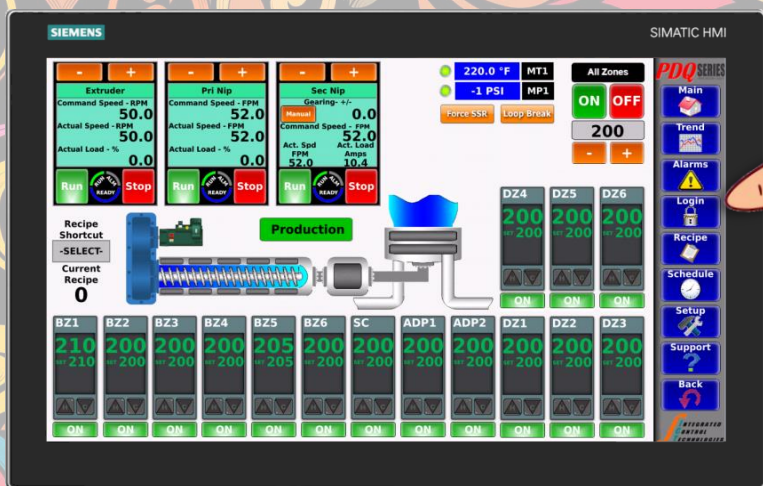


**INTEGRATED
CONTROL
TECHNOLOGIES**



Get Your
Extruder
Out of the 7's



www.integratedcontroltech.com

The screenshot displays the PBOQ Series control interface. At the top, it shows 'S100' and 'S100' (likely serial numbers or identifiers). The main display area is divided into several sections:

- Extruder Section:** Shows 'Command Speed 100%', 'Actual Speed 50.0', and 'Actual Load - %'.
- P11 Mip Section:** Shows 'Command Speed 100%', 'Actual Speed 52.0', and 'Actual Load - %'.
- Sec. Mip Section:** Shows 'Command Speed 100%', 'Actual Speed 0.0', and 'Actual Load - %'.
- Temperature Section:** Displays '220.0 °F' and '1 PSI'.
- Control Buttons:** Includes 'Main', 'Trend', 'Alarm', 'Login', 'Recipe', 'Schedule', 'Setup', 'Support', and 'Back'.
- Production Section:** Shows 'Production' status and a 'Recipe' selection menu.
- Temperature Readings:** Displays '220.0', '200.0', and '200.0' for different zones.
- Pressure Readings:** Displays '200', '200', and '200' for different zones.
- Flow Rate Readings:** Displays '200', '200', and '200' for different zones.

1. IT MUST BE EASY FOR A NEW OPERATOR TO USE
2. STOP OPERATORS FROM DAMAGING EQUIPMENT
3. IMMEDIATELY AND SPECIFICALLY IDENTIFY PROBLEMS
4. PROVIDE PROCESS DATA FOR BETTER PRODUCTION

COLOR ENHANCED DESIGN

BZ1	BZ2	BZ3	BZ4	BZ5	ADPT
389	298	302	300	297	300
SET 300	SET 300	SET 300	SET 300	SET 300	SET 300
SHORTED SSR	LOW TEMP	HIGH TEMP		LOW TEMP	
ON	ON	ON	ON	ON	ON

STOP DAMAGE BEFOREHAND



"Hold The Line" - Toto

PREVENTATIVE DIAGNOSTICS

The screenshot displays the PDU Series monitoring interface. The top section, 'Drive Health', shows various components with their status (0%) and a green indicator light. The bottom section, 'Drive Health Life', shows the remaining life for each component in hours and percentage. The right sidebar contains navigation buttons for Main, Trend, Alarm, Login, Schedule, Setup, Support, and Back.

Component	Status (%)	Life (hrs)	Life (%)
Drive Health	0%	0 hrs	0%
Cooling Fan	0%	0 hrs	0%
Capacitor Bank	0%	0 hrs	0%
Soft Charge Relay	0%	0 hrs	0%
IGBT	0%	0 hrs	0%
Operation Time	0 hrs	0 hrs	0%
Heat Sink Temp.	0°F	0°F	0%
Current	0°F	0°F	0%
Shutdown	0°F	0°F	0%

QUIT WASTING YOUR TIME



THE MAJORITY OF MAINTENANCE DOWNTIME IS ASSOCIATED WITH TRYING TO FIGURE OUT WHY A SYSTEM HAS STOPPED WORKING PROPERLY, BUT OUR SYSTEM TELLS YOU EXACTLY WHAT, WHERE AND WHY THE PROBLEM OCCURRED IN PLAIN LANGUAGE. ALONG WITH VISUALIZED I/O STATUS FOR TROUBLESHOOTING HARDWARE, WE CAN EVEN CONNECT TO YOUR SYSTEM AND HELP.

"I'm Not Going to Let it Bother Me Tonight - ARS

YOUR DATA OUTTA SIGHT?

PLC'S DON'T REMEMBER MUCH, BECAUSE THEY CAN'T, BUT OUR SYSTEM REMEMBERS EVERYTHING AND MAKES IT ALL EASILY ACCESSIBLE. ACCESS PROCESS DATA THROUGH SQL, FILEZILLA OR EVEN A FLASHDRIVE...NO MATTER HOW, WE GOT WHAT YOU NEED! QUIT OPERATING IN THE DARK AND PARTNER WITH SOMEONE THAT HAS A FLASH LIGHT...SPOT LIGHT...NEON LIGHT!

"Flashlight" - Parliament



GROOVY OPTIONS

ARC-FLASH ⚡ PLUS



PRE-ENGINEERED DESIGN TO REMOTELY MOUNT THE MAIN BREAKER ISOLATING HIGH VOLTAGE FROM THE MAIN CABINET WHILE STILL PROVIDING 24VDC TO POWER DIAGNOSTICS, DIG IT!? A VARISAFE PANDUIT NON-CONTACT VOLTAGE DETECTOR IS MOUNTED ON THE DOOR OF THE ENCLOSURE FOR VISIBLE AND TOUCH-POINT VERIFICATION OF VOLTAGE.

"Blinded by the Light" - Manfred Mann's Earth Band

WE CAN CHECK YOU OUT

IT'S ALWAYS NICE TO HAVE SOMEONE LOOKING OVER YOUR SHOULDER WHEN TROUBLE COMES, AND THAT IS WHAT WE CAN DO WITH AN EWON AND AN INTERNET CONNECTION. NO WORRIES BIG DADDY, WE AREN'T CRASHING YOUR FIREWALL, WE'RE TALKING TO THE MAN IN THE CLOUD AND LENDING A HELPING HAND!

"I Need You" - America



SEE IT FROM THERE

USUALLY WE MOUNT THE BIG MONITOR ON THE MAIN ENCLOSURE DOOR, BUT YOU CAN MOUNT IT ANYWHERE ELSE! WE CAN ADD A "CLASSIC" ROCKER ARM, A SEPARATE PEDESTAL, OR YOU CAN PUT IT IN YOUR ENCLOSURE! YOU CAN EVEN SEE IT ON YOUR PHONE OR TABLET! NO NEED TO SPAZ, WE CAN DO WHATEVER WHEREVER DUDE! YOU JUST LET US KNOW HOW YOU WANT IT.

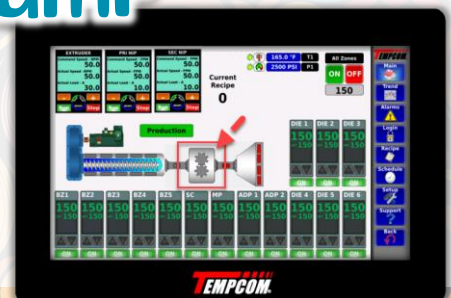
"Any Way You Want it!" - Journey



SMOOTH MOVE MELT PUMP

YOU DON'T NEED TO BUY A SEPARATE MELT PUMP CONTROL; WE CAN ADD THAT TO OUR SYSTEM WHERE IT BELONGS, NO PROBLEMO! ONE SOLUTION, CONSISTENT CONTROL, AND CONFIDENCE IN THE QUALITY OF YOUR PRODUCTION. IT'S DYN-O-MITE!!

"Walking in Rhythm" - The Blackbyrds



OTHER COOL STUFF

CHILL "ROLL" OUT, Man!

**CHILL
ROLL
CONTROL**

ANOTHER PART OF OUR GROOVY PRE-ENGINEERED SOLUTIONS IS THE COORDINATION OF THE CHILL ROLLS WITH THE EXTRUDER. THIS ISN'T SOME JIVE THING WE THREW TOGETHER, IT IS PART OF OUR EXISTING DEVELOPMENT THAT YOU CAN DEPLOY WITH CONFIDENCE, KNOWING IT HAS BEEN PROVEN AND INSTALLED IN MANY OTHER PEOPLES PADS. YOU CAN ASK FOR IT BY ITS NAME, CRC, OR JUST SAY, "LAY SOME CHILL ON ME!" WE'LL CATCH YOUR DRIFT!

"Three Times a Lady" - The Commodores

THE HEART OF YOUR LINE

THE EXTRUDER DRIVE IS THE HEART OF THE LINE AND WHEN IT BUGS OUT, EVERYTHING STOPS. STILL RUNNING DC? BUMMER! IT'S TIME FOR AC, AND THAT'S NO SWEAT FOR ICT; WE HAVE ABOUT 1,000 OF OUR ACPAK DRIVES RUNNING ON EXTRUDERS ALL ACROSS THE US. DUDE, ICT CAN EVEN SHIP SYSTEMS IN 24 HOURS, AND THAT AIN'T NO JIVE!

"Heartbeat, It's a Lovebeat" - The DeFranco Family



MECHANICAL NEEDS



YEP, WE ARE EXPANDING OUR OFFERING TO INCLUDE ALL THAT OTHER STUFF YOU NEED. ASK US ABOUT NEW AND REBUILT SCREWS (YA KNOW, IF YOU USED OUR CONTROL YOU WOULD QUIT BREAKING THEM!) WE ALSO ARE NOW WORKING WITH A GEARBOX REBUILDER AND CAN GET YOU BACK UP AND RUNNING FASTER AND FOR LESS MONEY THAN BUYING A NEW ONE!

"All I Ever Need is You" - Sonny & Cher

MAINTENANCE AGREEMENT

NOTHING LAST FOREVER, EVEN THE GROOVY SEVENTIES! WE OFFER SUPPORT FOR YOUR SYSTEM FOR YEARS TO COME WELL BEYOND THE WARRANTY PERIOD. WHETHER YOU CHOOSE TO HAVE AN ANNUAL AGREEMENT, OR SUPPORT ON DEMAND, EITHER WAY, WE HAVE YOUR BACK, JACK!

"I'll Be There" - Jackson 5



PDQ SERIES

PRICE DELIVERY QUALITY

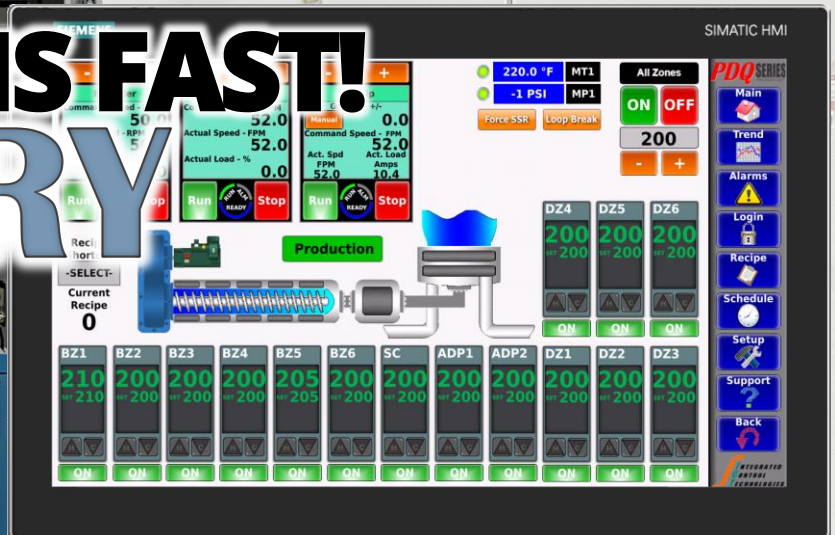
YOU CAN'T...

BUILD IT FOR THIS!

PRICE

BUILD IT THIS FAST!

DELIVERY



BUILD IT THIS WELL!

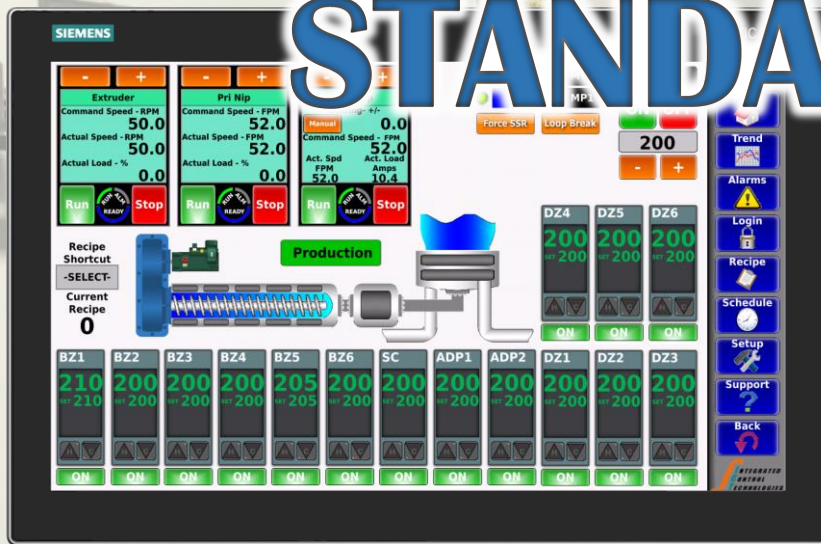
QUALITY



TEMPCOM[®]

EXTRUDER CONTROL SYSTEM

CUSTOM SYSTEMS STANDARD CODE



INSTALLED BASE PROVEN DESIGN



ELIMINATE RISK MARKET LEADER

Risk Assessment Form

Although plastic machinery may be operating, it doesn't mean that there is not a significant risk for extended downtime. The following is a means of measuring risk and determining the urgency of your need for an upgrade:

use one form per line

Answer the following Questions



Is your system in violation of the National Electric Code or a safety concern?

(Systems from China, Taiwan, and those done internally are suspect)

Is the extruder more than 20 years old?

Does the manufacturer of the extruder no longer exist or been purchased by another company?

Does the manufacturer of the control system consider it obsolete and no longer available?

Are any of the software or components used in the control system considered obsolete?

Are some portions of your extruder control non-operational?

Are you using eBay as one of your suppliers?

Has the door ever been left open with a fan blowing in the enclosure? Insufficient cooling

Has there been any undocumented changes to the extruder control system?

Is your control wiring outside wire ducts making troubleshooting difficult?

Does the extruder control system contain mercury relays?

Has the screw ever been damaged because an operator started into a cold zone?

Has there been a run-away heater condition that caused damage or downtime?

Are there DC Drives and Motors in use on the extruder?

Have you experienced more than 3 days of unscheduled downtime because of a maintenance issue?

Does someone come in early to pre-heat the extruder?

Is process data collected by hand?

YES

NO

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Total Number of "Yes" Answers _____

Low

Medium

High

Very High

0	1	2	3	4	5	6	7	8	9+
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Low Risk = Your need is not urgent

Medium Risk = You have a need and should start the planning process

High Risk = Your need is urgent and you should try to upgrade your line within the next few months

Very High = Your need is critical and you should upgrade your line immediately

Control System Evaluation Form

Selecting an established solution that is used within the plastics industry, is a better investment than getting something custom developed. A proven solution minimizes risk as well as provides you with a richer feature set. Pre-engineered solutions are even better because they offer the greatest “bang for the buck” in terms of reliability and features at a lower cost. A product evaluation could be done by reviewing a specification sheet or better yet, a product demonstration which would give you more insight into the product design itself.

Answer the following Questions

YES NO

Does the operator screen appear to be easy to use and intuitive?	<input type="checkbox"/>	<input type="checkbox"/>
Does the operator or main page have a graphical representation of the system?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product sense a shorted solid-state relay and alert the operator?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have cold zone inhibit?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have recipes and recipe scheduling?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have an I/O status page for troubleshooting?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have trending and data collection?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have an alarm log?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have a maintenance log?	<input type="checkbox"/>	<input type="checkbox"/>
Does the product have preventative maintenance scheduling?	<input type="checkbox"/>	<input type="checkbox"/>
Does the system have configurable security levels?	<input type="checkbox"/>	<input type="checkbox"/>
Can the screens be viewed remotely?	<input type="checkbox"/>	<input type="checkbox"/>
Is the system pre-engineered?	<input type="checkbox"/>	<input type="checkbox"/>
Does the system sense a broken probe and failing heater?	<input type="checkbox"/>	<input type="checkbox"/>
Has the system been applied to various extruder manufacturer's products allowing for standardization?	<input type="checkbox"/>	<input type="checkbox"/>

Total Number of “Yes” Answers _____

Run Away

Poor Value

Good Value

Very Qualified

6	7	8	9	10	11	12	13	14	15
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Run Away = This product should not be considered in the evaluation

Poor Value = Although it can be considered, it should not be considered an equal to other products

Good Value = This product should be considered as a possible solution

Very Qualified = This product would be the best choice for your solution

Vendor Evaluation Form

It is possible to get pricing for an upgrade from many sources that claim to have the expertise necessary for a successful project. Unfortunately, selecting the wrong vendor to perform an upgrade can be costly and you may not get what you were expecting. It's important to understand that not all vendors are the same and that you need to qualify them based upon specific criteria. The following is a means of ranking vendors and eliminating those that are not qualified.

Answer the following Questions

YES NO

Do they have literature or a website that identifies them as being a specialist in the plastics industry?	<input type="checkbox"/>	<input type="checkbox"/>
Is their proposed software fully developed?	<input type="checkbox"/>	<input type="checkbox"/>
Can they demonstrate their software (live) with its features and functions?	<input type="checkbox"/>	<input type="checkbox"/>
Do they have multiple user references within the plastics industry?	<input type="checkbox"/>	<input type="checkbox"/>
Are they recognized in any plastics industry publications?	<input type="checkbox"/>	<input type="checkbox"/>
Do they participate in industry trade shows? (NPE, Extrusion Conference, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
Are they a member of the Plastics Industry Association?	<input type="checkbox"/>	<input type="checkbox"/>
Are they a UL508A panel shop?	<input type="checkbox"/>	<input type="checkbox"/>
Is the vendor's company more than ten years old?	<input type="checkbox"/>	<input type="checkbox"/>
Do they have four or more engineers on staff?	<input type="checkbox"/>	<input type="checkbox"/>
Do they have a standardized process flow for upgrades?	<input type="checkbox"/>	<input type="checkbox"/>
Do they have a means of remotely supporting their product?	<input type="checkbox"/>	<input type="checkbox"/>
Do they have a product manual?	<input type="checkbox"/>	<input type="checkbox"/>
Have they completed extrusions systems in multiple verticals (i.e., blown film, pie, wire, cast, etc....)?	<input type="checkbox"/>	<input type="checkbox"/>

Total Number of "Yes" Answers _____

Run Away		Poor Value		Good Value		Very Qualified			
6	7	8	9	10	11	12	13	14	15

Run Away = This product should not be considered in the evaluation

Poor Value = Although it can be considered, it should not be considered an equal to other products

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