MODEL RWE-STANDARD

The RWE-STANDARD is a PLC controlled bench model with LCD display modul with 2 text lines and incorporates the famous RUFF modular system with 24 interchangeable standard heads. It is designed with modern hi-tech components: PLC control, servomotor for head drive, servomotor for core drive, interface for PC and printer and much more... It also incorporates RUFF's revolutionary machine drive technology. After input of the winding data the PLC will automatically set up the winding program: the load turns and start pitch are calculated and shown on the display screen. Teach-in buttons and an operator joystick enable to improve the winding program at any time. The user friendly PLC software guides the operator thru the programming with clear text commands. Typical jobs for the RWE-STANDARD are all general taping and winding applications.



COMBINATION CAPABILITY:

24 HEADS

6 GEAR HEADS RW0,1,2,3,4,4-V

5 SLIDER HEADS RW10,20,25,30,40

6 BELT HEADS RW60-C,100-C,100,200,200-V,300

7 TAPING HEADS RW0/B,1/B,2/B,3/B,4/B,200/B,300/B

6 ROLLER TABLES RW111,111-V,112,222,222-V,332

PRODUCTION CAPABILITY

	inch/AWG	mm
- SINGLE WIRE SIZE:	11 - 44	0,05 - 2,5
- BIFILAR WIRE SIZE:	up to 2x13 1/2	up to 2x1,8
- FINISHED CORE O.D.:	0,2 - 14	5 - 350
- FINISHED CORE I.D.:	from 0,06	from 1,5
- FINISHED CORE HEIGH	T: up to 5,9	up to 150
- TAPE SIZES:	0,15 - 1,18	4 - 30

TECHNICAL DATA:

CONTROLLER:

PLC CONTROL WITH SOFTWARE LANGUAGES: E, D, GB, I, F, CZ, H, TR

DISPLAY:

LCD WITH BACKGROUND ILLUMINATION CONTI-NOUS READ OUT OF TURNS, SPEED, PITCH, PROGRAM NO., SEQUENCE NO. ETC.

PRESETS:

200 PROGRAMS, EACH PROGRAM **CONTAINING UP TO 30 PRESETS**

PROGRAMMING: AUTOMATIC SET UP **AUTO SAVE TEACH-IN-FUNCTIONS**

DATA MEMORY AND OUTPUT: INTERFACES FOR PC AND PRINTER INTERFACE FOR MULTIMACHINE CONNECTION

WINDING SPEED: UP TO 1800 RPM FOOT OR AUTO CONTROL OPTIONAL HAND CONTROL UNIT

CORE DRIVE: POWER AC SERVO MOTOR

WIRE PITCH CONTROL: FULLY AUTOMATIC PITCH CHANGE. PROGRAMMABLE IN STEPS OF 0,001 MM

CORE INDEX AND REVERSE CONTROL: AUTOMATIC

ACCELERATION: **AUTOMATIC**

DECELERATION: AUTOMATIC

STOPS FOR TAPS: **AUTOMATIC**

SECTOR / BANK WINDING CONTROL: AUTOMATIC

TAPING OPERATION: **FULLY AUTOMATIC**

WINDING HEAD DRIVE: AC SERVO MOTOR 0,75 KW (BRUSHLESS)

SUPPLY VOLTAGES: 230 (110 AND 240) VOLT, 50 HZ AC

MACHINE SIZE AND WEIGHT: 900 X 600 MM / 95 KG NET, 125 KG GROSS

















PROGRAMMING SCREENS

TEACH IN BUTTON PITCH

WINDING MACHINE PROGRAM

FITOGRAM	•
Operation method?	Wind
(Tape.,Wind.=Shift)	1
Head type?	RW3
(Enter Menue=Shift)	2
Table type?	RW222-V
(Enter Menue=Shift)	3
Roller O.D.?	65.00 mm
(0-999.99mm)	4
Auto Index speed?	20%
(0-100%)	5
Mag. Joystick speed?	20%
(0-100%)	6
Core Joystick speed?	20%
(0-100%)	7
Load?	Yes
(Yes,No=Shift)	S1/8
Load accel?	20%
(0=no, 100=max ramp)	S1/9
Load top speed?	80%
(0-100%)	S1/10
Load slow turns?	0
(0-999)	S1/11
Load decel?	0%
(0=no, 100=max ramp)	S1/12
Load finish speed?	0
(0-100%)	S1/13
Wind accel?	5%
(0=no, 100=max ramp)	S1/14
Wind top speed?	80%
(0-100%)	S1/15
Wind slow turns?	2
(0-999)	S1/16

Wind finish speed? (0-100%)

WINDING PROGRAM WITH CALCULATION

Core O.D.?	100 mm
(0-999.9mm)	S1/20
Core I.D.?	50 mm
(0-999.9mm)	S1/21
Core height?	25 mm
(0-999.9mm)	S1/22
Wire diameter?	1.000 mm
(0.001-9.999mm)	S1/23
Winding method?	segm.
(Cont,Segm,Prog.,Rev.=Shift)	S1/24
Winding sector?	360°
(0-360° degrees)	S1/25
No of turns?	250
(0-99999)	S1/26
Cumul turns to next seq?	No
(Yes,No=Shift)	S1/27
Core start dir?	CCW
(CW,CCW=Shift)	S1/28
Stop after wind?	Yes
(Yes,No=Shift)	S1/29
Core index?	CW
(CW,CCW,No=Shift)	S1/30

WINDING PROGRAM

WITHOUT CALCUL	ATION
Load turns?	133
(0-99999)	S1/20
Wind turns?	250
(0-99999)	S1/21
Cumul.turns to next seq.? (Yes,No=Shift)	No S1/22
Core start dir?	CCW
(CW,CCW=Shift)	S1/23
Pitch per turn?	0,300 mm
(0-99.999 mm)	S1/24
Wind CW turns?	0
(0-99999)	S1/25
(0-99999)	51/25
(0-99999) Wind CCW turns? (0-99999)	250 S1/26
Wind CCW turns?	250
Wind CCW turns?	250
(0-99999)	S1/26
Stop after wind?	Yes
Wind CCW turns? (0-9999) Stop after wind? (Yes,No=Shift) Core index?	250 S1/26 Yes S1/27

TAPING MACHINE PROGRAM

(Tape,Wind=Shift)	
Head type? (Enter Menue=Shift)	RW3
Table type? (Enter Menue=Shift)	RW222
Roller O.D.? (0-999.99mm)	65.00 n
Auto Index Speed? (0-100%)	20
Mag. Joystick speed? (0-100%)	50
Core Joystick speed? (0-100%)	50
Load? (Yes,No=Shift)	S1
Load accel? (0=no, 100=max ramp)	20 S1
Load top speed? (0-100%)	80 S1/
Tape accel? (0=no, 100=max ramp)	20 S1/
Tape top speed? (0-100%)	80 S1/

Tape slow turns? (0-999) 2 S1/13 90% S1/14 Tape decel? (0=no, 100=max ramp) Tape finish speed? (0-100%) 20% S1/15

Yes S1/16

Automatic calc? (Yes,No=Shift)

TAPING PROGRAM

WITH CALCULATION		
Core O.D.?	30 mm	
(0-999.9mm)	S1/17	
Core I.D.?	20 mm	
(0-999.9mm)	S1/18	
Core height?	10 mm	
(0-999.9mm)	S1/19	
Tape width?	9.000 mm	
(0.01-99.99mm)	S1/20	
Overlap on O.D.?	50%	
(0-100%)	S1/21	
Culum.turns to next seq?	No	
(Yes,No=Shift)	S1/22	
Taping sector?	360°	
(0-360°degrees)	S1/23	
Core start dir?	CCW	
(CW,CCW=Shift)	S1/24	
Stop after tape?	Yes	
(Yes,No=Shift)	S1/25	

TAPING PROGRAM WITHOUT CALCULATION

Load turns? (0-9999)	10 S1/17
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Tape turns? (0-99999)	80 S1/18
0	No
Cumul.turns to next seq? (Yes,No=Shift)	S1/19
Core start dir?	CCW
(CW,CCW=Shift)	S1/20
Pitch per turn?	1.500 mm
(0-99.999)	S1/21
Stop after tape?	Yes
(Yes,No=Shift)	S1/22
Core index?	No
(CW,CCW,No=Shift)	S1/23
Next sequence?	
(0-9999)	

DIALOG FUNCTIONS

20% S1/18 Yes S1/19

Special Start Enter Menue=Shift)	1
Batch quantity? No of Pcs for m/c stop)	
Curr.No of Pcs= Reset=key C)	(
Prod.time= Reset curr time=key C)	0:
Gear rack locking? On,off=Shift)	of (
Print current Prog.No? Print=Shift)	2
Del. current Prog.No? Delete=Shift)	2
Frans. current Prog.No? Transfer=Shift)	

PRINTOUT AFTER PRODUCTION

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Program No: Head type: Roller O.D.: Auto index speed: ldx Joystick speed: Mag. Joystick speed:	1 RW3 65.00 mm 20 % 25 % 20 %	Methode: Table Type: Core O.D.: Core I.D.: Core height:	Wind RW222V 100.0 mm 50.0 mm 25.0 mm	
Load: Load accel: Load sloy speed: Load slow turns: Load decel: Load finish speed: Wind accel: Wind accel: Wind slow turns: Wind slow turns: Wind finish speed: Wind finish speed: Wind finish speed: Wind diameter: Load turns: Wind turns: Cumu. turns count: Winding sector: Core start dir: Pitch per turn: Wind CW turns: Wind CW turns: Stop after wind: Core index: Index. distance: Stop after Index:	\$1 Yes 20 % 80 % 2 90 % 20 % 80 % 20 % 80 % 20 % 1.000 mm 44 44 44 44 44 44 44 40 20 % 20 % 20 % 3000 Yes Cont. 3800° CCW 2.052 mm 0 300 Yes CW 26.1 mm Yes	\$2 Yes 20 % 80 % 2 90 % 20 % 20 % 20 % 20 % 80 % 20 % 1.000 mm 47 7 300 Yes Cont. 360° CW 2.179 mm 0 300 Yes CCW 80.0 mm Yes	\$3	