WPC APEX
3rd Generation Wintriss Clutch/Brake/Press Control
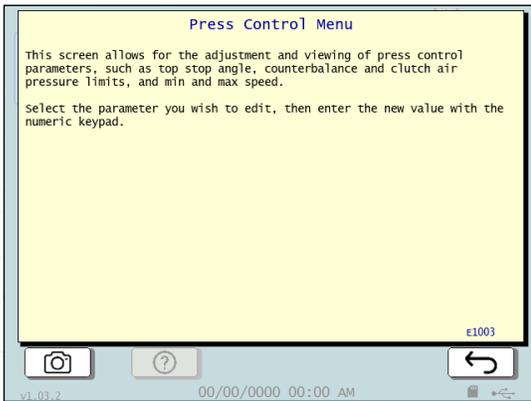
WPC APEX

Full-Featured Wintriss Clutch/Brake Press Control for Safety and Automation
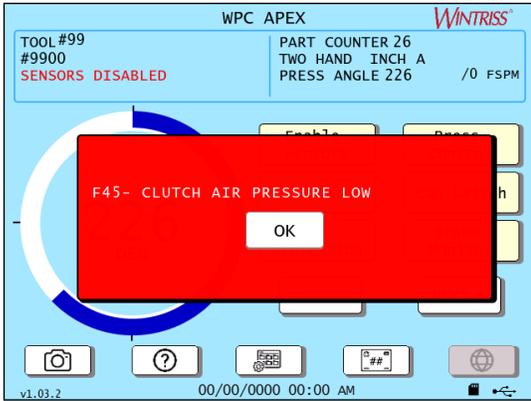
WPC APEX dislays fault code and explanation of machine fault.

Help or detail screens are available on every page.

WPC APEX is designed for any clutch/brake control application. Resolver-based for accuracy and reliability, it meets or exceeds all ANSI B11.1-2009 and OSHA 1910.217 regulations, including Control Reliability.

WPC Standard Features

The WPC APEX includes all the standard features of the WPC line: Clutch/Brake Control, Brake monitoring (both stopping time and number of degrees to stop), crank angle and SPM display.

In addition, the WPC APEX features counters (strokes, good parts, total hits, presets), up to 7 cross-checked safety interlocks and 7 standard non-safety programmable user inputs, a 4-input die protection system, and 8 optional programmable cam outputs.

Improved WPC Features
Detailed Self Diagnostics

Instead of a simple code, when a fault is detected, an error pop-up will appear on the WPC APEX screen with a detailed explanation of the fault.

Interrupted Stroke Provision

When an interrupted stroke occurs, the WPC APEX automatically changes to "Two-hand-maintained Inch" mode, then reverts to its original production mode once the press reaches the top of the stroke.

Micro-Inch

Makes setup easier by enabling you to inch the slide for a predetermined amount of time whenever you press the palm buttons.

Brake Monitor

The WPC's built-in real-time brake monitor performs all standard brake monitor functions including the 90° stop-time test and a unique brake wear indicator.

WPC APEX Retrofit Options

WPC APEX has all WPC standard features and is compatible with all available system components for press retrofits. You can upgrade older components and minimize downtime during installation.

Clutch/Brake Motor Control

The APEX CBMC includes WPC APEX necessary motor control components for a complete retrofit. The standard motor starter package is up to 20 HP @ 460 VAC. Other configurations can be quoted on request.

View and manage your tools with ease with the WPC APEX HMI touchscreen.

WPC APEX Features

Includes built-in tool memory, programmable features, and a modern HMI touchscreen.

User-Configurable Interlocks and Inputs

WPC APEX provides 7 standard inputs for non-safety applications such as low lube, drive faults, incorrect feed mode, etc. and up to 7 pairs of cross-checked interlocks for safety applications such as monitored door guards and die safety blocks. These interlocks and inputs can be configured with their own custom names.

Mode-Specific User Inputs

The user-configurable inputs can be setup to only apply in certain operation modes (Inch, Single, Continuous, and Dead Motor Inch.).

Programmable Cams

WPC APEX can be configured with an 8-channel programmable cam switch, which can be used to control feed initiation, air blow-off, etc.

Four Light Curtain Inputs

The WPC APEX can connect to up to four sets of light curtains. This allows you flexibility in protecting your operators and machines, e.g. front and back guarding.

Dedicated BDC and TDC outputs (NPN)

These can be used to enable die clamping, ram adjust, etc.

Die Protection Inputs (4)

These can be programmed as cyclic (Green), Static Normally Open (Yellow), or Static Normally Closed (Red).

Program/Run and Operating Mode Key Switches

Programming and operating mode settings are supervisory controlled via key switches.

Tool Number Memory

WPC APEX can store settings for up to 50 dies (standard).

WPC 2000 Legacy Mode

When running in legacy mode, the WPC APEX operates as a WPC 2000 control, and is compatible with legacy products such as the SmartPAC 2, WPC Option 1, WPC Option 2, and WPC Clock Display.

Four Operator Station Inputs

WPC APEX allows native use of up to 4 Operator Stations.
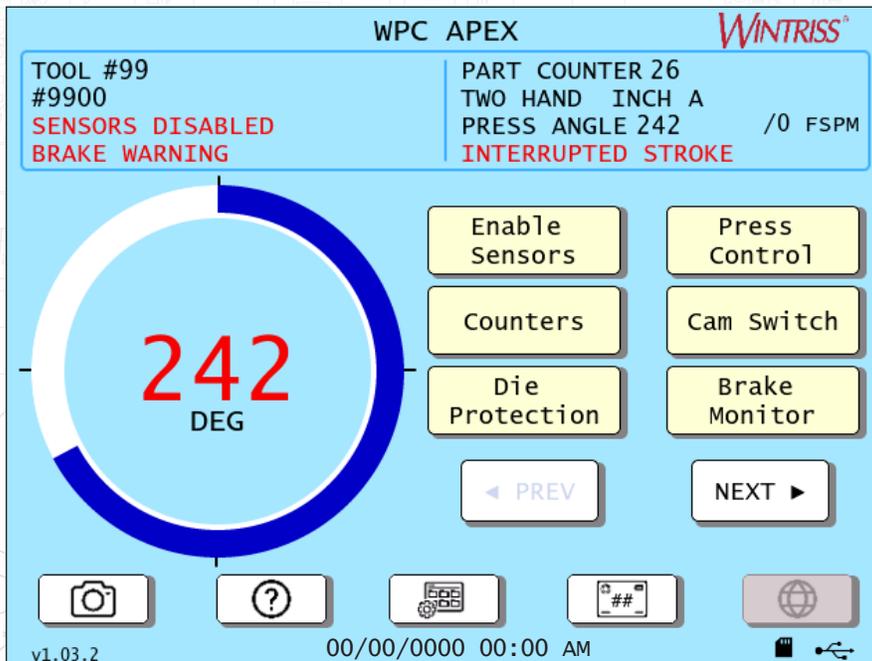
Firmware Updates

These are delivered via the USB port on the WPC APEX display board.

Five Programmable E-Stop Code Inputs

These have fixed fault codes that can be custom named.

WPC APEX HMI

HMI includes notable press information at-a-glance and easy navigation to valuable screens.

From left to right, the hotkeys represent the Screenshot Button, Help Window, Tool Manager, Magnified View, and Language (Option).

Status Window

Shows your tool, die protection status, settings, and run mode.

Angle Wheel

Shows the live angle of the crank wheel.

WPC APEX die protection detects common die malfunctions such as non-ejected parts, material buckle, and misfeeds.

Option 2
WPC APEX Expanded Capabilities

Motor Current Readout

Optional current sensor is required: Manual counterbalance pressure adjustments.

Flywheel Brake Control

Ensures that the flywheel brake is released or engaged at the proper time.

Lube Control

Monitors and controls up to three existing lube systems, using feedback from cycle switches. If there is a lube system malfunction, the press is top-stopped and a detailed fault message is displayed.

Speed Control for Variable Speed Presses

Precise speeds can be set for each mode (Inch, Single-stroke, and Continuous) and are conveniently stored in the SmartPAC PRO's memory for each tool. The press speed changes automatically when you change modes.

Hydraulic Overload Control

Emergency-stops the press when a hydraulic overload occurs and provides the logic necessary to reset the system.

Integration with SmartPAC PRO

WPC APEX Integrated with SmartPAC PRO is a Powerful Combination of Safety and Press Automation.

WPC APEX integrated with SmartPAC PRO has all WPC standard features and is compatible with all available system components for press retrofits.

SmartPAC PRO Features:

- Unlimited Tool Memory
- Programmable Counters and Speed Limits
- Networkable: View Press Status Over the Internet, Send Text Messages, etc.

SmartPAC PRO Options:

- Info Center for Paperless Shop
- Up to 32-Sensor Inputs for Die Protection
- Up to 16-Channel Programmable Cam Outputs
- Four Input WaveformPAC Analyzer - Load Monitor
- Servofeed Interface (SFI)
- Auto Shut Height & Counterbalance Control
- Preventive Maintenance Monitor
- Remote Data Collection
- Alternate Language Displays

Customizable

Clutch/Brake/Motor Control Consoles and Panels built to your specifications!

Custom Control Options

- Reversing or Non-Reversing Starters
- Variable Speed Drives
- Fused Disconnects
- Control Transformers
- NEMA or IEC Components
- Integrated Servofeed Controls
- Integration of PLCs for Automation
- Select an Enclosure of Your Choice - Pendant, Consolette, Freestanding, Press-mounted, or Console

The Wintriss Advantage

- Combining all press control functions in one enclosure saves space and eliminates clutter
- OSHA/ANSI compliance for both motor control and clutch/brake control including electrical schematics

Technical Help

Unsurpassed Wintriss Services

- Nationwide Field Service
- Overnight Shipment for Replacement Parts
- Pressroom Surveys
- Toll-free technical support hotline: 1-800-586-8324

Wintriss Controls Group is a leading manufacturer of press automation, die protection, press brake guarding, and safety controls for metal stamping and forming industries, and data collection systems for all discrete manufacturing. We provide seminars for all products and OSHA compliance along with plant surveys.

These products, which leverage Wintriss's 70+ years of experience in the metal stamping industry, are known for their proven performance and rugged dependability in the toughest factory environments. Wintriss equipment is backed by attentive service, timely repairs, and comprehensive spares inventories. A toll-free hotline gives customers immediate access to technical support experts for product information and applications assistance.

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