DFD6750 Tier 2

(Rev. 1.00L)

Trainee		Period	
Company		Trainer	

		, <u></u>	Original Material	Sign-off		
Module	Material	Chapter	Title	Date	Trainee	Trainer
Day 1						
1. Safety Information	· · · · · · · · · · · · · · · · · · ·		<i>p</i>	,	,	
			General Safety Precautions			
1.1. Interpret General Safety Precautions	SAF	-	1-1. Precautions on Safe Use of this Machine			
,			1-2. Precautions on Safe Hoisting, Transfer and Installation of this Machine			
			1-3. Precautions on Safe Operation and Maintenance of this Machine			
			Inherently Hazardous Areas and Ways to AvoidHazards			
1.2. Interpret Potentially Hazardous Areas	SAF	-	2-1. Inherently Hazardous Operation Areas and Ways to Avoid the Area-specific Hazards			
and Ways to Avoid the Hazards			2.2. Inherently Hazardous Maintenance Areas and Ways to Avoid the Area-specific Hazards			
4.2. Interment the EMO Switch	045		2-3.Mounting the Protective Cover			
1.3. Interpret the EMO Switch	SAF		3. EMO Switch			
			4. Power Circuit Breaker			
1.4. Interpret Power Circuit Breaker SAI	SAF	-	4-1. About the Power Circuit Breaker			
			4-2. Electrical Ratings of the Power Circuit Breaker			
			4-3. Circuit Breaker Lever Lockout			
1.5. Interpret the Interlock Mechanism			5. Interlock Mechanism			
	SAF	-	5-1. Positions and Functions of Interlock Devices			
			5-2. Interlock Mechanism of the Cut Covers			
			5-3. How to Release the Lock Cylinders			
1.6. Interpret the Safety Labels	SAF		5-4. Interlock List 6. Safety Labels			
2. Machine Components and Functions	- OAI	I	o. Salety Labels			
Machine Components and Functions	:	:	Machine Outer Cover			
			2. Axis Section			
			2-1. Axis Arrangement 2-2. X-axis Section			
		1	2-3. Y (Y1 and Y2)-axis Section			
			2-4. Z (Z1 and Z2)-axis Section			
			2-5. 0-axis Section			
lata and Marking Orange and		A	2-6. Microscope (Microscope 1, 2) Section			
2.1. Interpret Machine Components and Functions	MNT		2-7. Spindle-axis (Spindle 1, Spindle 2) Section			
i dilctions			3. Main Body Section			
			4. Detection Function			
			4-1. Personnel Protection			
			4-1-1. Safety Switch/Lock Cylinder of the Cut Cover			
			4-1-2. Transmission Sensor 4-2. Machine Protection			
			4-2-1. Air Pressure Sensor			
			4-2-2. Flow Rate Sensor			
			4-2-3. Pressure Sensor for Clean Air/Vacuum/Deionized Water			
3. Data Maintenance	i	i	4-2-0. Pleasure Genson for Clean Air/Vacuum/Delonized Water			
, Data Maintenance	:		1-5. Device Data Operation Screens			
			1-5-1. DEVICE DATA LIST Screen [3.0]			
			1-5-2. Entering the DATA PASSWORD			
			1-5-3. DEVICE DATA COPY Screen			
3.1. Edit the Device Data	DAT		1-5-4. DEVICE DATA MOVE Screen [3,3]			
5.1. Eult the Device Data	DAI		1-5-5. DEVICE DATA MOVE Screen [3.3]			
			1-5-6. DEVICE DATA RENAME Screen [3.4]			
			1-6. Device Data Delete Screen [5.5]			

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3 2	Set the Subindex Data	DAT		1-6-5. SUB INDEX DATA screen [3.1.5.*]			
J.Z.		DAI		1-6-6. Screens Related to EAD Specification Sub Index			
3 3	Interpret the Cutting Function	DAT		2-1. Cutting Function 2-1-1. Cutting Shape			
0.0.	interpret the editing runotes.			2-1-2. Cutting Mode			
				1-6-2. ALIGNMENT DATA Screen [3.1.3]			
3.4.	Set the Alignment Data	DAT		1-6-3. ALIGNMENT SPECIAL DATA Screen [3.1.3.3]			
3.5.	Set the Process Control Table	DAT		1-6-4. Measuring Alignment Related Screens 1-6-7. PROCESS CONTROL TABLE Screen [3.1.6]			
3.6	Set the Data of Kerf Check Function	DAT		1-6-9. KERF CHECK DATA Screen [3.1.8]			
		1		1-6-10. KERF CHECK DATA 2 Screen [3.1.8.8]			
4. Alig	gnment Teach			3-1. Teach Operation			
				3-1-1. Device Data Alignment Operation Setup			
				3-1-2. Setting a Workpiece			
4.1.	4.1. Execute the Alignment Teach	DAT	В	3-1-3. θ Adjustment			
				3-1-4. Macro (Low Magnification) Target Teach			
				3-1-5. CH1 Micro (High Magnification) Target Teach 3-1-6. CH1 Street Adjustment			
Day 2				· · · · · · · · · · · · · · · · · · ·			
	de Maintenance					•••••	
				6. Blade Maintenance			
				6-1. Preparation for Blade Replacement			
				6-2. Replacement of Blades			
				6-2-1. Stopping the Spindle and Cutting Water			
	5.1. Execute the Blade Maintenance	OPE	В	6-2-2. Saving Data of Used Blades			
5.1.				6-2-3. Removing Blades 6-2-4. Installing a New Blade			
				6-3. Data Setting of the Type of Blade Installed			
				6-3-1. Setting Data for a New Blade			
				6-3-2. Setting Data for a Used Blade			
				6-4. Adjusting the Blade Breakage Detector			
				6-5. Executing Warming Up (Idling)			
				7. Setup			
				7-1. Preparation for Setup			
				7-2. Executing Setup	0		
E 2	Evenute the Setup	ODE		7-2-1. Executing Chuck Table Setup			
5.2.	Execute the Setup	OPE	В	7-2-2. Executing Setup Area Setup 7-2-3. Executing Non-Contact Setup [Optional Accessory]			
				7-2-4. Executing Sensor Calibration Setup [Optional Accessory]			
				Skip "7-2-4-2. Executing Sensor Calibration Setup (Using the Setup Area)"			
				7-2-5. Executing Correction Setup			
				Blade Dressing Operation			
				5-1. Preparation of Operation			
				5-2. Setting a Dresser Board			
				5-3. Verification of Dress Data			
53	Execute the Dress Cutting	OPE		Calling Up SINGLE CHANNEL ALIGNMENT Screen S-5. Adjusting Light Intensity			
J.J.	Execute the Diess Cutting	OLE		5-6. Adjusting Microscope Focus			
				5-7. Executing θ Alignment			
				5-8. Designation of Dress Cutting Start Position			
				5-9. Executing Dress Cutting			
		ļ		5-10. Completion of Dress Cutting			
				6-6. Hairline Alignment			
				6-6-1. Setting a Dummy Workpiece			
				6-6-2. Adjusting Light Intensity 6-6-3. Adjusting Microscope Focus			
				6-6-4. Executing θ Alignment			
5.4.	Correct the Hairline Alignment	OPE	В	6-6-5. Executing draingline Alignment			
				6-6-6. What to Do after Performing Hairline Alignment			
				6-7. Tape Hairline Alignment			
				6-7-1. Setting a Dummy Workpiece			
				6-7-2. Operation after Tape Hairline Alignment			

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6. Operator Maintenance		***************************************				
6.1. Interpret the Precut Data	DAT	1	5-2. Precut Data Maintenance 5-2-1. PRECUT DATA LIST Screen [5.1]			
			5-2-2. Copying the Precut Data			
6.2. Use the Measure Function	DAT		5-3. Measure Function 5-3-1. Measure Function 1			
			5-3-2. Measure Function 2			
			5-4. Function Data Maintenance			
			5-4-1. FUNCTION DATA MAINTENANCE Screen [5.3]			
			5-4-2. OPERATION DATA MAINTENANCE Screen [5.3.1]			
6.3. Set Up the Function Data	DAT	В	5-4-3. STATUS INDICATOR DATA MAINTENANCE Screen [5.3.2] 5-4-4. ALIGNMENT FUNCTION DATA Screen [5.3.4]			
			5-4-5. WATER PROGRAM DATA MAINTENANCE Screen [5.3.5]			
			5-4-6. FUNCTION DATA MAINTENANCE <special> Screen [5.3.10]</special>			
			5-5. External Memory Device			
			5-5-1. EXTERNAL MEMORY UNIT OPERATION Screen [5.4]			
		1				
			5-5-2. LOAD DEVICE DATA Screen [5.4.1]			
			5-5-3. SAVE DEVICE DATA Screen [5.4.2]			
Execute the External Memory Unit			5-5-4. DELETE DEVICE DATA Screen [5.4.3]			
6.4. Operation	DAT		5-5-5. FORMAT Screen [5.4.4]			
'			5-5-6. Auto Batch Execution			
			5-5-7. Machine Data Backup Function			
			5-5-8. Machine Data Restoring Function			
			5-5-9. LOAD PRECUT DATA Screen [5.4.8]			
			5-5-10. SAVE PRECUT DATA Screen [5.4.9]			
7. Machine Maintenance			āā			
			6-2. Rotation Alignment (0 Point Adjustment)			
			6-2-1. Rotation Alignment Through Cutting			
7.1. Execute the Rotation Alignment	DAT		6-2-2. Rotation Alignment Through Cutting Pass			
			6-2-3. ROTATION ALIGNMENT EXPLANATION Screen			
7.2. Execute the Focus Maintenance	DAT		6-3. Focus Maintenance			
8. Log Viewer			······································			
	1		8. Log Viewer			
			8-1. LOG VIEWER Screen			
			8-1-1. Displaying LOG VIEWER Screen			
		1	8-1-2. Displaying and Selecting the Event Data			
			8-2. Search			
8.1. Utilize the Log Viewer	OPE	В	8-2-1. Date and Time Search 8-2-2. Field Search			
			8-3. Query			
			8-3-1. Basic Operation			
			8-3-2. Data Retrieval Example 1 Data Retrieval by Multiple Queries			
			8-3-3. Data Retrieval Example 2 Data Retrieval by Time Period			
	.i		8-3-4. Data Retrieval Example 3 Data Retrieval by Error Code			
9. Troubleshooting	· · · · · · · · · · · · · · · · · · ·		··········			
			Remedies for Problems Invoking No Error Code Indication- Problems at Power ON -			
			1-1. Main Circuit Breaker Problems			
			1-2. Main Power Supply Problems			
			1-3. POWER Lamp (Power-On Lamp) Problems			
9.1. Remedy for Problems Invoking No	MNT	D	1-4. Touch Panel Problems			
Error Code Indication			1-5. Microscope Light Source Problems			
			1-6. EMO Switch Problems			
			2. Remedies for Problems Invoking No Error Code Indication - Freeze Detection -			
			2-1. Detection of Freeze of the CPU Circuit Board for Machine Control			
			2-2. Detection of Freeze of the Computer			

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			Remedies for Problems Invoking Error Code Indication			
			3-1. Error Code Classification			
			3-2. Error Code List			
			3-3. Error Remedies Requiring an Emergency Stop			
0.2 Evacute the Recovery Operations	MNT		3-4. Blade/Setup Related Error Remedies			
9.2. Execute the Recovery Operations	IVIINI		3-5. Valve Related Error Remedies			
			3-6. Alignment Related Error Remedies			
			3-7. Kerf Check Related Error Remedies			
			3-8. Axis-Related Error Remedies			
			3-9. Remedies for Other Errors			
10. Adjustment Operation			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
			1. Table Replacement			
			1-1. Replacing the Jig Table			
			1-1-1. Removing the Jig Table			
10.1. Replace the Table	MNT	В	1-1-2. Mounting the Jig Table			
			1-1-3. Jig-Groove Teach			
			1-2. Replacing the Sub Table			
			1-2-1. Removing and Mounting the Sub Table			
			2. Flange/Hub Mount Replacement			
			2-1. Flange Replacement (1.8 kW Spindle)			
			2-1-1. Removing the Flange (1.8 kW Spindle)			
			2-1-2. Mounting the Flange (1.8 kW Spindle)			
			2-2. Hub Mount Replacement (1.8 kW Spindle)			
			2-2-1. Removing the Hub Mount (1.8 kW Spindle)			
10.2. Replacethe Wheel Mount/Flange	MNT	В	2-2-2. Mounting the Hub Mount (1.8 kW Spindle)			
			2-3. Flange Replacement (2.2 kW Spindle) [Optional Accessory]			
			2-3-1. Removing the Flange (2.2 kW Spindle)			
			2-3-2. Mounting the Flange (2.2 kW Spindle)			
			2-4. Hub Mount Replacement (2.2 kW Spindle) [Optional Accessory]			
			2-4-1. Removing the Hub Mount (2.2 kW Spindle)			
			2-4-2. Mounting the Hub Mount (2.2 kW Spindle)			
			3. Sensor Adjustment			
			3-1. Pressure Sensor			
			3-1-1. Initial Setting			
			3-1-2. Pressure Setting			
10.3. Adjust the Pressure Sensor	MNT	В	3-1-3. Zero Clearance			
			3-2. Air Pressure Sensor Adjustment			
			3-2-1. Adjusting the Air Pressure Sensor			
			3-2-2. Checking Operation of the Air Pressure Sensor			
11. Engineering Maintenance	i	L	3			
			2. Hub Mount/Flange Conditioning			
			2-1. Movement in Conditioning			
			2-1-1. Flange Conditioning			
			2-1-2. Hub Mount Conditioning			
Perform the Wheel Mount/Flange			2-2. Executing Conditioning			
11.1. Conditioning	MNT		2-2-1. Replacing the Table			
J G			2-2-2. Verifying FLANGE DRESSING Screen Data			
			2-2-3. Executing Conditioning			
			2-2-4. Checking the End Face Accuracy			
			2-2-5. Completion of Conditioning			
			3. Axis Operation Check			
11.2. Verify Axis Operation	MNT		3-1. AXIS OPERATION Screen			
			4. Sensor/Solenoid Valve Check			
1.3. Verify Sensor and Solenoid Valve		4-1. I/O Check				
2. 12, 22o. and colonial valvo			4-2. Axis Sensor Check			
			Customizing Setting			
			5-1. Setting on USER DEFINE DATA Screen [7.4]			
11.4. Customize User Define Data	MNT		5-2. Setting on USER DEFINE DATA 2 Screen [7.4.2]			
	IVIIVI	-	5-3. COMMON WORKPIECE WASHING DATA Screen [7.4.9] and COMMON JIG WASHING DATA Screen [7.4.9.4]			
			5-4. REMNANT BOX SETTING Screen			
	i		5-4. REMINANT BUX SETTING Screen			

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Day 3	i	i				
12. Maintenance and Inspection					,	
			1-1. Cleaning the Non-Contact Setup Sensor (Detection Surface) [Optional Accessory]			
			1-1-1. Calling Up the NCS SENSOR CLEANING Screen [4.8]			
12.1. Clean the Non-Contact Setup Sensor	MNT	E	1-1-2. Cleaning of the Non-Contact Setup Sensor			
			1-1-3. Cleaning the Non-Contact Setup Sensor with Abrasives (Optional Accessory) 1-1-4. Adjusting the Non-Contact Setup Amplifier			
			1-1-5. Completion of Cleaning the Non-Contact Setup Sensor			
			1-2. Cleaning the Blade Breakage Detector Sensor			
			1-2-1. Removing the Blade Breakage Detector			
12.2. Clean the Blade Breakage Detector Sensor	MNT		1-2-2. Cleaning the Blade Breakage Detector Sensor			
CONSO			1-2-3. Adjusting the Amplifier of the Blade Breakage Detector			
			1-2-4. Completion of Cleaning the Blade Breakage Detector Sensor			
			1-3. Cleaning the 1.8 kW Spindle			
			1-3-1. Removing the Blade and Flange/Hub Mount 1-3-2. Removing the Wheel Cover			
			1-3-3. Removing the Front Cap			
			1-3-4. Cleaning the Air Curtain Section and Taper Section			
			1-3-5. Cleaning the Front Cap			
12.3. Clean the Spindle MNT			1-3-6. Mounting the Front Cap			
	MNIT	E	1-3-7. Completion of Spindle Cleaning			
	IVIIVI		1-4. Cleaning the 2.2 kW Spindle			
			1-4-1. Removing the Blade and Flange/Hub Mount			
			1-4-2. Removing the Wheel Cover			
			1-4-3. Removing the Front Cap			
			1-4-4. Cleaning the Air Curtain Section and Taper Section 1-4-5. Cleaning the Front Cap			
			1-4-6. Mounting the Front Cap			
			1-4-7. Completion of Spindle Cleaning			
			1-6. Cleaning the Cutting Room and Remnant Box			
2.4. Clean the Water Case Exterior			1-6-1. Cleaning the Water Case Exterior			
	MAIT	E	1-6-2. Cleaning the Water Case Interior			
	IVINI		1-6-3. Cleaning the Remnant Box Interior			
			1-6-4. Cleaning the Dust Box Interior			
			1-6-5. Completion of Cleaning			
			4-2. Cleaning the Cooling Water Path			
			4-2-1. Preparation of Cleaning the Spindle 1 Cooling Water Path 4-2-2. Cleaning the Spindle 1 Cooling Water Path			
12.5. Clean Spindle Coolant Water Path	MNT	E	4-2-3. Completion of Cleaning the Spindle 1 Cooling Water Path			
. z.e. e.e epa.e eee.a.k . rake . aa.			4-2-4. Preparation of Cleaning the Spindle 2 Cooling Water Path			
			4-2-5. Cleaning the Spindle 2 Cooling Water Path			
			4-2-6. Completion of Cleaning the Spindle 2 Cooling Water Path			
			5. Maintenance to Be Performed at 365-Day (Recommended) Intervals			
			5-1. Greasing the X-Axis			
			5-1-1. Preparation of Greasing the X-Axis			
			5-1-2. Cleaning the X-Axis Front-Side and Its Periphery			
			5-1-3. Cleaning the X-Axis Rear-Side and Its Periphery 5-1-4. Greasing the X-Axis			
		1	5-1-5. Completion of Greasing the X-Axis			
			5-2. Greasing the Y-Axis			
			5-2-1. Cleaning the Central Part of the Y-Axis			
			5-2-2. Cleaning the Left and Right Edge of the Y-Axis			
			5-2-3. Greasing the Y-Axis			
12.6. Grease the Axes	MNT		5-2-4. Completion of Greasing the Y- and Z-Axes			
			5-3. Greasing the MY-Axis			
			5-3-1. Cleaning the Central Part of the MY-Axis			
			5-3-2. Cleaning the Left and Right Edge of the MY-Axis 5-3-3. Greasing the MY-Axis			
		1	5-3-3. Greasing the MY-Axis 5-3-4. Completion of Greasing the MY-Axis			
			5-4. Greasing the MZ-Axis			
			5-4-1. Removing the Microscope Section Cover (1-Axis Side)			
			5-4-2. Greasing the MZ1-Axis			
			5-4-3. Removing the Microscope Section Cover (2-Axis Side)			
			5-4-4. Greasing the MZ2-Axis			
			5-4-5. Completion of Greasing the MZ-Axis			

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13. Consumable Parts Replacement	A					
13.1. Replace Air Clean Unit Consumables	MNT	i	1-1. Replacing the Air Clean Unit Consumable Parts			
			1-2. Replacing the Halogen Lamp			
13.2. Replace the Halogen Lamp	MNT	F	1-2-1. Preparation of Replacing the Halogen Lamp			
			1-2-2. Replacing the Halogen Lamp			
			1-3. Replacing the Spindle Carbon Brush			
			1-3-1. Preparation of Replacing the Spindle Carbon Brush (1-Axis Side)			
			1-3-2. Removing the Waterproof Cap (1-Axis Side)			
13.3. Replace the Spindle Carbon Brush	MNT		1-3-3. Replacing the Carbon Brush Assembly (1-Axis Side)	J		
., ., ., ., ., ., ., ., ., ., ., ., ., .			1-3-4. Preparation of Replacing the Spindle Carbon Brush (2-Axis Side)			
			1-3-5. Removing the Waterproof Cap (2-Axis Side)			
			1-3-6. Replacing the Carbon Brush Assembly (2-Axis Side)			
			1-3-7. Completion of Replacing the Spindle Carbon Brush			
			1-5. Replacing the Remnant Box Brush			
			1-5-1. Preparation for the Remnant Box Brush Replacement			
13.4. Replace the Remnant Box Brush	MNT	F	1-5-2. Replacement Operation of the Remnant Box Brush (Upper)			
			1-5-3. Replacement Operation of the Remnant Box Brush (Lower)			
			1-5-4. Completion of the Remnant Box Brush Replacement			
			1-6. Replacing the X-axis Brush			
13.5. Replace the X-axis Brush	MNT	F	1-6-1. Preparation for the X-Axis Brush Replacement	J		
•			1-6-2. Replacement Operation of the X-Axis Brush			
			1-6-3. Completion of the X-Axis Brush Replacement			
			2-1. Replacing the Cooling Water Flow Rate Sensor			
13.6. Replace the Cooling Water Flow Rate Sensor	MNT	F	2-1-1. Removing the Machine Outer Cover			
			2-1-2. Replacing the Flow Rate Sensor			
·····			2-1-3. Completion of Replacing the Flow Rate Sensor			
13.7. Replace the Cutting Water Flow Rate Sensors and Flowmeters	MNT		2-2. Replacing the Cutting Water Flow Rate Sensors and Flowmeters			
			2-3. Replacing the Solenoid Valve			
13.8. Replace Solenoid Valve	MNT		2-3-1. Removing the Machine Outer Cover			
•			2-3-2. Replacing the Solenoid Valve			
			2-3-3. Completion of Replacing the Solenoid Valve			
			2-4. Replacing the X-axis Bellows (White)			
			2-4-1. Preparation for Replacement of the X-Axis Bellows (White)			
			2-4-2. Operation for Replacement of the X-Axis Bellows (White)			
			2-4-3. Completion of Replacement of the X-Axis Bellows (White)			
13.9. Replacing the axis Bellows (White)	MNT		2-5. Replacement of the MY-axis Bellows (White)			
			2-5-1. Operation for Replacing the MY-Axis Bellows (White)			
			2-5-2. Completion of Replacement of MY-Axis Bellows (White)			
			2-6. Replacement of the Y-axis Bellows (White)			
			2-6-1. Operation for Replacing the Y-Axis Bellows (White)	o o		
		<u> </u>	2-6-2. Completion of Replacement of Y-Axis Bellows (White)			
			3-1-1. Preparation of Replacing the Bellows			
13.10. Replace Bellows	MNT	F	3-1-2. Replacing the Bellows			
			3-1-3. Completion of Replacing the Bellows			
			3-2. Replacing the Waterproof Cover/O-Ring/V-Ring for θ-Axis			
Replace the Chuck Table Waterproof			3-2-1. Removing the Jig Table			
13.11. Replace the Chuck Table Waterproof Cover/O-ring/V-ring	MNT	F	3-2-2. Replacing the Waterproof Cover/O-Ring/V-Ring			
,			3-2-3. Completion of Replacing the Waterproof Cover /O-Ring/V-Ring			
	j		3-3. Replacing the O-Rings on the Table Base Top Surface (For Workpiece Vacuum)			
			3-3-1. Removing the Jig Table			
13.12. Replace the O-Rings on the Table Base Top Surface	MNT		3-3-2. Replacing the Waterproof Cover/O-Ring/V-Ring on the Table Base Top Surface			
			3-3-3. Completion of Replacing the Waterproof Cover/O-Ring/V-Ring			
			3-4. Replacing the Remnant Box Stopper			
			3-4-1. Preparation for the Remnant Box Stopper Replacement			
13.13. Replace the Remnant Box Stopper	MNT	: F	3-4-2. Replacement Operation of the Remnant Box Stopper			
			3-4-3. Completion of the Remnant Box Stopper Replacement			
			3-5. Replacing the Remnant Box Curtain			
			3-5-1. Preparation for the Remnant Box Curtain Replacement			
13.14. Replace the Remnant Box Curtain	MNT	; F	3-5-2. Replacement Operation of the Remnant Box Curtain (Upper/Lower)			
	İ	İ	3-5-3. Completion of the Remnant Box Curtain Replacement			

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13.15. Replace the Cutting Section Light	MNT	F	5-1. Replacing the Cutting Section Light 5-1-1. Preparation of Replacing the Cutting Section Light 5-1-2. Replacing the Cutting Section Light 5-1-3. Completion of Replacing the Cutting Section Light			
13.16. Replace the Battery on the CPU Board	MNT	F	5-2. Replacing the Battery on the CPU Board			
13.17. Replace the Hooks of the Nut Demounting Jig	MNT	F	5-3. Replacing the Hooks of the Nut Demounting Jig 5-3-1. Disassembling the Nut Demounting Jig 5-3-2. Hook Replacement 5-3-3. Assembling the Nut Demounting Jig			

Course composition, intended trainees and course objective

Course Name	Intended Trainees	Course Objective			
Tier 1	who operates the machine to process products	To enable trainees to understand the terms necessary for operating the machine and to process products by calling up the data set in the machine			
Tier 2	- who has already completed the "Tier 1" course (or has equivalent operation skills) - who conducts data and function settings of the machine - who conducts periodic maintenance of the machine	To enable trainees to create the data and set the data and functions for operating the machine To enable trainees to safely and precisely perform the periodic maintenance and consumable parts replacemen described in the Maintenance Manual of the machine			
Tier 3	- who has already completed the "Tier 2" course (or has equivalent operation skills) - who conducts maintenance works which are not described in the Maintenance Manual of the machine	To enable trainees to conduct maintenance works which are not described in the machine Maintenance Manual (only the items that can be executed without any special tools or access to the internal Maker Data)			