

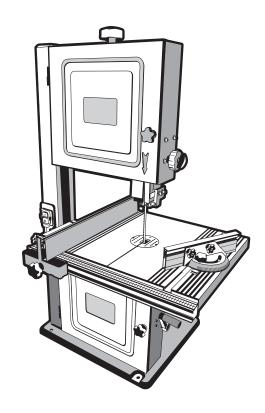
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## **KRAFTOOL HONG KONG LIMITED**

G/F, MOD595, RECLAMATION STREET, KOWLOON, HONG KONG



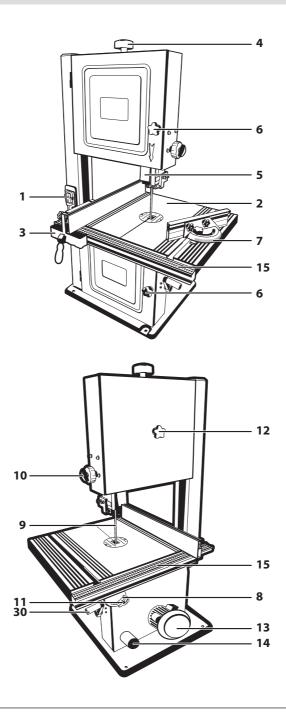


Instruction Manual

Band Saw

ZPL-350-190

ZPL-305



#### Dear customer!

When purchasing product:

 require the verification of its serviceability by trial switching-on, as well as completeness according to the delivery kit;

make sure that the warranty slip is duly executed and contains the date of sale, the stamp of the store and the seller's signature.

Before using the product for the first time, carefully read this instruction manual and strictly follow the requirements. Only in this way you will be able to learn how to handle the product correctly and avoid errors and dangerous situations. Keep this manual throughout the life of your product.

Remember! The product is a source of high traumatic danger.

## Purpose and scope

Band Saw is designed for sawing of workpieces from wood and its derivatives at various angles, along the radius, and also at an inclination.

Please read this manual carefully, including the «Safety instructions» section and the «Basic Safety Instructions» appendix. Only in this way you will be able to learn how to handle the tool correctly and avoid errors and dangerous situations.

The product is intended for short time works with medium intensity loads in areas with a moderate climate with a characteristic temperature of -10 to +40 ° C, relative air humidity of not more than 80% and the absence of direct exposure to atmospheric precipitation and excessive dustiness of the air.

This manual contains the most complete information and requirements that are necessary and sufficient for reliable, efficient and safe operation of the product.

In connection with the continuation of the work on improving the product, the manufacturer reserves

the right to introduce into its design minor changes that are not reflected in this manual and do not affect the effective and safe operation of the product.

#### ATTENTION

Do any work with the saw blade in gloves.

Some parts of the product are heated during operation. Do not touch them immediately after work is finished and until it cools down completely.

Application of the product in industrial volumes, in conditions of high intensity of work and superheavy loads, reduces its service life.

## **Specification**

Model	ZPL-350-190	ZPL-305	
Continuous rating Input, W	350	750	
Rating Voltage	220V±10% / 50Hz		
Blade speed, m/s	14,7	6,3 / 13,2	
Thickness cutting capacity, mm	80	170	
Width cutting capacity, mm	190	305	
Blade:			
▶ length, mm	1425	2320	
▶ width, mm	8	12,7	
▶ thickness, mm	0,35	0,4	
▶ teeth, quantity/inch (TPI)	12	4	
Minimum cutting radius, mm	20	35	
Table tilt angle, degrees	0-45		
Table size, mm	290x290	495x390	
Dust extraction sleeve diameter, mm	40	40 / 70	
Sound power, (k=1.5), dB	103	98	
Sound pressure, dB	90	85	
RMS vibration acceleration, (k=1.5), w/c <sup>2</sup>	-	-	
Safety level	l level		
Net weight, kg	28,3	59	
Service life, years	5		

Delivery Set			
Band saw	1 pc		
Service table	1 pc		
Table tightening handle with washer	1 pc		
Longitudinal guide rail	1 pc		
Angle detent (protractor)	1 pc		
Pusher	1 pc	-	
Hex key	3 pcs	5 pcs	
Ruler	-	2 pcs	
Переходник патрубка пылеотводного	-	1 pc	
Safety Instruction	1 pc		
Instruction Manual	1 pc		

## ATTENTION

Ensure that there is no visible mechanical damage on the product and accessories that may have occurred during transportation.

## Operating Instruction

## Components

- 1 Switch
- 2 Work table
- 3 Longitudinal guide
- 4 Screw of the blade tension
- 5 Limiter of blade
- 6 Fixing screw of cover
- 7 Angle detent (protractor)
- 8 Table bracket with a tilt pointer
- 9 Jigsaw blade
- 10 Regulator of blade limiter
- 11 Table lock handle
- 12 Screw of wheel adjustment
- 13 Engine
- 14 Dust-removing socket
- 15 Table ruler
- 16 Adjusting screw
- 17 Tightened screw
- 18 Bracket of Guide rail
- 19 Locking Handle
- 20 Guide rail
- 21 Leading pulley
- 22 Driving Belt
- 23 Lower wheel (slave)
- 24 Limiting pin
- 25 Fixing screw
- 26 Adjusting screw
- 27 Detent Bearing
- 28 Fixing Screw
- 29 Locking Screw
- 30 Handle of lower wheel adjustment (for ZPL-305 only)

## **Assembly**

#### ATTENTION

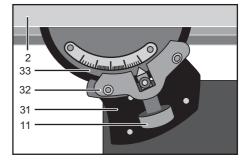
All works related to the assembly, adjustment and replacement, should be done with electrically disconnected product.

Install the product on a flat horizontal surface.

▶ Note! To avoid injury and damage of the

workpiece or the product there is HIGHLY recommended that you anchor the base on the support surface.

- How to install the work table:
- Set the table 2 with a bracket 33 on the base bracket 31 by passing the blade through the table slot:
- Fix the special washer with the pin of the handle 11 and lock the table by tightening of the handle;
- set the bar 32 (for ZPL-305;

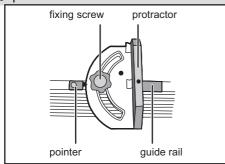


## for ZPL-305:

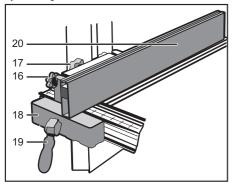
- Set the table ruler 15 (two pcs) on the front edge of the table and fix these two pcs with fly screws on the underside of the table.
- Check and adjust (if necessary) the horizontal position of the table:
- Loosen the fixing of table tilt by loosening the fixing screw of bracket 8;
- Set the angle of the table so that it rests upon the limiter (table below);
- using setsquare, check the perpendicularity of a blade and table surface. If adjustment is required, loosen the locknut of the limiter and adjust the perpendicularity using limiting pin. Tighten the locknut.

Set Longitudinal guide and Angle detent:

 Set Angle detent 7, by inserting the detent's quide into the appropriate slot of the table;

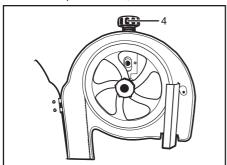


For ZPL-350-190: set guide 3 on the table and fix it by lowering the handle 19.



There is set standard sawing blade for wood on your product. To replace it (for the corresponding job or for a new one in case of wearout):

 Remove the screws 6 of a fastening of the cover and open the cover;



- Loosen the belt tension by turning of the screw 4 counterclockwise and moving the upper drive wheel down to the stop or tapping on the screw by hand down to the stop;
- remove the blade from the upper and lower

wheels and pull it out through the slot of the table;

#### ATTIENTION

To avoid injury and damages STRONGLY recommend that you contact with saw blade wearing in gloves.

 install a new blade in reverse order so that the blade teeth are downward. Adjust the position of the blade strictly on the center of wheels;

Note! New blade is unstretched and may not be put on wheels. For ease of installation put a blade on the lower wheel, pull it, as far as possible, on the upper wheel and, by turning of the wheel, get full installation of the blade. This method is also convenient to adjust a centering of blade.

by rotating of the screw 4 clockwise, do the blade tension according to the section Getting Started.

Check and, if necessary, adjust an alignment of the planes of upper and lower wheels:

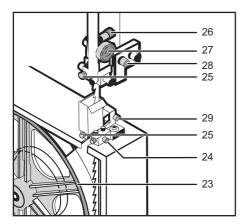
- turn the upper wheel clockwise for several turns and check a disalignment of blade from the center of the wheel:
- ▶ if the blade dislocated to the front of the machine, you should get an unavailability of disalignment by rotation of the screw 12 clockwise. Here again adjust the position of the blade in the center:
- if the blade dislocated to the rear of the machine, an adjustment should be performed by rotating the screw 12 counterclockwise;
- check the position of the blade on the lower wheel. If necessary, adjust the position of the blade by the center of the wheel;
- by the rotation of the upper wheel for some turns, be sure in an unavailability of disalignment from the center position. If necessary, repeat the adjustment;
- close the machine cover and tighten the screws 6.

A list of the respective blades can be found on page 12.

To avoid vibrations of the saw blade and poor cutting results during working operation, adjust the limiters (upper limiter 5 and bottom limiter):

**Note!** Adjust the limiters after the blade tension only. Adjustment is described on the example of ZPL-305. For ZPL-350-190 all operations are similar.

a) Adjustment of the upper limiter:



provide a safety detent of a blade by a bearing 27 in avoid of its disalignment under pressure of the workpiece. To do this, rotate the adjusting screw 26 and adjust the clearance between the bearing and the rear edge of the blade is equal to 0.7-1mm. Tighten the locking screw;

**Note!** To prevent premature run-out of the bearing, the bearing must not be pressed against the blade.

- provide a limit of blade vibrations by releasing (use a hex key) of fixing screws 25 and adjusting the position of the pins 24 in the vicinity of the blade (without its touching). Tighten the screws;
- закройте крышку изделия и заверните винты 6.
- b) Adjustment of the lower limiter:
- loosen the fixing screws 6 of the cover and open it. Limiter is under work table;
- provide a safety detent of a blade by a bearing in avoid of its disalignment under pressure of the workpiece. To do this, loosen the locking screw 29 and adjust the clearance between the bearing and the blade is equal to 0.7-1mm. Tighten the locking screw;
- the setting of the lower limiter's pins is similar as for upper pins.

## **Getting Started**

Check the tension of the blade. The properly tensioned blade should NOT slip on the drive wheels. If necessary, you can increase the tension of the blade by rotating of the screw 4 clockwise.

Based on the workpiece and the nature of the work:

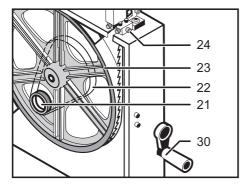
a) Adjust the position of the upper limiter 5:

- ▶ loosen the screw of the regulator 10;
- adjust the position of the lowest point of the limiter at a height of 2-3 sm from the top of the workpiece by rotating of the fly screw (for ZPL-305) or manually (for ZPL-350-190), depending on the thickness of the workpiece;
- tighten the screw of the regulator 10.
- b) Adjust the position of the longitudinal guide **3**:
- lift the locking handle 19 of the guide;
- set the edge of guide according to the saw off width of the workpiece;
- lock the guide.

**Note!** To avoid uneven cutting, as well as damage (due to bending and twisting) of the saw blade, always use the longitudinal guide when cutting.

- c) If necessary an oblique cutting of workpiece, set the angle detent at the desired angle.
- d) If necessary to cut the workpiece with any angle up to 45°, to set the angle of the table:
- loosen the fixing of table tilt by the handle 11;
- set the desired angle of cutting with a tilt pointer of the table bracket 8;
- ▶ lock the table tilt by the handle 11.
- e) Check the tension of the driving belt 22 (only for ZPL-305). Well tensioned belt means that when you press on it at the center between the pulleys, the deflection should not exceed 1sm. Otherwise, adjust the belt tension by the rotation of the handle 30.
- f) Check (only for ZPL-305) an adjusted speed of blade. It should match to the workpiece material and to the upcoming kind of the work. To do this:
- remove the fastening screws 6 of the lower cover and open the cover;
- check the position of the belt 22 on the pulleys and determine the current speed:
  - the belt on a front pair of pulleys higher speed of movement of the blade;
  - the belt on a rear pair of pulleys lower speed of movement of the blade.

If necessary, you can set the speed that you need:



- ▶ loosen the belt tension by rotating the handle 30.
- remove the belt and install it on the other pair of pulleys;
- tighten the belt in accordance with Section ASSEMBLY, by rotation of the handle 30 in the opposite direction;
- close the product cover and tighten the screws 6.

To reduce the amount of dust when working, we recommend to connect a vacuum cleaner (not included) to the dust-removing socket 14. Socket diameter is 40 mm (for ZPL-305 - 40/70 mm). You may need an adapter (not included).

Prepare for your work:

- make sure that the saw blade is on the wheels, correctly installed and strained;
- remove all keys and not necessary objects away from the rotating parts of the machine and from the working area;
- make sure that the workpiece has no metal objects (nails, screws and so on).

## Operating procedure

Connect the product to the power.

#### ATTIENTION

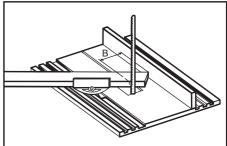
The machine complies with the level I of protection against electric shock, i.e. it must be grounded (for that ground contacts are provided in the plug). Do not modify the plug by yourself if it does not fit into your socket. Let a qualified electrician install the proper plug.

Switching-on is enable by press on the button «I» of switch  ${\bf 1}$ .

Note! The type of the switch is electromagnetic. If the power supply will disappear and then subsequently appears, the product will not turn on by its own. In this case press the button «I» again to activate the product.

Put one the edge of the workpiece on the table, press it to the guide (with the adjusted cutting width) and start feeding the workpiece toward the blade.

If necessary to make oblique sawing, press the workpiece against the detent 7. For feeding of the workpiece use the sliding detent.



#### ATTENTION

During the cutting always FIRMLY hold the workpiece by both hands.

When operating the machine, follow for the motor speed. The drop of speed by 20% or more indicates an overload. In this case it is necessary to reduce the feeding speed of the workpiece.

When finished, turn off the machine by pressing of button «0». Unplug the machine from the power.

Carefully remove all residua from the table and from under the cover.

## **Periodic inspection**

During the operation life, the followings are periodically required (as needed):

- a) Replacement of blade;
- b) Inspection of tension of blade:
- c) Adjustment of blade limiters;

For performing the above, refer to the ASSEMBLY section.

- d) Adjusting of the angle pointer of the table:
- turn off the product and unplug it out of the power;
- loosen the table tilt angle lock by releasing of handle 11:
- using a setsquare (not included), set the right angle between the plane of the blade and the surface of the table:
- check a position of a bracket pointer 8. If the position is not zero, release the pointer fixing screw, adjust its position, tighten the screw.
- e) Adjusting of the longitudinal guide rail:
- using a setsquare (not included), check the angle between the plane of the guide and the edge of the table. If the angle is not a right angle, release the two screws at the top of the plane of the guide and adjust the angle of the guide.
- tighten the screws.

f) Adjusting of the angle detent pointer:

- loosen the fixing screw of the detent;
- with the help of a setsquare, set the right angle between the plane of the detent and the guide groove;
- check whether protractor's index is 90° or not. If not, release the fixing screw of the pointer - adjust its position - tighten the screw.
- g) Cleaning of the coating of driving wheels. To clean the coating from dirt, use a hard-wearing brush. DO NOT use solvents or other chemicals for cleaning.

# **Operating Instructions**

Make sure that the voltage of your power supply corresponds to the rated voltage of the product.

Connect the product to the power when you are ready to work only.

Before using the product for the first time, turn it on without any load and let it run for 10-20 seconds. If at this time you hear a strange noise, feel an increased vibration or the smell of burning, turn off the product, disconnect the power cord from the power and find

out the cause of this phenomenon. Do not operate the product before the cause of the malfunction is found and rectified.

Provide good lighting, ventilation (or connect a vacuum cleaner to the product - dust is generated in large quantities during the sawing process) and workplace order - insufficient lighting and foreign objects can lead to damage and injuries.

To avoid accidents, each time before turning on the product, make sure that:

- the saw blade is correctly installed and tensed;
- wheels and limiters are adjusted;
- You removed all hand tools and foreign objects out of therotatingpartsoftheproductandoutoftheworkarea;
- there are no metal objects (nails, screws, etc.) in the workpiece.

For electrical safety, the product corresponds to the 1st class of protection against electric shock, i.e. it must be grounded (grounding contacts are provided for this purpose). Do not modify the plug yourself if it does not fit into your socket. Instead, a qualified electrician must install a suitable plug.

The product is designed **ONLY** for sawing wood products and derived materials (plywood, chipboard, fiberboard, MDF), as well as laminated panels and various types of plastic.

**DO NOT** cut other materials (metal, ceramics, stone), and also do not install a different interchangeable tool (of other types, with dimensions different from those indicated in the characteristics, damaged - with worn teeth, cracks, twisted).

For your work we recommend to use a replaceable tool of the «3Y6P» brand.

To avoid injury, do not place your hands in the sawing area.

**DO NOT** saw the workpieces (especially long ones, with uneven surfaces), just holding them with your hands. **ALWAYS** use the longitudinal guide rail.

Always FIRMLY hold the workpiece.

#### DO NOT ever saw:

- rounded workpieces;
- workpieces that are so small that you can not hold them;
- several workpieces simultaneously.

Do not apply excessive force when working with the product. This will not speed up the sawing process, but will only reduce the quality of work and shorten the life of the product.

Watch the condition of the blade. At the increased runout of a blade (it is shown in the complicated sawing, fluctuations at insufficient tension and a curvature at an overheat) replace it with a new one. To replace the blade, follow the steps in the ASSEMBLY section.

To avoid overheating, take sufficient pauses in the work to cool the product.

When working without connecting a vacuum cleaner, it is recommended to take pauses in the work more frequently, to clean the inner surface under the cover of the product.

If the blade is jammed, immediately turn off the product with the «0» button of the switch. Check the workpiece for the presence of metal objects, as well as the condition and tension of the blade and, if necessary, replace it (see ASSEMBLY section). Continue working only after installing and eliminating the cause of jamming.

Unplug the product immediately after use.

Turn off the product only with the «0» button of the switch. Do not turn it off just by unplugging the cable from the power supply (removing the plug from the socket).

Periodically clean the frame, cable and ventilation holes from dirt and dust.

All maintenance works must be carried out with the cable disconnected from the power grid.

The product does not require any other special maintenance.

All repair work should be carried out only by specialists of service centers.

Watch for good condition of the product. In case of appearance of suspicious smells, smoke, fire, sparks - turn off the product, disconnect it from the power supply and contact a specialized service center.

If something seems to you abnormal in the work of the product, immediately stop using it.

Due to the technical complexity of the product, the limit state criteria can not be determined by the user independently. In case of an obvious or suspected malfunction, refer to the section «Possible malfunctions and methods of their elimination». If there is no fault description in the list or you could not solve it, contact a specialized service center.

Conclusion on the limit state of the product or its parts the service center issues in the form of the relevant Act

# **Safety Instructions**

Before using the product, make sure that there is no visible mechanical damages to the product itself, the cable and the sawing blade. Do not use the product with visible mechanical damage.

All work on the assembly, adjustment and replacement of elements is performed only if the product is disconnected from the power supply.

To avoid accidents, each time before turning on the product, make sure that You removed all hand tools and foreign objects out of the rotating parts of the product and out of the work area.

For electrical safety, the product corresponds to the 1st class of protection against electric shock, i.e. it must be grounded (grounding contacts are provided for this purpose). Do not modify the plug yourself if it does not fit into your socket. Instead, a qualified electrician must install a suitable plug.

During operation, the blade is very hot - do not touch it immediately after work is finished and until it cools down completely.

To avoid injury and damage, we recommend that you work with a saw blade in gloves.

# Conditions for transportation, storage and disposal

Keep the product in a safe, dry and out of reach of children place.

Store and transport the product in box or cabinet.

The end of life product, additional accessories and packaging should be recycled in an environmentally friendly manner.

Band Saw | 11

# **Warranty Liabilities**

We constantly care about improving the quality of service for our customers, therefore, if you have any complaints about the quality, please report this to 3Y6P support by e-mail at cs@kraftool.hk.

This guarantee neither limit the buyer's right to claim, nor limit the legitimate rights of consumers.

We provide a guarantee for 3Y6P tools on the following conditions:

- 1) The warranty is provided by free elimination of the tool's defects within the established warranty period, which is proved to be caused by defects in material or workmanship.
- 2) The warranty period starts from the date of purchase of the tool by the first owner.

The warranty period is **12 months** from the date of sale, only with unconditionally household use of the tool for personal needs.

The warranty period is **6 months** from the date of sale when using the tool for work related to professional activity under conditions of moderate intensity, with the exception of industrial work under conditions of high intensity and superheavy loads.

- 3) The guarantee does not cover:
  - a) parts that are subjects to work and other types of natural run-out, as well as tool failures caused by this type of run-out
  - b) Malfunctions caused by non-observance of the operating instructions or malfunctions by resulting of the use of the tool for other purposes, during use in abnormal environmental conditions, inappropriate operating conditions, due to overloads or insufficient, inadequate maintenance or care. Unconditional signs of product overload include, among others: the appearance of tarnishing colors, the simultaneous failure of the rotor and stator, the deformation or fusion of the parts and components of the product, the darkening or charring of the electric motor wires under the influence of high temperature.
  - When using the product in conditions of high work intensity and superheavy loads

- **d)** For maintenance of the tool, for example: lubrication, washing
- e) Malfunctions of the tool due to the use of accessories and spare parts that are not original accessories / parts of «3Y6P»
- f) For mechanical damages (cracks, chips, etc.) and damages caused by an influence of corrosive environment, high humidity and high temperatures, foreign objects entering the ventilation orifices of power tools, as well as damages caused by improper storage and corrosion of metal parts
- g) Accessories, fast run-out parts and consumables that fail due to normal run-out, such as: drive belts, batteries, guiding rollers, safety covers, collets, cartridges, soles, saw chains, saw blades, sprockets, tires, carbon brushes, knives, saws, abrasives, drills, borax, trimmer line etc.
- h) The tool, in the construction of which were made changes or additions
- j) Minor deviation from the declared properties of the instrument, not affecting its value and the possibility of using it for its intended purpose
- 4) Elimination of malfunctions admitted as a guarantee case is carried out at Kraftool company's choice by repairing or replacing the faulty instrument with a new one (possibly the next generation model). Replaced tools and parts become the property of the company.
- 5) Warranty claims are accepted during the warranty period. To claim the warranty case: show or send the faulty instrument to the service center specified in the Instruction manual or 3Y6P business card, enclosing the receipt (the bill) confirming the date of purchase and its name.

The tool, sent to the dealer or to the service center in partially or completely disassembled form, does not cover by the warranty. All risks associated with the transfer of the instrument to the dealer or the service center are borne by the owner of the tool.

- 6) Other claims, other than the mentioned right to free removal of the shortcomings of the instrument, do not fall within the scope of the warranty.
- 7) The service life of the product is 5 years.

## POSSIBLE MALFUNCTIONS AND METHODS OF THEIR ELIMINATION

Possible malfunction	Possible reason	Action to eliminate	
	No mains voltage	Check the mains voltage	
The product does not turn on	Defective switch, motor or other component	Contact the service center for repair or replacement	
	Jamming of a blade or mechanism	Release the blade, adjust the tension (see Assembly section), clean the wheel cover or contact the service center for repair	
	Low mains voltage	Check the mains voltage	
The product turns on, but does not work	Burned winding or break in the motor winding	Contact the service center for repair	
at full power	Defective switch, motor or other component	Contact the service center for repair or replacement	
	Jamming or slipping of the blade	Replace the saw blade (see Assembly section)	
	The mains voltage was lost	Check the mains voltage	
The product or the blade stopped during operation	Jamming, slippage or breakage of the blade	Adjust the blade tension or clean the wheel cover. Adjust the blade limiters (see Getting Started section)	
	Defective switch, motor or other component	Contact the service center for repair	
	The saw blade is blunted or damaged (curved, lost teeth, cracks)	Replace the blade (see Assembly section)	
Unsatisfactory sawing result	The blade slips on wheels	Adjust the position of the blade (see Assembly section)	
	Increased swinging of the blade	Contact the service center for repair	
	Insufficient motor power or speed (see malfunction 2 above)	Perform actions on malfunction 2	
	Intensive operation mode, work with maximum load	Change the operating mode, reduce the load	
The product overheats	High ambient temperature, poor ventilation, blocked ventilation orifices	Take measures to reduce temperature, improve ventilation, clean ventilation orifices	
	Lack of lubrication, wedging in the mechanism	Contact the service center for repair	
	Burned winding or break in the motor winding	Contact the service center for repair	

## **SAWING BLADES**

Band Saw Article	Blade Article	Name	Features
ZPL-350-190	155810-190-2	Band Saw 3Y6P	L-1425mm, H-8,0mm, teeth pitch-2mm (12TPI), carbon steel-65
ZPL-350-190	155810-190-4	Band Saw 3Y6P	L-1425mm, H-8,0mm, teeth pitch-4mm (6TPI), carbon steel-65
ZPL-305	155815-305-2	Band Saw 3Y6P	L-2320mm, H-12,7mm, teeth pitch-4mm (8TPI), carbon steel-65
ZPL-305	155815-305-4	Band Saw 3Y6P	L-2320mm, H-12,7мм, teeth pitch-6мм (4TPI), carbon steel-65

| 13 Notes

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Customer Signature			

14 Notes

Shop 3, G/F, MOD 595, Reclamation street, Kowloon, Hong Kong www.kraftool.hk cs@kraftool.hk 3184-0265, 3184-0368