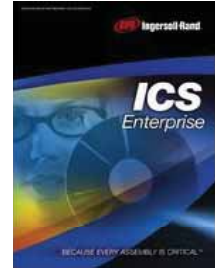


## ICS Software

Paired with an Insight IC1D or IC1M controller and a computer, our groundbreaking ICS Software Suite makes it possible to more precisely control and monitor your fastening process. Optimizing your system is as simple as selecting one of four packages. Visibility of real-time data and controller status can be viewed from your desk top or other remote locations connected to your network. Additional specific information on each software package can be found on the following pages. Software is available in the following languages: Chinese, English, French, German, Italian, Russian and Spanish.

### ICS Connect

ICS Connect gives operators the ability to access and program basic fastening strategies, as well as view cycle data with a single IC1D or IC1M controller via a one-to-one Ethernet connection. ICS Connect is supplied standard with all IC1D and IC1M controllers.



### ICS Network

Description	Part Number	Licenses
ICS Network enables programming of multiple IC1D and IC1M controllers connected through a local area network (LAN) or direct connection. This option also allows operators to program advanced fastening strategies including yield and prevailing torque control. Finally, ICS Network unlocks the patented TactAlert feature of the QE Series tools that provides the operator with tactile feedback of a tool fault or NOK signal through gentle mechanical oscillation in the grip surface, reducing reliance on visual or audible signals.	ICS-NETWORK-001	1
	ICS-NETWORK-002	2
	ICS-NETWORK-005	5
	ICS-NETWORK-010	10
	ICS-NETWORK-020	20
	ICS-NETWORK-050	50
	ICS-NETWORK-100	100
	ICS-NETWORK-500	500

### ICS MultiSync

Description	Part Number	Licenses
The ICS MultiSync package facilitates set-up and control of multiple spindle systems consisting of up to 100 spindles in groups of up to 40 spindles. This package also offers advanced multiple spindle fastening strategies such as fault back-out. Remote monitoring and data archiving are also standard features in this versatile package.	ICS-MULTISYNC-001	1
	ICS-MULTISYNC-002	2
	ICS-MULTISYNC-005	5
	ICS-MULTISYNC-010	10
	ICS-MULTISYNC-020	20
	ICS-MULTISYNC-050	50
	ICS-MULTISYNC-100	100

### ICS Enterprise

Description	Part Number	Licenses
ICS Enterprise offers advanced programming and management of a network of up to 500 IC1D or IC1M controllers using QE tools, QM spindles, or multiple spindle systems. This package includes all elements of ICS Connect, Network, and MultiSync, and also enables ODBC-compliant database archiving, searching, and statistics processing.	ICS-ENTERPRISE-001	1
	ICS-ENTERPRISE-002	2
	ICS-ENTERPRISE-005	5
	ICS-ENTERPRISE-010	10
	ICS-ENTERPRISE-020	20
	ICS-ENTERPRISE-050	50
	ICS-ENTERPRISE-100	100
	ICS-ENTERPRISE-500	500

Additional versions of software have been developed to meet specific customer requirements and protocols.

Ingersoll Rand offers two levels of controllers and four levels of software. The IC1M controller can only be programmed via one of the software packages. The IC1D controller offers limited basic programming via the keypad. Either controller can be combined with any of the four ICS software packages to provide the features and level of sophistication required for various applications. The ICS Connect program is included standard with each controller. ICS site software is licensed based on the number of controllers to be connected to the network.

	IC1M Controller	IC1D Controller	ICS Connect	ICS Network	ICS MultiSync	ICS Enterprise
<b>SOFTWARE PROGRAMMING</b>						
Maximum Number of Configurations	256	256	256	256	256	256
Maximum Number of Steps per Configuration	32	32	1	32	32	32
Program Parameters: Editable		▲	▲	▲	▲	▲
Gang Count		▲	▲	▲	▲	▲
Auto Increment		▲	▲	▲	▲	▲
Quick Setup		▲	▲	▲	▲	▲
Advanced Setup				▲	▲	▲
Name Configuration			▲	▲	▲	▲
CW/CCW Tightening		▲	▲	▲	▲	▲
Tubenut Operation				▲	▲	▲
Adjustable Acceleration				▲	▲	▲
Optional End of Run Data for Each Step				▲	▲	▲
			▲	▲	▲	▲
<b>DATA ARCHIVING</b>						
Number of Stored End of Run Records	200	1000	Unlimited	Unlimited	Unlimited	Unlimited
Data Can be Transferred to					MS SQL	MS SQL
					▲	▲
<b>POWERHEAD</b>						
Powerhead Operation					▲	▲
Maximum Number of Spindles in Powerhead					40	40
Maximum Number of Groups					8	8
Fault Backout Options: None, Spindle, Group, Powerhead					▲	▲
Final Fault Backout Options: None, Spindle, Group, Powerhead					▲	▲
Synchronizing Spindles					▲	▲
<b>SOFTWARE GENERAL</b>						
Date/Time Set		▲	▲	▲	▲	▲
System Name			▲	▲	▲	▲
Select Language		▲	▲	▲	▲	▲
Network Time Protocol		▲	▲	▲	▲	▲
End of Run Onscreen Filter			▲	▲	▲	▲
End of Run Viewable on Screen	Value Only	▲	▲	▲	▲	▲
Load New Software via Ethernet	▲	▲	▲	▲	▲	▲

# ICS Software

	ICTM Controller	ICTD Controller	ICS Connect	ICS Network	ICS MultiSync	ICS Enterprise
<b>TOOL PROGRAMMING</b>						
Transducer Value Adjustment		▲	▲	▲	▲	▲
Angle Scaling Constant Adjustment		▲	▲	▲	▲	▲
Transducer and ASC Reset		▲	▲	▲	▲	▲
Auto Calibration Function			▲	▲	▲	▲
Torque Units Selection		▲	▲	▲	▲	▲
Select Start Mode		▲	▲	▲	▲	▲
Tool Operation Selection		▲	▲	▲	▲	▲
Special Function Switch		▲	▲	▲	▲	▲
Configuration Mode Selection		▲	▲	▲	▲	▲
Set Preventive Maintenance Alarms				▲	▲	▲
View Tool Memory			▲	▲	▲	▲
<b>PASSWORDS</b>						
Number of Passwords	0	1	Unlimited	Unlimited	Unlimited	Unlimited
Auto Timer Lockout		▲				
<b>STATISTICS</b>						
Sample and Population Statistics		▲	▲	▲	▲	▲
Statistics Values Calculated	Cp, Cpk, Mean, SD, Capability, CAM, Max Value, Min Value, % Number of Rejects, % Number of Pass, Number of Rejects High, Number of Rejects Low, Mean Shift, Range					
Statistics Alarms			▲	▲	▲	▲
Statistics Alarms Output	▲	▲	▲	▲	▲	▲
Maximum Sample Statistics Size	200	1000	1000	1000	1000	1000
Powerhead Statistics					▲	▲
Mean Range Charts				▲	▲	▲
Histograms				▲	▲	▲
Pareto Chart				▲	▲	▲
Statistics E-mail Alarms					▲	▲
Stats Calculation from User Selected Data				▲	▲	▲
<b>TIGHTENING CURVES</b>						
Curve Types	Torque vs Angle, Torque vs Time, Current vs Time					
Curves Stored on Controller	Last Reject Last Cycle	Last Reject Last Cycle				
Display Curves On Screen				▲	▲	▲
Print Tightening Curves				▲	▲	▲
Print Tightening Curve Data				▲	▲	▲
Full View				▲	▲	▲
Zoom Function				▲	▲	▲
Number of Curves that Can be Overlaid				1	10	10
Archive Curves					▲	▲
Parameter Values Shown on Curve				▲	▲	▲

	ICTM Controller	ICTD Controller	ICS Connect	ICS Network	ICS MultiSync	ICS Enterprise
<b>TIGHTENING STRATEGIES</b>						
Torque Control		▲	▲	▲	▲	▲
Torque Control with Angle Monitoring				▲	▲	▲
Torque Control with Yield Override				▲	▲	▲
Angle Control		▲	▲	▲	▲	▲
Angle Control with Torque Monitoring				▲	▲	▲
Angle Control with Yield Override				▲	▲	▲
Yield Control				▲	▲	▲
Prevailing Torque				▲	▲	▲
Drag Torque				▲	▲	▲
Backout				▲	▲	▲
Fault Backout					▲	▲
Final Fault Backout					▲	▲
Retorque				▲	▲	▲
Wait				▲	▲	▲
Jog				▲	▲	▲
Bypass				▲	▲	▲
<b>COMMUNICATIONS</b>						
Serial End of Run Data Out		▲	▲	▲	▲	▲
Serial Custom End of Run Data			▲	▲	▲	▲
Host Data Out		▲	▲	▲	▲	▲
PFCS				▲	▲	▲
Plus				▲		▲
Barcode Passive				▲	▲	▲
Barcode Active				▲	▲	▲
Barcode Setup on Screen				▲	▲	▲
Field Bus Setup on Screen				▲	▲	▲
Ethernet End of Run Setup				▲	▲	▲
Ethernet End of Run				▲	▲	▲
Ethernet Programming				▲	▲	▲

# ICS Software

	ICTM Controller	ICTD Controller	ICS Connect	ICS Network	ICS MultiSync	ICS Enterprise
<b>DIAGNOSTICS</b>						
Error Codes	▲					
Text Errors		▲	▲	▲	▲	▲
System Test		▲	▲	▲	▲	▲
Store System Test Results			▲	▲	▲	▲
View Input Status		▲	▲	▲	▲	▲
Set Output Status		▲	▲	▲	▲	▲
View Outputs		▲	▲	▲	▲	▲
Assign Inputs			▲	▲	▲	▲
Assign Outputs			▲	▲	▲	▲
Event Log			▲	▲	▲	▲
View Event Log			▲	▲	▲	▲
Tool Test		▲	▲	▲	▲	▲
Lamp Test		▲	▲	▲	▲	▲
<b>HELP</b>						
Help Screen Menu			▲	▲	▲	▲
Wizard Text		▲				
<b>PRINTED REPORTS</b>						
Number of Reports	0	0	6	6	9	11
Report Types	Cycle Log, Stats, Parameter Dump, Diagnostics, Event Log, Tightening Curve					
					Histogram, Pareto, Mean/Range	Histogram, Pareto, Mean/Range VIN, Custom
Export to File Function			▲	▲	▲	▲