MANUAL

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# M964

## Manual - EN



# IGM Vacuum Clamp One-sided, set

Dear customer,
thank you for the confidence you have placed in us with the purchase of your new IGM Vacuum Clamp One-sided, set.

This manual was prepared for the owner and operator of **IGM Vacuum Clamp One-sided, set** to promote safety during setup, operation and maintenance. Please read carefully and understand the information contained in this manual and accompanying documents. To obtain maximum service life and performance, use the machine according to these instructions and safety guidelines. Observe work safety.

We wish you a lot of work satisfaction and joy when working with the IGM Vacuum Clamp One-sided, set.

### 1. Intended Use

Vacuum Clamp is designed for securing non-porous workpieces during edge-banding, routing, cutting, sanding, drilling, and other operations.

### 1.1 Warranty

IGM always strives to deliver a high-quality and efficient product. The warranty is governed by the valid terms and conditions of IGM.

### 2. Product Specifications

| | |
|---|---|
| Air Consumption: | 23 l / min at 0.6 to 0.8 MPa |
| Clamping Force: | more than 800 g per $cm^2$ |
| Maximum Capacity: | 150 kg |
| Clamp Dimensions (WxHxD): | 165 x 22 x 205 mm |
| Clamp Weight: | 325 g |

### 3. Safety

**Warning!** Read all instructions and safety guidelines. Failure to follow safety instructions may result in damage to the jig and serious injury to the operator. Keep the manual for future reference.

- Check the technical condition of the jig and cutting tool before work. The cutting tool must be sharp and free from damage. Do not use the jig or cutting tool when damaged.
- The working area must be clean and well-lit. There must be sufficient space around the work area.
- Take care of your safety when working. Long hair, loose clothing and jewellery may cause injury. Wear suitable work clothing, footwear and eye, ear and respiratory protection.
- Watch your hands and fingers. Always use both hands when working with the jig.
- Ensure that the jig is held securely in place. If necessary, use a clamp. Never hold the jig with your hand while working!
- Keep the jig out of reach of children and unqualified persons.
- Do not leave the jig in a damp environment and do not expose it to rain.

### 3.1 Symbols

| | |
|---|---|
|  | Read the manual and all instructions carefully before use. |
|   | Scan the QR code and find the manual in your language. |
|  | Recycle package materials. |

## 4. Package Contents

• Vacuum clamp
• Rubber gaskets (2x for whole surface, 1x for 2 surface sections, 1x for 1 clamp section)
• Transparent pressure tube with an end connector

### Installation

The vacuum clamp must first be securely mounted to a workbench using four screws through holes in the corners. The workbench must be stable. Excessive vibrations may cause the clamped workpiece to loosen.

### Assembly (connection)

Insert and firmly push the free end of the transparent tube into the opening on the side of the clamp. When properly inserted, it cannot be pulled out and will not disconnect when the air supply is turned on. To release the tube, pull back the black collar.

Screw the other end onto a lever valve (we recommend M966-01).

The air supply pressure must be between 550–700 kPa (approx. 80–100 psi). Pressure above 800 kPa (120 psi) may damage the clamp and pose a safety risk to the operator. Lower pressure reduces suction efficiency; this can be intentionally used when clamping foam materials.

The supply hose must be clean. Contamination reduces suction efficiency. A small amount of condensed water in the air hose is acceptable. A small compressor capable of supplying 23 liters of air per minute can be used. Lower pressure consumes less air. Compressed air should be supplied from a tank to prevent pressure fluctutation.

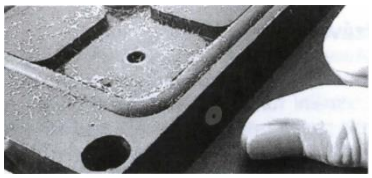
### Seal Adjustment

The sealing rubber has an oval shape. If it becomes twisted or otherwise deformed, sealing quality and suction performance may be reduced.

The seal can be positioned on the suction surface according to the size and shape of the workpiece. If necessary, the seal can be shortened. Always cut it 3 mm longer, as it will compress when deformed. The holding force will be the same whether the seal covers the entire surface or only a small section.

When shortening the seal, use a chisel and finish it with a single strike using a mallet. This creates a straight edge and prevents air leakage that would reduce efficiency. For any required shape or layout, lead the seal around the suction opening.

### Cleaning Suction Port



1. Clean the surface of the clamp from dirt using compressed air or a brush. Reduce the air supply to approximately 270 kPa (40 psi).
2. Hold your finger near the air outlet (you will feel air flowing out when activated).
3. Turn on the air supply and block the air outlet. Air will escape through the suction opening. Keep your head away to avoid dust being blown into your face.
4. Repeat this procedure several times until the suction port is completely clean. The suction cup will then be ready for operation again.

### Irregullar Shapes

The sealing rubbers can be adjusted according to the shape and size of the workpiece. A clamping force of 800 g per cm² means that a larger surface area will be held more securely than a smaller one.

When machining workpieces larger than 1 m², use a second clamp or support the overhanging ends to prevent slipping. Using multiple clamps ensures safer operation.

A knot hole may cause poor suction on wood. Additional clamps will provide sufficient holding force.

### Use

The suction cup is designed for securing any non-porous material with a smooth surface and no obvious defects.

The suction cup is not intended as a lifting device.

The suction cup is not designed for securing moving workpieces.

If the workpiece is hollow or cut through in the area where the vacuum is generated, the workpiece will be released immediately.

The suction cup is not intended for securing large workpieces.

### Cleaning

The clamp does not require special cleaning.

Do not use solvents.

Ensure that the supplied air is free of contaminants; otherwise, the function and clamping performance will be affected.

**Useful Information**

When clamping any workpiece, always try to use the largest possible clamping surface. A larger surface area means stronger holding force.

The air supply hose is transparent to allow visual inspection of air cleanliness. Contaminants may clog the nozzle and reduce or temporarily interrupt the clamping force.

Slightly porous materials such as MDF will be clamped with lower holding force because air can pass through the material. The same applies to cracked materials and knot holes. Small holes in the workpiece can be effectively sealed with masking tape.

**Warning**

This product is intended for securing non-porous materials. Using this product for purposes other than those specified in this manual may be dangerous and may result in damage to the product or personal injury.

The user must check the clamping and stability of the workpiece before starting any operation. Suction performance is largely influenced by user skill.

High altitude reduces suction performance. Do not use for lifting objects!

## 6. Accessories

Recommended accessories are listed on the IGM website.

**Caution!** Installing unapproved accessories may cause damage to the jig and serious injury. Use only accessories recommended for this jig by IGM.