



> Erik Tollefsen

Programme Manager Stockpile destruction, EOD and technology

Geneva International Centre for Humanitarian Demining

Key deliverables:	
✓ An IT-based solution, with an optional possibility to print hard-copy document of the ammunition fact sheets.	✓ The information provided by the CM ID tool will contain descriptions, technical data, weight, line drawings, dimensions, photographs, packing information, hazardous materials information, and special information when available.
✓ The ability to 'drill down' from first principles of weapon and sub munition category.	✓ The ID database will be available free of charge through the web and able to run on independent computers.
✓ Pictorial guidance, including shapes and markings, where possible (parts of the funds will be used for purchasing property rights for use of pictures of explosive submunitions).	✓ The CM ID tool will be easy to access and have both low system requirements as well as a low technical user threshold.
✓ Pictorial guidance, including shapes and markings, where possible (parts of the funds will be used for purchasing property rights for use of pictures of explosive submunitions).	✓ The technical datasheets will have to be uniform in its construction, in order to facilitate easy upgrade and overview.
✓ Simple and intuitive user interface.	✓ The CM ID tool <u>will not</u> describe render safe procedures (RSPs) for cluster munitions and explosive submunitions.

INTRODUCTION – CLUSTER MUNITION IDENTIFICATION TOOL

The Cluster Munition Identification tool (CM ID tool) is a conduit for easy identification of the explosive submunitions in the weapon system. In order to support the CCM on issues related to reporting on State Parties' ordnance stockpiles covered by this convention, the GICHD is in the process of developing a software tool to assist State Parties in honouring its commitments to the convention as accurately as possible.

For States Parties without a complete inventory of its Cluster Munitions stockpiles, defining what ammunition falls exactly under the definitions described under article 2 in the Convention on Cluster Munition (CCM) presents substantial challenges. Within the Anti-Personnel Mine Ban Convention (APMBC) the definition of an AP mine was quite easily understood to most. The CCM is somewhat more detailed in its definition, in particular in describing what weapons are not covered by the convention (e.g. mentioning specific design features, numbers of sub-munitions and fuse types). These definitions can be easily understood by technical expert personnel, but for the typical government official involved in reporting of such weapons, the CCM definitions can be a challenge.

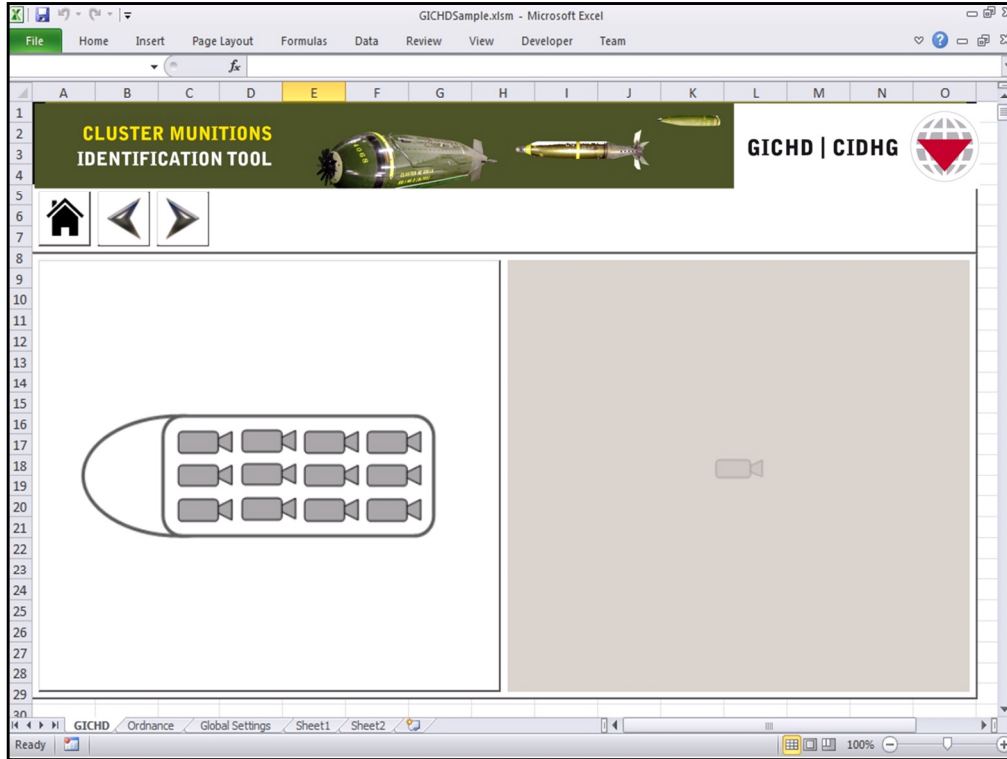
In many countries these munitions were procured from various foreign governments over many decades, while in others they were left behind when allies or occupants withdrew. There are hundreds of different Cluster Munitions carriers, many of which have very similar characteristics to unitary munitions. The GICHD has already been requested to support a State that was uncertain if a number of weapon systems were covered by the CCM.

Accurate initial reporting is critical for the success of the convention. The aim is to create a simple system that will allow managers and administrators with little technical knowledge to identify the types of cluster munition in their possession and to assess whether or not they fall within the categories banned under the CCM.

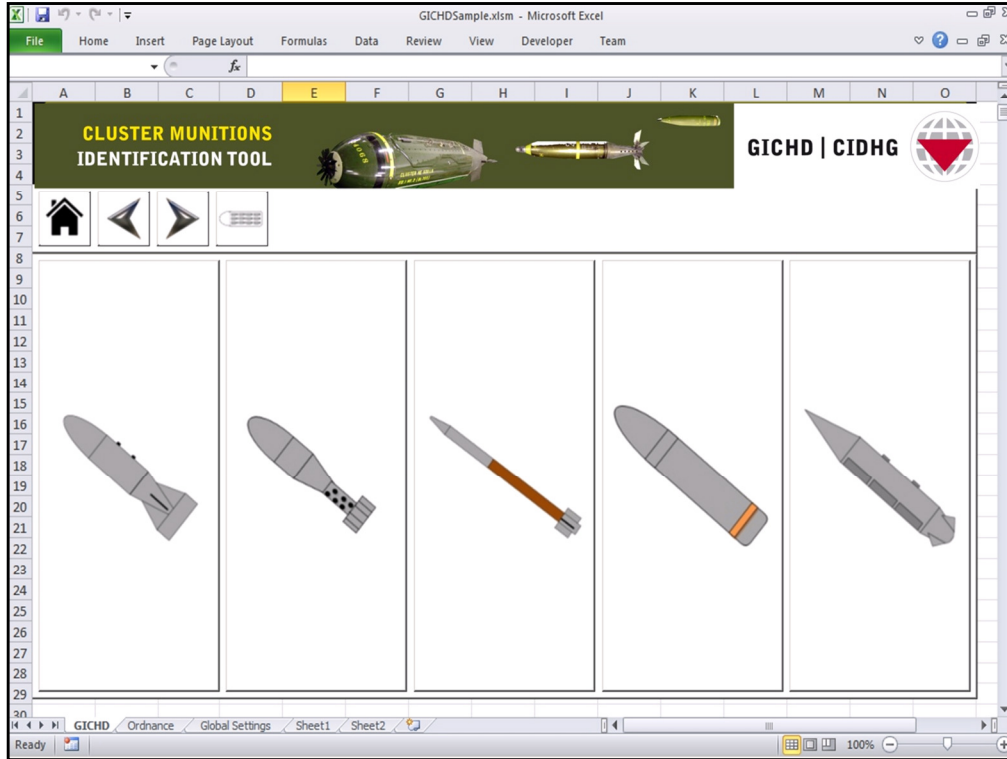
Further to this, an opportunity exists where the CM ID tool can also be used as a reference in cases which questions whether ammunition used in conflict falls under the definitions set in Article 2 of the Convention. In order to achieve this, the CM ID tool will need not only to contain a complete inventory of all the ammunition able to carry a cargo of bomblets, but also needs to contain a database providing an overview over the types and combinations of explosive submunitions that can be carried by such cluster munitions.

Benefits of the inclusion of the explosive submunition category in the CM ID tool are many. The software would be presenting a complete inventory of cluster munitions and submunitions that are banned by the CCM. Recent conflicts such as in Libya have demonstrated the need for a tool listing ammunition that is covered by the convention. Such an overview of ammunition that is banned by the CCM could assist in raising the stigma around the use of such weapons in conflict. Operators involved in clearance operations or training of demining personnel would be able to utilise the CM ID tool as a conduit for easy access to necessary technical information on explosive submunitions. Due to the intuitive design and the low technical threshold of the CM ID tool, also civil society could use the system as a channel of information for ammunition banned by the CCM.

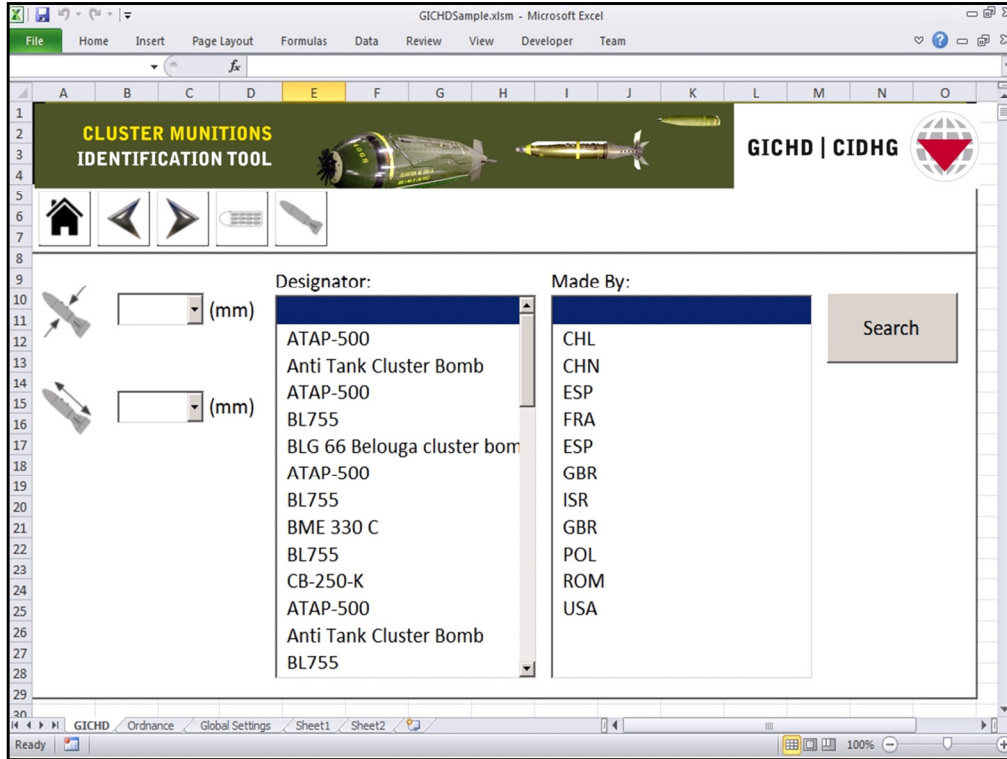
The GICHD and its partner organisations has to the best of its ability tried to assess all known ammunition of the cluster munition type in order to support states to report on their stockpiles as accurate as possible. There might however exist munition or munition types that are not included in the 'GICHD CM ID tool'.



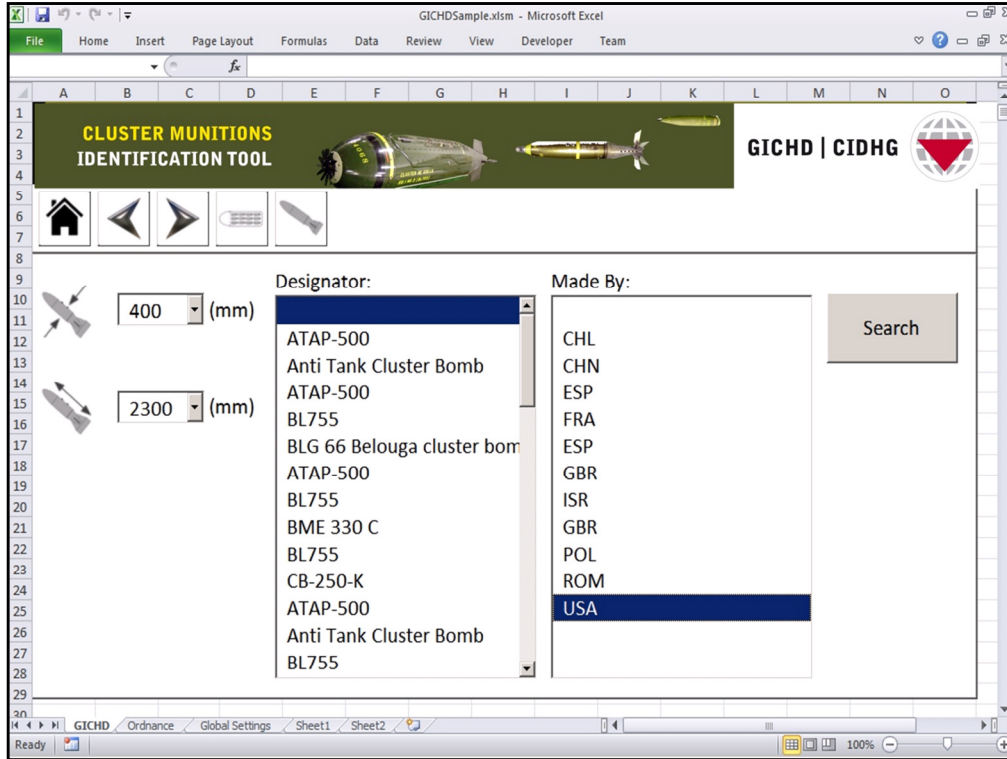
Initial screen. Can offer choice between searching on cluster munitions (CM) or submunitions (SM) - SM option not yet available



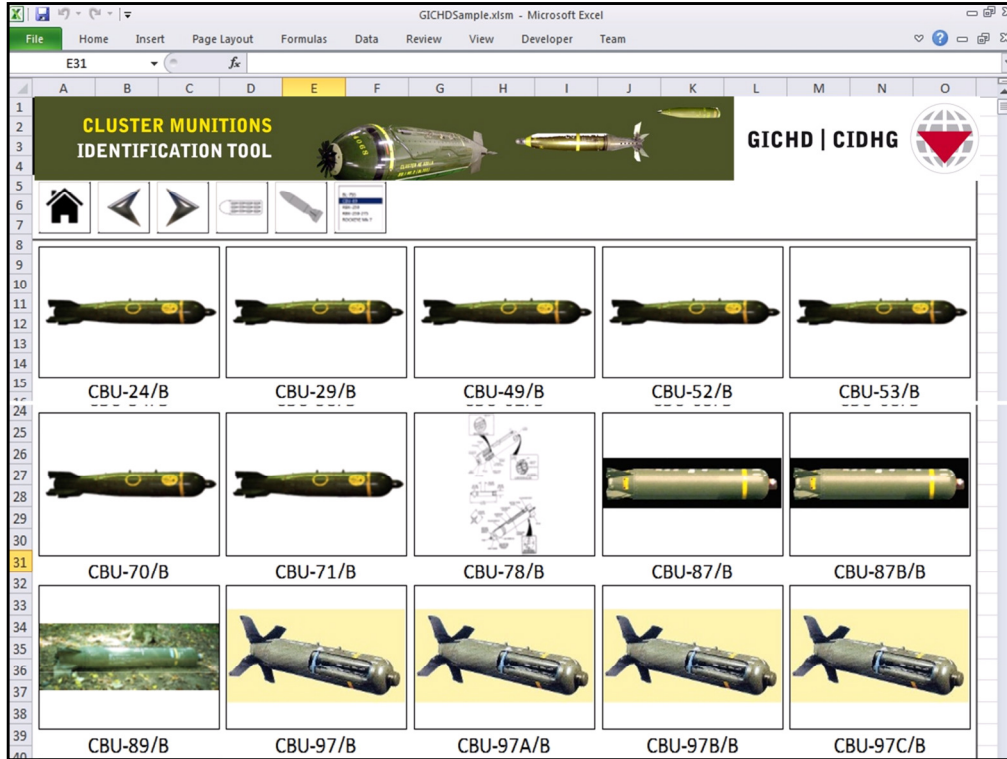
Category screen: offers the choice of bomb, mortar, rocket, projectile or dispenser



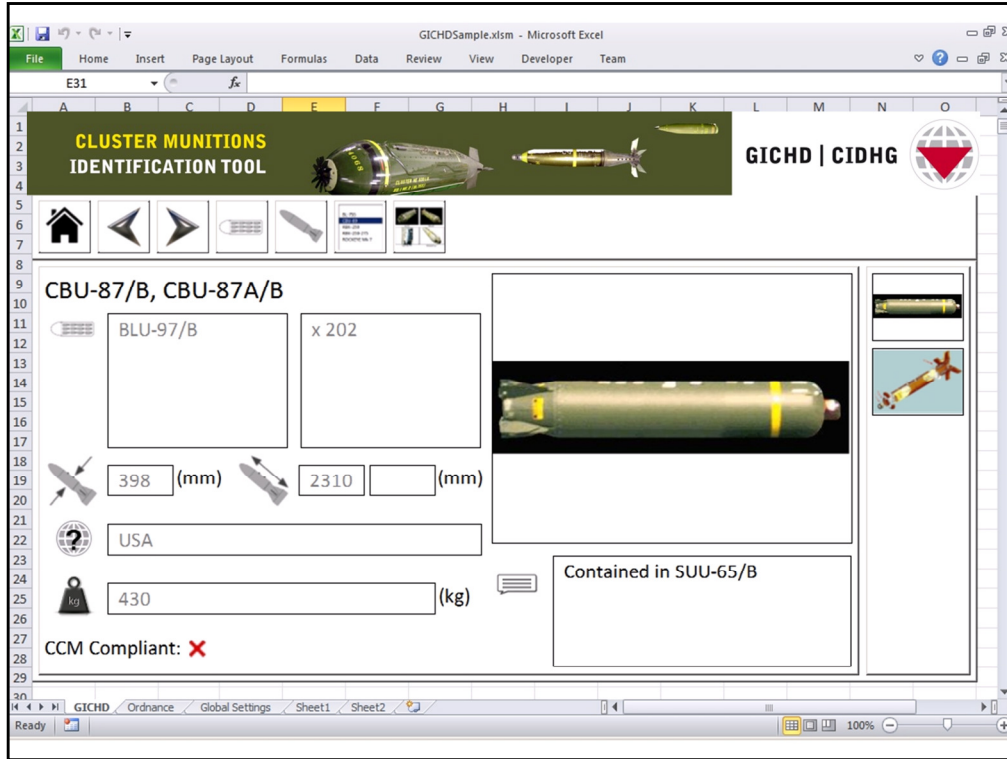
Pick screen. Can search on diameter, length, designator or country of origin. Dimensions search plus or minus 10% of entered values.



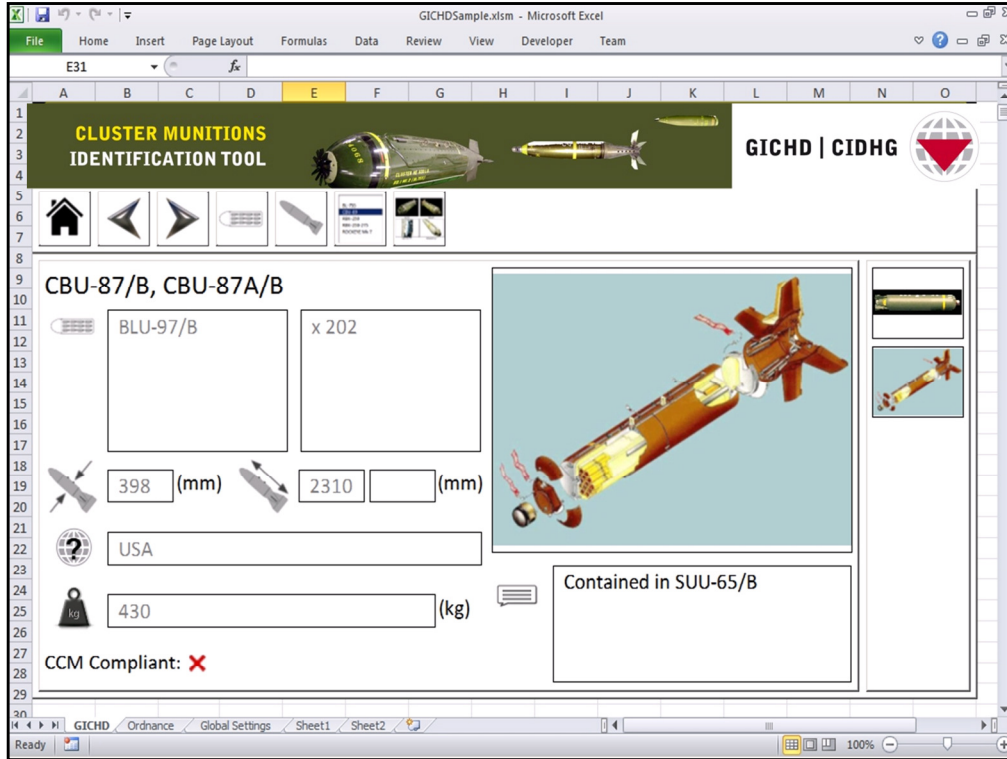
Pick screen: an example of a search based on approximate dimensions and country of origin



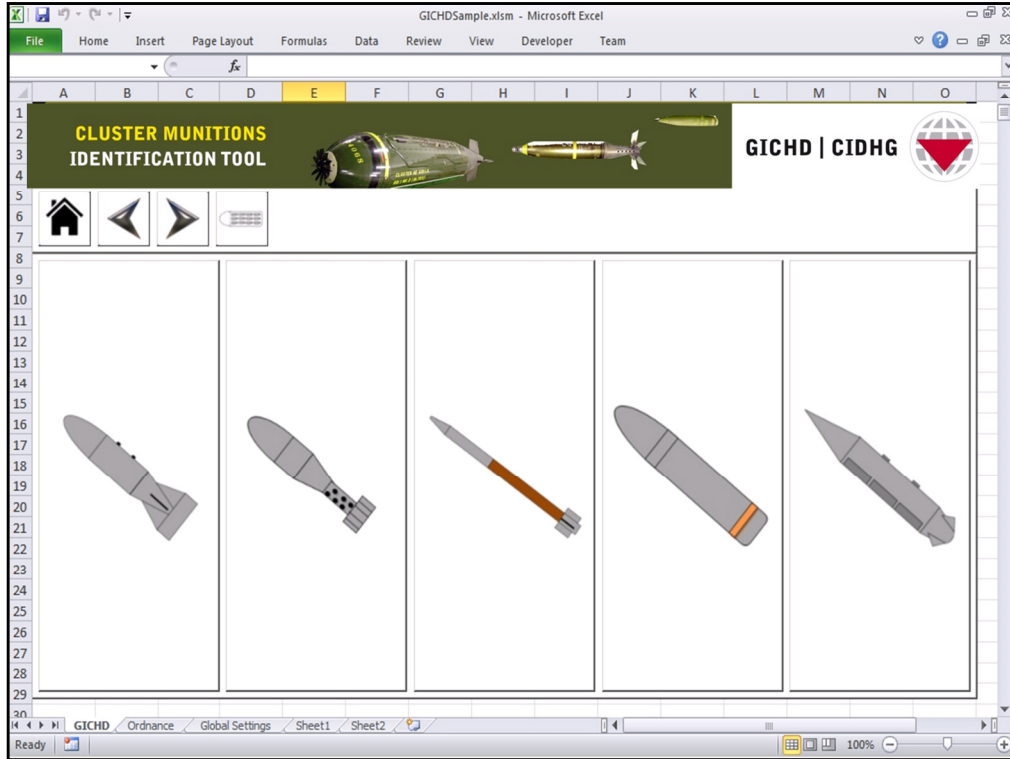
Thumbnail screen. Displays a view of the CM, together with designation. In this search, many cluster bombs share the same container, but contain different payloads



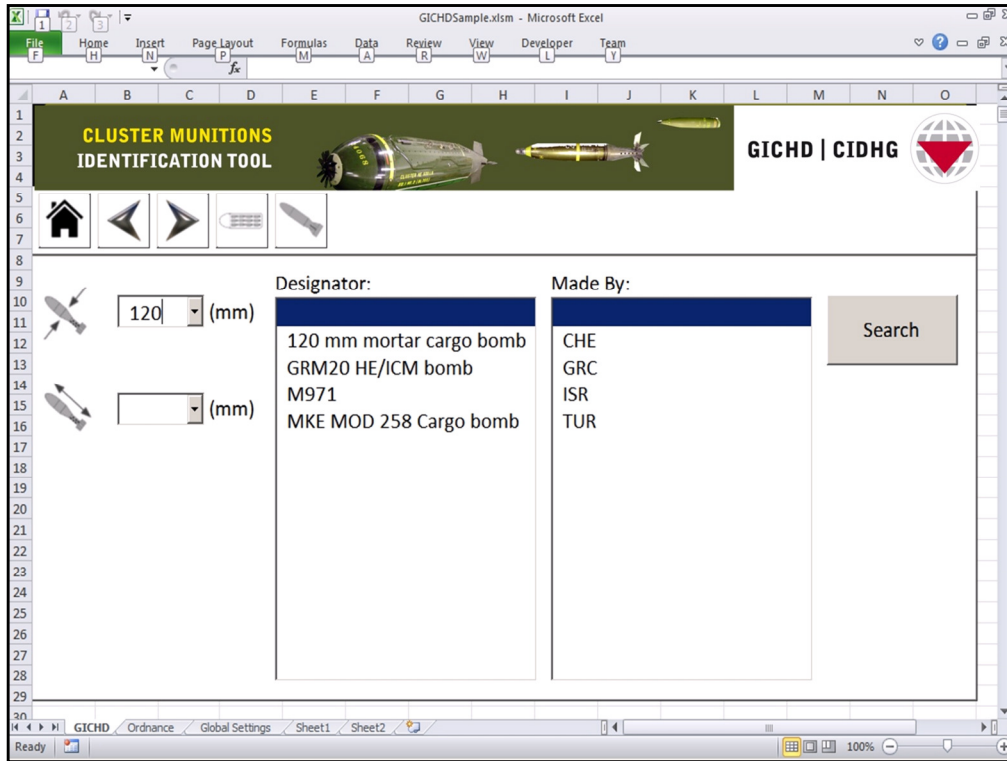
Results screen. Displays image and thumbnails together with the designation, type and number of SM, diameter, length, country of origin, weight and remarks. Note also the breadcrumb trail just below the banner, which shows the current location and allows navigation to other screens. Most importantly, at the bottom left of the screen is an indication of whether or not the munition is prohibited under the terms of the CCM.



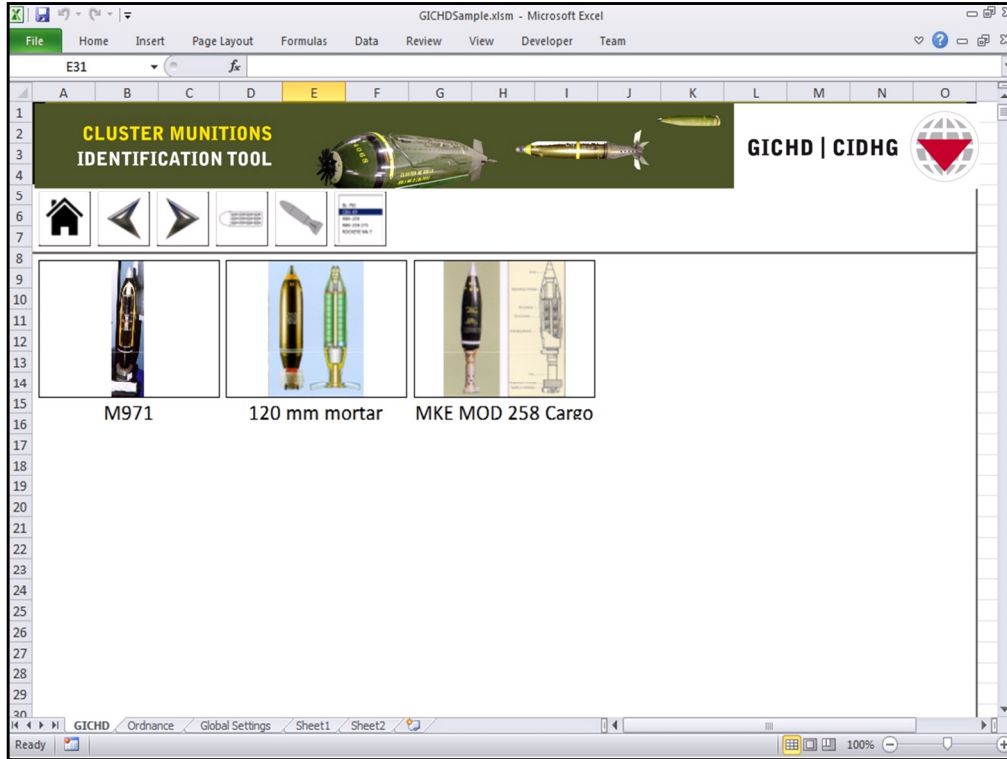
Results screen. Clicking on a thumbnail changes the main image



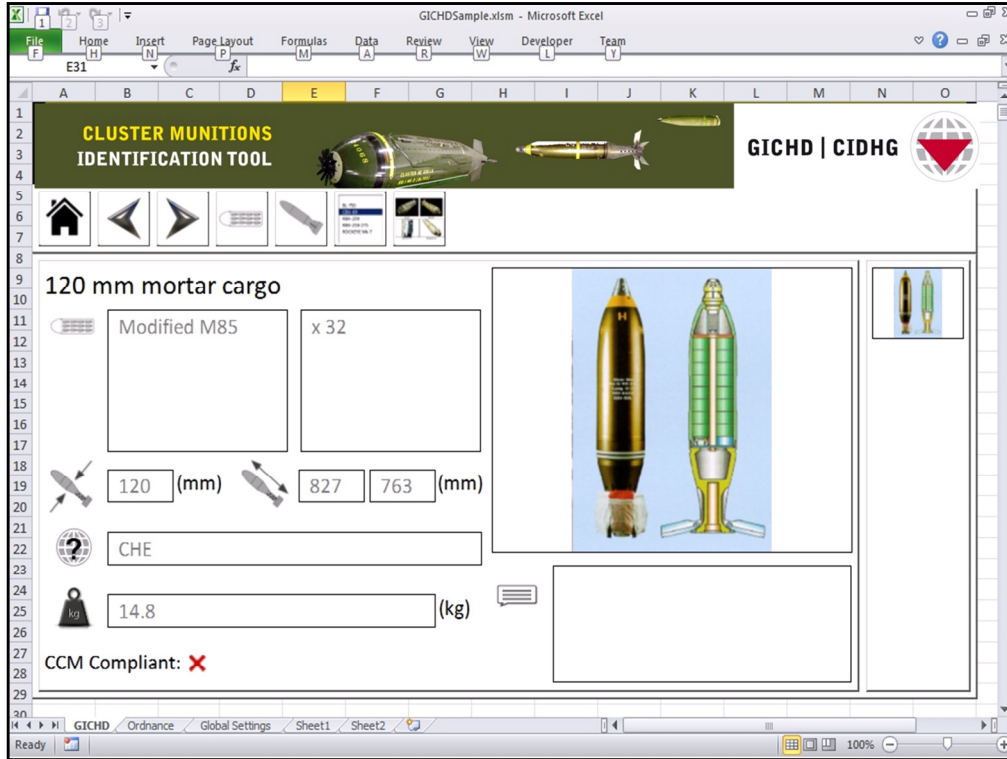
In this search, a mortar is selected



Here is a search on calibre of 120 mm



Thumbnails from this search



Results from the search. Note the two length figures displayed – maximum and minimum, in this case referring to length fuzed and unfuzed.

GCHDSample_demo.xlsm - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View Developer Team

C5 fx D-30 Cargo (also known as Type 83)

ID	Symbol	Designator	Subunits	Pictures	Caliber/Diameter (mm)	Length (mm)
1	BOMB	CB-250-K	PM-1	CB250K_01		440
2	BOMB	CB-500-K-2	PM-2	CB500K2_01		440
3	BOMB	CB-770	PM-3	CB770_01		440
4	PROJ	D-30 Cargo (also known as Type 83)	Type 81	D30CARGO_01		122
5	BOMB	Anti Tank Cluster B Sensor fuzed rocket assisted		ATKCB_01		410
6	RKT	122 mm AGAT/JRKH Unknown DPICM, Incendiary		122AGAT-JKKK-G_01,122AGAT-JKKK-G_02		122
7	BOMB	BLG 66 Belouga clu:GR 66 AC,GR 66 EG,GR 66 IZ		BELOUGA_01,BELOUGA_02		360
8	DISP	APACHE (Arme Pro KRISS,MUSPA		APACHE_01		630
9	PROJ	OMI mine cargo prc AC DSIP F1		155OMI_01,155OMI_02		155
10	PROJ	Type Ogre F1 cargo M85		155OGRE_01		155
11	PROJ	ACED	ACED	155ACED_01		155
12	DISP	DWS 24, DWS 39, BI KB 44,MIFF,MUSA,MUSPA,ST		MW1_01,MW1_02		630
13	PROJ	DM632/DM642	DM 1385	DM642_01		155
14	MOR	GRM20 HE/ICM bon M20G		GRM20_01		107
15	PROJ	24G HE/ICM grenad M24G		M24G_01		105
16	PROJ	GRM49 HE/ICM grei GM1		GRM49_01		155
17	MOR	M971	M87	M971_01,M971_02		120
18	PROJ	M396	M85	M396_01		155
19	BOMB	ATAP-500	M85 family	ATAP-500_01		406
20	BOMB	ZK-300	LBOk-1	ZK300_01		450
21	BOMB	CL-250	BAAT-10,BF-10T	CL250_01		325
22	DISP	ZR 4	LBOk-1	ZR4_01		225
23	PROJ	M77 Oganj	KB-1,KB-2,KPOM mine	OGANJ_01,OGANJ_02		128
24	RKT	Krizná-S	Krizna mine,PT Mi-D mine	KRIZNA-S_01,KRIZNA-S_02,KRIZNA-S_03		122
25	RKT	Kus	PPMI-S1 mine	KUS_01		122
26	BOMB	BME 330 C	CP,CH,SNP	BME-330 C_01,BME-330 C_02,BME-330 C_03		350
27	MOR	120 mm mortar car Modified M85		120MMCARGOMOR-CHE_01		120
28	MOR	MKE MOD 258 Carg	M15	MKEMOD258_01		120
29	BOMB	BL 755	CO/M4-1 AAA/M4-2 Incendiary	BL755_01, BL755_02, BL755_04		410

Ready | GCHD | Ordnance | Global Settings | Sheet1 | Sheet2 | 100%

Organisations assisting in the project:



The GICHD would like to thank the governments of **Australia, Belgium, France, Norway, Sweden** for supporting this project with the provision of technical data on cluster munitions and to **Switzerland** for supporting this project financially.

The GICHD would also like to thank the following organisations and companies for their assistance in this project: Ballard Chalmers, Fenix Insight, Golden West Humanitarian Foundation, Fort and Human Rights Watch.