

Tangram Technical Note

CreateExcelMap

Tangram V4.02

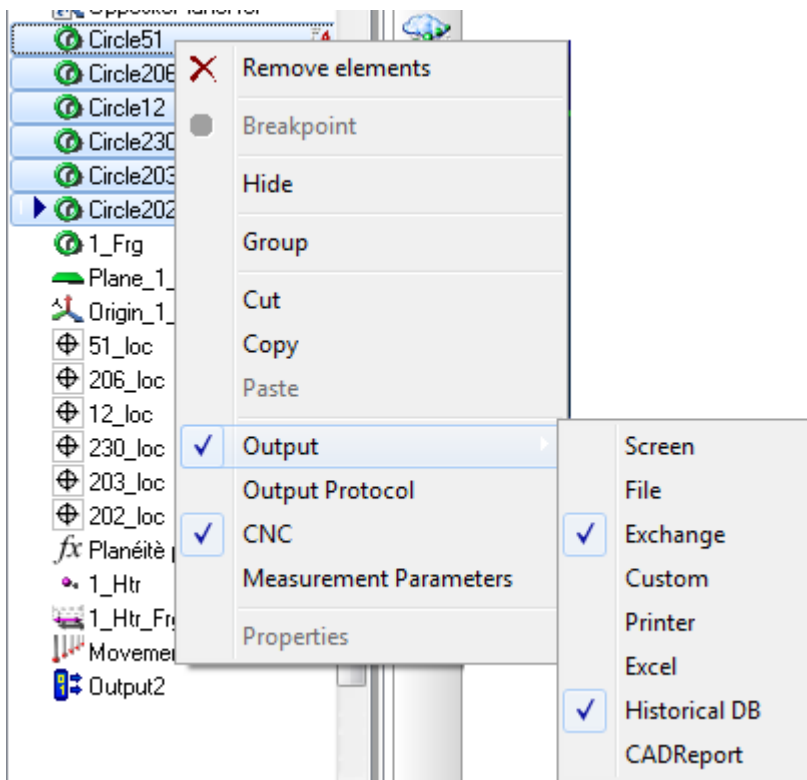
Rev.	Date	Change Reason
1	29-07-2015	
2	22-05-2017	Update New Output

Overview

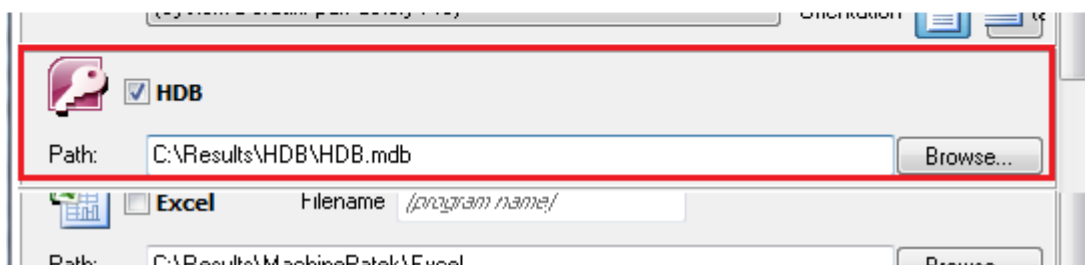
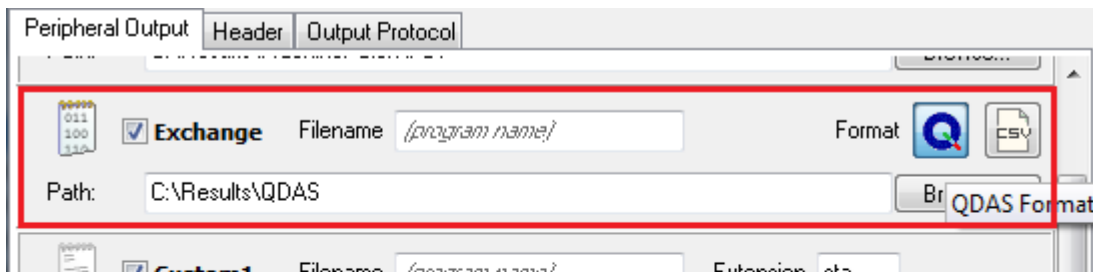
CreateExcelMap is a utility for internal use to collect data of measurement and calculate repeatability.

Preparatory activities

- Set the output channels: "Exchange" and "HDB" for the features that must be controlled, in the measuring Program



- Configure properly the Output devices in the program :

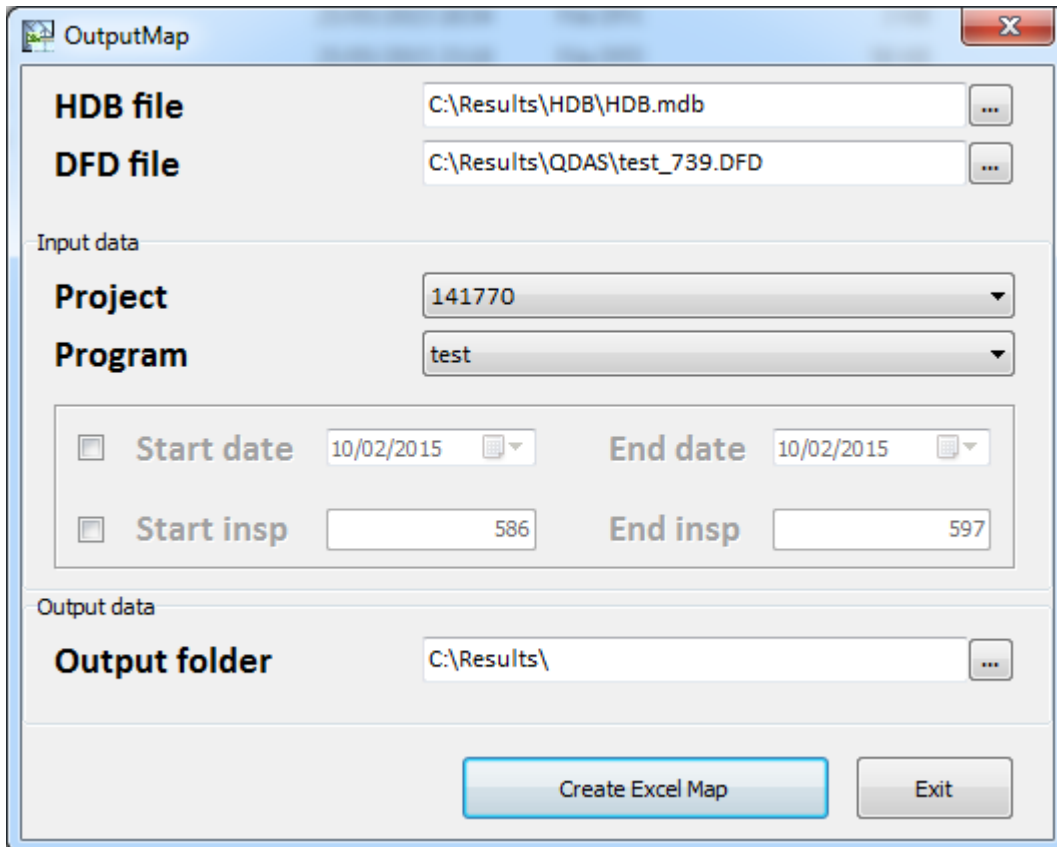


The QDAS Format will produce two files: .DFX and .DFD. The first includes all the measured values, the second the list of features with nominal.

HDB will ensure that all the results will be in the database from which the CreateExcel Map will collect.

Using CreateExcelMap

When you run **CreateExcelMap**, the following form brings up:



The screenshot shows the **OutputMap** dialog box with the following fields and options:

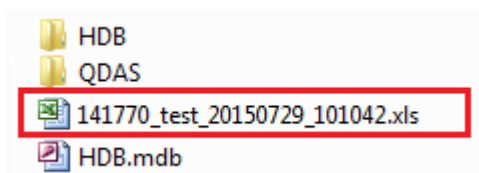
- HDB file:** C:\Results\HDB\HDB.mdb
- DFD file:** C:\Results\QDAS\test_739.DFD
- Input data:**
 - Project:** 141770
 - Program:** test
 - Start date:** 10/02/2015
 - End date:** 10/02/2015
 - Start insp:** 586
 - End insp:** 597
- Output data:**
 - Output folder:** C:\Results\

Buttons: **Create Excel Map** and **Exit**

Browse to choose HDB and DFD / Ini files. Select the project in the list of projects included in the database, and choose the program.

Set the output folder and optionally filter the inspections by number or date

Clicking on “Create Excel Map” the excel file will be created:



TANGRAM												
141111 RH Short												
Inspection	Date	E13	F7	K1_left	K1_right	P18	Q31	Q35	R20	S31	S35	S6
		DIAM	DIAM	DIAM	DIAM	DISTZ	DIAM	DIAM	DISTZ	DIAM	DIAM	DISTZ
Nominal		42.85	45.4	20.4	20.4	47.78999997	45.6	50.6	50.33999999	48.15	53.15	50.34
Tol Up		0.1	0.1	0.05	0.05	0.17	0.035	0.2	0.17	0.035	0.2	0.17
Tol Low		0.04	0.04	0	0	0.04	-0.075	-0.2	0.04	-0.075	-0.2	0.04
Tol Band		0.06	0.06	0.05	0.05	0.13	0.11	0.4	0.13	0.11	0.4	0.13
652	27/01/2017 16:26:18	42.9200	45.4744	20.4178	20.4217	47.9419	45.5414	50.4605	50.4887	48.1143	53.1918	50.4676
653	27/01/2017 16:28:04	42.9027	45.4787	20.4248	20.4178	47.9120	45.5532	50.5626	50.4381	48.1062	53.0857	50.4001
654	27/01/2017 16:29:25	42.9023	45.4780	20.4088	20.4150	47.8939	45.5555	50.5532	50.4441	48.1068	53.0978	50.4038
655	27/01/2017 16:30:52	42.9005	45.4708	20.4087	20.4150	47.9006	45.5549	50.5574	50.4367	48.1030	53.0888	50.4110
656	27/01/2017 16:32:14	42.8929	45.4454	20.4025	20.3985	47.8557	45.5871	50.5180	50.4123	48.1276	53.0878	50.4422
657	27/01/2017 16:33:52	42.9187	45.4564	20.3894	20.4177	47.9135	45.5824	50.6236	50.4303	48.1362	53.1581	50.4588
658	27/01/2017 16:35:18	42.8950	45.4472	20.3972	20.4000	47.8556	45.5803	50.5262	50.4269	48.1333	53.0934	50.4562
659	27/01/2017 16:36:49	42.8912	45.4498	20.4287	20.4271	47.8958	45.5811	50.5728	50.4595	48.1024	53.1750	50.4351
660	27/01/2017 16:38:15	42.8909	45.4447	20.4060	20.4118	47.8558	45.5923	50.5179	50.4172	48.1323	53.0892	50.4296
661	27/01/2017 16:39:38	42.8912	45.4497	20.4223	20.4263	47.8930	45.5796	50.5516	50.4608	48.1057	53.1668	50.4298
662	27/01/2017 16:41:10	42.9234	45.4747	20.4212	20.4207	47.9463	45.5427	50.4599	50.4961	48.1143	53.1907	50.4561
663	27/01/2017 16:42:37	42.9027	45.4708	20.4254	20.4176	47.8967	45.5557	50.5635	50.4470	48.1064	53.0798	50.3955
664	27/01/2017 16:43:57	42.8990	45.4792	20.4093	20.4154	47.8950	45.5548	50.5526	50.4532	48.1012	53.0979	50.3940
665	27/01/2017 16:45:22	42.9001	45.4764	20.4076	20.4178	47.9065	45.5553	50.5530	50.4468	48.1006	53.0870	50.4012
666	27/01/2017 16:46:46	42.8938	45.4479	20.4046	20.4013	47.8580	45.5887	50.5180	50.4177	48.1285	53.0889	50.4407
667	27/01/2017 16:48:13	42.9206	45.4713	20.4001	20.4130	47.9077	45.5839	50.6395	50.4265	48.1410	53.1585	50.4441
668	27/01/2017 16:49:39	42.8928	45.4485	20.4011	20.4022	47.8666	45.5889	50.5347	50.4220	48.1344	53.0929	50.4529
669	27/01/2017 16:51:06	42.8881	45.4479	20.4365	20.4274	47.8929	45.5810	50.5878	50.4580	48.1048	53.1743	50.4374
670	27/01/2017 16:52:39	42.8860	45.4486	20.4057	20.4040	47.8750	45.5894	50.5275	50.4210	48.1333	53.0915	50.4378
AVG		42.9006	45.4611	20.4115	20.4142	47.8928	45.5710	50.5463	50.4423	48.1175	53.1208	50.4312
DEV		-0.0506	-0.0611	-0.0115	-0.0142	-0.1028	0.0290	0.0537	-0.1023	0.0325	0.0292	-0.0912
MIN		42.8860	45.4447	20.3894	20.3985	47.8556	45.5414	50.4599	50.4123	48.1006	53.0798	50.3940
MAX		42.9234	45.4792	20.4365	20.4274	47.9463	45.5923	50.6395	50.4961	48.1410	53.1918	50.4676
%Tol		00.084	00.102	00.023	00.028	00.079	00.026	00.013	00.079	00.030	00.007	00.070
R		00.000	00.000	00.000	00.000	00.000	00.000	00.000	00.000	00.000	00.000	00.000
S		0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000	0.000.000
Cp (@6s)		0.852454188	0.720983711	0.680288234	0.910189992	0.809167849	1.041661777	1.489538326	0.929661491	1.261591311	1.574312296	0.920995888
Cpk (@6s)		0.302048078	0.506378664	0.311736292	0.517747192	0.781425993	0.870586493	1.08990283	0.890494431	0.974872938	1.344717095	0.726141469

Each line is a inspection. At the top there are:

- Name
- Characteristic
- Nominal value
- Upper tolerance
- Lower tolerance
- Band width

Finally there are calculations:

- average value
- average deviation
- minimum value
- maximum value
- percentage of deviation respect the Tol Band
- R = max-min
- Sigma
- Cp = band/(6* sigma)
- Cpk