

## Overview of the eDART System

# eDART™

### The Next Level of Process Control

The eDART System™ is the most comprehensive and powerful process monitoring and control system for plastic injection molding applications. It helps users gain control over the two greatest variables in injection molding: people and plastic. The system is essential for any molder who wants to stabilize their injection molding process, contain bad parts, and/or control their process to ensure parts of the highest quality, while reducing the cost to make them.

### eDART Versions 9 and 10

Software version 9 offers a full array of in-depth functionalities for the processors who want all of the capability the eDART has to offer. Software version 10 offers a lighter array of functionalities in a more user-friendly package for those who don't need all of the bells and whistles.

### Three Software Options to Choose from

RJG offers 3 software options: the eDART **apex**™ for full process control, the eDART **conx**™ for stabilizing your process, and eDART **flx**™ for abnormal part containment. All software options are available in versions 9 and 10. If more functionality is needed, **conx** and **flx** can be upgraded to **apex**.



## Benefits of the eDART System

### Find the Root of the Problem

This touchscreen-friendly software provides numerical and graphical tools both in the plant overview and at the machine that let users get to the cause of the problem. The eDART can quickly answer questions like: Has the hold pressure changed? Is the screw mixing differently? Has someone adjusted the cooling time? And has the viscosity been rising? This shortens the time to find the causes, keeps utilization up, and provides constant feedback that quality procedures for process setups are being followed.

### Know When a Process Is out of Template

All eDARTs using the **apex**, **conx**, or **flx** software will appear on a system overview screen that shows each machine's status. A quick glance will let users know when a process isn't running to template and how much it has deviated.

### Get Started Quickly and Easily

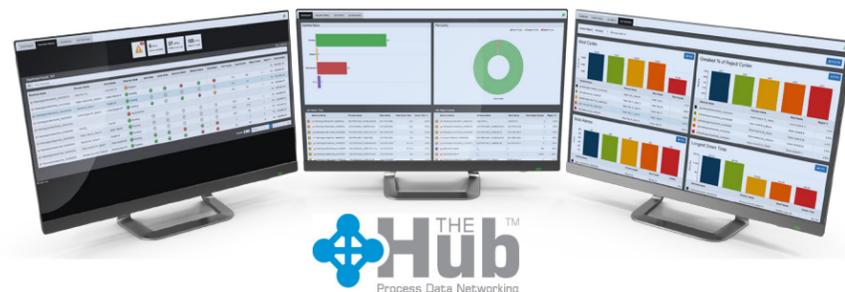
The **apex** software platform works seamlessly with RJG's Lynx sensors. Upon plugging a Lynx sensor into the system, the program automatically recognizes it and allows users to assign it to a mold or machine. This ability to plug and play means less time training and setting up and more time making quality parts.

### Build a Network

We also have remote machine monitoring software available. The Hub™ provides a simple interface that allows users to access, support, and view all of the eDARTs on their network from a web browser. It also automatically stores data from every shot, allowing users to view exactly how each job performed at any given time on any given day. Users can view the current process running on any individual eDART with real time cycle and summary data, including:

- Which presses have gone down and for how long
- Which jobs are currently running
- How many suspect parts are being produced and why

The Hub also gives users the ability to automatically back up all of their eDART data. With detailed job summary reports, managers can quickly deploy resources to fix issues the moment they occur and resolve ongoing problem areas. Job audit reports verify that each machine is running at the proper alarm and control settings and notify users of changes made during the job run.



## eDART System Software Options

**conx**

### conx: Stabilize the Process

The eDART **conx**™ software module provides users with the ability to view machine conditions, giving them the ability to easily verify that a process is repeatable. It may not be practical to put cavity pressure into every mold all at once, but the next best thing is to monitor the machine and material and make corrections in a systematic way. The eDART **conx** software identifies when the right machine setup is running and the material viscosity is in a specified range.

**flx**

### flx: Catch and Contain Bad Parts

The eDART **flx**™ software module provides users with the ability to view in-cavity behavior, such as pressure and temperature. Data collected from the eDART allows processors to set alarm bands to catch and contain short shots quickly with minimal setup. To ensure proper part diversion, the **flx** software can see short shots before the mold opens and control the timing of conveyors, flippers, and robots. This eliminates the time-consuming, costly process of hand sorting each part.

**apex**

### apex: Gain Complete Process Control

The eDART **apex**™ software allows users to see and adjust process conditions in real time. It is equipped with all of the features of **conx** and **flx** plus the ability to monitor cavity pressure. **Apex** allows users to know when a job is operating within tolerance and provides real-time reports about what is happening with their process. If a process is out of match, **apex** not only presents the data, it guides them to a solution. This enables users to keep up with the ever growing demand for absolute quality and produce good parts shot after shot.

### eDART System Software Options

	<b>conx</b>	<b>flx</b>	<b>apex</b>
Process Stabilization	X		X
Abnormal Part Containment		X	X
Advanced Process Control			X

# eDART Diagram with Machine Wired Interface

## eDART™ Layouts for Electric Machines

