



Target Classification

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A new targeting tool has been added to the package for 2011, a classification database for storing example sidescan target capture files. During processing in HYSCAN (SIDE SCAN TARGETING AND MOSAICKING) you can compare new targets in your data to known target types you have saved in the Classification Database.

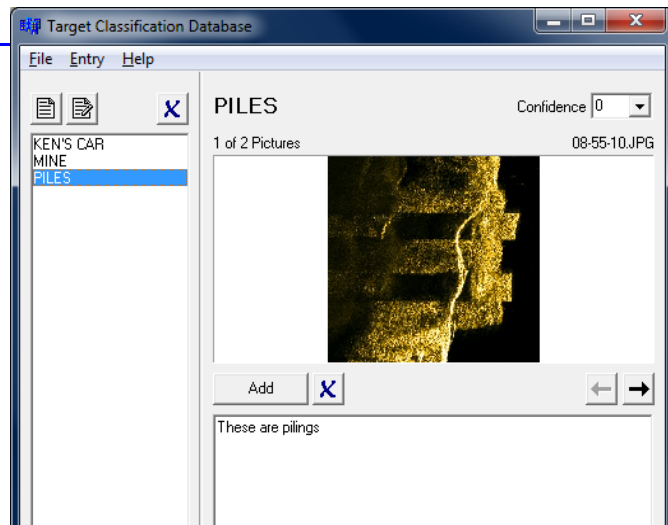
EDITING THE DATABASE

The Classification Database is maintained across all HYPACK® Projects and is editable using a new utility (TgtClassDB.exe) which you will access from the Side Scan menu in HYPACK® 2011.

FIGURE 1. Target Classification Database

For each entry in the database you can specify a unique identifier, a description, and multiple example image capture files that typify the class code. In addition, each capture file can be assigned a confidence code to indicate how sure you are that the example image is accurate.

Finally, the entire database (or a single code) can be exported to a RTF-formatted report.



COMPARISON IN HYSCAN

Once you've created your classification codes in the Classification Database utility, you are able to use this information in HYSCAN when working with your targets. You will notice a new drop down list on the Targeting window that contains your classification codes.

FIGURE 2. Classification ID Field in the HYSCAN Targeting Window

To the right of the drop down list is a "?" button. Clicking this button pops up the new comparison dialog.

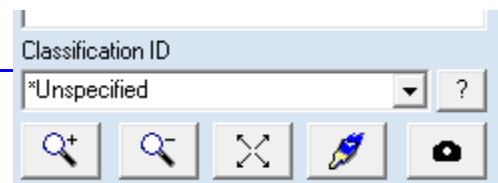
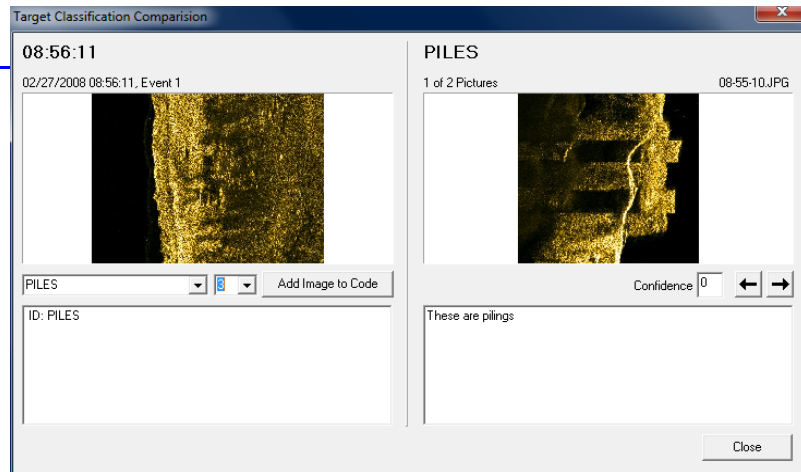


FIGURE 3. Target Classification Comparison Window

On the left is the currently marked target; on the right, for reference, is a display of your classification database. As you change the selected code, the right panel will update. If the code has more than one capture file associated with it, the left and right arrow buttons will scroll through the pictures.



Most of the database is not editable from HYSCAN, but it will allow you to add new pictures to the database. To do so, simply click the 'Add Image to Code' button and the current capture file will be added to the selected code with the specified confidence value.

When the compare dialog is closed, the selected code and confidence value are applied to the current target and included in the target notes. Both target viewers (the one built into HYSCAN and the stand-alone version accessible from the HYPACK® Side Scan menu) also support the new classification field and comparison display.

FINAL NOTES

To wrap up, here are some final thoughts about using this utility.

First, do not use the database editor tool while HYSCAN is open. Since they read and write the database files, you will lose your edits when the programs close, depending on who closes first.

Second, the database is stored under the \Support\ folder as \TargetInfo\. The database metadata is stored in an INI file (TargetInfo.ini) and the pictures in subdirectories, one for each code. If you want to transfer the database to another installation of HYPACK®, you may safely copy the entire \TargetInfo\ directory to the new computer.