

VC-Rebuild-Package for old Ruff machines

For Ruff Bench machines: RWA & RWE-LE & RWE

For Ruff Floor machines: RWS-PC & RWS-MICRO-PC & RW55 & RW55-PC

Example of Ruff Floor machine after Rebuild:



VC-Rebuild-Package for old Ruff machines

- **New operator controls:**

Technical Details:

- Touch Screen 12,1"
- RAM Memory: 1 GB
- Front Access: 1 x USB 2,0
- Rear Access: 1 x Ethernet 10/100 Mbps



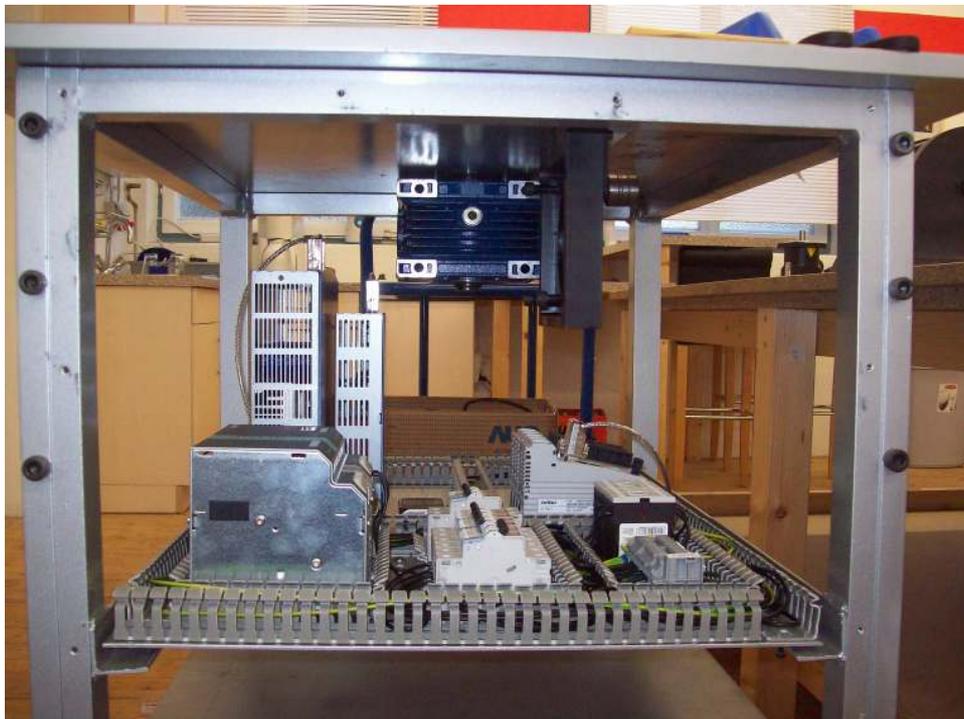
Advantages:

- VC Machine Software runs on all standard XP PCs
- WIN-XP, Network, USB, Ethernet, W-LAN
- Automatic Winding Program Calculation
- Only multi language
- Self learning by VC Teach-In system



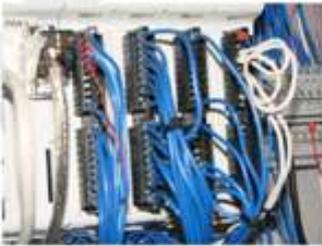
Operator Touch Screen

- **New electro & motor drive station:**



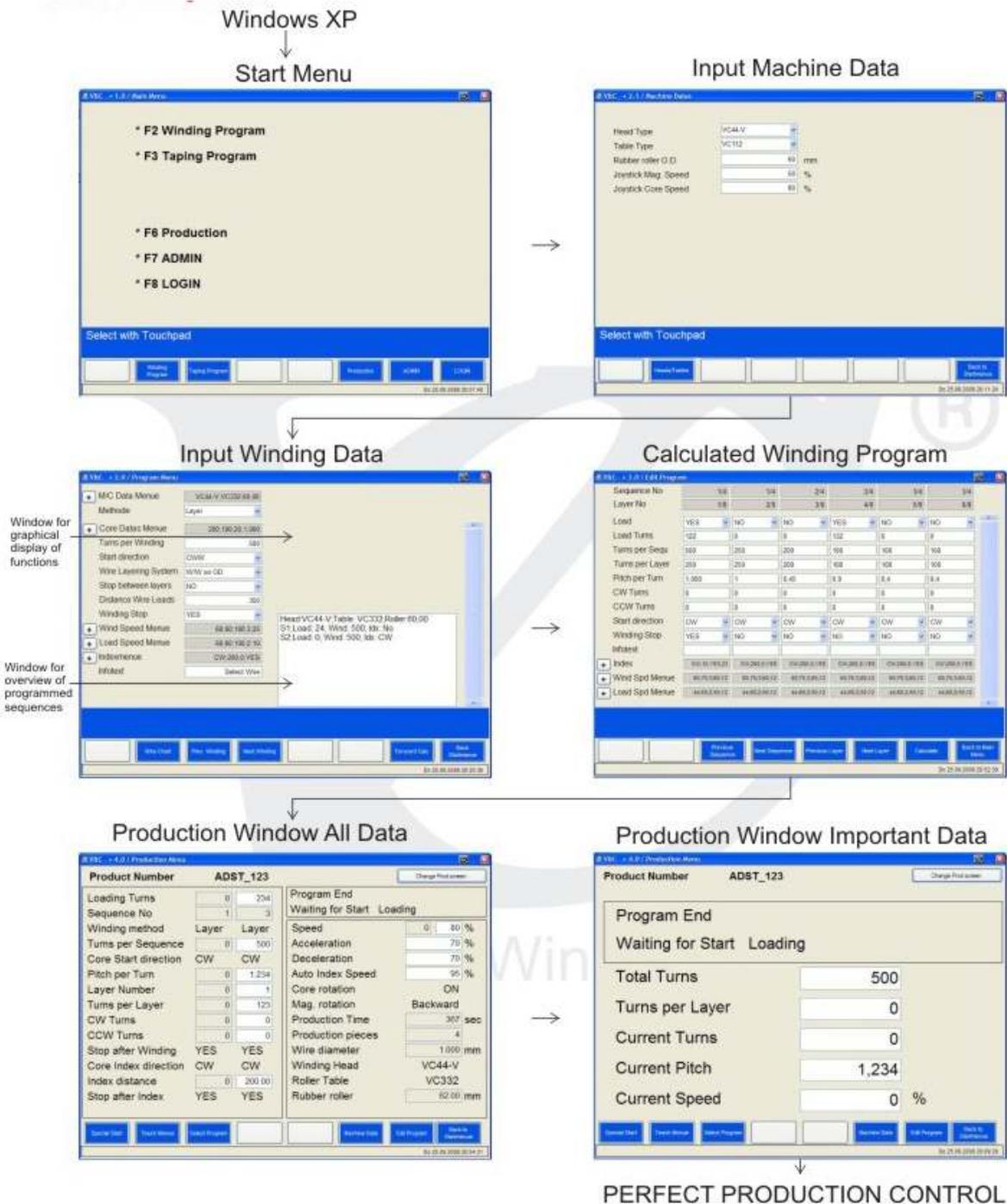
VC-Rebuild-Package for old Ruff machines

- Overview new components

		
Touch Screen	Switch Control Unit	Hand Control Unit
		
Break Cylinder	Jet Move Motors and Gear Box	Jet Move Servo Drivers
		
Electro Station	Wire Connections	Electrical Components
		
Electrical Components	Power Supply	Cable Connections

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- **New Software:**



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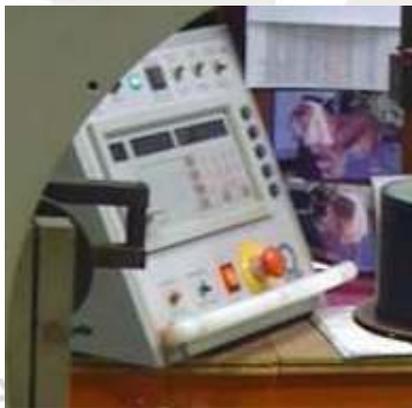
- Rebuild Example: Conversion of Ruff floor machine into modern VC machine:

Before Rebuild:

Old Ruff Floor machine



Old controller no more spare parts
Controls



After Rebuild:

Modern VC Floor machine



Modern Controller - Touch PC & Hand



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- Rebuild Example: Conversion of Ruff floor machine into modern VC machine:

Before Rebuild:

Old mechanical drive system



Old Relay electrostation



Old DC Motor



After Rebuild:

Modern electronic drive system



Modern PLC electrostation



Modern powerful servo motors



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- Example of rebuilt Ruff Toroidal Winding machines carried out at customers sight:



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- Description of the work carried out when rebuilding a Ruff Toroidal Winding machine:

- Remove existing control box & electrostation & motors
- Strip down machine & clean
- Change worn bearings & belts
- Fit new PLC control & electrostation
- Fit new SERVO motor & driver to winding head drive
- Fit new SERVO motor & driver to core drive
- Fit new reduction gear box
- Fit new safety relay & E-stop
- Fit new SwitchCon and HandCon & Foot pedal
- Re-wire & load new Software
- Test & de-bug



Precision Coil Winding Machines

VC-Rebuild-Package for old Ruff machines

- List of Components used when rebuilding a Ruff Toroidal Winding machine:

- PC with Display 12,5," touch screen, Network, USB, Ethernet, W-LAN etc.
- PC Software: WIN-XP, Program calculation , Production Data, Multi language etc
- PLC Jet control unit from Jetter with machine software
- Holding arm for PC Controller
- Switch Con Unit with cable and plug
- Hand Con Unit with cable and plug
- SERVO motor form Jetter 8,6 Nm for winding head drive
- SERVO motor from Jetter for 4,3 Nm core drive
- Holding plates & pulleys and belt for head motor
- Holding plates & pulleys and belts for core motor
- Drive pulleys and belt for female housing on RWS
- Gear box Fine adjustment & pulleys & belt
- Machine cover plates complete with sockets, pneumatic station, etc.
- Complete Electro station connection 230 V. AC (110 V. AC)
(From VC machine series VC-STANDARD-PC or VC-FLOOR-PC)
- Set of operating tools
- Operation Manual

Precision Coil Winding Machines