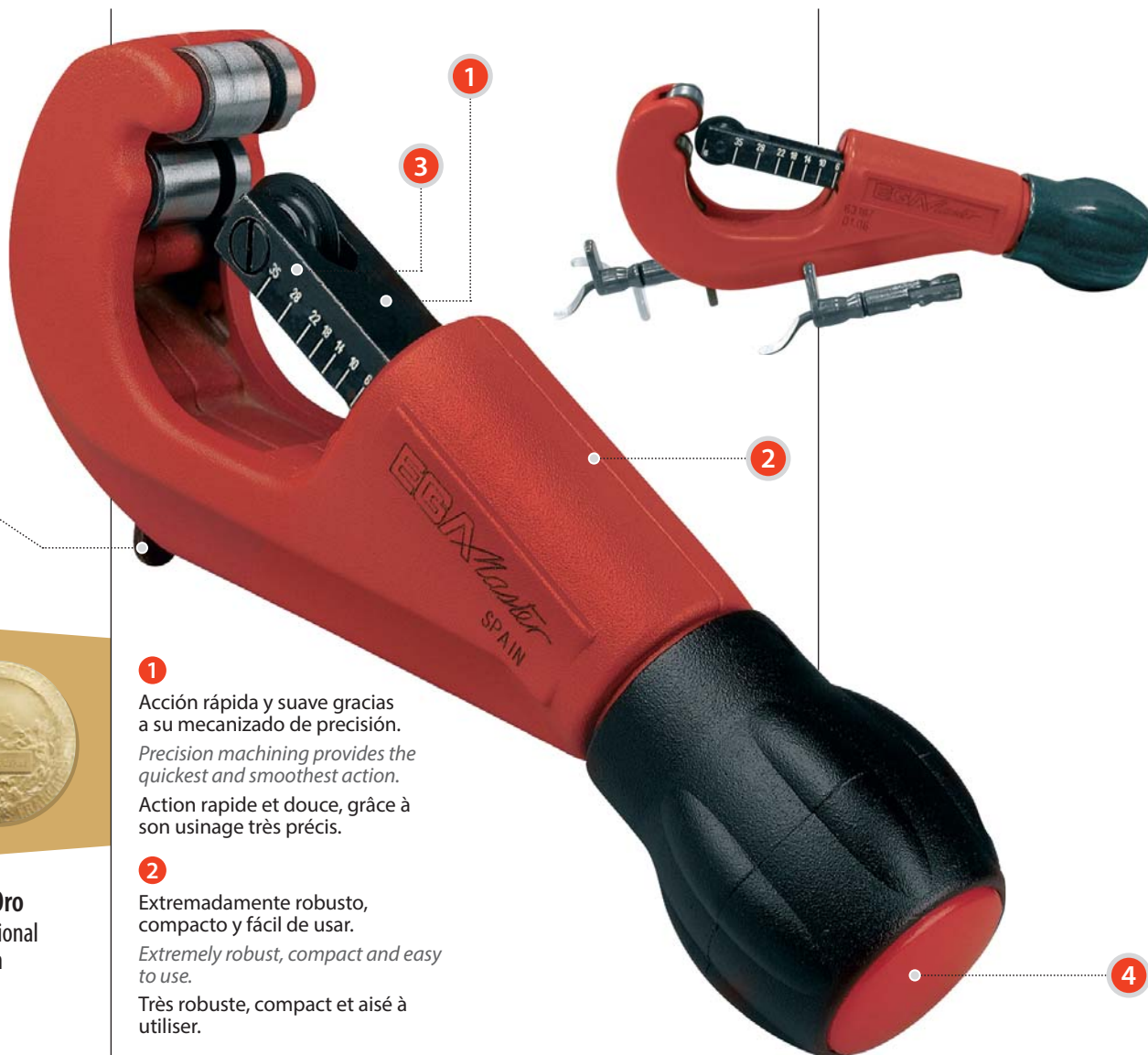


21

HERRAMIENTA PARA COBRE  
TOOLS FOR COPPER  
OUTILLAGE POUR LE CUIVRE  
WERKZEUGE FÜR KUPFER  
UTENSILI PER RAME  
FERRAMENTAS PARA COBRE  
ИНСТРУМЕНТ ДЛЯ МЕДИ




**Medalla de Oro**  
**Salón Internacional**  
**de la Invención**

París 2004

**Gold Medal**  
**International Inventors**  
**Competition**

Paris 2004

**Medaille d'Or**  
**Salon International**  
**de l'Invention**

Paris 2004

**1** Acción rápida y suave gracias a su mecanizado de precisión.

*Precision machining provides the quickest and smoothest action.*

Action rapide et douce, grâce à son usinage très précis.

**2** Extremadamente robusto, compacto y fácil de usar.

*Extremely robust, compact and easy to use.*

Très robuste, compact et aisé à utiliser.

**3** Escala graduada marcada en láser para facilitar el posicionamiento.

*Laser marked graduated scale to facilitate working action.*

Echelle graduée, marquée au laser, pour faciliter le positionnement.

**4** Cuchilla de repuesto incluida en el pomo.

*Extra cutting wheel at the knob.*

Molette de rechange, incluse dans le manche.

**5** Puede cortar tubos de cobre, acero inoxidable y plástico con las cuchillas correspondientes.

*Able to cut copper, inox and plastic pipes with the proper cutting wheels.*

Il peut couper du cuivre, de l'inox et du plastique avec les molettes correspondantes.

**6** Escariador extraíble puede trabajar montado en el cortatubos o de forma independiente.

*Extractable reamer can work assembled in the tubing cutter or independently.*

L'alésoir extractif peut travailler assemblé au coupe-tubes ou de manière indépendante.

**7** Modelo registrado:  
Registered model:  
Modèle enregistré:  
M.I.S.146.561



■ CORTATUBOS / TUBE CUTTER / COUPE-TUBES / KUPFER ROHRABSCHNEIDER / TAGLIATUBI / CORTA TUBOS / ТРУБОРЕЗ

■ SERIE CU = COBRE / COPPER / CUIVRE

■ MINI

| COD.  |    |  |  |  |  |  |  |
|-------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63095 | CU | 3-16                                                                              | 90                                                                                | 20                                                                                | ●                                                                                 | 63093                                                                             | 20                                                                                  |
| 63106 |    | 3-22                                                                              | 120                                                                               |                                                                                   |                                                                                   | 63110                                                                             |                                                                                     |

| COD.  |    |  |  |  |  |  |  |
|-------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63097 | CU | 3-22                                                                              | 135                                                                               | 20                                                                                | ●                                                                                 | 63110                                                                             | 20                                                                                  |

CARACTERÍSTICAS / FEATURES / CARACTÉRISTIQUES

Reforzado / Reinforced / Renforcé

■ MINI 30

| COD.  |    |  |  |  |  |  |  |
|-------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63168 | CU | 3-30                                                                              | 210                                                                               | 10                                                                                | ●                                                                                 | 63086                                                                             | 20                                                                                  |

Modelo registrado / Registered model / Modèle enregistré

■ CLASSIC 32

| COD.  |    |  |  |  |  |  |  |
|-------|----|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 63170 | CU | 3-32                                                                               | 300                                                                                | 1                                                                                  | ●                                                                                  | 63110                                                                              | 20                                                                                   |

■ TELESCOPIC 32

| COD.  |    |  |  |  |  |  |  |
|-------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63105 | CU | 6-32                                                                                | 290                                                                                 | 1                                                                                   | ●                                                                                   | 63110                                                                               | 20                                                                                    |

■ UNIQUE

| COD.  |    |  |  |  |  |  |  |
|-------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63077 | CU | 6-35                                                                                | 480                                                                                 | 1                                                                                   | ●                                                                                   | 63111                                                                               | 10                                                                                    |
| 63119 |    | 6-42                                                                                | 550                                                                                 | 8                                                                                   |                                                                                     |                                                                                     |                                                                                       |
| 63187 |    | 6-45                                                                                | 600                                                                                 | 1                                                                                   |                                                                                     |                                                                                     |                                                                                       |

● I Modelo registrado / Registered model / Modèle enregistré

■ AUTOMATIC 50

| COD.  |    |  |  |  |  |  |  |
|-------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63363 | CU | 6-50                                                                                | 450                                                                                 | 1                                                                                   | ●                                                                                   | 63720                                                                               | 10                                                                                    |

■ AUTOMATIC 67

| COD.  |    |  |  |  |  |  |  |
|-------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63107 | CU | 6-67                                                                                | 750                                                                                 | 1                                                                                   | ●                                                                                   | 63111                                                                               | 10                                                                                    |

■ AUTOMATIC 127

| COD.  |    |  |  |  |  |  |  |
|-------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63174 | CU | 50-127                                                                              | 1950                                                                                | 1                                                                                   | ●                                                                                   | 64106                                                                               | 10                                                                                    |



### KIT 3 PCS.

| COD.     | PCS.      |
|----------|-----------|
| 69465    | 3         |
| PCS./UN. | COD. PCS. |
| 1        | 63106     |
|          | 63170     |
|          | 63119     |



### ROLLCUT

| COD.  | O.D. mm | g   |   |   |       |    |
|-------|---------|-----|---|---|-------|----|
| 63210 | 12      | 230 |   |   | 63243 |    |
| 63211 | 15      | 220 |   |   | 63244 |    |
| 63212 | 18      | 250 | 6 | • | 63245 | 10 |
| 63213 | 22      | 240 |   |   | 63246 |    |



### EXPOSITORES / DISPLAYS / PRESENTOIRS / DISPLAY / ESPOSITORE / DISPLAY STAND / СТЕНДЫ

#### SERIE CU = COBRE / COPPER / CUIVRE

### 20 PCS.

| COD.     | PCS.      |
|----------|-----------|
| 55567    | 20        |
| PCS./UN. | COD. PCS. |
| 4        | 63170     |
|          | 63105     |
|          | 63077     |
|          | 63119     |
|          | 63187     |
|          | Ø32 mm    |
|          | Ø35 mm    |
|          | Ø42 mm    |
|          | Ø45 mm    |



### ESCARIADORES / REAMERS / ALESOIR / ENTGRATER / SBAVATORI / ESCARIADOR / ЗЕНКОБКА

| COD.  |                                                                                   | g  |    |   | 47 mm | 26 mm |
|-------|-----------------------------------------------------------------------------------|----|----|---|-------|-------|
| 63371 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 90 | 20 | • | 64008 | 64447 |
| 63375 | Latón, Fundición / Brass, Cast iron / Laiton, Fonte                               |    |    |   | 64446 | 64448 |
| COD.  |                                                                                   | g  |    |   | 47 mm |       |
| 63370 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 50 | 20 | • | 64008 |       |
| 63374 | Latón, Fundición / Brass, Cast iron / Laiton, Fonte                               |    |    |   | 64446 |       |
| COD.  |                                                                                   | g  |    |   | 47 mm |       |
| 63368 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 10 | 20 | • | 64008 |       |
| 63372 | Latón, Fundición / Brass, Cast iron / Laiton, Fonte                               |    |    |   | 64446 |       |



| COD.  | Descripción / Description / Description                                           | L (mm) |    |
|-------|-----------------------------------------------------------------------------------|--------|----|
| 64008 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 47     | 6  |
| 64446 | Latón, Fundición / Brass, Cast iron / Laiton, Fonte                               |        |    |
| COD.  | Descripción / Description / Description                                           | L (mm) |    |
| 64447 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 26     | 20 |
| 64448 | Latón, Fundición / Brass, Cast iron / Laiton, Fonte                               |        |    |





| COD.  |                                                                                                                        |  |  |  |  |  |
|-------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63958 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Brass, Aluminum / Cu, Acier, Plastique, Inox, Laiton, Aluminium | 8-35                                                                              | 5/16-1.3/8                                                                        | 250                                                                               | 1                                                                                  | •                                                                                   |
| 63959 |                                                                                                                        | 10-54                                                                             | 1/2-2.1/8                                                                         | 500                                                                               |                                                                                    |                                                                                     |



| COD.  |                                                                   |  |  |  |  |
|-------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63085 | Cu, Latón, Aluminio / Cu, Brass, Aluminum / Cu, Laiton, Aluminium | 235                                                                               | 40                                                                                | 10                                                                                 | •                                                                                   |

■ **ESCARIADOR DE CHAFLANES / CHAMFERBIT / EBASUREUR À CHANFREINS / ABSCHRÄGER / SBAVATORE PER SMUSSARE / ESCARIADOR DE CHANFROS / ЗЕНКОВКА С РУКОЯТКОЙ**

| COD.  |                                                                                   |  | Crestas / Crests / Crête |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63776 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 12,4                                                                              | 3                        | 100                                                                                 | 6                                                                                   |
| 63777 |                                                                                   | 25                                                                                |                          | 120                                                                                 |                                                                                     |



**ESPECIFICACIONES TÉCNICAS / TECHNICAL SPECIFICATION / DÉTAILS TECHNIQUES**

Material / Material / Matière HSS (M2)

■ **FRESA CÓNICA / CONIC MILLING TOOL / FRAISE CONIQUE / SCHAFTFRÄSER KONISCH / FRESA CONICA / FRESA CÓNICA / КОНИЧЕСКАЯ ЗЕНКОВКА С РУКОЯТКОЙ**

| COD.  |                                                                                   |  | Crestas / Crests / Crête |  |  |
|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 63778 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 10-34                                                                              | 6                        | 150                                                                                  | 6                                                                                    |



**ESPECIFICACIONES TÉCNICAS / TECHNICAL SPECIFICATION / DÉTAILS TECHNIQUES**

Material / Material / Matière HSS

■ **ESCARIADOR CÓNICO / TAPER REAMER / EBASUREUR CONIQUE / HANDREIBAHLEN / SBAVATORE CONICO / ESCARIADOR CÓNICO / ЛЕНТОЧНАЯ ЗЕНКОВКА**

| COD.  |                                                                                   |  | Crestas / Crests / Crête |  |  |
|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63779 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 3-12                                                                                | 6                        | 100                                                                                   | 6                                                                                     |
| 63780 |                                                                                   | 10-25                                                                               | 8                        | 120                                                                                   |                                                                                       |



**ESPECIFICACIONES TÉCNICAS / TECHNICAL SPECIFICATION / DÉTAILS TECHNIQUES**

Material / Material / Matière HSS

■ **RASQUETA / SCRAPER / RACLOIR / ENTGRATER / RASCHIETTO / ESPÁTULA / ШАБЕР**

| COD.  |                                                                                   |  |  |  |         |
|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 63376 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 60                                                                                  | 20                                                                                  | •                                                                                   | 64449                                                                                        |
| COD.  |                                                                                   | Válido para / Valid for / Valable pour                                              |                                                                                     |                                                                                     | L (mm)  |
| 64449 | Cu, Acero, Plástico, Inox / Cu, Steel, Plastic, Inox / Cu, Acier, Plastique, Inox | 63376                                                                               | 120                                                                                 | 20                                                                                  |                                                                                              |



■ **CEPILLOS PARA LIMPIEZA DE COBRE / COPPER CLEANING BRUSHES / BROSE DE NETTOYAGE POUR CUIVRE / KUPFER - REINIGUNGSBÜRSTE / SPAZZOLE PER RAME / ESCOVAS PARA LIMPIEZA DE COBRE / ЩЕТКИ ДЛЯ ЗАЧИСТКИ МЕДИ**

| COD.  | CAP. Ø (inch) |  |  |  |
|-------|---------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63206 | 1/2-3/4       | INT./ EXT.                                                                          | 30                                                                                   | 6                                                                                     |



| COD.  | CAP. Ø (inch) |            |  |  |  |
|-------|---------------|------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63207 | 1/2           | INT./ EXT. | 10                                                                                | 6                                                                                 | ●                                                                                   |



| COD.  | CAP. Ø (inch) |      |  |  |  |
|-------|---------------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63208 | 1/2           | INT. | 5                                                                                 | 6                                                                                 | ●                                                                                   |



**PARA TUBO DE COBRE RECOCIDO Y ALUMINIO / FOR SOFT COPPER & ALUMINIUM TUBING / POUR TUBE EN CUIVRE RECUIT ET ALUMINIUM / FÜR WEICHES KUPFER UND ALUMINIUM / PER TUBIRICOTTI E ALLUMINIO / PARA TUBO DE COBRE RECOZIDO E ALUMINIO / ДЛЯ МЯГКИХ МЕДНЫХ И АЛЮМИНИЕВЫХ ТРУБ**

**CURVATUBOS DE CARRACA / RATCHET TUBE BENDER / CINTREUSE ARBALETE / EINHAND-BIEGERÄT / CURVATUBI A CRICCO / CURVADORA DE ROQUETE / АРБАЛЕТНЫЙ ТРУБОГИБ**

#### KITS

| COD.  |  O.D. (mm) |  O.D. (inch) |  |  | Incluye / Includes / Inclus |
|-------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|
| 68165 | 12 (68130) - 15 (68132) - 18 (68134) - 22 (68135)                                           | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68166 | 10 (68129), 12 (68130), 14 (68131), 18 (68134), 22 (68135)                                  | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68167 | 10 (68129), 12 (68130), 15 (68132), 18 (68134), 22 (68135)                                  | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68168 | 10 (68129), 12 (68130), 16 (68133), 18 (68134), 22 (68135)                                  | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68169 | 12 (68130), 15 (68132), 18 (68134), 22 (68135)                                              | -                                                                                             | -                                                                                 | -                                                                                 | 68118                       |
| 68170 | 10 (68129), 12 (68130), 14 (68131), 18 (68134), 22 (68135)                                  | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68171 | 10 (68129), 12 (68130), 15 (68132), 18 (68134), 22 (68135)                                  | -                                                                                             | 63170                                                                             | 63085                                                                             |                             |
| 68172 | 10 (68129), 12 (68130), 16 (68133), 18 (68134), 22 (68135)                                  | -                                                                                             | -                                                                                 | -                                                                                 |                             |
| 68173 | -                                                                                           | 3/8 (68136), 1/2 (68137), 5/8 (68138), 3/4 (68139), 7/8 (68140)                               | -                                                                                 | -                                                                                 |                             |



| COD.  |  |
|-------|-------------------------------------------------------------------------------------|
| 68118 | 1645                                                                                |



#### MM

| COD.  |  O.D. mm |
|-------|---------------------------------------------------------------------------------------------|
| 68128 | 8                                                                                           |
| 68129 | 10                                                                                          |
| 68130 | 12                                                                                          |
| 68131 | 14                                                                                          |
| 68132 | 15                                                                                          |
| 68133 | 16                                                                                          |
| 68134 | 18                                                                                          |
| 68135 | 22                                                                                          |



#### INCH

| COD.  |  O.D. inch |
|-------|-------------------------------------------------------------------------------------------------|
| 68136 | 3/8                                                                                             |
| 68137 | 1/2                                                                                             |
| 68138 | 5/8                                                                                             |
| 68139 | 3/4                                                                                             |
| 68140 | 7/8                                                                                             |



■ KIT MULTICAPA / KIT MULTILAYER / KIT MULTICOUCHES / BIEGEGERÄT SET / KIT MULTISTRATO / KIT MULTICAPA / НАБОР ДЛЯ МЕТАЛЛОПЛАСТИКА

| COD.  |  O.D.<br>(mm) |  |  | Incluye / Includes / Inclus |
|-------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------|
| 68162 | 16 (68133), 18 (68134), 20 (68139)                                                             | -                                                                                 | -                                                                                 | 68118                       |
| 68161 |                                                                                                | 63170                                                                             | 63085                                                                             |                             |
| 68228 | 16 (68133), 18 (68134), 22 (68135)                                                             | -                                                                                 | -                                                                                 |                             |
| 68227 |                                                                                                | 63170                                                                             | 63085                                                                             |                             |



COBRE RECOCIDO  
 SOFT COPPER  
 CUIVRE RECUIT



COBRE RECUBIERTO  
 COVERED COPPER  
 CUIVRE PLASTIFIÉ



MULTICAPA  
 MULTILAYER  
 MULTICOUCHES



■ MUELLES CURVATUBOS / SPRING TUBE BENDERS / RESSORT À CINTRER / KUPFERROHR-AUSSENBIEGEFEDERN / MOLLE CURVATUBI / MOLAS CURVA TUBOS / ПРЖИННЫЕ ТРУБОГИБЫ

| COD.  |  O.D.<br>mm |  O.D.<br>inch |  g |  |  |
|-------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 68041 | 6                                                                                            | -                                                                                              | 55                                                                                  | 15                                                                                | ●                                                                                  |
| 68048 | -                                                                                            | 1/4                                                                                            | 75                                                                                  |                                                                                   |                                                                                    |
| 68042 | 8                                                                                            | 5/16                                                                                           | 70                                                                                  |                                                                                   |                                                                                    |
| 68049 | -                                                                                            | 3/8                                                                                            | 110                                                                                 |                                                                                   |                                                                                    |
| 68043 | 10                                                                                           | -                                                                                              | 100                                                                                 |                                                                                   |                                                                                    |
| 68050 | -                                                                                            | 7/16                                                                                           | 115                                                                                 |                                                                                   |                                                                                    |
| 68044 | 12                                                                                           | -                                                                                              | 110                                                                                 |                                                                                   |                                                                                    |
| 68051 | -                                                                                            | 1/2                                                                                            | 155                                                                                 |                                                                                   |                                                                                    |
| 68045 | 14                                                                                           | -                                                                                              | 145                                                                                 |                                                                                   |                                                                                    |
| 68046 | 15                                                                                           | -                                                                                              | 180                                                                                 |                                                                                   |                                                                                    |
| 68047 | 16                                                                                           | 5/8                                                                                            | 195                                                                                 |                                                                                   |                                                                                    |
| 68054 | 18                                                                                           | -                                                                                              |                                                                                     |                                                                                   |                                                                                    |
| 68056 | -                                                                                            | 3/4                                                                                            | 200                                                                                 |                                                                                   |                                                                                    |
| 68055 | 22                                                                                           | -                                                                                              | 230                                                                                 |                                                                                   |                                                                                    |



■ TENAZA CURVATUBOS / TUBE BENDER / PINCE À CINTRER / ZWEIHANDBIEGER / PINZA CURVATUBI / CURVADORA PARA TUBOS / ТРУБОГИБ

| COD.  |  O.D.<br>mm |  |  R (mm) |  Kg |  |
|-------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 68144 | 10                                                                                             | 0-180°                                                                              | 26                                                                                         | 0,3                                                                                    | 1                                                                                     |
| 68145 | 12                                                                                             |                                                                                     | 30                                                                                         | 0,6                                                                                    |                                                                                       |
| 68146 | 14                                                                                             |                                                                                     | 34                                                                                         | 0,9                                                                                    |                                                                                       |
| 68147 | 15                                                                                             |                                                                                     | 38                                                                                         | 1,4                                                                                    |                                                                                       |
| 68148 | 16                                                                                             |                                                                                     | 40                                                                                         | 1,7                                                                                    |                                                                                       |
| 68149 | 18                                                                                             |                                                                                     | 45                                                                                         | 2,1                                                                                    |                                                                                       |



CARACTERÍSTICAS / FEATURES / CARACTÉRISTIQUES

Aluminio / Aluminum / Aluminium

| COD.  |  O.D.<br>mm |  O.D.<br>inch |  |  R (mm) |  g |  |  |
|-------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 68010 | 6                                                                                              | -                                                                                                | 0-180°                                                                              | 17                                                                                         | 500                                                                                   | 1                                                                                   | ●                                                                                     |
| 68005 | -                                                                                              | 1/4                                                                                              |                                                                                     | 24                                                                                         |                                                                                       |                                                                                     |                                                                                       |
| 68011 | 8                                                                                              | 5/16                                                                                             |                                                                                     | 30                                                                                         | 600                                                                                   |                                                                                     |                                                                                       |
| 68006 | -                                                                                              | 3/8                                                                                              |                                                                                     | 30                                                                                         | 900                                                                                   |                                                                                     |                                                                                       |
| 68012 | 10                                                                                             | -                                                                                                |                                                                                     |                                                                                            |                                                                                       |                                                                                     |                                                                                       |
| 68013 | 12                                                                                             | -                                                                                                |                                                                                     | 46                                                                                         | 950                                                                                   |                                                                                     |                                                                                       |
| 68008 | -                                                                                              | 1/2                                                                                              |                                                                                     |                                                                                            | 1600                                                                                  |                                                                                     |                                                                                       |
| 68014 | 14                                                                                             | -                                                                                                |                                                                                     | 17                                                                                         |                                                                                       |                                                                                     |                                                                                       |
| 68015 | 15                                                                                             | -                                                                                                |                                                                                     | 30                                                                                         | 1700                                                                                  |                                                                                     |                                                                                       |
| 68016 | 16                                                                                             | 5/8                                                                                              |                                                                                     | 46                                                                                         | 2200                                                                                  |                                                                                     |                                                                                       |



| COD.  |  |  |  |  |  |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 68110 | -                                                                                 | 1/8-3/16-1/4                                                                      | 0-90°                                                                             | 10                                                                                | 140                                                                               | 1                                                                                 | •                                                                                   |
| 68111 | 6-8-10                                                                            | 1/4-5/16-3/8                                                                      | 0-180°                                                                            | 20                                                                                | 450                                                                               |                                                                                   |                                                                                     |



**TENAZA CURVATUBOS DE ACERO / STEEL TUBE BENDER / PINCE À CINTRER / ZWEIHANDBIEGER / PINZA CURVATUBI / CURVADORA PARA TUBOS / ТРУБОГИБ ДЛЯ СТАЛЬНЫХ ТРУБ**

| COD.  | Tipo / Type / Type    |  |  |  | Recocido R220 (mm) / Annealed R220 (mm) / Recuit R220 (mm) | Semirrígido R250a (mm) / Semi-hard R250a (mm) / Semi-rigide R250a (mm) | Rígido R290 (mm) / Hard R290 (mm) / Rigide R290 (mm) |  |  |  |
|-------|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 68210 | Patin / Slide / Patin | 12                                                                                | 0-120°                                                                            | 36                                                                                | 1                                                          | 1                                                                      | -                                                    | 1,3                                                                               |                                                                                    | 82860                                                                               |
| 68211 |                       | 15                                                                                |                                                                                   | 52                                                                                |                                                            |                                                                        |                                                      | 2,7                                                                               | 1                                                                                  | 82861                                                                               |
| 68213 |                       | 22                                                                                |                                                                                   | 76                                                                                | 1,5                                                        | -                                                                      |                                                      | 4,0                                                                               |                                                                                    | 82863                                                                               |



EN 1057

| COD.  | Tipo / Type / Type         |  |  |  | Recocido R220 (mm) / Annealed R220 (mm) / Recuit R220 (mm) | Semirrígido R250a (mm) / Semi-hard R250a (mm) / Semi-rigide R250a (mm) | Rígido R290 (mm) / Hard R290 (mm) / Rigide R290 (mm) |  |  |  |
|-------|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 68215 | Rodillo / Roller / Rouleau | 12                                                                                | 0-120°                                                                            | 36                                                                                | 1                                                          | 1                                                                      | -                                                    | 1,3                                                                               |                                                                                    | 82865                                                                               |
| 68216 |                            | 15                                                                                |                                                                                   | 52                                                                                |                                                            |                                                                        |                                                      | 2,7                                                                               | 1                                                                                  | 82866                                                                               |
| 68218 |                            | 22                                                                                |                                                                                   | 76                                                                                | 1,5                                                        | -                                                                      |                                                      | 4,0                                                                               |                                                                                    | 82868                                                                               |



EN 1057

**ABOCINADORES / FLARING TOOLS / APPAREIL À BATTRE LES COLLETS / BÖRDELGERÄT / FLANGIATUBI / ABOCARDADORES / РАЗВАЛЬЦОВКИ**

**KIT ABOCINADOR CONO EXCÉNTRICO CON CARRACA / ECCENTRIC CONE FLARING TOOL KIT WITH RATCHET / KIT DUDGEONNIERE EXCENTRIQUE À CLIQUET / EXZENTRISCH BÖRDELGERÄT SATZ MIT RATSCHKE / KIT FLANGIATUBI A FRIZIONE CON CRICCHETTO / KIT ABOCARDADOR CONO EXCÉNTRICO COM ROQUETE / ВАЛЬЦОВКА ДЛЯ ТРУБ С ЭКСЦЕНТРИКОВЫМ ТРЕЩЕТЧНЫМ МЕХАНИЗМОМ**

| COD.  |  |  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 57610 |                                                                                     | 1/4, 3/8, 1/2, 5/8, 3/4                                                             |                                                                                     | 1,3                                                                                   |                                                                                       |
| 57611 | -                                                                                   | 1/4, 5/16, 3/8, 1/2, 5/8, 3/4                                                       |                                                                                     | 1,4                                                                                   |                                                                                       |
| 57612 |                                                                                     | 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4                                            |                                                                                     | 1,5                                                                                   |                                                                                       |
| 57613 | 6, 8, 10, 12, 15                                                                    |                                                                                     |                                                                                     | 1,3                                                                                   |                                                                                       |
| 57614 | 6, 8, 10, 12, 16, 18                                                                | -                                                                                   | •                                                                                   | 1,4                                                                                   | 1                                                                                     |
| 57615 | 6, 8, 10, 12, 14, 15, 16, 18                                                        |                                                                                     |                                                                                     | 1,5                                                                                   |                                                                                       |
| 57616 | 6, 8, 10, 12, 15                                                                    | 1/4, 3/8, 1/2, 5/8, 3/4                                                             |                                                                                     | 1,9                                                                                   |                                                                                       |
| 57617 | 6, 8, 10, 12, 16, 18                                                                | 1/4, 5/16, 3/8, 1/2, 5/8, 3/4                                                       |                                                                                     | 2                                                                                     |                                                                                       |
| 57618 | 6, 8, 10, 12, 14, 15, 16, 18                                                        | 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4                                            |                                                                                     | 2,2                                                                                   |                                                                                       |



**ABOCINADOR CONO EXCÉNTRICO CON CARRACA / ECCENTRIC CONE FLARING TOOL WITH RATCHET / DUDGEONNIERE EXCENTRIQUE À CLIQUET / TAUMEL-BÖRDELGERÄT MIT RATSCHKE / FLANGIATUBI CON CRICCHETTO / ABOCARDADOR CONO EXCÉNTRICO COM ROQUETE / РАЗВАЛЬЦОВКА С ЭКСЦЕНТРИЧЕСКИМ КОНУСОМ С ТРЕЩЕТКОЙ**

| COD.  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 57603 | •                                                                                   | 0,8                                                                                 | 1                                                                                   |

**CARACTERÍSTICAS / FEATURES / CARACTÉRISTIQUES**

Aluminio / Aluminum / Aluminium





**REGLA PARA ABOCINAR / RATCHET FLARING TOOL / RÈGLE À DUDGEONNER / MATRIZE FÜR BÖRDELGERÄT / SLITTA PER FLANGIATUBI / RÉGUA PARA ABOCARDADOR / ВАЛЬЦОВКА ДЛЯ ТРУБ**

N!

| COD.  | O.D.<br>mm                   | O.D.<br>inch                             | 90° | g   |   |
|-------|------------------------------|------------------------------------------|-----|-----|---|
| 57604 |                              | 1/4, 3/8, 1/2, 5/8, 3/4                  |     | 530 |   |
| 57605 | -                            | 1/4, 5/16, 3/8, 1/2, 5/8, 3/4            |     | 600 |   |
| 57606 |                              | 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 |     | 680 |   |
| 57607 | 6, 8, 10, 12, 15             |                                          | ●   | 530 | 1 |
| 57608 | 6, 8, 10, 12, 16, 18         | -                                        |     | 600 |   |
| 57609 | 6, 8, 10, 12, 14, 15, 16, 18 |                                          |     | 680 |   |



**KIT ABOCARDADOR CONO EXCÉNTRICO / ECCENTRIC CONE FLARING TOOL KIT / KIT DUDGEONNIERE EXCENTRIQUE / EXZENTRISCH BÖRDELGERÄT SATZ MIT KEGEL / KIT FLANGIATUBI A FRIZIONE / KIT ABOCARDADOR CONO EXCÉNTRICO / КОМПЛЕКТ ВАЛЬЦОВОК С ЭКСЦЕНТРИКОВЫМ ТРЕЩЕТОЧНЫМ МЕХАНИЗМОМ**

| COD.  | O.D.<br>mm         | O.D.<br>inch             | 90° | Kg  |   |
|-------|--------------------|--------------------------|-----|-----|---|
| 68087 | -                  | 1/4-5/16-3/8-1/2-5/8-3/4 |     | 1,4 | 1 |
| 68086 | 6-8-10-12-14-15-16 | -                        | ●   | 2,0 |   |
| 68091 |                    | 1/4-5/16-3/8-1/2-5/8-3/4 |     |     |   |



**ABOARDADOR CONO EXCÉNTRICO / ECCENTRIC CONE FLARING TOOL / DUDGEONNIERE EXCENTRIQUE / TAUMEL-BÖRDELGERÄT / FLANGIATUBI CONO ECCENTRICO / ABOCARDADOR CONO EXCÉNTRICO / РАЗВАЛЬЦОВКА С ЭКСЦЕНТРИЧЕСКИМ КОНУСОМ**

| COD.  | 90° | Kg  |   |
|-------|-----|-----|---|
| 68092 | ●   | 0,8 | 1 |



**REGLA PARA ABOCINAR / RATCHET FLARING TOOL / RÈGLE À DUDGEONNER / MATRIZE FÜR BÖRDELGERÄT / SLITTA PER FLANGIATUBI / RÉGUA PARA ABOCARDADOR / ВАЛЬЦОВКА ДЛЯ ТРУБ**

| COD.  | O.D.<br>mm         | O.D.<br>inch                  | 90° | g   |   |
|-------|--------------------|-------------------------------|-----|-----|---|
| 68094 | -                  | 1/4, 5/16, 3/8, 1/2, 5/8, 3/4 |     | 560 | 1 |
| 68093 | 6-8-10-12-14-15-16 | -                             | ●   | 620 |   |



**ABOARDADOR AJUSTABLE / ADJUSTABLE FLARING TOOL / DUDGEONNIERE REGLABLE / UNIVERSAL-BÖRDELGERÄT / FLANGIATUBI REGOLABILE / ABOCARDADOR AJUSTAVEL / РЕГУЛИРУЕМАЯ РАЗВАЛЬЦОВКА**

| COD.  | O.D.<br>mm | O.D.<br>inch | 90° | g   |   |
|-------|------------|--------------|-----|-----|---|
| 68090 | 5-16       | 3/16-5/8     | ●   | 800 | 1 |



**ABOCINADOR DE TORRETA / COMPACT FLARING TOOL / DUDGEONNIERE COMPACTE / KOMPAKT BÖRDELGERÄT, AUFKLAPPBAR / FLANGIATUBI A TORRETTA / ABOCARDADOR DE TORRETA / КОМПАКТНАЯ РАЗВАЛЬЦОВКА**

| COD.  | O.D.<br>mm      | O.D.<br>inch              | 90° | Kg |   |
|-------|-----------------|---------------------------|-----|----|---|
| 68017 | -               | 3/16-1/4-5/16-3/8-1/2-5/8 | ●   | 1  | 1 |
| 68018 | 6-8-10-12-14-15 | -                         | ●   | 1  | 1 |



**ABOCINADOR / FLARING TOOL / APPAREIL À BATTRE LES COLLETS / BÖRDELGERÄT / FLANGIATUBI / ABOCARDADOR / РАЗВАЛЬЦОВКИ**

| COD.  | O.D.<br>mm          | O.D.<br>inch                   | 90° | g   |   |
|-------|---------------------|--------------------------------|-----|-----|---|
| 68001 | -                   | 3/16-1/4-5/16-3/8-7/16-1/2-5/8 | ●   | 950 | 1 |
| 68003 | 4-4,75-6-8-10-12-14 | -                              | ●   | 950 | 1 |



**EXPANDIDORES / EXPANDING TOOLS / PINCES À EMBOITURE / EXPANDER / ESPANSORI / EXPANDIDORES / МУФТИРУЮЩИЕ ИНСТРУМЕНТЫ**

**EXPANKIT**

| COD.  | O.D.<br>mm                                                      | O.D.<br>inch    | 90°             | Include/<br>Includes/<br>Inclus | Kg  |
|-------|-----------------------------------------------------------------|-----------------|-----------------|---------------------------------|-----|
| 68204 | 12 (68178), 15 (68180), 22 (68184), 28 (68186)                  | -               |                 |                                 |     |
| 68205 | 12 (68178), 14 (68179), 18 (68182), 22 (68184)                  | -               |                 |                                 |     |
| 68206 | 12 (68178), 15 (68180), 18 (68182), 22 (68184)                  | -               |                 |                                 | 3,0 |
| 68207 | 1/2 (68191), 5/8 (68192), 3/4 (68193) 1 (68195)                 | 3-32 mm (63170) | Ø 40 mm (63085) |                                 |     |
| 68209 | 3/8 (68190), 1/2 (68191), 5/8 (68192), 3/4 (68193), 7/8 (68194) |                 |                 |                                 | 3,1 |
| 68220 | 1/2 (68191), 3/4 (68193), 1 (68195)                             |                 |                 | 68175                           | 3,0 |
| 68221 | 12 (68178), 14 (68179), 16 (68181), 18 (68182), 22 (68184)      |                 |                 |                                 | 2,9 |
| 68223 | 10 (68177), 12 (68178), 14 (68179), 16 (68181), 18 (68182)      |                 |                 |                                 | 2,8 |
| 68224 | 12 (68178), 14 (68179), 16 (68181), 18 (68182)                  |                 |                 |                                 | 2,7 |
| 68225 | 12 (68178), 14 (68179), 16 (68181), 18 (68182), 22 (68184)      |                 |                 |                                 | 2,8 |



| COD.  |   | Kg  |   |   |
|-------|---|-----|---|---|
| 68175 | 1 | 1,3 | 1 | ● |



**MM**

| COD.  | O.D.<br>mm | g   |   |   |
|-------|------------|-----|---|---|
| 68177 | 10         | 125 |   |   |
| 68178 | 12         | 130 |   |   |
| 68179 | 14         | 135 |   |   |
| 68180 | 15         | 140 |   |   |
| 68181 | 16         | 145 | 8 | ● |
| 68182 | 18         | 150 |   |   |
| 68184 | 22         | 270 |   |   |
| 68186 | 28         | 400 |   |   |
| 68188 | 35         | 430 |   |   |
| 68189 | 42         |     |   |   |



**INCH**

| COD.  | O.D.<br>inch | g   |   |   |
|-------|--------------|-----|---|---|
| 68190 | 3/8          | 125 |   |   |
| 68191 | 1/2          | 130 |   |   |
| 68192 | 5/8          | 135 |   |   |
| 68193 | 3/4          | 140 |   |   |
| 68194 | 7/8          | 145 | 8 | ● |
| 68195 | 1            | 160 |   |   |
| 68196 | 1.1/8        | 270 |   |   |
| 68198 | 1.3/8        | 400 |   |   |
| 68200 | 1.5/8        | 480 |   |   |



## SWAGING KIT

| COD.  |  |  |  |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 68060 | 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4"                           | 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"                                        | 1/8-1.1/4" (63105)                                                                | 2,8                                                                                 | 1                                                                                   |



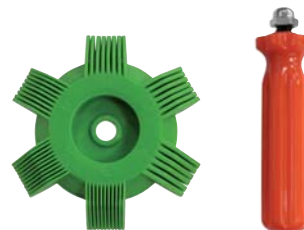
## KIT FRIGORISTA / KIT REFRIGERATION / KIT FRIGORISTE / KIT KÜHLUNG / KIT FRIGORISTI / KIT FRIGORISTA / НАБОР ДЛЯ ХОЛОДИЛЬЩИКА

| COD.  |  |  |  |  |  |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 68052 | 4 - 4,75 - 6 - 8 - 10 - 12 - 14 mm (68003)                                        | 10 (68043), 12 (68045), 14 (68047)-16 (68044) mm                                  | 3-32 mm (63170)                                                                   | 2,3                                                                                 | 1                                                                                   |
| 68053 | 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" (68001)                                      | 5/16" (68042), 3/8" (68049), 5/8" (68047), 1/2" (68051)                           | 1/8"-1.1/8" (63170)                                                               |                                                                                     |                                                                                     |



## PEINE PARA ALETAS 6 EN 1 / 6 IN 1 FIN COMB / PEIGNES POUR LAMES 6 EN 1 / 6 IN 1 MESSKAM / PETTINI PER ALETTE 6 IN 1 / PENTES DE ALHETAS 6 EN 1 / 6 В 1 ГРЕБЕНЬ ДЛЯ ЛЬНА

| COD.  |  |  |  |
|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63751 | 8-9-10-12-14-15                                                                     | 70                                                                                    | 1                                                                                     |



## PEINE PARA ALETAS METÁLICO / STAINLESS STEEL FIN COMB / PEIGNES POUR LAMES MÉTALLIQUES / MESSKAMM ROSTFREI / PETTINI PER ALETTE IN METALLO / PENTES DE ALHETAS METÁLICOS / ГРЕБЕНЬ ДЛЯ ЛЬНА ИЗ НЕРЖАВЕЮЩЕЙ СТАЛИ

| COD.  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63752 | 30                                                                                  | 6                                                                                   |



## TENAZA GRIP PINZATUBOS / PINCH OFF GRIP PLIER / PINCE ÉTAU POUR TUBES / SCHNEIDGRIPZANGE / PINZA GRIP PER TUBI / ALICATES DE GRIFE DE SELAR PARA REFRIGERAÇÃO / КЛЕЩИ С ПЛАВНОЙ РЕГУЛИРОВКОЙ

| COD.  | L (inch) |  |  |  |  |  |
|-------|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63753 | 7        | 8,0                                                                                 | 5/16                                                                                | 0,3                                                                                 | 6                                                                                    | •                                                                                     |



## LLAVE DE CHICHARRA / RATCHET WRENCH / PINCE À CLIQUET / RATSCHENSCHLÜSSEL / CHIAVE A CRICCO / CHAVES DE ROQUETE / ТРЕЩЕТКА

| COD.  |  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63754 | 1/4, 3/8, 3/16, 5/16                                                                | 95                                                                                  | 12                                                                                   | •                                                                                     |

| COD.  |  |  |  |  |  |
|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63755 | 1/4, 3/16                                                                           | 1/2, 9/16                                                                           | 160                                                                                 | 12                                                                                   | •                                                                                     |



ENSANCHADORES DE GOLPE / SWAGING PUNCHES / CHASSES GOUPILLES À EMBOITURE / KLEMM DURCHSCHLAG / CALIBRATORE PER TUBI / PUNÇÕES PARA ABOCARDAR / ПРОБОЙНИКИ

SET

| COD.  |  O.D.<br>inch |  g |  |
|-------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63756 | 1/4, 5/16, 3/8, 1/2, 5/8                                                                       | 550                                                                                  | 6                                                                                   |



ENSANCHADOR DE GOLPE 3 EN 1 / 3 IN 1 SWAGING PUNCH / CHASSES GOUPILLES À EMBOITURE 3 EN 1 / 3 IN 1 KLEMM DURCHSCHLAG / CALIBRATORI PER TUBI 3 IN 1 / PUNÇÕES PARA ABOCARDAR 3 EM 1 / 3 В 1 ПРОБОЙНИКИ

| COD.  |  O.D.<br>inch |  g |  |  |
|-------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63757 | 1/2, 5/8, 7/8                                                                                  | 550                                                                                 | 6                                                                                  | ●                                                                                   |



ENSANCHADOR DE GOLPE 5 EN 1 / 5 IN 1 SWAGING PUNCH / CHASSES GOUPILLES À EMBOITURE 5 EN 1 / 5 IN 1 KLEMM DURCHSCHLAG / CALIBRATORI PER TUBI 5 IN 1 / PUNÇÕES PARA ABOCARDAR 5 EM 1 / 5 В 1 ПРОБОЙНИКИ

| COD.  |  O.D.<br>inch |  g |  |  |
|-------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 63758 | 1/4, 5/16, 3/8, 1/2, 5/8                                                                       | 280                                                                                 | 6                                                                                  | ●                                                                                   |



PINZA CORTACAPILARES / CAPILLARY TUBE CUTTER / PINCE COUPE CAPILAIRES / MIKROSTRIPPER ZANGE / PINZA TAGLIACAPILLARI / ALICATES CORTA CAPILARES / ТРУБОРЕЗ ДЛЯ КАПИЛЛЯРНЫХ ТРУБОК

| COD.  |  O.D.<br>mm |  g |  |  |
|-------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 63759 | 1-3                                                                                            | 85                                                                                    | 6                                                                                    | ●                                                                                     |



PARA LAVABO / BASIN TOOLS / OUTILS LAVABO / WERKZEUG FÜR WASCHBECKEN / UTENSILI PER LAVABI / FERRAMENTA PARA LAVABO / ИНСТРУМЕНТЫ ДЛЯ РАКОВИН, РАДИАТОРОВ

LLAVE PARA RADIADORES / RADIATOR SPUD WRENCH / CLÉ DE MONTAGE / SPEZIAL RATSCHKE FÜR HEIZKÖRPER / CHIAVE DI MONTAGGIO / CHAVE DE MONTAGEM / РАДИАТОРНЫЙ КЛЮЧ

| COD.  |
|-------|
| 61168 |
| 61169 |



KIT

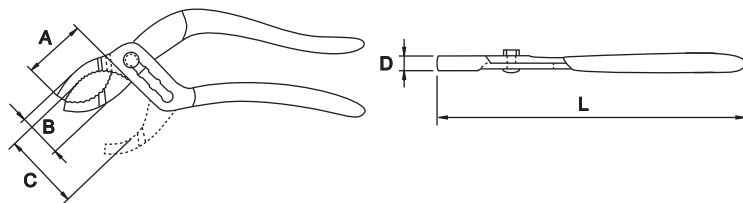
| COD.  |  g |  |
|-------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 61167 | 490                                                                                   | 1                                                                                   |



| COD. PCS. |  O.D.<br>inch |
|-----------|--------------------------------------------------------------------------------------------------|
| 61168     | 3/8-1/2-3/4-1                                                                                    |
| 61169     |                                                                                                  |



■ TENAZA DE SIFÓN / SYPHON PLIER / PINCE SANIGRIP / SIPHONZANGE / PINZA PER SIFONI / ALICATE DE SIFÃO / КЛЕЩИ ДЛЯ СИФОНОВ



| COD.  | L (inch) | A (mm) | B (mm) | C (mm) | D (mm) |     |   |   |
|-------|----------|--------|--------|--------|--------|-----|---|---|
| 62136 | 10       | 45     | 36     | 60     | 15     | 300 | 6 | ● |

CARACTERÍSTICAS / FEATURES / CARACTÉRISTIQUES

Fundas blandas / Soft sleeves / Mâchoires de protection en plastique molle



■ KIT REPARADOR DE GRIFOS / VALVE RESEATER / KIT PLOMBIER / WASSERHAHN-FRÄSGERÄT / KIT APPARECHI PER RUBINETTI / KIT REPARADOR DE TORNEIRAS / НАБОР ДЛЯ ПРИТЯЖКИ КРАНОВ

| COD.  |                   |     |   |   |
|-------|-------------------|-----|---|---|
| 68059 | 10-12-13-14-15-16 | 380 | 1 | ● |

| COD.  |                      |     |   |   |
|-------|----------------------|-----|---|---|
| 68058 | 10-12-13-14-15-16 mm | 400 | 1 | ● |



■ LLAVES DE LAVABO / BASIN WRENCHES / CLÉS LAVABO / STANDHAHNMUTTERNSCHLÜSSEL / CHIAVI PER LAVABI / CHAVES DE LAVABO / КЛЮЧ ДЛЯ РАКОВИН

■ STANDARD

| COD.  |       | L (mm) |     |   |   |
|-------|-------|--------|-----|---|---|
| 61008 | 10-32 | 288    | 490 | 6 | ● |



■ TELESCOPIC

| COD.  |       | L (mm) |     |   |   |
|-------|-------|--------|-----|---|---|
| 61009 | 10-32 | 460    | 700 | 6 | ● |



| COD.  | O.D.<br>mm | L (mm) | g   |   |   |
|-------|------------|--------|-----|---|---|
| 61000 | 15-32      | 240    | 500 | 6 | ● |

| COD.  | O.D.<br>inch | L (mm) | g   |   |   |
|-------|--------------|--------|-----|---|---|
| 61325 | 1-1.1/4      | 240    | 300 | 6 | ● |



NIVEL PARA LAVABOS / PLUMBERS BASIN LEVEL / NIVEAU LAVABO / NORMABSTAND WASSERWAAGE / DIMA REGOLABILE PER LAVABO / NÍVEL DA BACIA DOS CANALIZADOR / УРОВЕНЬ САНТЕХНИЧЕСКИЙ

| COD.  | O.D.<br>mm | L (mm) | (mm/m) | CAP. (inch) | g   |   |   |
|-------|------------|--------|--------|-------------|-----|---|---|
| 65780 | 90-220     | 300    | 0,5    | 1/2         | 400 | 1 | ● |

