Models WD6010 – WD7010

– PROGRAM TABLE –

WD6010: instrument washers with forced-air drying system. Hinged doors.	**WD7010**: instrument washers with forced-air drying system. Sliding doors.

WARNING

This document is an appendix to the appliance's user manual and must be consulted together with the manual for proper, safe use of the device.

It contains up-to-date information concerning the characteristics of the washing programs installed in the appliance. Due to changes made in response to improvements in products, the programs described here may differ from those described in the manual: in this case, only refer to the information provided in this document.

Programs may vary depending on the firmware version installed in the appliance. If in doubt, have authorized staff check on the appliance that the installed version is the same as the version stated in the table at the back of this document.

ABBREVIATIONS USED IN THE PROGRAM TABLE

CW: "cold water", cold mains water, the type of water used in a specific phase of the program. When a particular number is specified, it indicates the water intake quantity (Eg. CW(18) means 18 liters of cold water).
HW: "hot water", the type of water used in a specific phase of the program.
CW+HW: loading phase cold and hot water (contemporary).
DW: "demineralised water", the type of water used in a specific phase of the program.
Estimated Cycle Time: Total estimated time for execution of the cycle.
Holding Time: period during which the critical process variables are maintained at or above the values specified. If it is not set a target temperature, "holding time" corresponds to the total duration of the phase.
ID_prog: identity number of the washing program; it is not bonded to the program name. (E.g. the program " *9 instruments std*" has an *ID_prog* = 109).
Int: (used on the display) means "**intensive**" – use this programs to process **dirty instruments**.
N.C.: "NOT CONTROLLED" - refers to the relatively short heating phases during which the heating elements are ON (active) but no target temperature value is set. By default there is an active control so that the maximum target temperature, considering the possible range (Tmax -0/+5 °C) of the cycle is never exceeded. If a target temperature "T_target" is not defined in the cycle, then T_target = 60 ° C.
P1, …, P4: the code refers to the activation of the relative peristaltic pump, with dispensing of the liquid detergent associated to it. **P1(5), P1(6), P3(5), P3(10)**: the code refers to dispensing by the referenced pump (P1, P2, P…) at a rate different from the default rate, used in special cases, as specified in the table. E.g**. P1(5)** means P1 dosing rate: **5ml/liter**; **P1(6)** means **6ml/liter**. **P1(20)** means **20ml/liter: Warning -** this dosing rate is used only for service purposes. Each pump has default dispensing rates set in the factory.

Quick, Fast: "quick" programs – fast treatment with final stage of thermal disinfection, to be used to process almost clean instruments for the subsequent sterilization process.	
TD: thermal disinfection - phase during which the target temperature is kept above a target value for a specified time. The efficacy of the thermal disinfection process is indicated by means of parameter $A0$. In Standard Original programs, the target value for a thermal disinfection process is always at least 80°C.	
T target: Target temperature of the current phase.	
Water filling: field that identifies the type of water used (CW, HW, DW, CW+HW).	

DETERGENTS DOSAGE

PERISTALTIC PUMP	ID USED IN THE TABLE	CHEMICAL AGENT	PRODUCT DOSAGE [ml/liter]
P1	P1(5)	alkaline liquid detergent	5
	P1(6)	alkaline liquid detergent	6
	P1(4)	Enzymatic detergent	4
	P1(20)	- for service purpose only -	20
P2	P2	Acid neutraliser	3
	P2(20)	- for service purpose only -	20
P3	P3(10)	Disinfecting agent	10
	P3(20)	- for service purpose only -	20
P4	P4	Lubricant	0.2
	P4(20)	- for service purpose only -	20

VARIOUS NOTES

WATER INTAKE

Programs for the processing of solid devices instruments (ID. 101-124)
Washing phases: water intake of **22 liters** (the washing phases are characterized by the dosage of P1, alkaline or enzymatic cleaning agents).
Other phases: water intake of **18-20 liters**.

Other programs – Anesthesia and chemical disinfection (ID. 125-131)
Water intake for every phase: **23 liters**.

Service program (ID.202)
Peristaltic pumps activation: water intake 10liters per phase.

CYCLE TIME

the stated time (and the "residual" time on the device display) for the complete cycle is indicative and not-binding.

A$_0$ PARAMETER

Parameter A0 is used by product standard UNI EN ISO 15883-1 to assign a numerical value to the thermal disinfection process.
It is calculated mathematically using the formula:

$$A_0 = \sum 10^{\left[(T-80)/z\right]} \times \Delta t$$

z = 10°C - *t* = duration of time interval considered in seconds - *T* = load temperature in °C.

When calculating the parameter, only the time intervals during which the temperature is above 65°C are considered.
For thermal disinfection programs, the calculation is simplified by only including the "extension" phase, when the temperature is kept constant with reference to the target value set.

PROCESSABLE LOAD

Never exceed a total load of 30 kg to ensure good washing results.
The items in the load must be positioned correctly, with no overlapping. The instruments have to be processed immediately after the use.

SELF DISINFECTION CYCLE

After 24 hours of inactivity, It is advisable to run a **thermal disinfection program without load**, no load inside the washing chamber (93°C).

CHAMBER RECOVERY DRAIN

Only if installed the optional "WD-VDS6010": according to the default factory programs settings, the first two phases of the cycle are marked as "recovery drain" (potentially contaminated).

WASHING PROGRAMS AND TEST

The washing programs are structured for the chemical agents and the target values preset in factory:

Programs 1-16 (ID_prog 101-116): P1 Smeg DETERLIQUID C2 (5ml/l – 6ml/l) and P2 Smeg ACIDGLASS C2 (3ml/l).

Programs 17-22 (ID_prog 117-122): P1 Smeg DENTALNE5 (4ml/l).
Programs 25, 26, 27, 28, 31 (ID_prog 125, 125, 127, 128, 131): P3 Smeg ECOSEPT (10ml/l)
***15883** validated programs: ID_prog 109, 110, 115, 116, 117, 118.*

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QUICK and FAST PROGRAMS

The "*Quick*" and "*Fast*" programs (E.g. 101, 102, 103) are intended to be used to process pretreated loads, performing a fast treatment (with the final stage of thermal disinfection) and are to be used to process "almost clean" instruments for the subsequent sterilization processes.
Coarse dirt and coarse contamination have to be removed before this treatment.
When using wet disposal: it is recommended to use detergent-disinfectant solution that has no protein-fixing effect.

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COMPLETE PROGRAMS
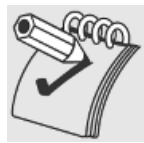
	TO PROCESS DIRTY INSTRUMENTS *Use adequate programs. Complete programs: Instruments std: ID_prog 109, 110 - Intensive: ID_prog 115, 116 – Enzymatic: ID_prog 117, 118 (marked with the symbol *** in the following table). The other programs derived from these, with shorter phases and can be used only on pretreated instruments. The responsible body in charge of the device and of the process of decontamination also keeps the responsibility on the choice of the most suitable washing programs for the required treatment.*

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CHEMICAL DISINFECTION PROGRAMS

Programs 25-28, 31 (ID_prog 125-128, 131) are programs that include the use of chemical disinfectants and do not include a thermal disinfection. They can be activated only if installed the peristaltic pump P3.

	Please note: the thermal disinfection is always preferable, when possible, with respect to a process of chemical disinfection. Based on the regional regulations, the processes of decontamination by chemical agents cannot be considered valid by the authorities, and can be used only if the load cannot tolerate the temperatures required for thermal disinfection. *The Responsible body in charge of the device and of the process of decontamination also keeps the responsibility on the choice of the most suitable washing cycle for the treatment required.*

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CUSTOM PROGRAMS

Programs from n.1 to 20 (*ID_prog* from 101 to 120) are defined as Factory non-editable programs.

Custom programs: programs from n. 21 to 40 (IdProg from 121 to 140) are predisposed to be personalized, with a maximum of n.10 washing phases.

The change can be made through the touch-screen interface of the device, using the updated firmware.

If parameters are modified from the default settings, a record should be kept of the various phases and the new program settings.

> ⚠ *ATTENTION: The editing of a washing program requires specific knowledge in relation to the load-treatment process, and to the device parameters. For this reason, the function is protected by password.*
>
> *Always proceed according to the rules in force in the place of installation: **a custom program**, used to process the load, **must be validated according to the standards and regulations applicable.***
>
> *Consult the authorized technical service for clarification. Warning: when creating a custom program, **do not include more than two thermal disinfection phases at 93°C for 10min.***

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SERVICE PROGRAMS

> *Programs 201, 202, 203 are service programs, **not to be used for the processing of the load.***

ID_prog	Hospital Set Program Name	Prewash / Washing Water Filling	T target [°C]	Holding Time [min]	Washing Water Filling	T target 1 [°C]	Holding Time [min]	T target 2 [°C]	Holding Time [min]	Neutralization Water Filling	T target [°C]	Holding Time [min]	Neutralization / Rinse 1 Water Filling	T target [°C]	Holding Time [min]	Rinse 2 Water Filling	T target [°C]	Holding Time [min]	Thermal Disinfection / Demi Rinse Water Filling	T target [°C]	Holding Time [min]	Drying Temperature [°C]	Holding Time [min]	A0 value	Cycle time [min]	Cycle time [min] boiler version
101	1 Fast 90° 1min Ao=600				HW (22)	55	5			HW (18)	N.C.	1							DW (20)	90	1	110	13	600	44	34
					P1(6)					P2																
102	2 Fast 90° 5min Ao=3000				HW (22)	55	5			HW (18)	N.C.	1							DW (20)	90	5	110	13	3000	52	42
					P1(6)					P2																
103	3 Fast 93° 5min Ao=6000				HW (22)	55	5			HW (18)	N.C.	1							DW (20)	93	5	110	13	5986	53	43
					P1(6)					P2																
104	4 Instruments quick 80° 10min Ao=600	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	80	10	100	13	600	60	47
					P1(5)					P2									P4							
105	5 Instruments quick 90° 1min Ao=600	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	90	1	110	13	600	54	41
					P1(5)					P2									P4							
106	6 Instruments quick 90° 5min Ao=3000	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	90	5	110	13	3000	56	43
					P1(5)					P2									P4							
107	7 Instruments quick 93° 5min Ao=6000	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	93	5	110	13	5986	57	44
					P1(5)					P2									P4							
108	8 Instruments quick 93° 10min Ao=12000	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	93	10	110	13	11972	63	50
					P1(5)					P2									P4							
109 ***	9 Instruments std 93° 5min Ao=6000	CW (20)	-	5	CW+HW (22)	55	5			CW (20)	N.C.	3				HW (20)	N.C.	3	DW	93	5	110	30	5986	84	68
					P1(5)					P2									P4							
110 ***	10 Instruments std 93° 10min Ao=12000	CW (20)	-	5	CW+HW (22)	55	5			CW (20)	N.C.	3				HW (20)	N.C.	3	DW	93	10	110	30	11972	89	73
					P1(5)					P2									P4							
111	11 Instruments int. 80° 10min Ao=600	CW (20)	-	1	CW+HW (22)	50	5	75	5	HW (20)	N.C.	1				HW (20)	N.C.	3	DW	80	10	100	13	600	74	58
					P1(6)					P2									P4							
112	12 Instruments int. 90° 1min Ao=600	CW (20)	-	1	CW+HW (22)	50	5	75	5	HW (20)	N.C.	1				HW (20)	N.C.	3	DW	90	1	110	13	600	68	52
					P1(6)					P2									P4							
113	13 Instruments int. 90° 5min Ao=3000	CW (20)	-	1	CW+HW (22)	50	5	75	5	HW (20)	N.C.	1				HW (20)	N.C.	3	DW	90	5	110	13	3000	72	56
					P1(6)					P2									P4							
114	14 Instruments int. 93° 1min Ao=1200	CW (20)	-	1	CW+HW (22)	50	5	75	5	HW (20)	N.C.	1				HW (20)	N.C.	3	DW	93	1	110	13	1197	68	52
					P1(6)					P2									P4							
115 ***	15 Instruments int. 93° 5min Ao=6000	CW (20)	-	5	CW+HW (22)	50	5	75	5	CW (20)	N.C.	3				HW (20)	N.C.	3	DW	93	5	110	30	5986	97	81
					P1(6)					P2									P4							
116 ***	16 Instruments int. 93° 10min Ao=12000	CW (20)	-	5	CW+HW (22)	50	5	75	5	CW (20)	N.C.	3				HW (20)	N.C.	3	DW	93	10	110	30	11972	102	86
					P1(6)					P2									P4							
117 ***	17 Enzymatic std 93° 5min Ao=6000	CW (20)	-	5	CW+HW (22)	60	7									HW (20)	N.C.	3	DW	93	5	110	30	5986	83	70
					P1(4)														P4							

ID_prog	Hospital Set Program Name	Prewash / Washing			Washing					Neutralization			Neutralization / Rinse 1			Rinse 2			Thermal Disinfection / Demi Rinse			Drying		A0 value	Cycle time [min]	Cycle time [min] boiler version
		Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target 1 [°C]	Holding Time [min]	T target 2 [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Temperature [°C]	Holding Time [min]			
118 ***	18 Enzymatic std 93° 10min Ao=12000	CW (20)	-	5	CW+HW (22)	60	7									HW (20)	N.C.	3	DW	93	10	110	30	11972	88	75
					P1(4)														P4							
119	19 Enzym. Quick 80° 10min Ao=600	CW (20)	-	1	CW+HW (22)	45	5									HW (18)	N.C.	1	DW	80	10	100	13	600	55	42
					P1(4)														P4							
120	20 Enzym. Quick 90° 1min Ao=600	CW (20)	-	1	CW+HW (22)	45	5									HW (18)	N.C.	1	DW	90	1	110	13	600	51	38
					P1(4)														P4							

CUSTOM PROGRAMS

ID_prog	Custom: Program name	Prewash / Washing Water Filling	T target [°C]	Holding Time [min]	Washing Water Filling	T target [°C]	Holding Time [min]	T target [°C]	Holding Time [min]	Neutralization / Rinse 1 Water Filling	T target [°C]	Holding Time [min]	Chemical disinfection P3 Water Filling	T target [°C]	Holding Time [min]	Rinse 2 Water Filling	T target [°C]	Holding Time [min]	Thermal Disinfection / Demi Rinse Water Filling	T target [°C]	Holding Time [min]	Drying Temperature [°C]	Holding Time [min]	Ao value	Cycle time [min]	Cycle time [min] boiler version
121	21 Enzymatic quick 90° 5min Ao=3000	CW (20)	-	1	CW+HW (22)	45	5									HW (18)	N.C.	1	DW	90	5	110	13	3000	55	42
					P1(4)														P4							
122	22 Enzymatic quick 93° 1min Ao=1200	CW (20)	-	1	CW+HW (22)	45	5									HW (18)	N.C.	1	DW	93	1	110	13	1197	52	39
					P1(4)														P4							
123	23 Decontamination 90° 5min Ao=3000				CW (22)	90	5			HW	N.C.	3				HW	N.C.	3	DW	75	1	110	30	3000	87	77
					P1(5)					P2									P4							
124	24 Decontamin. "BGA" 93° 10min Ao=12000				CW (22)	93	10			HW	N.C.	3				HW	N.C.	3	DW	75	1	110	30	11972	90	80
					P1(5)					P2									P4							
125	25 Quick chem.				CW (23)	60	5			HW(23)	N.C.	3	HW(23)	60	10				DW	60	1	100	13	-	75	65
					P1(5)					P2			P3(10)													
126	26 Plastic				CW (23)	70	5			HW(23)	N.C.	3	HW(23)	60	10				DW	70	1	100	30	-	102	92
					P1(5)					P2			P3(10)													
127	27 Plastic int	CW (23)	-	3	CW+HW (23)	70	5			HW(23)	N.C.	1	HW(23)	60	10				DW	70	1	100	30	-	76	66
					P1(6)					P2			P3(10)													
128	28 Clogs				CW (23)	80	5			HW(23)	N.C.	3	HW(23)	60	10				DW	80	1	100	30	-	100	90
					P1(5)					P2			P3(10)													
129	29 Anesthesia 90° 5min Ao=3000	CW (23)	-	5	CW+HW	55	5			CW	N.C.	3				HW	N.C.	3	DW	90	5	110	30	3000	92	82
					P1(5)					P2																
130	30 Anesthesia int 90° 5min Ao=3000	CW (23)	-	5	CW+HW	50	5	75	5	CW	N.C.	3				HW	N.C.	3	DW	90	5	110	30	3000	100	90
					P1(6)					P2																
131	31 Clogs int	CW (23)	-	3	CW+HW	80	5			HW	N.C.	1	HW(23)	60	10				DW	80	1	100	30	-	84	74
					P1(6)					P2			P3(10)													
132	32 Clogs 80°C 10min Ao=600	CW (18)	-	1	CW+HW (22)	50	5			HW (18)	N.C.	1							DW	80	10	100	30	600	74	64
					P1(5)					P2																
133	33 Clogs 90°C 5min Ao=3000	CW (18)	-	2	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	90	5	110	30	3000	79	69
					P1(5)					P2																
134	34 Container 80°C 10min Ao=600	CW (18)	-	1	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	80	10	100	30	600	77	67
					P1(5)					P2									P4							
135	35 Container 93°C 1min Ao=1200	CW (18)	-	2	CW+HW (22)	55	5			HW (18)	N.C.	1							DW	93	1	110	30	1197	72	62
					P1(5)					P2									P4							
136	Custom 1	CW (18)	-	1	CW+HW (23)	55	5			HW (23)	N.C.	3							DW	90	5	-	-	3000	-	-
					P1(5)					P2																
137	Custom 2	As Custom 1																				-	-	-	-	-

ID_prog	Custom: Program name	Prewash / Washing			Washing					Neutralization / Rinse 1			Chemical disinfection P3			Rinse 2			Thermal Disinfection / Demi Rinse			Drying		Ao value	Cycle time [min]	Cycle time [min] boiler version
		Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Temperature [°C]	Holding Time [min]			
138	Custom 3	As Custom 1																					-	-	-	-	-
139	Custom 4	As Custom 1																					-	-	-	-	-
140	Custom 5	As Custom 1																					-	-	-	-	-

SERVICE PROGRAMS

IdProg	Service Programs: Program name	Prewashing / Washing / NAOH washing			Washing / NAOH washing / Thermo disinfection					Neutralization			Mains rinsing			Demi rinsing			Rins. Hot demi			Drying phase		Ao	Cycle time std [min]
		H2O load	Temp °C	Extension (min)	H2O load	Temp °C	Extension (min)	H2O load	Temp °C	Extension (min)	H2O load	Temp °C	Extension (min)	H2O load	Temp °C	Extension (min)	H2O load	Temp °C	Extension (min)	Temperature °C	Extension (min)	H2O load	Temp °C		
200	Empty boiler																					-	-	-	-
201	Drying																					100	30	-	30
202	Service 1 (peristaltic pump test)				CW / P1(20)+P3(20)	-	0			CW / P2(20)	-	0				CW / P4(20)	-	0	DW	-	1	-	-	-	15
203	Probes calibration (TL, TCL)	DW	93	10																		90	10	-	31

Recommended use of the service programs:

- Program "200 Empty boiler": only for devices with boiler, the program performs an emptying of the boiler, recommended before periods of inactivity of the device.
- Program "201 Drying": performs a drying step in itself - to be used if the load drying was partial / not completely effective.
- Program "202 Service 1" It performs a loading of all installed peristaltic pumps - can be used to fill the circuit of detergents in case of first installation or to check the proper functioning of the peristaltic (detergents) pumps.
- Program "203 Probes calibration" to verify the good calibration of temperature probes in chamber.

Please note:

these programs can be disabled by the Superuser to facilitate the choice of the basic operator for the everyday programs.

CUSTOM PROGRAM RECORD TEMPLATE

Name	Phase 1			Phase 2			Phase 3			Phase 4			Phase 5			Phase 6			Phase 7			Phase 8			Phase 9			Phase 10			Drying		A0 value
	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Water Filling	T target [°C]	Holding Time [min]	Drying Temperature [°C]	Holding Time [min]	

Doc. code	Rev.	Ver. Firmware	Data Doc.	Note
19 592 0343	12 – EN	Program set cod. 16 812 0014 06 Custom program set cod. 16 813 0001 01	02 / 02 / 2017	Custom 1, …, Custom 5 (ID_prog 135, …, 140) modified to be complete washing programs. Program 26, ID_prog 126.

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