DFD6361 Maintenance 2 (Half-cut Specification) (Rev. 3.00)

Trainee		**Period**	
Company		**Trainer**	

<DFD6361 Maintenance 2 (Rev. 5.00)>

Item	Date	Trainee	Trainer
..... Day 1			
1. Machine Structure			
1.1. Verify the Safety Interlock Circuit and Functions	_____	_____	_____
1.2. Identify the Electrical Connection	_____	_____	_____
1.3. Identify the Locations for Electric Components	_____	_____	_____
1.4. Identify the PC Board Function and Setting	_____	_____	_____
1.5. Identify the Axes Zero Point Position	_____	_____	_____
1.6. Identify the Axis Stroke	_____	_____	_____
1.7. Identify the Servo Motor Driver Error Code	_____	_____	_____
1.8. Identify the Spindle Motor Driver Error Code	_____	_____	_____
1.9. Identify the Stepping Motor and Spindle Driver Setting	_____	_____	_____
1.10. Interpret the Water and Pneumatic Piping	_____	_____	_____
1.11. Interpret the Chuck Table Setup Principle	_____	_____	_____
2. Inspection and Adjustment			
2.1. Check and Adjust the DC Power Supply Output Voltage	_____	_____	_____
2.2. Inspect and Adjust the Air/Water Curtain Pipe Height/Angle	_____	_____	_____
2.3. Adjust the Cutting Room Partition Height	_____	_____	_____
..... Day 2			
2.4. Identify How to Properly Use the Dial Gauge	_____	_____	_____
2.5. Inspect the X-axis Straightness Accuracy	_____	_____	_____
2.6. Inspect the X-Spindle Axis Perpendicularity	_____	_____	_____
2.7. Adjust the X-Spindle Axis Perpendicularity	_____	_____	_____
2.8. Inspect the Y-axis Straightness Accuracy	_____	_____	_____
2.9. Inspect the Spindle Shaft Axial Runout	_____	_____	_____
2.10. Inspect the Chuck Table Leveling Accuracy	_____	_____	_____
2.11. Adjust the Theta-axis (Chuck Table) Leveling Accuracy	_____	_____	_____
2.12. Inspect the Z-axis Positioning Repetition Accuracy	_____	_____	_____
2.13. Inspect the Workpiece Transfer Position	_____	_____	_____

2.14. Adjust the Workpiece Transfer Position			
2.15. Adjust the Wheel Cover Nozzle Position			
2.16. Perform the Pixel Size Measure Operation			

Day 3

3. Machine Parts Replacement			
3.1. Replace the Microscope LED Light			
3.2. Replace the PC Board after Setting Jumper and DIP Switches			
3.3. Replace the Motor Driver after Setting Jumper and DIP Switches			
3.4. Replace the Axis End Sensor			
3.5. Replace the NCS Sensor			
3.6. Replace the Blade Breakage Detector (BBD) Sensor			
3.7. Replace the Microscope Unit			
3.8. Replace the Air Spindle Unit			
3.9. Replace the Spinner Seal Unit			
4. Appendix			
4.1. (Appendix) DFD6361 Accuracy Certificate			
4.2. (Appendix) Water and Air Piping Diagram [Standard Specification]			
4.3. (Appendix) Electrical Circuit Diagram [Standard Specification]			

Day 4

<DFD6361 Maintenance 2 (Half-cut Specification) (Rev. 1.00)>

Item	Date	Trainee	Trainer
1. Inspection and Adjustment [Half-cut Specification]			
1.1. Adjust the Non-contact Surface Detector (NSD) Air Pressure			
2. Machine Parts Replacement [Half-cut Specification]			
2.1. Replace the Waterproof Cover / O-ring / V-ring for θ-axis			
2.2. Inspect the Sub-chuck Table Leveling Accuracy			
2.3. Replace the Non-contact Surface Detector (NSD) Sensor Unit			
3. Appendix [Half-cut Specification]			
3.1. (Appendix) Water and Air Piping Diagram [Half-cut Specification]			
3.2. (Appendix) Electrical Circuit Diagram [Half-cut Specification]			

Course composition, intended trainees and course objective

Course Name		Intended Trainees	Course Objective
Operation	Operation 1	- who has no experience of operating the machine	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
	Operation 2	- who has already completed the "Operation 1" course (or has equivalent operation skills) - who conducts data and function settings of the machine	To enable trainees to create the data and set the data and functions for operating the machine
Mainte-nance	Mainte-nance 1	- who has already completed the "Operation 2" course (or has equivalent operation skills) - who conducts periodic maintenance of the machine	To enable trainees to safely and precisely perform the periodic maintenance and consumable parts replacement described in the Maintenance Manual of the machine
	Mainte-nance 2	- who has already completed the "Maintenance 1" course (or has equivalent maintenance 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)