet (up to 1 mm thick), hard metal sheet (up to 0.5 mm), PVC, cardboard, rubber, floor coverings up to 5 mm thick. Hoses, plastic ties, small diameter pipes, electric cables (up to Ø 2.5 mm), insulating foam, wrapping paper... And many other applications.

**Precise**

- serrated blades, no risk of slipping.

**Smart**

- 2 opening positions, adapts to your hand. (26 mm / 36 mm)

**Safe**

- Locks in closed position.

**Comfortable**

- Non-slip bi-material grips.

**980C - Angled serrated shears**

- Ideal for cutting long lengths
- Keeps the hand away from the cutting operation.

**980 Universal shears**

- 980 : straight blade version.
- 980C : angled blade version.
- 2 opening positions :
  - Blade opening 29 to 36 mm.
  - Handle opening 77 to 102 mm.
- Comfortable : Non-slip bi-material grips.
- Safe : Locks in closed position..
- Accurate : Slightly serrated blade prevents any risk of slippage.
- Cardboard, rubber, PVC, leather 5 mm thick.
- Thin sheet steel 0.5 mm thick, aluminium sheet up to 1 mm thick.
- Electric cables up to 2.5 mm dia.
- Hoses, tubes, insulating foam, etc.

|             | L<br>mm | B<br>mm | C<br>mm | ΔΔ<br>g |
|-------------|---------|---------|---------|---------|
| <b>980</b>  | 205     | 67      | 49      | 201     |
| <b>980C</b> | 205     | 67      | 49      | 201     |



980C



980



## "Stubby" scissors

### 841.0

- Long, strong and pointed blades, with wire cutter.
- Left/right hand.
- Polished chrome finish.

|       | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|-------|--------------------|--------------------|---------|
| 841.0 | 43                 | 125                | 65      |



## Sheathed electricians scissors

### 841.4

- Plastic moulded sheathing.
- Long blades, with wire cutter.
- Hardened setting screw.

|       | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|-------|--------------------|--------------------|---------|
| 841.4 | 56                 | 144                | 90      |



## Electricians scissors

### 841

- Long blades, with wire cutter.
- Polished chrome finish.

|     | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|-----|--------------------|--------------------|---------|
| 841 | 33                 | 150                | 94      |



## Heavy-duty scissors

### 841.7

- Industrial model built and sized to cut leather, rubber, carpet, fabric, etc.
- Right handed handles.
- Polished chrome finish.

|       | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|-------|--------------------|--------------------|---------|
| 841.7 | 115                | 255                | 420     |



## Offset scissors

### 841.6

- Strong scissors. Right hand. Offset handles.
- For leather, rubber and other materials.
- Polished chrome finish.

|       | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|-------|--------------------|--------------------|---------|
| 841.6 | 115                | 240                | 235     |



## Multi-purpose scissors

- Titanium coated stainless steel scissors for a perfect cut along the full blade length.
- Non-slip bi-material handle for a better grip and comfort of use.

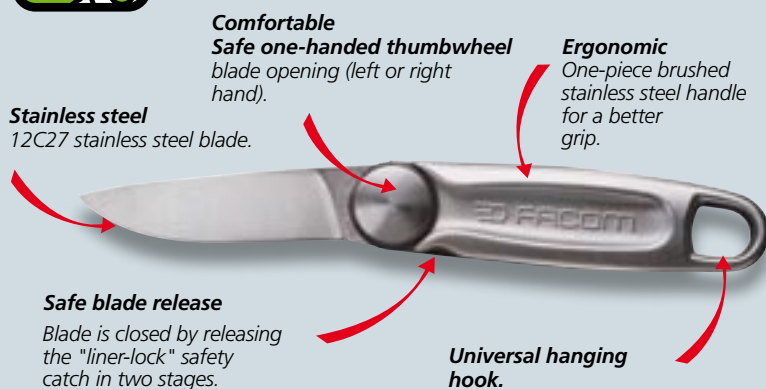
|        | Blade length<br>mm | Total length<br>mm | ΔΔ<br>g |
|--------|--------------------|--------------------|---------|
| 841.8A | 92                 | 227                | 119     |
| 841.9  | 112                | 232                | 135     |





## 840 LE

## THE KNIFE DESIGNED AS A TOOL



**Comes with horizontal leather case** for complete freedom of movement and compliance with the safety regulations.

## Folding knife

## 840LE

- 12C27 stainless steel construction
  - Quick one-handed opening.
  - Right/left hand.
  - Liner lock safety catch and 2 stage release.
  - Universal hanging hook.
  - Closed length 115.5 mm.
  - Total length : 189 mm, blade length : 73.5 mm, closed length : 115.5 mm.
  - Comes with horizontal leather case.
- ΔΔ : 246 g.



## Lock-back knife

## 840.4A

- Polished stainless blade.
  - Rosewood handle and nickel silver bolster.
  - Fits case 840.E.
  - Blade length 78 mm; closed length 105 mm.
- ΔΔ : 160 g.



## Case

## 840.E

- Real leather. Worn on belt.
  - Takes knives 840.3 and 840.4A.
  - Closed length 150 mm.
- ΔΔ : 53 g.



## Pocket knife

## 840.2

- Carbon-steel burnished blade.
  - Black plastic handle unscrews for maintenance.
  - Blade length 75 mm.
  - Closed length : 105 mm.
- ΔΔ : 75 g.



## Locking pocket knife

### 840.3

- Lock-back design.
- Carbon-steel burnished blade.
- Rosewood handle unscrews for maintenance. Hanging clip.
- Supplied with leather thong. Fits case 840.E.
- Blade length 95 mm; closed length 120 mm.

ΔΔ : 127 g.



## Twin-blade electricians knife

### 640180

- Ideal for all common cable cutting and stripping tasks..
- 1 straight hollow ground general-purpose blade.
- 1 short curved blade, specially designed for cable work (640180).
- 1 lock-back for each blade.

|        | Number of blades | L mm | ΔΔ g |
|--------|------------------|------|------|
| 640180 | 2                | 42   | 100  |



## Single-blade electricians knife

### 631013

- Ideal for all cable cutting and stripping tasks.
- 1 lock-back for each blade.
- Hollow ground blades for increased strength.
- Ergonomic handle providing a firm grip.

|        | Number of blades | L mm | ΔΔ g |
|--------|------------------|------|------|
| 631013 | 1                | 30   | 100  |



## Electricians knife

### 840B

- Billhook blade 65 mm.
  - Black plastic handle.
  - Closed length 100 mm.
- ΔΔ : 63 g.



## Twin-blade electricians knife

### 843

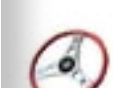
- Billhook blade 65 mm.
  - Straight 80 mm blade
  - Wood handle.
  - Closed length 100 mm.
- ΔΔ : 83 g.



## Electricians knife with wire stripper

### 840.1

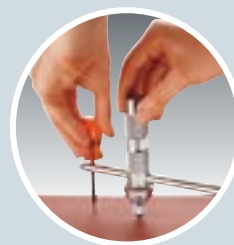
- 1 blade with half-moon notch for stripping and vee for cutting.
  - Rosewood handle.
  - Closed length : 105 mm.
- ΔΔ : 64 g.





## Punch kits

These kits are used to cut out clean and accurate circular gaskets in a variety of materials including cardboard, leather, rubber and fabric. To cut holes Ø 3 to 50 mm, use a punch 245A.T with a shank 245A. M. To cut holes Ø 44 to 420 mm, use calipers with centre-point and cutter. All components are available either separately or in kits.



### "Standard" kit

#### 245.J1

- For making round gaskets.
  - Cutting capacity : Ø 3 to 30 mm using a punch and Ø 56 to 330 mm using calipers.
  - Supplied in a plastic case BP.115 and tray PL.100A.
  - Dimensions 332 x 143 x 67 mm.
- ΔΔ : 1.8 kg.



### "Maintenance" kit

#### 245.J2

- Cutting capacity Ø 3 to 50 mm using a punch and Ø 44 to 420 mm using calipers.
  - Supplied in a plastic case BP.109 and tray PL.99A.
  - Dimensions : 472 x 195 x 53 mm.
- ΔΔ : 3.7 kg.



### Calipers

#### 245A.C

- Cutting capacity Ø 44 to 420 mm.
  - Supplied in a plastic case : 260 x 90 x 40 mm.
- ΔΔ : 590 g.





## 245A Gasket cutter for calipers

| ⇒        | Ø<br>mm | 245.J1 | 245.J2 |
|----------|---------|--------|--------|
| 245A.T3  | 3       | •      | •      |
| 245A.T4  | 4       | •      | •      |
| 245A.T6  | 6       | •      | •      |
| 245A.T8  | 8       | •      | •      |
| 245A.T10 | 10      | •      | •      |
|          |         |        |        |
| 245A.T12 | 12      | •      | •      |
| 245A.T14 | 14      | •      | •      |
| 245A.T16 | 16      | •      | •      |
| 245A.T18 | 18      | •      | •      |
| 245A.T20 | 20      | •      | •      |
|          |         |        |        |
| 245A.T22 | 22      | •      | •      |
| 245A.T24 | 24      | •      | •      |
| 245A.T26 | 26      | •      | •      |
| 245A.T28 | 28      | •      | •      |
| 245A.T30 | 30      | •      | •      |
| 245A.T32 | 32      |        | •      |
| 245A.T34 | 34      |        | •      |
| 245A.T36 | 36      |        | •      |
| 245A.T38 | 38      |        | •      |
| 245A.T40 | 40      |        | •      |
| 245A.T42 | 42      |        | •      |
| 245A.T44 | 44      |        | •      |
| 245A.T46 | 46      |        | •      |
| 245A.T48 | 48      |        | •      |
| 245A.T50 | 50      |        | •      |



| ⇒       | 245.J1 | 245.J2 | 245.AC |
|---------|--------|--------|--------|
| 245A.M1 | •      |        |        |
| 245A.M2 | •      |        |        |
| 245A.M3 | •      |        |        |
| 245A.M4 | •      | •      |        |
| 245A.P1 | •      | •      | •      |
| 245A.C1 | •      | •      | •      |
| 245A.B1 | •      |        |        |
| 245A.B2 | •      | •      |        |
|         |        |        |        |

