Product training BESSEY cutting technology
BESSEY Tool GmbH & Co. KG
Types of snips

- **Normal** metal snips
  - The force required for cutting is determined by the ratio of edge length to the handle length
  - Handles painted or PVC dipped
  - Optional: spring mounting for automatically opening the snips
  - Edges and handle are traditionally forged into one unit → robust version
Types of snips

- **Compound** leverage tin snip
- Forged and tempered snips head  
  -> no risk of breakage
- Integrated steel spring for independent opening
- One-handed operable latch
- Approx. 25% less effort of power, because of leveraged style
- Advantage: less physical effort
Differentiation of snips – models

1. **Shape and straight cutting snips (right and left):**
   These snips are „all-rounders“. They can cut through a metal sheet (straight-cut) as well as cut large and small contours or radii (e.g. D39ASS, D29ASS or D08, D216).

2. **Shape cutting snips (right and left):**
   These snips are best suited when you want fine and narrow radius cuts near the edges of a metal sheet. You can use the snips to cut extremely narrow shapes or curves without any problem (e.g. Aviation snips, D29SS).

3. **Straight cutting snips (right and left):**
   These snips are perfect to cross-cut and notch large metal sheets quickly and precisely with less effort (e.g. Pelican snips, D29BSS-2).
Differentiation of snips – left or right?

Left and right with snips has nothing to do with left or right handed versions!

Left snips = left curve

Right snips = right curve

Left cutting aviation snip D16L
Wrong

- If sheets of metal are not laying smooth on the edge of the cutting blade, life-time will be decreased.

Right

- Optimized cut and optimized life-time, if sheets of metal laying smooth on the edge of the cutting blade.
## Qualities

<table>
<thead>
<tr>
<th>Grades of steel:</th>
<th>Material:</th>
<th>Hardness min. HRC:</th>
<th>Cutting edge life</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS-TiN</td>
<td>1.100 N/mm²</td>
<td>65</td>
<td>+ + + + +</td>
</tr>
<tr>
<td>HSS</td>
<td>1.100 N/mm²</td>
<td>65</td>
<td>+ + + +</td>
</tr>
<tr>
<td>Special high grade steel</td>
<td>800 N/mm²</td>
<td>61</td>
<td>+ + +</td>
</tr>
<tr>
<td>High grade steel</td>
<td>600 N/mm²</td>
<td>59</td>
<td>+ +</td>
</tr>
<tr>
<td>Quality steel</td>
<td>400 N/mm²</td>
<td>56</td>
<td>+</td>
</tr>
</tbody>
</table>

HSS-TiN-coating increases life-time of cutting blades.
Good entrance of raw forged parts

- Receiving the drop forged untreated parts from forging companies in Germany, Italy or Romania. Before entering into the production process these parts are quality checked at Bietigheim-Bissingen.
Production process

Heat treatment

- Lever snips are punched, heat treated and hardened
Production process

Grinding

- Full automatic grinding at a new „Berger“ CNC-machine
Production process

Set up/ packaging

- Assembling blades and handles, printing and laser-marking by semiautomation
- Manual adjusting of blades of each and every snips
- Quality control
- Packing and shipping or storing
Compound leverage snips – robust design

D29SS-2
Shape cutting snips
For short, straight and curved cuts

D39ASS
Shape and straight cutting snips
For continuous, straight and curved cuts

D17ASS
Shape and straight cutting snips, robust
For continuous, straight and curved cuts
Compound leverage snips – light design

**D08**
Shape and straight cutting snips, maneuverable
Special flat cutter head enables cutting in narrowest radius

**D16**
Avation snips
For short, straight and curved cuts

**D16S**
Avation snips
No offset to blades, for short, straight and curved cuts with a large radius in both left and right directions
The latest generation of leverage snips D39ASS – for low-fatigue continuous cutting

Frictionless robust
The shape and straight cutting snips D39ASS are particularly smooth running and extremely wear-resistant.
- due to sintered steel insert in the joint area
- due to permanent threaded connection of the joint area with a stable stud bolt
- due to stainless steel panel over the joint for protecting the spring beneath

It is possible to use the complete cutting length with every cut.
- due to a significantly reduced handle opening angle

Perfect cornering
They enable high-precision cutting of curves in the tightest of radii and, with less risk of scratching the surface.
- due to extremely compact cutter head with partially sunken threaded head connection

Effort-saving, easy to use
Right and left-handed users can lock and unlock the snips with ease, without a change in grip.
- due to central positioning of the latch on the top handle
Shape and straight cutting snips D15A – small, strong, manouvrable

1. Extremely compact cutting head:
gives the ability to cut the narrowest radii and to reach some of the most difficult to access spots

2. Practicable combination of bar and arrester:
for less time effort

3. Compound leverage:
considerably reduces the effort required

4. Ergonomic handle:
soft cushion inserts that further reduce hand fatigue
Shape and straight cutting snips D15A – small, strong, manoeuvrable

- **Overall size:**
  Total length 25% shorter than customary snips with lever translation = 180 mm

- **Handle opening:**
  Ideal opening width of the 2K-handle = max. 80 mm → also for users with small hands

- **Easily & agilely:**
  cuts the smallest radii up to 3 mm

- **Cutting performance:**
  Stainless steel → 800 N/mm², up to 0.8 mm
  Steel sheet → 600 N/mm², up to 1.0 mm
High-performance snips with HSS edges

1. **Longer service life:**
   Tempered drop-forged cutting heads have hardened HSS inserts for much longer service life and performance than conventional snips.

2. **Compound leverage:**
   Considerably reduces the effort required.

3. **Ergonomic handle:**
   Soft cushion inserts that further reduce hand fatigue.
High-performance snips with HSS edges

D27AH
HSS shape and straight cutting snips
For continuous, straight and curved cuts

D407-275
HSS punch snips
For short, straight and curved cuts

D416-280
HSS shape and straight cutting snips
For continuous, straight and curved cuts

D416-280
HSS shape and straight cutting snips
For long continuous straight cuts
Application compound leverage tin snips

Shape and straight cutting snips
for straight cuts that change into curve cuts.

Shape cutting snips
for curved cuts with a large or small radius and outline cuts.
Standard tin snips – basic programme

D216
Shape and straight cutting snips
For continuous, straight and curved cuts

D216
Shape and straight cutting snips, without opening stop
For continuous, straight and curved cuts

D218
Pelican snips
For long, continuous straight cuts
Standard tin snips – basic programm

D214  
Shape cutting punch snips  
For short, straight and curved cuts (especially small radii)

D207  
Punch snips  
For short, straight and curved cuts

D208  
Punch snips with curved blades  
Especially for circular cuts
Standard tin snips – special version

**D202**  
Berlin pattern snips  
For straight cuts

**D159**  
English pattern snips  
For straight cuts

**D146**  
American pattern Snips  
For straight cuts
Snips pouch

DSET16
D16 (green), D16S (yellow), D16L (red)

DSET29-15
D29ASS-2, D29ASSL-2, D15A

DSET15
D15A (red), D15S (yellow), D15AL (red)

DSET-SF3
D216-280, D216-280L, D218-300
One-handed cutting of strong steel straps – Safety strap cutter with compound leverage D123S

1. **Tempered cutter head:**
   Tempered fine-cast cutter head cuts steel straps up to 32 x 1mm

2. **Strap holding element:**
   Holds the strap down while it is cut, preventing it from snapping upwards

3. **Compound leverage:**
   Considerably reduces the effort required

4. **Ergonomic handle:**
   Soft cushion inserts that further reduce hand fatigue
Multi-purpose cutters

**D47-2**
Multi-purpose cutters

**D48A-2**
Angled combi snips

**D49-2**
Cable cutters
For multicore cables with diameter up to 10 mm

**D51A**
MULTISNIP Master
For long continuous straight and curved cuts (large radii)
Jeweller snips

Snips drop-forged, cutter head hardened, completely nickel coated

D72-1
Open handles

D74-1
Closed handles

D76-1
Closed handles with spring
Household and multi-purpose shears

D820-250
Multi-purpose shears

D821-180
Multi-purpose shears

D860-250
Industrial and professional shears

Surely BESSEY has lots of different snips ...
Household and dressmakers` shears –
Paperhangers` and paper shears – Electricians` scissors
Tools for sheet metal work and plumbing

D301
Flat nose pliers

D311
Round nose pliers

D341-60
Seaming and clinching pliers
passed through vs. put on

D336
Squeeze-folding pliers

Surely BESSEY has lots of different snips...
Folding pliers – Corner cleaming and clinching pliers
Crimper – Gutter support bowing pliers
Folding utility knife DBKPH

1 Blade change mechanism
Lever for safe locking of blades. This mechanism permits a quick and easy blade change.

2 Soft thumb pad
Soft plastic thumb pad allows maximum pressure.

3 Storage compartment
Safe storage of spare blades so they are always quickly accessible.

4 Release lever
It needs just a short push on the metal release lever to unlock the knife so that it can be safely folded.
Folding utility knives

**DBKPH-EU**
With comfortable plastic handle and belt clip

**DBKWH-EU**
With fine wooden handle and belt clip

**DBKAH-EU**
With light aluminium handle and belt clip

**Spare Blades:**
- Standard blade DBK-T
- Hook blade DBK-H
- Linoleum blade DBK-L
- Scoring blade DBK-A

Spare Blades:
DBST Multitool

1. **Multiple applications:**
   Equipped with shears, blade, saw, file, Philips head screwdriver and both large and small slotted screwdriver

2. **Tools made from stainless steel:**
   Rustproof tools guarantee a long service life

3. **Slip-proof handle:**
   Red soft cushioned inserts, sits firmly in the hand

4. **Practical belt pouch:**
   Always to hand, folding tool is stored in the robust nylon pouch
BESSEY. Simply better.

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