Since 1895, the Burcklé brand has stood for quality & innovation, especially as Jean Burcklé fostered the airjet technology and service the world over. Our know-how has been sought after by reed shops around the globe, and our reeds by leading mills. Mills whose fabrics are among the best in the market.

At the heart of your weaving process lies your reed. For reeds fashion the fabric, and determine its very quality and appearance. Simply put, quality reeds create quality fabrics. The quality of your reed also creates a quality weaving process. In this way, the threads of your business are connected to your choice of reed.
Burcklé’s reeds respect carefully all technical specifications given by machine manufacturers and are quickly made to order for our customers’ satisfaction. In-house stamping, polishing and finishing allow a strict quality control of all manufacturing steps for Burcklé’s profiled dents production. Quality reeds are made from quality dents.

Burcklé’s reeds are made using the TRINOX technology – profiled dents, binding wires & half-rounds are exclusively made from high performance stainless steel in different steel grades giving the guarantee of high precision reeds manufacturing.

Airflex® reeds

Solutions for every kind of fabric or application

TRINOX

- Half-round wire
- Spring wire
- Dents

85 dents for the milled cone

End Dent

End Dent
Reeds

Their durability is known around the world. And their ability to withstand the extreme demands of such highly abrasive yarns as fiberglass is second to none. Burcklé’s specially developed stainless steel like MA33 (improved AISI 420) is the best option to weave abrasive yarns made out of glass, aramids, basalt, silk or having abrasive sizing material. Burcklé has the necessary experience and skills to produce reeds that perform under such extreme conditions.

Burcklé’s Airflex® reeds may be delivered optionally with:

- **DLC coating (Diamond-Like Carbon) treatment is providing a protective layer (abt. 2µ) on the profiled dents against abrasion. This carbon coating, applied uniformly to the dent, combines a high hardness level (3000-4000 HV) & a low friction coefficient (0.1) for a greater dent’s abrasion resistance when fabric contraction is high.**

- **Conical entries for 4 to 8 colors machines (milled, progressive nose & bi-conical). They allow better weft insertion & better warp yarns uncrossing.**

**Conical**

Conical entrance is designed to allow perfect weft yarns (4 to 8 colors) insertion into the reed.

**Progressive nose**

Progressive nose entrance is specially designed when less than 4 weft colors insertion are used and especially for fabrics which are subject to high warp tension at reed’s.

**Bi-conical**

It’s a combination of a conical entry and a conical with progressive nose. Bi-conical entrance ensures a better warp yarns uncrossing by providing low friction of the warp yarns on the left insertion side of the reed thanks to the low relief design of the milled profiled dents.

Burcklé’s Airflex® reeds deliver the stable yarn free flight and controlled compressed air consumption that you need to produce durable high-tech fabrics with today’s economical and competitive environment. An Energy Saving Reed version is also available in order to bring closer the relay nozzles to the channel for lower compressed air consumption. Please contact us for details.
Tsudakoma / Toyota Airflex® reeds

DPNH low friction Airflex® reeds

Burcklé’s Airflex® reeds offer you:
- High fabric quality
- High precision
- High productivity
- Costs saving
- Constant airflow
**Duraflex® reeds**

Duraflex® flat reeds are using advanced stainless steel grades such as AISI 301 (18/8), AISI 410 (standard) & AISI 420 (TECH) to provide the best possible performance with abrasive yarns. See page 8 for carpet weaving.

**Perfect - High Precision Milling for Rapier & Air jet reeds**

In-house designed special milling machine provides perfect tolerances for the most demanding rapier & air jet looms.

Burcklé’s Duraflex® reeds offers you:
- High fabric quality
- High productivity
- High precision
- Costs saving

Burcklé’s Duraflex® reeds may be delivered optionally with:
- DLC coating (Diamond-Like Carbon) to prevent premature abrasion when fabric contraction is high.

This “perfect” milling on the 2 faces of the lower “U” aluminum profile guarantees:
- A tolerance of +/- 0.05 mm over 4200 millimeters
- Reed holder fixation sides strictly parallel
- Constant distance between relay nozzles & reed’s tunnel
- A quick change without additional settings
Backinox® reeds

Backinox® profiled & flat reeds are commonly used for terry fabrics, mattress ticking and tire cord weaving as they improve the warp yarns guiding & uncrossing.

Standard double reed

Backinox® reed

Backinox® Duraflex® reeds

Backinox® Airflex® reeds
Burcklé’s carpet & velvet reeds have been developed together with leading machinery producer. They are commonly using C75 carbon steel dents but can also be delivered with stainless steel dents when required.

In-house dents production guarantees a total quality control from raw material to finished products. Made from high quality raw material dents and with in-house designed binding machine, our carpet reeds have a precise flatness.

Carpets can be delivered up to 5 meters long & with high density. Various reed heights are available.

Velvet «Boomerang» reeds are produced entirely by hand by our skilled colleagues who have a great experience and know-how. With our own dents production and specially developed gluing gage our velvet reeds can be produced with high precision and flatness.

Burcklé offers a wide range of soldered reeds usually used for narrow fabrics looms or on old shuttle & rapier looms. They can be delivered either with tempered steel or with stainless steel dents in various widths (3 to 8 mm). They are produced according to customer specifications and can be delivered in meter length or to specific dimensions and designs.
No matter which OEM machine you use in your warp preparation process (direct & sectional warping, sizing, knotting...), Burcklé can deliver warp preparation reeds specific to your needs such as V-reeds, expansion combs (zig-zag), leasing reeds, hook reeds... Each reed will have the famous Burcklé brand quality which you can trust to stand the test of time.
## Burcklé’s raw material

<table>
<thead>
<tr>
<th>Product Name</th>
<th>AISI</th>
<th>Mechanical resistance Rm (N/mm²)</th>
<th>Corrosion Resistance</th>
<th>Abrasion Resistance</th>
<th>Use</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>INOX</td>
<td>301</td>
<td>1100 - 1300</td>
<td>****</td>
<td>**</td>
<td>Profiled dents</td>
<td>Standard</td>
</tr>
<tr>
<td>MA33</td>
<td>420</td>
<td>1700 - 1900</td>
<td>***</td>
<td>****</td>
<td>Profiled dents</td>
<td>Technical / abrasive sizing</td>
</tr>
<tr>
<td>INOX</td>
<td>410</td>
<td>1100 - 1200</td>
<td>***</td>
<td>**</td>
<td>Flat reed wire</td>
<td>Standard</td>
</tr>
<tr>
<td>18/8</td>
<td>301</td>
<td>1400 - 1500</td>
<td>****</td>
<td>***</td>
<td>Flat reed wire</td>
<td>Technical / waterjet</td>
</tr>
<tr>
<td>TECH</td>
<td>420</td>
<td>1500 - 1600</td>
<td>***</td>
<td>****</td>
<td>Flat reed wire</td>
<td>Technical</td>
</tr>
<tr>
<td>½ ROUND</td>
<td>430</td>
<td>950 - 1000</td>
<td>****</td>
<td>**</td>
<td>½ round binding wire</td>
<td>all</td>
</tr>
<tr>
<td>C75</td>
<td>1075</td>
<td>1450 - 1600</td>
<td>*</td>
<td>***</td>
<td>Carpet &amp; Velvet dents</td>
<td>Standard</td>
</tr>
</tbody>
</table>
Burcklé supplies a whole range of drop wires for conventional weaving machines & for carpet / velvet weaving machines.

Key features:
- **Type:** Open / closed
- **Thicknesses:** from 0.2 to 1.0 mm
- **Material:** Stainless steel or carbon steel
- **Treatment:** nickel or zinc plating (yellow or blue)
Heddles

Burcklé offers flat steel heddles, twin wire heddles & brazed eye heddles.

**Flat heddles key features:**
Flat steel heddles are the most commonly used in the textile weaving industry. They are rust proof & highly resistant to work with the most demanding weaving machines.

- **Material:** stainless steel
- **End loops:** “C”, “J”, “O” types
- **Style:** Cut out / not cut out
- **Cross sections:** 5.56 x 0.25 mm / 0.30 mm / 0.40 mm / 0.50 mm
- **Lengths:** 10” (260 mm) / 11” (280 mm) / 12” (302 mm) / 13” (331 mm) / 14” (356 mm) / 15” (382 mm) / 17” (432 mm)
  (for other dimensions please contact us)
- **Eyes dimensions:** 5.5x1.2 - 6.5x1.8 - 8.0x2.5 - 8.4x3.8
  (for other dimensions please contact us)
- **Options:** special eye shape for higher density / super polished eye for sensitive yarns / nickel plating
**Twin wire heddles key features:**

Twin wire heddles are used for jacquard harnesses, heavy fabrics & technical textiles as their main advantage is the use of a mail eye which eliminates sharp edges, and reduces friction on warp yarn in order to avoid yarn breakage.

- **Material:** oil tempered wire + tin coating.
- **End loops:** “C”, “J”, “O” types. Plastic injection / Lancia for jacquard harness
- **Mail eyes:** Various dimensions from Groz Beckert (formerly Bräcker) in various hardnesses (SP, TH, HP)
- **Lengths:** any length available up to 900 mm (Please contact us for details)
- **Wire Ø:** from 0.35 mm to 0.90 mm
- **Options:** nickel plating

**Brazed eye heddles key features:**

Brazed eye heddles are used in some niche application (conveyor belts, Paper Machine Cloth – dry & wet felts...) where high tension is required during the weaving process. They have a high strength & high stiffness and they are easily sliding in frame and easy to draw-in manually.

- **Material:** carbon steel wire
- **End loops:** “C”, “O” types
- **Eyelets dimensions:** 9.5 x 6.4 mm / 9.5 x 4.8 mm / 8.0 x 4.8 mm (other dimensions on request)
- **Lengths:** from 250 mm up to 900 mm
- **Wire Ø:** 1.6 mm (1.8 mm on request)
- **Finishing:** zinc or nickel plating
Various spare parts such as center braces, nose guides, end braces, lifting brackets, inserts... can be delivered for your existing frames.

Burcklé keeps developing new designs in order to always improve the harness frames’ quality.

Option: frames can be delivered with heddles counting & mounting.

(*PMC= Paper Machine Cloth)
Reeds manufacturing: Profiled dents, conicals, velvet reeds dents & binding wire

Consistent dent performance and efficient air consumption require strict control. Burcklé provides that control by covering every component of the reed on quality, development and innovation from sourcing raw materials to maintaining its own stamping and finishing capabilities. One crucial aspect of every reed is the precision of the profile dents. The shape, thickness, width, dent surface and material all have a strong influence on yarn passage, fabric appearance, machine productivity & reed durability.

Dent surfaces for instance, are carefully polished to prevent damage to your delicate yarns and some dents are treated with special DLC (Diamond-Like Carbon) surface coating to reduce wear. Burcklé's exclusive relations with steel suppliers ensure the highest possible dent quality.

Reed makers may also source from Burcklé conicals, velvet reed dents (boomerang), binding wire & epoxy glue to guarantee the best performance for their reed production.

R&D and Service

The Burcklé R&D team is equipped with the latest CAD system which allows us to create all necessary drawings (2D & 3D).

With its strong know-how and creativity, our team is able to offer customized solutions & all kinds of new development both for OEMs & end-users.

If you have questions about your product usage, weaving process, product maintenance & repairing, the Burcklé team is always available to provide you after-sales service & solutions to solve your challenges.

Burcklé dents’ key features:

- Excellent edge and surface conditions
- Carefully stamped for optimal airflow values
- Optimal straightness and stability
- High tensile strengths to improve overall rigidity of the reed
- Wear resistance