

Manual Dresser (New-ETD)

Instruction Manual

Please read this manual before using KYOKUTOH'S manual dresser (New-ETD)





REVISION

Revision history

Version	Date	Contents
First edition	06.23.2011	First edition issue
Revised edition	03.05.2019	Change Contacts page Change of address in China
Revised edition	May.2019	Format change

ATTENTION TO SAFETY

Please be sure to read ATTENTION TO SAFETY before using New-ETD

FEATURES

This manual dresser "New-ETD" is intended for reshaping deformed tip spot face due to resistance welding in manufacturing line. This product is not to be used in any manner other than that which is specified within. We will not be held responsible for damage or injury caused as a result of misuse of this product.

SYMBOLES

This following symbols "Warning" and "Caution", are used indicate possible hazards and to prevent their occurrence.

A Warning	Be careful to follow directions as specified, as an error could lead to possible injury or death.
A Caution	Be careful to follow direction as specified, as an error could lead to malfunction and serious damage.

The following symbols are explained below.

\bigcirc	This symbol indicates operations that should not be done.
()	This symbol indicates operation that should be done.

%After reading, please the manual to the place where you can check the manual.

<u>^</u> v	/arning
Absolutely never disassemble or reconfigure this machine or its parts.	Do not insert a finger or hand into gear opening while in operation.
\circ This could result in operation malfunction,	
ignition, or injury.	\circ It may get caught and cause serious injury.
Ware light dresses and do up a cuff and tie so that they won't be sucked in rotating part	Stop air supply before "exchange parts" or "maintenance".
 It may get caught and cause serious injury. 	\circ This could result in serious injury.
Stop air supply for installation or uninstallation of air pipe.	Do not use acidic or chlorine detergents for maintenance purposes.
and a second second particular second s	 Poisonous gas may be generated from the
\circ This will result in serious injury.	detergents, causing a possible health risk.
Remove alcohol or thinner properly after maintenance.	Do not operate a dresser near dangerous objects which catch fire, for instance gasoline, gas, paintand adhesive.
\circ The flying sparks can cause fires or	• Chips splash on highly flammable
explosion.	substances may cause fire.
Please consider safe location for peripheral equipment when you work in manufacturing line.	For your safety, please use an eye shield, a hard hat, an earplug, an antidust mask, and safety shoes.
$\circ \mbox{Follow}$ the factory rules. This will result in	$\circ \ensuremath{Follow}$ the factory rules. This will result in
serious injury.	serious injury.

	Caution		
\bigcirc	Please always stabilize a step and work with	\bigcirc	Please do not bring a dresser closer than
	the right posture. Working with unstable		other worker. Worker's legs may get stuck
	postur is dengerous.		with hose or hit tools.
\circ This could result in injury.		∘ Thi	s could result in injury.

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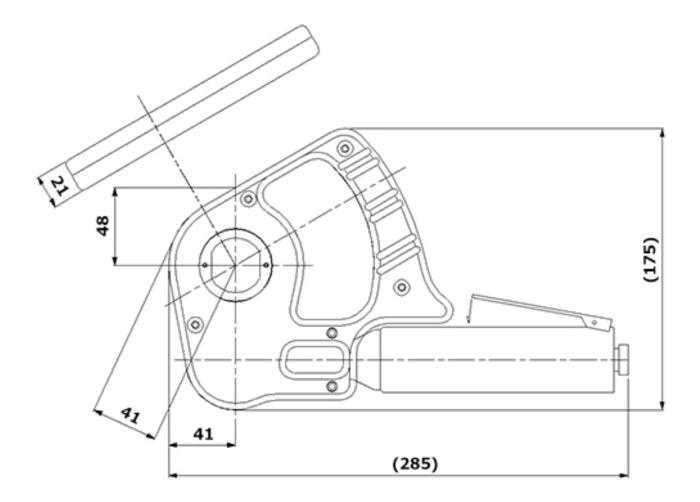
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1. Product Description

Specification

Power	Air Pressure (0.5MPa \sim 0.68MPa)
Minimum Hose Diameter	Ф8
Fitting Size	PT – 1/4
Weight	2.3kg

Exterior Dimension



Feature

 Cutter and holder for simultaneous dressing upper and lower (Different from the conventional shape "KTW - ** and KTWH - **".) Cutter : ETD - ** Holder : ETDH - **

(Ex.) In the case of φ16 - 6 - 8R • • •
Cutter : ETD - 12
Holder : ETDH - 12

Corresponding gun pressure up to 220 kgf

(Use "one side dressing cutter and case" for pressure over 220kgf.)

 Pressureless (One side dressing) cutter and case (Different from the conventional shape "KM - **".) Cutter : ETDS - ** Case : ETDSH - **

(Ex.) In the case of φ16 - 6 - 8R • • •
Cutter : ETDS - 12
Case : ETDSH - 12

2. Precaution

- 1. Use air hose of enough thickness (more $\phi 8$ inside diamater).
- Use this product with air pressure 0.5Mpa~0.68Mpa.
 It may cause a problem if higher air pressure will be used.
 If less, poor performance.
- Please supply clean and dry air for maintenance.
 Using air 3 items (Filter, Regulater and lubricator) are recommended.
- 4. Refuel periodically, following "8. Maintenance".
- 5. Before using, be sure that electrodes and cutter shapes are correct.
- 6. Please make sure electric currency is disconnected during gun pressure.
- 7. Be sure that the gun pressure is in the range of setting value.
- 8. Please check cutter and holders are fixed in New-ETD properly.
- Do not through, drop,or give great shock to this machine.
 This could cause trouble and accident.
- 10. Using the hand dresser without presssure for a prolonged time could cause the dressers abrasion or other damage.
- 11. After completing the job, please disconnect air hose.

3. How to Use

Cutter and holder for simultaneous dressing upper and lower

Timing Chart

ETD type cutter (Only clockwise rotation)

Gun Pressure	ON	Arbitrary
	OFF	
Dresser	ON	
Rotation	OFF	

Procedure

- ① Start motor to clockwise before gun press.
- 2 Please set pressure time(Dressing time) arbitrarily.
- ③ To finish dressing, release the gun pressure while dresser is removing.
- Before operating, make sure that the forms of the cutter and tips are fitting. The hand dresser and tip face become vertical during pressure time.
- Set the press power 1470[N] ~ 2450[N] (150kgf~220kgf).
- In order to remove chip from cap tip face after dressing, open a gun arm and press hand dresser upper and lower cap tips.

Pressureless (One side dressing) cutter and case

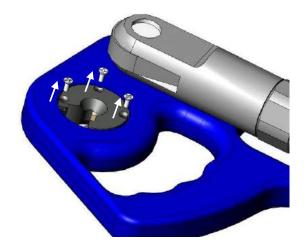
Procedure

- ① Press hand dresser on cap tips.
- ② Rotate the hand dresser.
- Before starting above operation, make sure that the forms the cutter and tip are fitting.
- Please do not pressurize the hand dresser. The cutter and cutter case can be broken.
- Pressurize hand dresser vertically on cap tips.

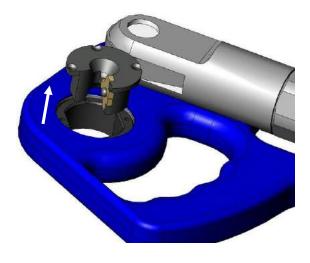
4. How to Change Cutter

Cutter and holder for simultaneous dressing upper and lower

1. Remove M3 screw from the cutter holder.



2. Remove the cutter holder from the dresser.



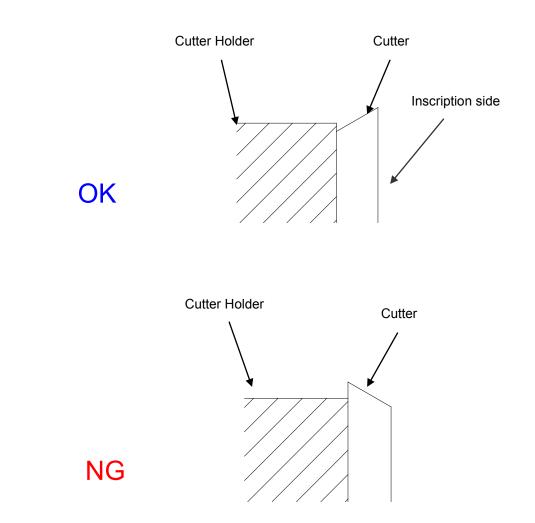
 To remove the cutter from the cutter holder, loosen the M3 torque screw. (With a torque wrench T-10)



4. Replace a new cutter.

Confirm cutter is replaced in the proper direction.

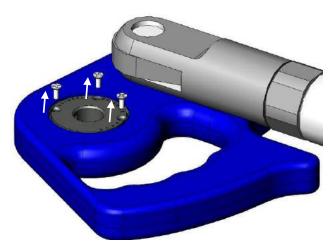
Please install the angle narrows on the side where touches the holder (Inscription side). (Recommended torque for M3 screw is to 10~12Kgf • cm)



5. To install the cutter holder to the dresser. Please do the reverse order from 1 to 2.

Pressureless (One side dressing) cutter and case

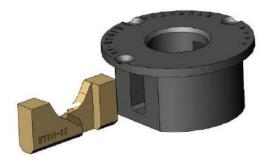
1. Remove M3 screw from the cutter case.



2. Remove the cutter case from the dresser.

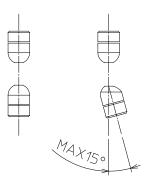


3. Remove the cutter case from the dresser.

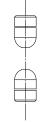


4. Do the reverse order from 1 to 3.

5. Procedure for the Selection Cutter



Cutter and holder for simultaneous dressing upper and lower			
Upper	Lower	Cutter	Holder
Ф6×R8	Ф6×R8	ETD - 12	ETDH - 12



Pressureless (One side dressing) cutter and case			
Upper	Lower	Cutter	Case
Ф6×R8	Ф6×R8	ETDS - 12	ETDSH - 16

%Please inquire us for the other tip spot shape.

6. Troubleshooting

Abnormal Condiction	Cause and Countermeasure
	* The regulation air pressure is not secured.
	\rightarrow Check the air pressure.
	 The Gun pressure is higher than specified by our company. (Simultaneous dressing)
	\rightarrow Set the pressure under2,450 N (220Kgf).
Dresser does not rotate.	 Motor is broken. → Need repair to replace the motor.
	* The shapes of the cutter and the cap tip are not fitting, and cling each other.
	\rightarrow Check the cutter shape and replace it if necessary.
The motor is running, but the	* Gear in the gear box is broken.
cutter does not rotate.	\rightarrow Need repair to replace the gear.
	 ★ Dressing time is too short. → Set the dressing time longer.
	 The cutting capability of the cutter has deteriorated or the cutter has been damaged.
	\rightarrow Replace the cutter and check the gun pressure.
	* Dressing point is not proper.
The diameter of the dress cap tip is different from the setting.	\rightarrow Pressurize hand dresser vertically on cap tips for dressing.
up to different from the octaing.	* The cutter is not suitable for the cap tip.
	\rightarrow Check the cutter shape and replace it if necessary.
	* Gear in gear box is broken.
	\rightarrow Need repair to replace the gear.
	 ★ The screw which fastens the cutter to the holder os loosen. → Tight the screw.
Abnormal sound during dressing	 * Dressing point is not proper. → Pressurize hand dresser vertically on cap tips for dressing. * The cutter has been damaged.
	\rightarrow Replace the cutter and check the gun pressure.

Abnormal Condision	Case and Countermeasure
	* Wrong control approach
	ightarrow Open the gun arm while the dresser is operating and stop using
	the dresser. (For using simultaneous dressing)
	 The shaps of the cap tips and the cutter are not matched.
The cap tip face has barr after dressing.	\rightarrow Check the cutter shape and replace it if necessary.
	* Cutter has been damaged.
	\rightarrow Replace the cutter, or check the gun pressure.
	* The screw which fastens the cutter to the holder os loosen.
	\rightarrow Tighten the screw.
The tip diatemer is not at the	* Dressing point is not proper.
center or the desinated location.	ightarrow Pressurize hand dresser vertically on cap tips for dressing.
	* The cutting capability of the cutter has deteriorated or the cutter
	has been damaged.
Dressing does not complete in the set time.	\rightarrow Replace the cutter and check the gun pressure.
	* Holder has been consumed.
	\rightarrow Replace the holder.
(Remarks)	

When the dresser is out of order, please contact us immediately. Do not take the dresser apart.
 It would not be able to repair if you disassemble it.

7. Consumption Parts List

Cutter and holder for simultaneous dressing upper and lower

	*	Cutter
		Parts Number:ETD - **
		Replacement Qty 1pc
	*	Replacing cycle(In case of a using the gun with
		150kgf \sim 200kgf pressurization)
		10,000 times when 3 sec./1 dress
	*	Cutter Holder
		Parts Number:ETDH - **
		Replacement Qty 1pc
	*	Replacing cycle(In case of a using the gun with
		150kgf \sim 200kgf pressurization)
		30,000 times when 3 sec./1 dress

Pressureless (One side dressing) cutter and case

	*	Cutter
		Parts Number:ETDS - **
		Replacement Qty 1pc
ETDS-12	*	Replacing cycle
		10,000 times when 3 sec./1 dress
E a a a a a a a a a a a a a a a a a a a	*	Cutter Case
		Parts Number:ETDSH - **
		Replacement Qty 1pc
	*	Replacing cycle
		30,000 times when 3 sec./1 dress

8. Maintenance

Maintenance place	How to maintenance
Supply oil to air motor	Every time before you use a manual hand dresser, please pour oil from air inlet (#60 spindle oil) 0.5cc and operate hand dresser without pressure for 3~5 sec to blends thoroughly.

<u>MEMO</u>

Contacts

Contact us if there is any damage or machine defects in our products.



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