

FIM and Coriolis

New ways of simple and fast information access to field instruments



Coriolis mass flowmeters offer one of the widest variety of meter data in today's instrumentation portfolio.

Not only mass flow, density and temperature can be delivered, but also volume flow, concentrations, and comprehensive diagnostic data to prove measurement quality. Accessing all this data in a simple, fast way is one of the challenges of today. ABB's new Field Information Manager based on latest FDI standard unlocks full functionality of modern Coriolis mass flow meters such as ABB CoriolisMaster FCB400 to make measurement easy.

One of the downfalls of established technology for device management, as many users are experiencing it today, is the complexity of the system. As users requires a basic host system and in addition DTM for every part of the communication chain. This is usually a HART modem DTM, Service access DTMs and, of course, the actual meter DTM. If all these parts come from a single source, interoperability is assured. Most users prefer though, to use only one host system for all meters and application. This can lead to compatibility issues during installation and operation.

The installation alone requires data packages of many MB, most likely well exceeding 100MB. Other known systems are limited to specific modems, operating systems or computer platform. How wonderful a system would be that would offer real lean access to all meters and would come with generic access files already built in. How wonderful it would be if the tool would offer direct links to global data bases offering access to specific data files from a vast variety of manufacturers?



New ABB Field Information Manager (FIM) does offer all of this. It can be downloaded and installed within just a few minutes, offers access to meters using very common HART modems and state of the art FDI device packages representing the physical device like a printer driver. Legacy devices are supported by either a conventional EDD or by the integrated Generic Driver Package.

No worries about mixing HART 5 or HART 7 devices in one installation, even with devices of same type coming in different revisions. FIM handles device types and revisions and does automatically assign the best fitting driver package to it – as simple as attaching a USB memory stick to Your computer. If specific meter files are needed, just drag and drop in FIM from the central server at FieldComGroup.

No longer bound by expensive proprietary hardware and corresponding upgrade cost!

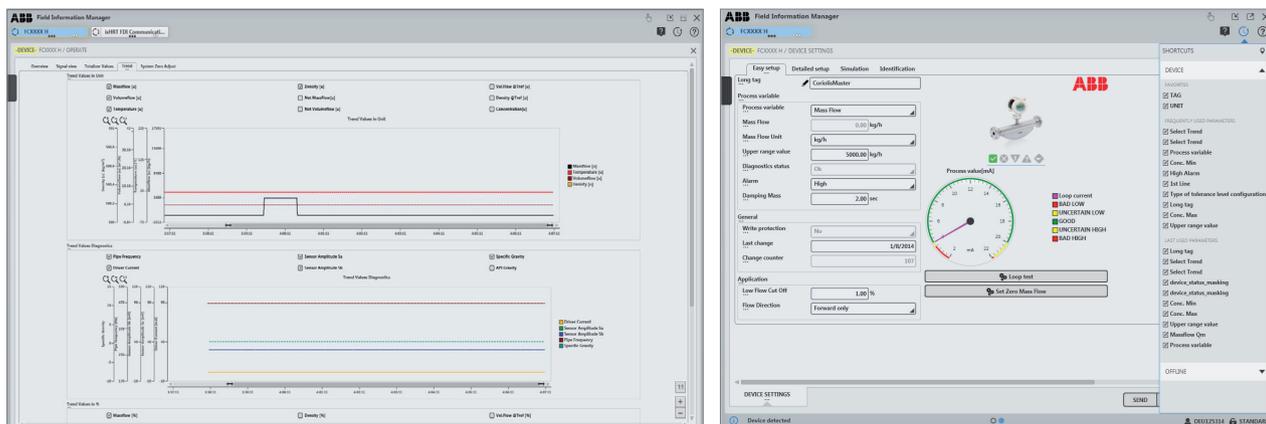
This already relieves many of the pains with configuration of field devices in lab or workshop. But what, if working at site is needed, directly on the devices in the field?

Classic handhelds do this job since years. Along with that, the maintenance engineer is cut off from pervading communication capabilities and other helpful features of today's smart devices: No email, no intranet connectivity, no datasheet and manual, no remote assistance, no audio and video capabilities. Or in other words – the handheld brings him straight back to the 80-ies.

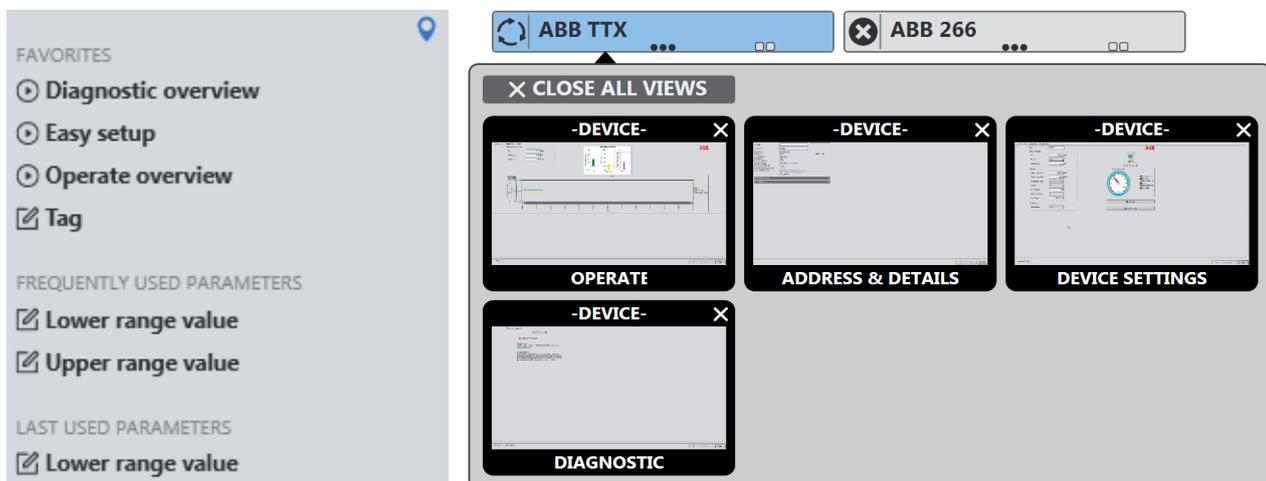
ABB Field Information Manager is optimized to run on WINDOWS based tablet computers and so You simply take all the features and performance of modern computers from lab or workshop just with You into the field – even in hazardous area! And the database with stored configurations for the devices just goes just with You.

For predictive maintenance, FIM already gives access to comprehensive test functions implemented in electro pneumatic positioners such as EDP300, e.g. partial stroke test or speed over position test of control valves. A user interface plugin (UIP) handles all, what a conventional EDD is not able to do. But when a field device signals a severe failure with low or high alarm current, diagnosis is needed. And when a flow measurement in closed loop control fails, it's all about straight forward messages and ease of use of a tool to direct the maintenance engineer to the root cause, not just to display 10 messages or – even worse – an error code to lookup in the manual.

NAMUR has published with its NE107 a recommendation how users in process industry expect diagnosis to be: Simple, structured, configurable. Clear and unambiguous information is the key, rather than too many details where the questions just is: Replace or repair?



The following example of the implementation of a complex Coriolis meter done in a profoundly simple way, illustrates the advantages: Trending has never been easier.



A quick and simple easy setup and favorites for most used parameters offers direct access to all relevant data.



CoriolisMaster in upstream O&G – installed with ABB's Field Information Manager.

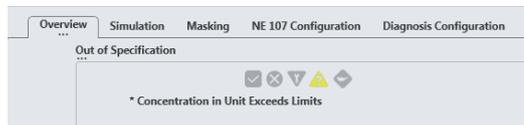
CoriolisMaster FCB400 and all other ABB field devices do show each diagnostic message structured following the NE107 but even more than that: There is a possible cause information added to it and a list of suggested actions in order to not waste time by investigation.

Finally as different the applications, as different the same might be handled. A medium temperature above the limits may need immediate action or are just expected along with an ongoing CIP activity (clean in process). Therefore users wish to tune the messaging of meters in order to be warned for failures and react, instead of getting messages to ignore – with the chance

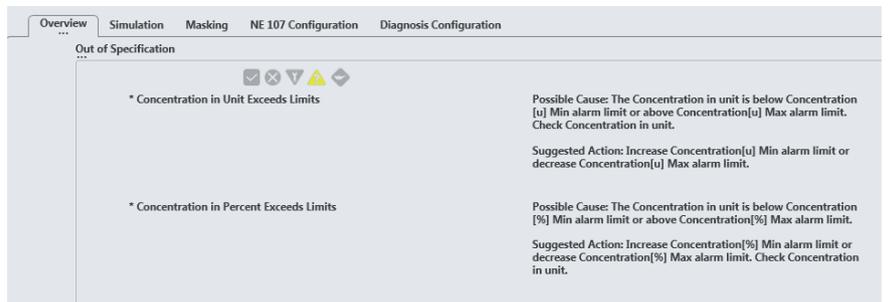
to slip the one important between the many. CoriolisMaster FCB400 series combines all of this and FIM makes it so easy to use.

And detailed diagnostic data including detailed descriptions, NAMUR grouping and NAMUR masking makes maintenance data access really easy.

The future has just begun. Join ABB webpage at www.abb.com/fieldinfo to learn more.



Finally, when the instrument is installed, diagnosis and messaging should be properly tested to feel safe, even in the event of a failure of the measurement. Therefore CoriolisMaster can simulate the different diagnosis conditions out of FIM in order to avoid “failures with diagnosis”.



Contact us

To find your local ABB contact visit:

www.abb.com/contacts

For more product information visit:

www.abb.com/measurement

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