# 230x280 GH-LR-M2V

**Technical data** 



- Gravitational band saw machine. Working movement of the arm is caused by the weight of the arm itself, speed is regulated by a hydraulic cylinder.
- The machine is designed for cutting of material in vertical and angle cuts, angle cuts are possible to set fluently from 0 to 60 grades to the right and from 0 to -45 grades to the left. Change of angle using quick clamping handle.
- It is suitable for piece production and small series production.
- Thanks to its robust construction it enables cutting of wide range of materials including stainless steels and tools steels as well as profiles and full materials.

## **Construction:**

- The machine is constructionaly designed in that way, so that it corresponds to standard exertions in productive conditions. That is why all carrying parts are made as cast-iron castings (solidity, absorbtion of vibrations and stops). Parts of arm, vice and turn table is cust iron.
- The arm of the machine is made of cust iron and it is designed to ensure the power and the precision of the cut. Arm is 25 grades sloped, it increases the lifetime of blade.
- Down working positions of the arm are controlled by the cam and microswitches. The arm stops automatically after reaching the down position. The arm is lifted by the operator manually.
- The vice is made from cast iron. Jaws ensure safe clamping of the material.
- The manually operating vice is placed in an adjustable dovetail groove.
- Moving jaw of the vice is manual with a wheel and trapeze thread.
- Basic part of the vice moves according to the direction of the angle cut setting, fixation is made by the handle.
- Turn table is cust iron. A turntable gives a big place for supportion of material and its perfect clamping.
- Manuall turning of the table for angle cuts, angle fixation using quick clamping lever.
- General angles are adjusted by the nonius.

#### **Basic equipment of the machine:**

- The blade leading in guides with hardmetal plates and leading bearings and along cast iron pulleys.
- There is a guide situated on the firm beam on the drive side. On the tightening side there is the guide situated on the moving beam.
- The guide beams of moving band guide is adjustable in whole working range. Manual adjustment and fixing of the guide beams.
- Guide holder moves in adjustabled dovetail groof.
- The saw-band is equipped with a guard, which protects the operator from millings and cutting emulsion.
- Mechanic tightening of the blade.
- Automatic indication of blade tension.
- A passive driven cleaning brush for perfect cleaning and function of blade.
- Drive of machine is solved by worm gear box with pernament oil filling. Three phase engine with double winding, two cutting speeds. Termoprotection of engine.
- The cooling system distributes cutting emulsion to the band guides.
- Base with a tank for chips.
- Indication of blade tightening and opening of the cover.
- Controlling 24 V.

#### **Basic accessories of machine:**

- Measuring end stop.
- Band saw blade.
- Set of spanners for common service.
- Manual instructions in eletronic form (CD).

**Technical data** 



## **Operating cycle:**

Manually controlled quick clamping vice, cut is regulated by a hydraulic dam per and a restrictor choke valve. operator cutting speed. After finnishing the cut machine will stop itself automatically and an operator lifts the arm manually to the start position. Feeding of material is manually.

| Cutting parameters |         |         |                           |         |         |  |
|--------------------|---------|---------|---------------------------|---------|---------|--|
|                    | 0°      | 45°     | <b>□</b> 60° <b>□</b> 45° |         | a b o   |  |
|                    | 230     | 190     | 120 185                   |         | x       |  |
| 0                  | 150*    | 110*    | 80*                       | 110*    | х       |  |
| ab                 | 280x220 | 180x170 | 120x90                    | 180x120 | 280x120 |  |

\* Recommended values. Recommendations of band blade producers are to be followed when choosing to cut full material, their dimensions are limited by available size of the teeth for the specific type of the band.

• Cutting of the bundle withnout upper vice HP. HP = accesory for additional prie. The cutting parameters are limited when using.

| Cutting parameters                |    |    |
|-----------------------------------|----|----|
| the shortest cutting              | 20 | mm |
| the smallest divisible diameter   | 2  | mm |
| the shortest rest durring one cut | 22 | mm |

| Performance parameters       |       |                     |
|------------------------------|-------|---------------------|
| drive of the blade           | kW    | 0,9/1,4             |
| pump of the cooling emulsion | kW    | 0,05                |
| total input                  | kW    | 1,54                |
| cutting speed                | m/min | 35/70               |
| diameter of the blade        | mm    | 2720x27x0,9         |
| electric connection          |       | 3x400V, 50 Hz, TN-S |

| Working movements            |  |  |  |  |
|------------------------------|--|--|--|--|
| feed of the Frame to the cut | by its own weight, the speed is regulated by a by-passing valve and hydraulic cylinder |  |  |  |
| feed of the material         | manually   |  |  |  |
| clamping of material         | manually   |  |  |  |
| bend tension                 | manually   |  |  |  |
| cleaning of the blade        | pasive cleaning brush  |  |  |  |

| Saw dimensions |       |        |        |                        |        |  |
|----------------|-------|--------|--------|------------------------|--------|--|
| Lenght         | Width | Height |        | Height of the<br>table | Weight |  |
| [L]            | [B]   | [Hmin] | [Hmax] | [V]                    | (kg)   |  |
| 1610           | 890   | 1320   | 1950   | 787                    | 320    |  |