# AGP<sup>®</sup> Electric Beveler



**Instruction Manual** C€CB



Model	1.1 kW Plate Beveler			
Power Output	1.1 kW (1.5 HP)			
Voltage	See machine nameplate			
No Load Speed	60 Hz: 3600 min <sup>-1</sup> , 50 Hz: 3000 min <sup>-1</sup>			
Angular Adjustment	Angle	Max. Bevel Width		
	60°	18 mm (0.709")		
	45°	20 mm (0.787")		
	37°	17.8 mm (0.709")		
	30°	16.7 mm (0.700")		
	15°	15.7 mm (0.657")		
	0°	21 mm (0.827")		
Dimensions	475 x 296 x 247 mm			
Weight	19.3 kg (42.5 lb)			



- 1. Handle
- 2. On / Off Switch
- 3. Depth adjustor knob
- 4. Front Handle
- **5.** Angular Adjustment from 0-60 Deg.
- 6. Roller





Pipe Beveling



Plate Facing-off: 0 Deg.



11.

7. Angular Adjustment Screw

9. AC Induction Motor

**11.** 12 carbide insert tool holder

10. Side Handle

#### GENERAL SAFETY INSTRUCTIONS



**WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

**Save all warnings and instructions for future reference.** The term "power tool" in the warnings refers to your mains operated (corded) power tool or battery-operated (cordless) power tool.

#### 1) WORK AREA SAFETY

- **a. Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

#### 2) ELECTRICAL SAFETY

- a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.
  - Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. If operating a power tool in a damp location is unavoidable, use an earth leakage circuit breaker. Use of an earth leakage circuit breaker reduces the risk of electric shock.

#### 3) PERSONAL SAFETY

- a. a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **d. Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

#### 4) POWER TOOL USE AND CARE

- a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- **b. Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **f. Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

## 5) SERVICE

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

## **SPECIFIC SAFETY RULES**

# Symbols used in this manual

V.....volts
A....amperes
Hz....hertz
W....watt
~...alternating current
n\_o...no load speed
min<sup>-1</sup>....revolutions or reciprocation
per minute
\_\_\_\_...warning of general danger



....with electrical earth



....read these instructions



.....always wear eye protection



....always wear a dust mask.



..always wear hearing protection



....wear safety-approved hard hat



....Keep hands clear – pinching hazard.



DANGER! Keep hands away from cutting area and the blade.



rotating parts - entanglement hazard. Keep hands, loose clothing and long hair away from moving parts



do not dispose of electric tools, accessories and packaging together with household waste material

1. **Never operate** the tool in an area with flammable solids, liquids, or gases. Sparks from the commutator/carbon brushes could cause a fire or explosion.

Warning:Risk of injury from high-temperature chips! High-temperature chips are expelled at high speed.

Never touch the tool holder and keep all vulnerable body parts clear while the machine is running.

- 2. Always guide the machine away from the body while working.
- 3. Do not work holding the machine above your head.

WARNING! Some dust created by power grinding contains chemicals known to cause cancer, birth defects or other reproductive harm.

An example of these chemicals are:

#### lead from lead-based paint

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

WARNING!: Never machine materials which contain asbestos.

- 4. Use only recommended carbide inserts, rated at the machine's maximum rated cutting rate or higher.
- 5. **Do not use dull or damaged** carbide inserts. Dull inserts cause excessive friction and binding and excessive load on the motor, leading to possible damage.
- **6. Important: After completing the operation,** Wait for coasting tool holder to stop rotating completely before putting the machine down.
- Maintain labels and nameplates. These carry important information. If unreadable or missing, obtain a replacement.

#### FUNCTIONAL DESCRIPTION INTENDED USE

This plate beveling and deburring tool is an electrically driven portable machine:

For machining workpieces in steel, chrome steel alloys, aluminum, aluminum alloys, brass and plastic. The machine is designed exclusively for Adding beveled edges to plates and pipes, facing off, and removing sharp corners on workpieces. The machine is equipped with an angle-adjustable and depth-adjustable support base. It comes with a tool holder for use with indexable square carbide cutter inserts to achieve quick and easy beveling.

WARNING: The machine should not be converted or modified, e.g. for any other form of use, other than as specified in these operating instructions.

The user shall be liable for damages and accidents due to incorrect use.

#### ELECTRICAL CONNECTION

The network voltage must conform to the voltage indicated on the tool name plate. Under no circumstances should the tool be used when the power supply cable is damaged. A damaged cable must be replaced immediately by an authorized Customer Service Center. Do not try to repair the damaged cable yourself. The use of damaged power cables can lead to an electric shock.

#### **EXTENSION CABLE**

If an extension cable is required, it must have a sufficient cross-section so as to prevent an excessive drop in voltage or overheating. An excessive drop in voltage reduces the output and can lead to failure of the motor. The following table shows you the correct cable diameter as a function of the cable length for this machine. Use only U.L. and CSA listed extension cables. Never use two extension cables together. Instead, use one long one.

Total Extension Cord Length (feet)	Cord Size (AWG)		
25	16		
50	12		
100	10		
150	8		
200	6		

#### UNPACKING

Carefully remove the tool and all loose items from the shipping container.

Retain all packing materials until after you have inspected and satisfactorily operated the machine.

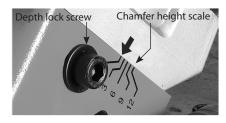
#### CARTON CONTENTS

- 1. M3 L-hex Wrench
- 2. M8 L-hex Wrench
- 3. M24 x 27 Double Open-End Wrench
- 4. M22 Open-End Wrench
- 5. M32 Open-End Wrench

#### DO NOT OPERATE THIS TOOL UNTIL YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

## SETTING THE CHAMFER HEIGHT-DISCONNECT TOOL FROM POWER SOURCE.

- 1. Loosen the 2 Depth lock screws of both sides with supplied M8 Hex. Wrench.
- Turn the Depth adjustor knob clockwise or counterclockwise to adjust to the desired chamfering height. Please refer to the scale on the side of the machine, maximum chamfering depth up to 12mm at 45 deg.
- **3.** After making sure the chamfering blades are set to the desired height, fasten the 2 Depth lock screws.



#### CHANGING THE INDEXABLE CARBIDE INSERTS - DISCONNECT TOOL FROM POWER SOURCE.

WARNING: Danger of Burns! Tool holder and carbide inserts become hot in operation. Wear gloves and take precautions to prevent burns when working with this part of the machine.

Note: indexable carbide inserts have multiple edges. When one edge is dull simply rotate to the next

sharp edge. Once all edges are dull, replace with new inserts.

NOTE: Make sure the indexable carbide inserts are installed in the correct direction, incorrect installation of indexable carbide inserts can cause the failure of chamfering or even rupture of the tool holders or the indexable carbide inserts. Please refer to the front of the machine for the rotation

direction, and install the indexable carbide inserts

accordingly.

Arrange the tool holder milling discs in a staggered orientation, in order to achieve better beveling result.

- 1. Loosen the 2 Depth lock screws and fully unscrew and remove the support deck assembly.
- 2. Use the supplied M32 combination wrench to secure the
- 3. Use the supplied 27mm x 24mm wrench to unscrew the nut in front of the tool holder and loosen the tool holder from
- 4. Rotate, remove or replace the tool holders as needed.
- Using the supplied M3 Hex wrench, loosen fixing screw and remove the carbide inserts.
- 6. Rearrange the carbide insert to the other sharp edge or insert a new one as needed.
- 7. Fasten carbide inserts.





#### INSTALLING THE MILLING DISCS

Note: There are two different lengths of Milling Receiver supplied with the machine. Use the long Milling Receiver for 0 deg. facing off and use the short Milling Receiver for other angles.

- First install the desired Milling Receiver to the spindle 1.
- 2. Add the first Milling Disc, noting the correct orientation. Since the spindle rotates in the clockwise direction when viewed from the spindle end, the cutting faces of the carbide inserts should be facing the riaht.
- Add the Intermediate Washer (with the keyway). 3.
- 4. Add the second Milling Disc, orienting it so that it is staggered 90 degrees relative to the first Milling Disc.
- Finally add the washer and nut and tighten the nut firmly. 5.

#### ADJUSTING THE BEVEL ANGLE

Loosen the two Angular Adjustment Screws using the L-hex wrench and adjust to the desired bevel angle. Then retighten the screws. Refer to the angle scale on the body of the machine. It may be necessary to readjust the depth adjustment after changing the bevel angle. (See above-"Setting the chamfer height")



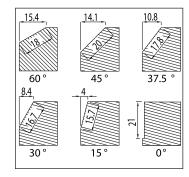
#### SWITCHING FROM PLATE BEVELING TO PIPE BEVELING MODE

The Table Plate has two possible modes. For plate beveling, keep the rollers mounted in the fixed position. (For

full plate beveling depth, the rollers may be removed)

For beveling of pipes 150 to 350mm diameter, remove the rollers and unscrew the wedge nuts from the rollers. Place the wedge nuts in the slots, put the flat washers on the rollers and first screw them in finger tight. Now match the machine to the pipe and adjust the rollers so that they are contacting the outside of the pipe. Now tighten the rollers. Every time you bevel a different sized pipe, you must readjust the rollers to match the circumference of the pipe.

When returning to plate beveling mode, screw the wedge nuts onto the rollers so that they will act as spacers.



#### **OPTIONAL LARGE PIPE BEVELING TABLE PLATE**

For even larger diameter pipes, there is an optional large pipe beveling table plate which can bevel pipes 300mm up to 600mm. Simply unbolt the four socket cap screws to remove the standard table plate and bolt on the optional table plate in its place.

## STARTING AND STOPPING TOOL

Make sure that the power circuit voltage is the same as that shown on the specification plate of the machine and that switch is "OFF" before connecting the tool to the power circuit.

# Switching the machine on and off

#### To switch on:

Press the green ON button to start.

#### To switch off:

Press the red OFF button to stop.

After the machine has been switched off, the arbor will still rotate for a time. Take care that parts of your body do not come into contact with the rotating parts or set the machine down while it is still rotating!

- Press green ON button to start motor. Use the handle to feed the machine to the desired working angle to work. Always use very light pressure when beginning the cutting.
- 2. To switch off the beveler, press the red motor OFF button.



#### **HOW TO USE THE TOOL**

- Effective control of this powerful tool requires two-handed operation at all times for maximum control
  and safety.
- Do not use this tool continuously over 30 minutes.

#### **OPERATION**

The machine must reach full speed before beveling/deburring begins.

Hold the machine keeping the table plate flat and securely to the workpiece. From the operator's
perspective, the spindle is spinning clockwise, so always operate in the direction from left to right (up

mill).

 Do not bevel too much per pass. If more depth is needed, make multiple passes until the desired bevel height is reached

# **MAINTENANCE**

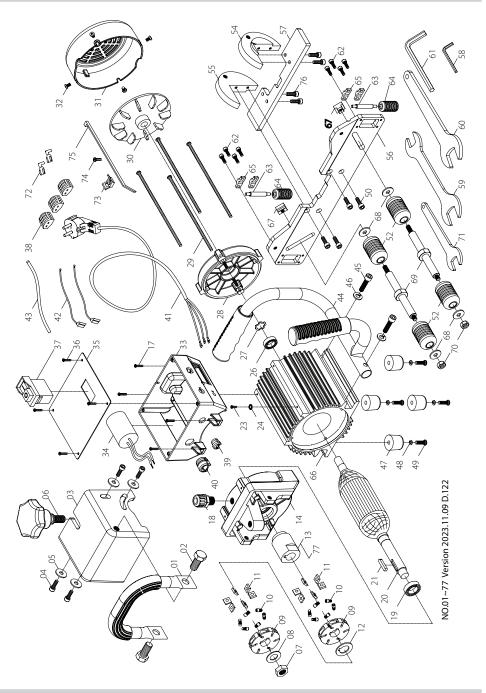
# **Keep tool clean**

Periodically blow the machine with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material. Wear safety glasses while using compressed air.

If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

**WARNING:** All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

# **EXPLODED VIEW**



# **PARTS LIST**

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	FRONT HANDLE	1	41	POWER SUPPLY CABLE	1
2	HEX BLOT (M14x25xP2.0)	2	42	WIRE LEAD (1015-16#15CM)	2
3	INNER COVER	1	43	WIRE SLEEVE (Ø6x15CM)	1
4	SOCKET CAP SCREW (M10x20xP1.5)	4	44	HANDLE	1
5	FLAT WASHER (Ø10xØ23x2)	4	45	SOCKET CAP SCREW (M8x40xP1.25)	2
6	DEPTH ADJUST NUT (M14xP2.0)	1	46	SPRING WASHER (M8)	2
7	HEX NUT (M16xP2.0)	1	47	RUBBER FOOT	4
8	DISC SPRING (Ø16.3xØ31.5x1.5)	1	48	FLAT WASHER (Ø6xØ13x1)	4
9	RECIPROCATING ROD	2	49	PANHEAD MACHINE SCREW (M6x30xP1.0)	4
10	SOCKET SET SCREW (M6x8xP1.0)	12	50	SOCKET CAP SCREW (M6-1.0 x 16)	4
11	CARBIDE MILLING INSERT	12	52	GUIDING ROLLER (Ø14xØ34x53)	4
12	SHAFT RACE (Ø20xØ35x2)	1	54	SLEWING ARM-L	1
13	SHAFT RACE (Ø20xØ40x53)	1	55	SLEWING ARM-R	1
14	BEARING PLATE	1	56	HORIZONTAL TABLE PLATE (Ø150~Ø350)/ (Ø300~Ø600)	1
17	PANHEAD MACHINE SCREW (M4x10xP0.7)	4	57	VERTICAL TABLE PLATE	1
18	CABLE GLAND	1	58	HEX KEY (M3)	1
19	BALL BEARING (6004)	1	59	WRENCH (M24/M27)	1
20	ARMATURE	1	60	COMBINATION WRENCH (M32)	1
21	PARALLEL KEY (6x6x30)	1	61	HEX KEY (M8)	1
23	PANHEAD MACHINE SCREW (M4x8xP0.7)	1	62	SOCKET CAP SCREW (M5x12xP0.8)	8
24	EXTERNAL STAR WASHER (M5)	1	63	ROLLER AXLE (Ø5xØ8x60)	2
26	BALL BEARING (6202)	1	64	GUIDING ROLLER (Ø8xØ20x40)	2
27	WAVE SPRING WASHER	1	65	AXLE SHACKLE	4
28	MOTOR END CASTING	1	66	STATOR ASSEMBLY (110V/220V)	1
29	SOCKET CAP SCREW (M5x200xP0.8)	4	67	RECIPROCATING GUIDE	2
30	FAN (14x128)	1	68	FLAT WASHER (Ø8xØ23x2)	4
31	FAN COVER	1	69	ROLLER AXLE (Ø14xØ25x147)	2
32	PANHEAD MACHINE SCREW (M5x8xP0.8)	4	70	NYLOCK NUT (M8xP1.25)	2
33	CONTROL BOX	1	71	WRENCH (M22)	1
34	CAPACITOR (110V/220V)	1	72	FEMALE SPADE TERMINAL	2
35	SWITCH PANEL	1	73	SADDLE TYPE TIE MOUNT	1
36	PANHEAD TAPPING SCREW (M4x10)	4	74	PANHEAD TAPPING SCREW (M5x8)	1
37	MOTOR SWITCH (110V/220V)	1	75	ZIP TIE (4.7x200MM)	1
38	THREE WIRE PUSH IN CONNECTOR	3	76	SOCKET CAP SCREW (M6x12xP1.0)	4
39	CABLE GLAND (SB7R-3)(6P3-4)	1	77	SHAFT RACE (Ø20xØ40x50.6)	1
40	CABLE GLAND (SB8R-3)(7P-2)	1			

# **WIRING**

