SPIRAL WINDING MACHINE MODEL KWM-PSE

WITH AUTOMATIC PITCH CHANGE AND AUTOMATIC COOPER WIRE INSERTION FUNCTION. WITH LARGE DISPLAY WITH 5,5" MONITOR AND GRAPHICAL INFORMATION.

This automatic high speed winding machine is designed for continuous winding onto endless carrier material.

FEATURES:

- Versatile applications
- Many standard accessories
- Non stop operation
- Virtually maintenance free
- PLC control
- Production data screen · Programming with user friendly windows

WINDING MATERIALS:

- · Round or flat wire · Copper, aluminium, chrome-
- nickel and more
- Wire diam. 0,015 0,40 mm, AWG 35 - 26
- Wire supply spools up to DIN 125 (250)
- Also tape wrapping

CARRIER MATERIALS:

- · Flat- or round carriers up to 8 (10) mm in size (larger on request)
- Steel, glass fibre, plastic, fabric, Nomex, cables etc.,
- Tube shaped materials Material supply spools up to DIN 400 (1000)
- · Multi-strands from several supply cones

INSERTION MATERIALS:

- Wire diameter up to 0,40 mm, AWG 26
- Up to 4 wires quadfilar
- Supply spools up to DIN 160

MACHINE SPECIFICATION

- Power supply: 230 Volt AC, 50/60Hz
- Motor power: 400 Watt
- Net weight: 140 kg
- Machine size: 3700 mm x 900 mm

MACHINE CONSISTING OF:

- 1 machine base with stepper motor for pitch drive 0 - 4,0 mm per turn, servomotor for winding head drive up to 6.000 RPM, plexiglass security cover
- 1 winding nozzle and one insertion nozzle
- 1 PLC controller with 5,5 inch monitor
- 1 Signal lamp for operation status
- · Memory capacity of 8 programmes with each 20 independent lengths
- Interface for PC
- · Optional software for data exchange

PROGRAMMING CAPABILITY

- PROGRAMMABLE WINDING DATA:
- · Production quantity (No. of Products)
- · Carrier material diameter
- Winding material Ohm Value with automatic pitch calculation
- · No. of lengths with independent pitch
- Distance per length
- Pitch of turns per length
- Copper insertion per length
- Autostop per length
- Special functions per length (start, duration and end) PROGRAMMABLE MACHINE FUNCTIONS:
- · Auto control of winding speed (acceleration, top speed and deceleration)
- Auto control of winding pitch (stepless 0 4,0 mm per turn)
- Auto control of wire tension (electromagnetic)
- · Auto control of speed adjustment when pitch changes
- · Auto Ohm control when resistance controller is used
- Auto copper wire insertion
- Auto carrier material brake control
- · Auto winding material brake control PRODUCTION DATA DISPLAY:
- · Current program No. and length No.
- Current winding speed (in RPM)
- Current winding pitch (in mm)
- Current wire tension value (in %)
- Current copper shooting
- Current Ohm control
- Current special function
- · Current production quantity
- · Programmed quantity reached

ACCESSORIES

- KWM-PSE-Z02: Motorized take up with auto speed control
- KWM-PSE-Z05: Motorized take off with auto speed control
- KWM-PSE-Z13: Take off unit for copper insertion wire
- KWM-PLE-Z08: Resistance controller (tolerance +/- 1%)
- KWM-PSE-Z04: Resistance measuring unit up to 12 meters length
- KWM-PSE-Z01:
- Copper shooting decice • KWM-DFT
- Detection cutter for extruded cables



TYPICAL INPUT AND PRODUCTION SCREENS

INTRODUCTION SCREEN

Variabler Spiral Winder Type KWM-PSE

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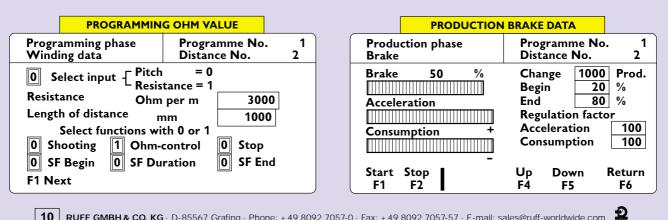
	PRODUCTION BASIC SCREEN		
Production phase Pro		Programm	e No. 1
Speed rpm 5000			5000
Distan	Distance		1000
Produ	ct	Dista	nces 20
Quant	ity	Prod	ucts 100
Start F1	Stop Data F2 F3	Pitch Brak F4 F5	e Quantity F6

	PROGRAMMING PRODUCT DATA			
Programming phase Product data		P	rogramme N	No. 1
No. of distances			20	
Dia. of ca	Dia. of carrier material		1.500	mm
Dia. of wi	Dia. of winding material		0.200	mm
Resistance of wire			100.0	Ohm/m
Brake po	wer Chang	е	1000	pcs
Next	Begin		20	%
F1	End		80	%

	PRODUCTION PARAMETER			
Production phase Parameter		Programme Distance N		1 2
Total length 1000				
Measuring	Measuring Resistance at		mn	1 🗌
Cut at		2500	mn	1 🗌
Special Function at		3000	mn	1 🗌
Quantity Order 1000 Actual 555				
Start Stop End Stop Extra F1 F2 F3 F4			Return F6	

PROGRAMMING PITCH PER TURN				
Programming phase Winding data	Programme No. Distance No.		1 2	
O Select input - Pitch = 1 Resistance = 0				
Pitch per turn	mm	2.500		
Length of distance	mm	1000		
Select functions with 0 or 1				
1 Shooting 0 Ohm	control	0 Stop		
0 SF Begin 0 SF Du	uration	0 SF End		
F1 Next				

PRODUCTION	PITCH CONTROL
Production phase Pitch control	Programme No. 1 Distance No. 2
Total length	2000 mm
Measuring resistance	2500 mm
Measuring copper shoot	3000 mm
	rection measure 0 adjusted
Start Stop Hand F1 F2	Up Down Return F4 F5 F6



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