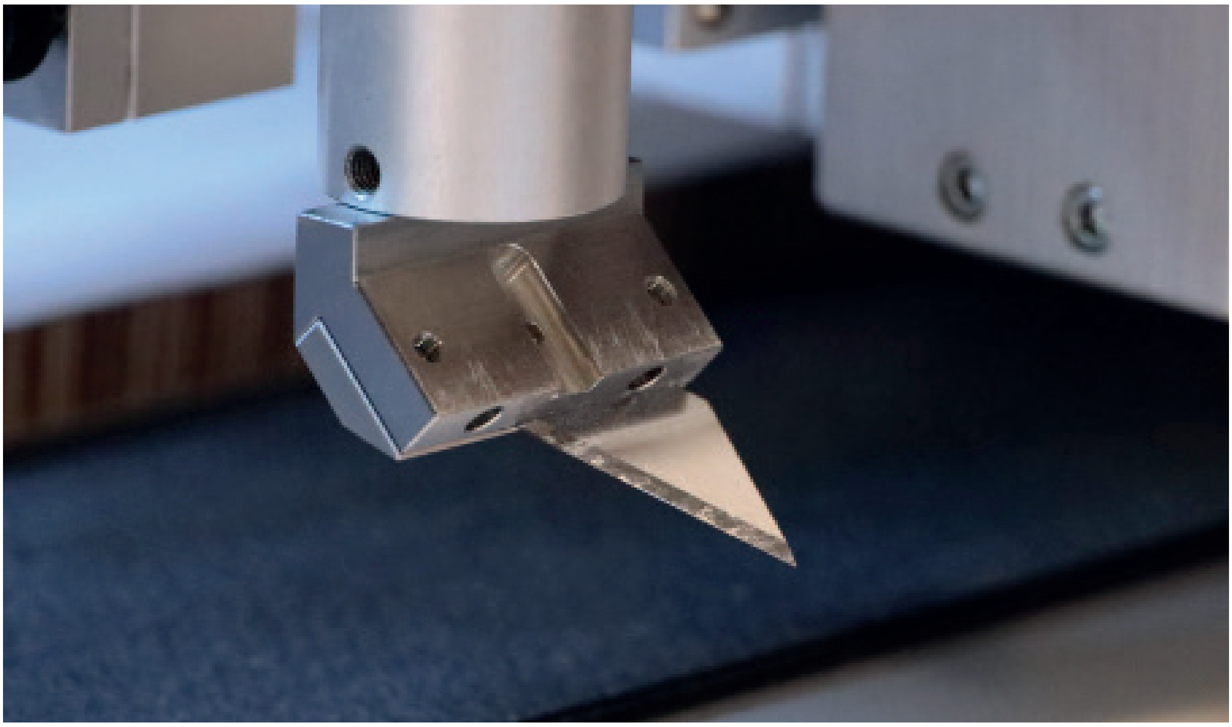
HANDY GUIDE FOR YOUR PRODUCTION

BLADE & ROUTER BITS

How to choose the right tool for your material

PMH SYSTEMS
Cutting edge in large scale

TABLE OF CONTENTS



WHY THE RIGHT TOOL MATTERS

Choosing the correct tool is not just a technical detail. It is a direct investment in your company's efficiency and product quality.

On the other hand, the wrong tool creates frustration, downtime, and unnecessary costs.

This guide helps you make the right choice from the start and gives you a quick reference for daily production so you can have a production with:

- ✓ **SHARPER RESULTS:** Achieve clean edges without fraying.
- ✓ **FASTER PRODUCTION:** Run smoother at higher speed.
- ✓ **LESS WASTE:** Optimize material use and reduce miscuts.
- ✓ **LONGER MACHINE LIFE:** Extend uptime and lower service costs.

TYPES OF TOOLS

BLADES

Blades are primarily used for flexible or thin materials. They are ideal for clean cuts in paper, cardboard, textiles, and foam.

STANDARD BLADE

The classic all-rounder for paper and cardboard. Fast, precise, and cost-effective.

- Ideal for paper and cardboard
- Provides fast, clean cuts
- Cost-effective choice for everyday production

OSCILLATING BLADE:

The back-and-forth motion makes it perfect for rubber, foam, and other tough materials that would fray with a straight cut.

- Perfect for rubber, foam, and textiles
- Back-and-forth motion ensures fray-free edges
- Used when standard blades are not sufficient

KISS CUT BLADE

Used for labels, foils, and self-adhesive materials, cutting only the top layer without touching the liner.

- Designed for labels and self-adhesive materials
- Cuts only the top layer, leaving the liner intact
- Saves time and reduces waste in label production

V-CUT BLADE:

Creates fold lines in Re-board® and corrugated board, making 3D constructions possible.

- Used for Re-board® and corrugated board
- Creates precise fold lines for 3D constructions
- Enables creative displays and prototypes

ROUTER BITS

Router bits are designed for harder, thicker materials and come in many variations, each tailored to specific results.

SINGLE FLUTE:

Highly effective for PVC and plastics. Removes chips quickly and prevents melting.

- Highly effective for PVC and plastics
- High chip removal prevents melting
- Well-suited for high-speed production

DOUBLE FLUTE:

Often used for acrylic and wood, creating polished edges and stable cuts.

- Commonly used for acrylic and wood
- Leaves polished, glossy edges
- Produces strong and stable cuts

SPIRAL UPCUT:

The spiral design removes chips efficiently - ideal for thicker materials.

- Removes chips efficiently during routing
- Best for thicker materials
- Improves both precision and tool lifespan

SPECIAL BITS:

Designed for demanding materials such as aluminum or composites. Require precise settings and often cooling to achieve clean cuts.

- For aluminum, composites, and other hard materials
- Requires lower speed and often cooling
- Chosen when standard bits can’t deliver clean results

TIPS FOR BEST RESULTS

- Always match the bit type to the material
- Adjust speed and feed-rate to avoid melting or chipping
- Use cooling when cutting aluminum or composites
- Replace dull bits to maintain precision and tool life

MATERIAL GUIDE

Choosing the right tool for each material ensures clean results, reduces waste, and protects your machine. Use this guide as a quick reference for your daily production.

MATERIAL	RECOMMENDED TOOL	NOTES
Paper/Cardboard	Standard blade	Fast, clean cuts without need for routing.
Re-board®	V-cut + oscillating blade	Combines fold precision with structural strength.
PVC / Plastics	Single flute router bit	High chip removal prevents melting.
Acrylic	Double flute router bit	Produces glossy, glass-like edges.
Textiles/Banners	Oscillating blade	Clean cuts without fraying.
Aluminum/Composite	Special router bit	Requires lower speed and often cooling.

DAILY CHECKLIST

- ☐ Clean the tool after use
- ☐ Check sharpness before the next run
- ☐ Record settings for repeat jobs

💡 Tip: Always test your tool settings on a small sample before starting full production. It can save both time and material.

Print this page and keep it next to your machine for quick reference.

DAILY CHECKLIST FOR BLADES & ROUTER BITS

Taking care of your blades and bits is one of the easiest ways to save money. Just a few minutes of maintenance can greatly extend their life.

☐ CLEAN THE TOOL

- Remove dust, chips, and adhesive residues.
- Use a soft brush or compressed air - never hard objects.

☐ SECURE PROPER MOUNTING

- Ensure the blade/bit is tightened and mounted correctly.
- Avoid vibrations or loose fitting that can damage the machine.

☐ CHECK THE SETTINGS

- Make sure speed, pressure, and RPM match your material.
- Note adjustments for the next production run.

☐ USE ORIGINAL PARTS

- Only use approved blades and router bits.
- Record in the logbook if a non-original tool has been used.

☐ STORE CORRECTLY

- Keep used and new tools in separate containers.
- Avoid sharp edges touching each other.

☐ INSPECT SHARPNESS AND WEAR

- Look for dull edges or damage.
- Replace if signs of wear appear - better too early than too late.

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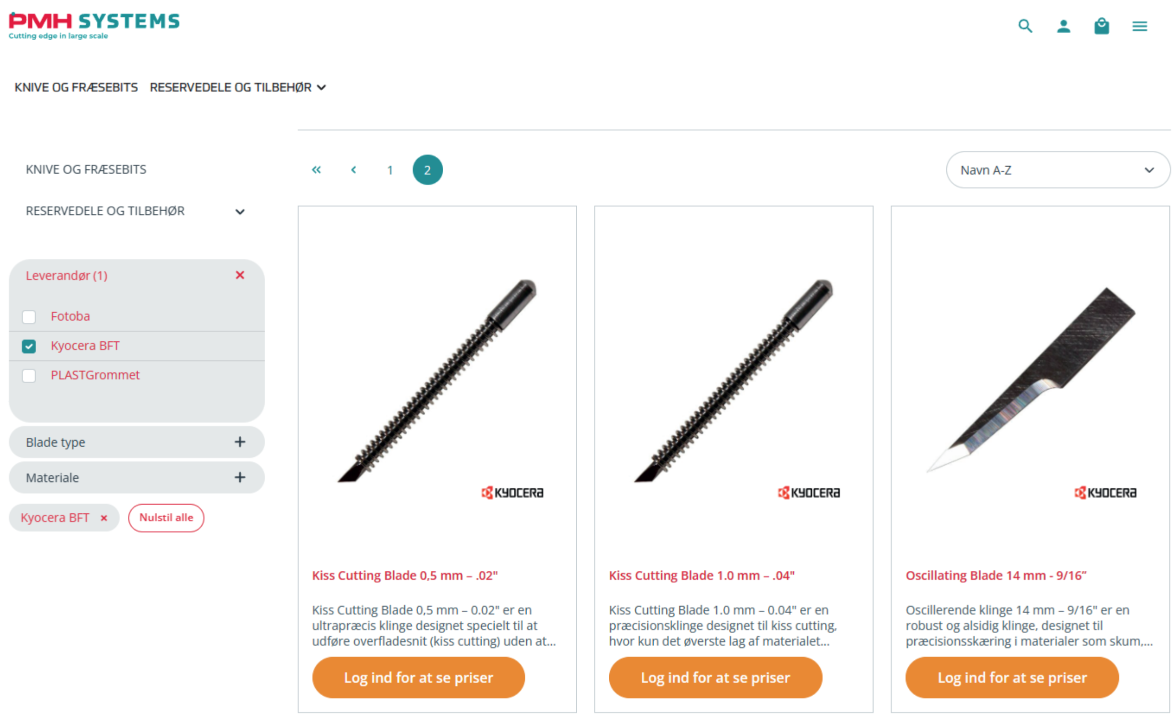

At PMH Systems you'll find a wide selection of original blades and router bits designed for your machines. We work close with our distibutor and can provide standard blades and bits as well as special designed blades.

We provide:

- ✔ Original blades and router bits for Colex, Fotoba, and more.
- ✔ Spare parts and other consumables for your machine and prodution.
- ✔ Fast delivery through our webshop.
- ✔ Personal guidance to help you choose the right tool for your material.

Visit our webshop (Danish): pmhsystems.dk
Or contact us directly - we are ready to help you optimize your setup.

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