

This front-end software simplifies how you enter sample information into your WinXRF analysis software by allowing you to customize it to meet your requirements. Sentry is a stand-alone application that links directly to the analysis procedure, bypassing the normal sample entry screen, and gives you a full featured, easy to use screen for entering your sample details either singly or as a batch.

## Sentry Sample Entry Software

Option for WinXRF software for  
Thermo Scientific X-ray fluorescence spectrometers

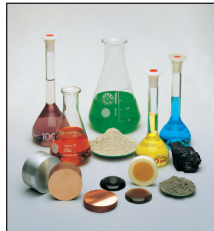


Fig. 1: Sample Entry screen

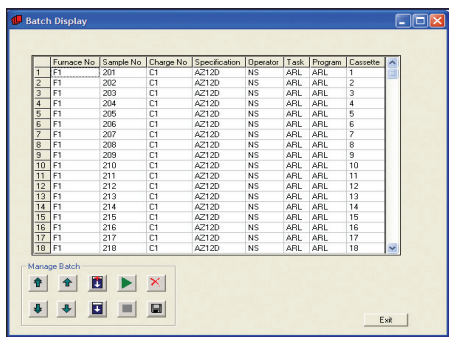
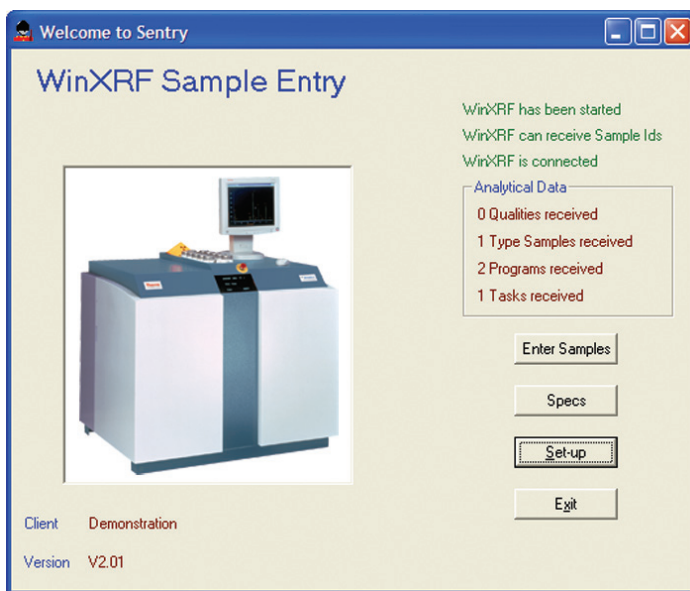


Fig. 2: Batch Display screen



### You tailor it to your requirements

Increased functionality allows you to set-up simpler data entry, using defaults, fixed items and selection from lists. You can also create several sample entry screens for your different samples. Depending on your requirements, each sample type can have different prompts and allowed entries. These entries can also be used to define the parameters for analysis. Sentry will also check that the chosen Analytical Task and Program are valid for the analytical software.

You can have validity checking on the user-entered fields to make sure that contents are of the right format and within a specified range. Once you have completed the sample information entry, you can start the analysis or sample batch directly from this sample entry screen (see Fig. 1).

### Powerful batch entry capabilities

Sentry provides convenient tools for managing a batch of samples. After using one of the many methods of sample entry to specify the samples for a batch, you can follow the analysis progress using the Batch Display screen. (see Fig. 2).

Simple tools allow you to change the order of the sample analysis, change the identity or cassette to be used, remove samples or add further samples to a batch.

'One click' functions are also available to update the identities of all samples in a batch, e.g., with a new Operator Name or to produce an incrementing series, e.g., for the cassette number. If an urgent sample needs to be analyzed while a batch is in progress, you can add the identity to the batch and then set it to be the next sample to be analyzed.

## Sample Registration

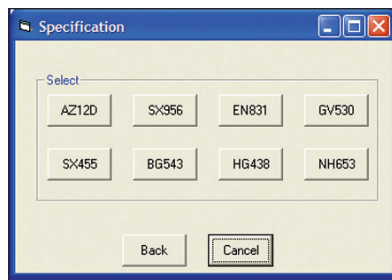
You can register several samples at the start of the day and then select them for analysis when the samples arrive. You can also read in sample identities from a comma separated variable (CSV) file and these can then be forwarded to WinXRF for analysis. These identities could be prepared using Microsoft Excel® or written to the file by another computer, e.g., a LIMS or Production Planning.

## Bar Code Support

You can create a sample identity field contents from the contents of another field. For example, you can enter your identity as one string of characters and it can be broken down and put into other fields automatically. This approach can be used in conjunction with a bar code reader where the user can swipe the bar coded identity and Sentry will put the components into the correct sample identity fields.

## Touchscreen Support

Sentry offers simple touchscreen support. Instead of the user having to type in sample identities, buttons showing the allowed entries are displayed and the user selects the required entry by touching it. This provides a simple, error free method for entering sample details. After completing the selections, one touch will then start the analysis.



## Running Number Support

If you have a sample type that is identified using a running number that increments each time it is analysed, you can configure Sentry to do that automatically. Sentry will also automatically reset this number when it reaches a specific value or at the start of a new day or month.

## Other sample identity entry features

Other sample entry features can simplify sample identification even further. For example, if you use the same identity often, you can define it once and then recall it by just referring to its name. You can also restrict the allowed entries for a sample identity field based on the contents of another field. You might use this if a particular furnace number meant that only some material specifications were allowed. Sentry will also automatically calculate a day number or shift code based on the date and time.

## Display Results

You can use the Examiner features of Sentry to display the values of results after they have been analysed on WinXRF. This allows you to both register samples and manage the results from within the one application. For each sample type, you can define which sample identities and values are displayed. You can also define the order in which the results are displayed. You can sort results by date and time, either showing the earliest first or the latest. You can also sort them alphabetically or numerically.

The display will highlight out of specification results using different flags or text or background colors. Three sets of limits are allowed and you can also display the specification limits for a selected result to give added insight into the specification checking.

Simple management tools are also provided to allow you to modify or delete results, carry out simple statistics and save

them in an Access® database, Excel® spreadsheet or text file.

You can also use the Examiner screen to retrieve results archived in an Access® database.

For measurements not received from the WinXRF instrument a Result Entry screen can be used to manually enter further values. If these manually entered values are from a balance, you can then use the Examiner calculation tools for LOI or fusion bead calculations.

A simple language utility allows you to change the text displayed on the forms and the content of the messages output. You can therefore change the screens to use terms appropriate for your laboratory.

## Custom Service

If the functions within Sentry do not meet your exact requirements, then a cost effective and prompt custom service is available. You will need to provide a full description of the additional functions that you require. A quotation will then be issued for the cost of these additional items.

## Technical Requirements

Sentry can be used from the local PC or a remote PC connected using a TCP/IP network. When used on the local PC, this PC must be fitted with a network interface card.

Sentry can be used with Windows® 2000 or Windows® XP Professional Operating Systems. All features described are available with Sentry V2.0. Sentry uses Thermo Scientific WinXRF version 3.1-2 or later, and includes the supply of the WinXRF/Remote Sample Definition option.

Sample	Production	Furnace No	JA1	JA2	JA3	JA4	JA5	JA6	JA7	JA8	JA9	JA10
Furnace No	H5	H6	H7	H1	H6	H1	H6	H2	H3	H9		
Sample No	1	1	1	1	1	2	1	1	2	1	1	1
Charge No	832	833	834	836	837	E	H829	847	847	848		
Specification	SX956	EN831	EN831	EN831	SX956	Q283R	EN831	AZ12D	AZ12D	EN831		
Si	1.75	2.32	(1.36)	.92	2.33	(1.94)	(2.14)	2.30	2.30	2.30		
Mn	0.63	0.61	(0.25)	0.50	0.71	0.61	0.68	0.61	0.61	0.61		
S	0.069	0.065	(0.027)	0.068	0.065	0.061	0.062	0.067	0.067	0.067		
P	0.069	0.270	0.241	.099	0.564	.099	0.232	0.588	0.588	0.588		
Ni	0.32	0.16	0.05	1.20	0.25	1.24	0.17	0.20	0.20	0.20		
Cr	0.40	0.34	(0.26)	.172	0.41	0.16	0.29	0.45	0.45	0.45		
Mo	0.07	0.21	0.25	0.72	0.30	0.73	0.16	0.27	0.27	0.27		
Ca	0.48	0.27	0.47	0.19	0.27	0.19	0.28	0.31	0.31	0.31		
Mg	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Sn	0.026	0.084	0.122	0.019	0.050	0.017	0.056	0.045	0.045	0.045		
Ti	0.009	0.015	0.015	0.005	0.022	0.007	0.012	0.025	0.025	0.025		
V	0.047	0.011	0.009	0.008	0.015	0.010	0.010	0.017	0.017	0.017		
B	0.0035	0.0048	0.0022	0.0050	0.0060	0.0040	0.0038	0.0058	0.0058	0.0058		
W	0.0048	0.0068	0.0038	0.0112	0.0076	0.0153	0.0039	0.0070	0.0070	0.0070		
Al	0.002	0.003	0.002	0.000	0.000	0.002	0.000	0.002	0.002	0.002		
Fe	0.0016	0.0016	0.0021	0.0011	0.0014	0.0002	0.0013	0.0019	0.0019	0.0019		

Sentry is supplied by:  
 NS Services Ltd  
 5 Claggy Road  
 Kimpton, Herts.  
 SG4 8PZ, England.  
 Tel. + 44 (0) 1438 832717  
 Email : normansharpe@  
 nsservices.co.uk

