

NS-HPDCA

HP3070 Data Collector and Analyser

NS

HPDCA

NICK'S SOFTWARE

NS-HPDCA: Suite

- ▶ **NS-HPDCA** was built using modern development technologies Visual Studio, Bootstrap, PHP, Java and MySQL to name a few
- ▶ **NS-HPDCA** is delivered as a suite of applications which together create a powerful engineering and manufacturing tool for analysing In Circuit Test activities
- ▶ **NS-HPDCA** contains
 - HPDC – Data Collector – Desktop based Application
 - HPDA – Data Analyser – Desktop based or Web based application
 - Last Test Result – Desktop based or Web based application

NS-HPDCA: HPDC

- ▶ **HPDC collects real time information from all your ICT machines**
 - It's directly connected to the ICTs
 - It's always looking for new log files and it parses their content into a **MySQL** database
 - It's doing a complete loop (tested with 20 locations to parse) in less than one minute
- ▶ **Data Collectors are available for:**
 - HP/Agilent/Keysight3070
 - Marconi/IFR4220
 - Custom parsers are also available on demand for any other ICT machines or any Functional Testers

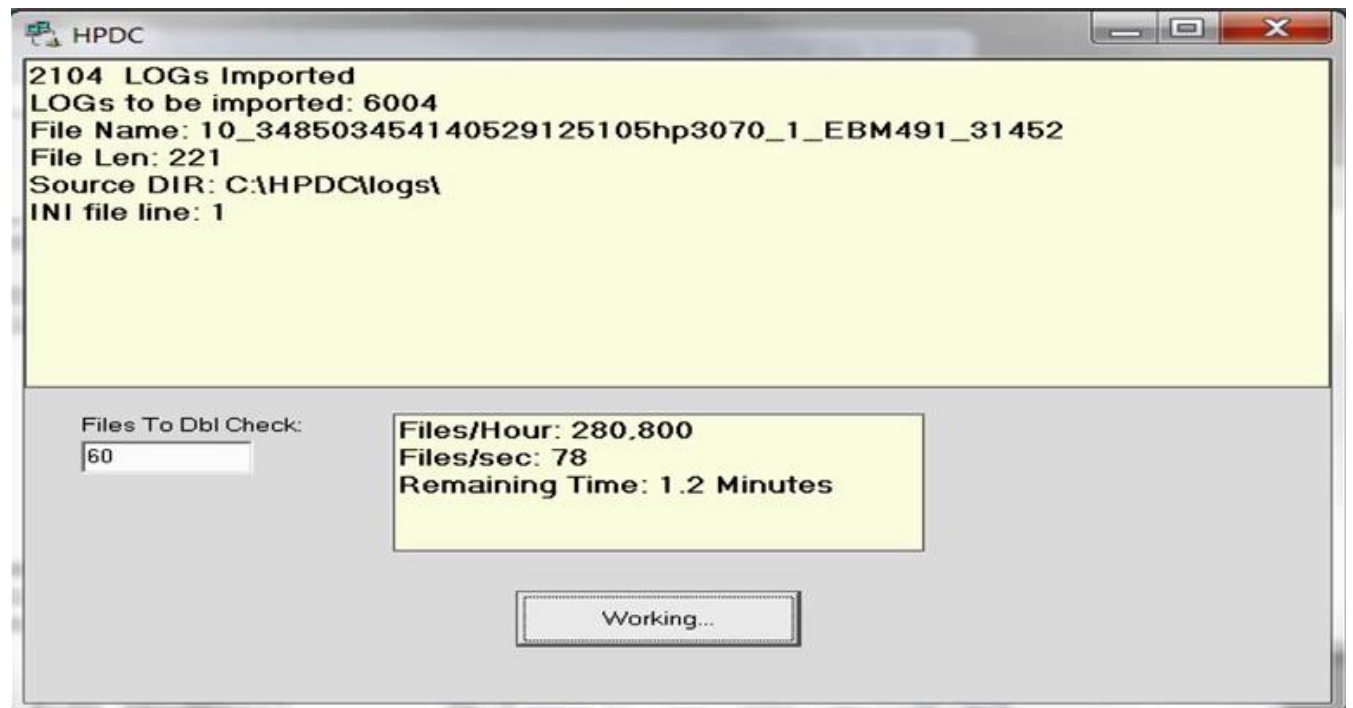
NS-HPDCA: HPDC

▶ Log files Management

- ICT machines are generating log files that contain valuable information regarding tests performed for a specific board, like:
 - Pass/Fail
 - Test and Sub Test names
 - Test and Sub Test results
 - Test Type
 - Measured Value
 - Limits
 - Date
 - Board Serial Number
- Using HPDC all these data are saved in a **MySQL** database and are available for your further analysis
- HPDC saves in the database all the FAIL measurements for your review, if you require to save in the database ALL the PASS and FAIL measurements please ask us about **HPDC for NPI**.

NS-HPDCA: HPDC

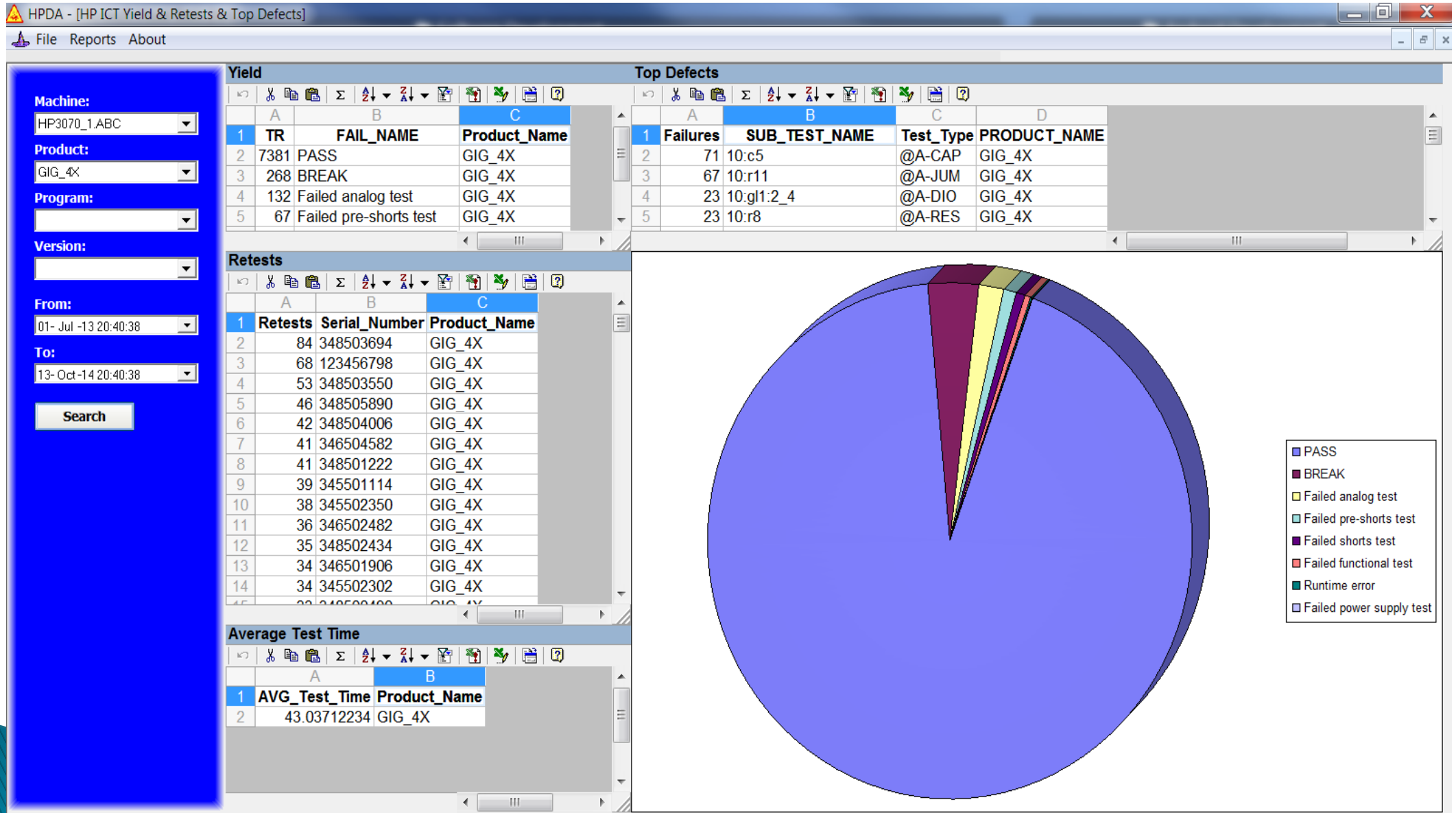
- ▶ Check the video below for more details about HPDC
 - <https://youtu.be/XBnfJCSdFW0>



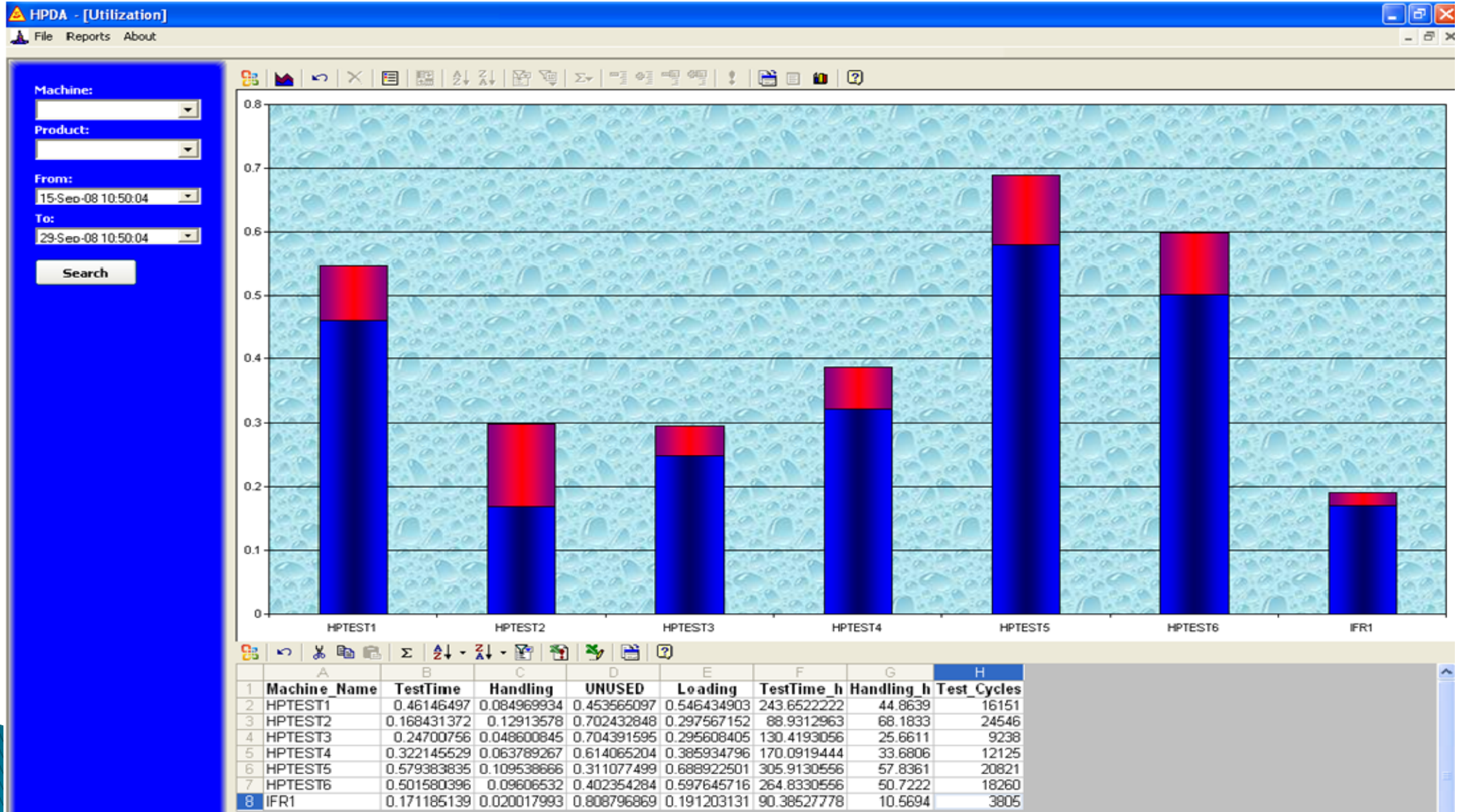
NS-HPDCA: HPDA

- ▶ **HPDCA is a software solution developed to analyse the data collected by HPDC from your ICT machines**
 - Through comprehensive reports HPDA is capable of presenting a holistic image of your ICTs
 - Available reports are:
 - True Yield Report
 - Retest Rate Report
 - Top Defects Report
 - Average Cycle Time Report
 - Utilization Report
 - Comprehensive measurements search
 - All these reports can be easily exported in Excel for further analysis

NS-HPDCA: HPDA – desktop app



NS-HPDCA: HPDA – desktop app



NS-HPDCA: HPDA – desktop app

HPDA - [Comprehensive Search]

File Reports About

Machine: HPTEST2
Product: H4I+
Program:
Version:
Serial Number:
 No Measurements
Test Name:
Test Type:
Test Result:
From: 01-Oct-15 21:57:54
To: 11-Nov-15 21:57:54
Search

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
|----|--------------|--------|---------|---------|---------------|------------|----------|------------------------|---------------------------|-----------|---------------|---------------|---------------|---------------|----------|
| 1 | Machine_Name | DUCT_N | PROGRAM | VERSION | Serial_Number | Start_Test | Duration | FAIL_NAME | SUB_TEST_NAME | Test_Type | Measurement | Nominal_Value | High_Value | Low_Value | Sub_Test |
| 2 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721441 | 11-Nov-15 | 52 | Failed analog test | 1% <i>d</i> 6 | @A-DIO | +8.115283E-01 | 0 | +7.900000E-01 | +6.800000E-01 | 1 |
| 3 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721361 | 11-Nov-15 | 44 | Failed pre-shorts test | 4% <i>f</i> 2 : res-4wire | @A-RES | +2.005696E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 4 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720813 | 11-Nov-15 | 52 | Failed analog test | 5% <i>q</i> 26 : IR-ON | @A-MEA | +5.645903E-01 | 0 | +4.000000E-01 | -1.000000E-01 | 1 |
| 5 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721915 | 11-Nov-15 | 45 | Failed pre-shorts test | 1% <i>f</i> 2 : res-4wire | @A-RES | +2.253673E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 6 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721394 | 11-Nov-15 | 45 | Failed pre-shorts test | 4% <i>f</i> 2 : res-4wire | @A-RES | +2.755029E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 7 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721361 | 11-Nov-15 | 44 | Failed pre-shorts test | 4% <i>f</i> 2 : res-4wire | @A-RES | +2.088692E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 8 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721361 | 11-Nov-15 | 47 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +2.275205E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 9 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720642 | 11-Nov-15 | 45 | Failed pre-shorts test | 6% <i>f</i> 2 : res-4wire | @A-RES | +9.999999E+99 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 10 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720640 | 11-Nov-15 | 45 | Failed analog test | 2% <i>q</i> 26 : IR-ON | @A-MEA | +3.815577E+00 | 0 | +4.000000E-01 | -1.000000E-01 | 1 |
| 11 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721811 | 11-Nov-15 | 44 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +9.999999E+99 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 12 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720262 | 11-Nov-15 | 45 | Failed pre-shorts test | 5% <i>f</i> 2 : res-4wire | @A-RES | -2.290183E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 13 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720891 | 11-Nov-15 | 45 | Failed pre-shorts test | 2% <i>f</i> 2 : res-4wire | @A-RES | +9.999999E+99 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 14 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720044 | 11-Nov-15 | 52 | Failed analog test | 4% <i>q</i> 26 : IR-ON | @A-MEA | +5.245650E-01 | 0 | +4.000000E-01 | -1.000000E-01 | 1 |
| 15 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721089 | 11-Nov-15 | 52 | Failed analog test | 5% <i>c</i> 3 | @A-CAP | +4.587271E-10 | +1.000000E-08 | +1.180000E-08 | +8.500000E-09 | 1 |
| 16 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721663 | 11-Nov-15 | 45 | Failed pre-shorts test | 1% <i>f</i> 2 : res-4wire | @A-RES | +4.996264E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 17 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721876 | 11-Nov-15 | 45 | Failed pre-shorts test | 2% <i>f</i> 2 : res-4wire | @A-RES | +1.797246E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 18 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52722102 | 11-Nov-15 | 52 | Failed analog test | 4% <i>q</i> 26 : IR-ON | @A-MEA | +3.810389E+00 | 0 | +4.000000E-01 | -1.000000E-01 | 1 |
| 19 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721936 | 11-Nov-15 | 45 | Failed pre-shorts test | 2% <i>f</i> 2 : res-4wire | @A-RES | +7.634783E+03 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 20 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720065 | 11-Nov-15 | 45 | Failed pre-shorts test | 4% <i>f</i> 2 : res-4wire | @A-RES | +1.696879E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 21 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721756 | 11-Nov-15 | 38 | Failed pre-shorts test | 2% <i>f</i> 2 : res-4wire | @A-RES | +2.290309E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 22 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721758 | 11-Nov-15 | 38 | Failed pre-shorts test | 6% <i>f</i> 2 : res-4wire | @A-RES | +1.145091E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 23 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721844 | 11-Nov-15 | 44 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +2.290183E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 24 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721844 | 11-Nov-15 | 45 | Failed pre-shorts test | 4% <i>f</i> 2 : res-4wire | @A-RES | +1.145154E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 25 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721844 | 11-Nov-15 | 45 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +7.634363E+03 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 26 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721876 | 11-Nov-15 | 45 | Failed pre-shorts test | 2% <i>f</i> 2 : res-4wire | @A-RES | +1.792447E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 27 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721752 | 11-Nov-15 | 37 | Failed pre-shorts test | 1% <i>f</i> 2 : res-4wire | @A-RES | +1.145091E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 28 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721751 | 11-Nov-15 | 37 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +2.290056E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 29 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721751 | 11-Nov-15 | 37 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +7.633942E+03 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 30 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721752 | 11-Nov-15 | 37 | Failed pre-shorts test | 1% <i>f</i> 2 : res-4wire | @A-RES | +2.290056E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 31 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52720065 | 11-Nov-15 | 44 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +1.691767E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 32 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721663 | 11-Nov-15 | 45 | Failed pre-shorts test | 1% <i>f</i> 2 : res-4wire | @A-RES | +3.696609E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 33 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721817 | 11-Nov-15 | 45 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +2.290056E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 34 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721817 | 11-Nov-15 | 44 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +1.145218E+04 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |
| 35 | HPTEST2 | H4I+ | H4I+ | 6.0 | 52721094 | 11-Nov-15 | 44 | Failed pre-shorts test | 3% <i>f</i> 2 : res-4wire | @A-RES | +1.534737E+01 | +1.000000E+01 | +1.400000E+01 | +7.200000E+00 | 1 |

NS-HPDCA: HPDA – web based app

HPDA Reports ▾ Charts ▾ Unit History ▾ Dashboards ▾ DB Admin ▾

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HPDA


HPDA - real time data analyses for HP3070 and IFR4220 ICT's log files

 Test Yield

Test Yield - Gauge

 PASS/FAIL By Product

 Yield History

 Retests by Product

 Test Time

Dashboards

 Any Product ICT

NS-HPDCA: HPDA – web based app

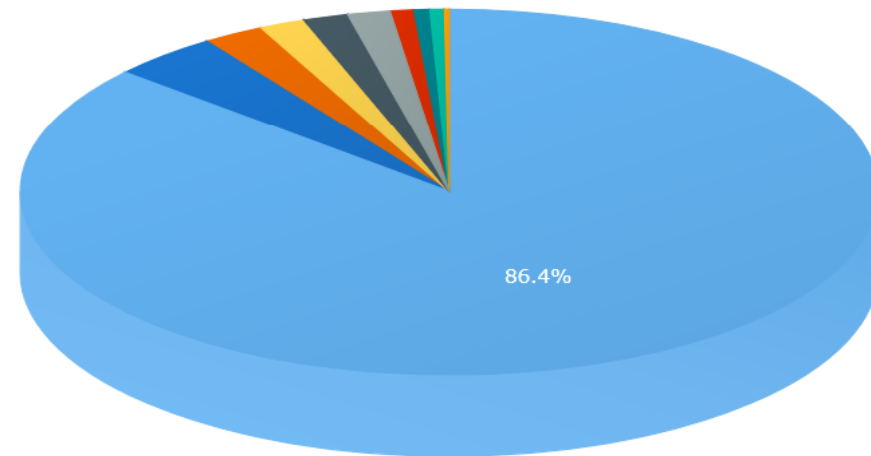
Home > Charts > Test Yield

PRODUCT NAME

- Runtime error (76)
- PASS (12133)
- Failed shorts test (126)
- Failed pre-shorts test (238)
- Failed power supply test (84)
- Failed Pin Test (243)
- Failed in TestJet (571)
- Failed functional test (224)
- Failed analog test (328)
- BREAK (24)

Multiselect

Test Yield - PASS/FAIL

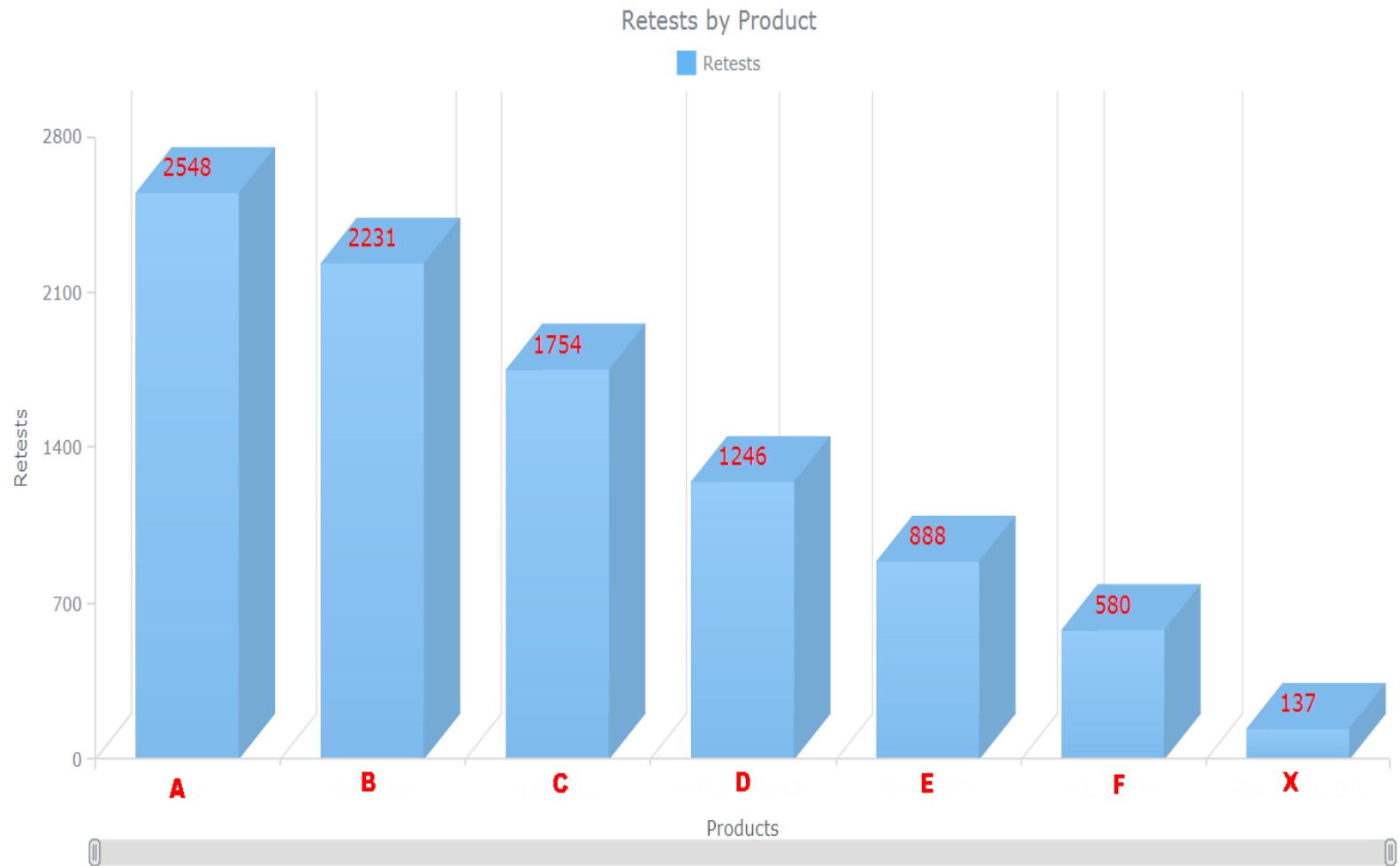


PASS Failed in TestJet Failed analog test Failed Pin Test Failed pre-shorts test Failed functional test Failed shorts test

NS-HPDCA: HPDA – web based app

Home > Charts > Retests

| Machine Name |
|-----------------|
| HPTEST1 |
| HPTEST2 |
| HPTEST5 |
| I3070SGH72903L6 |
| IFR1 |
| IFR2 |
| Multiselect |



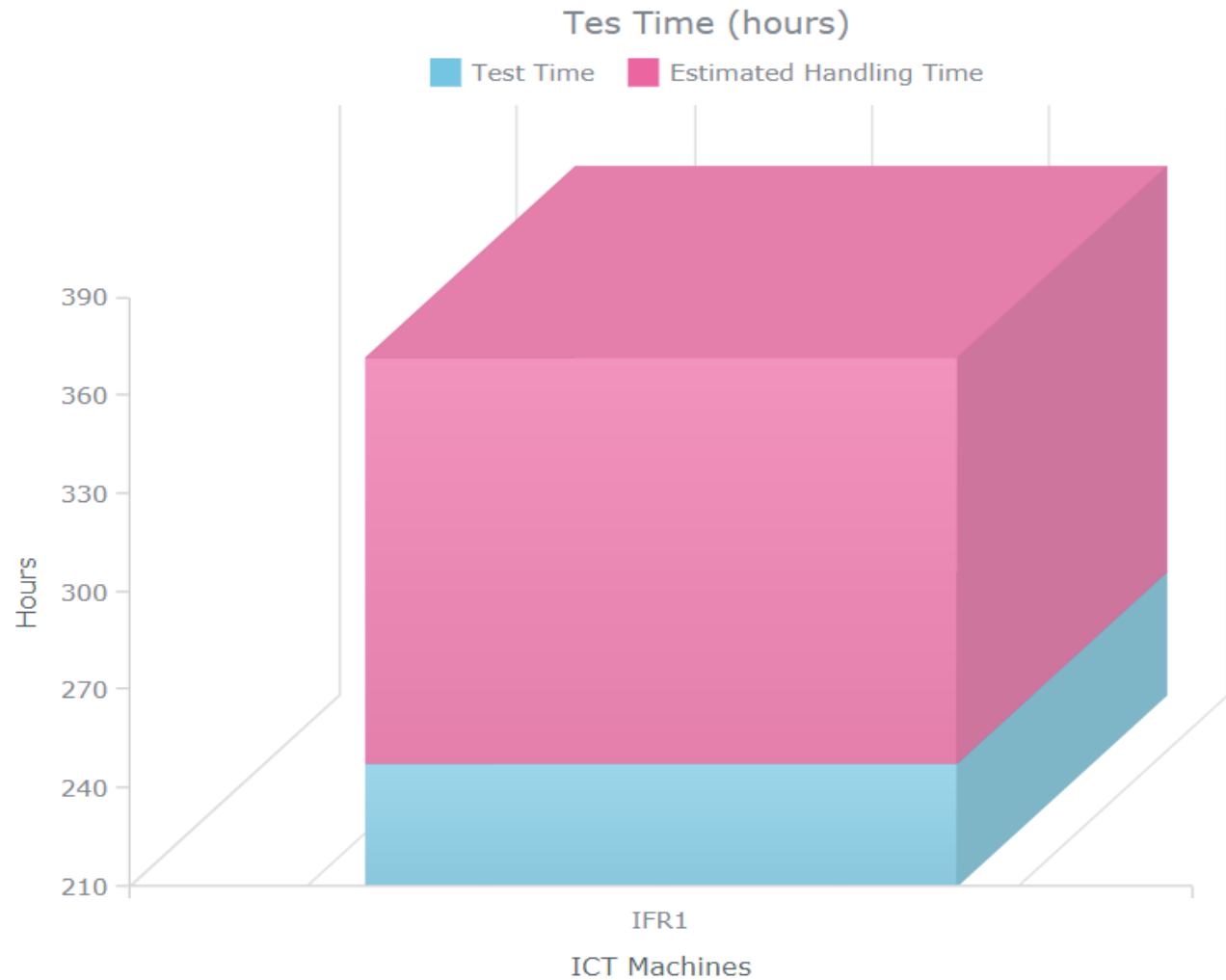
NS-HPDCA: HPDA – web based app

Home > Charts > Test Time

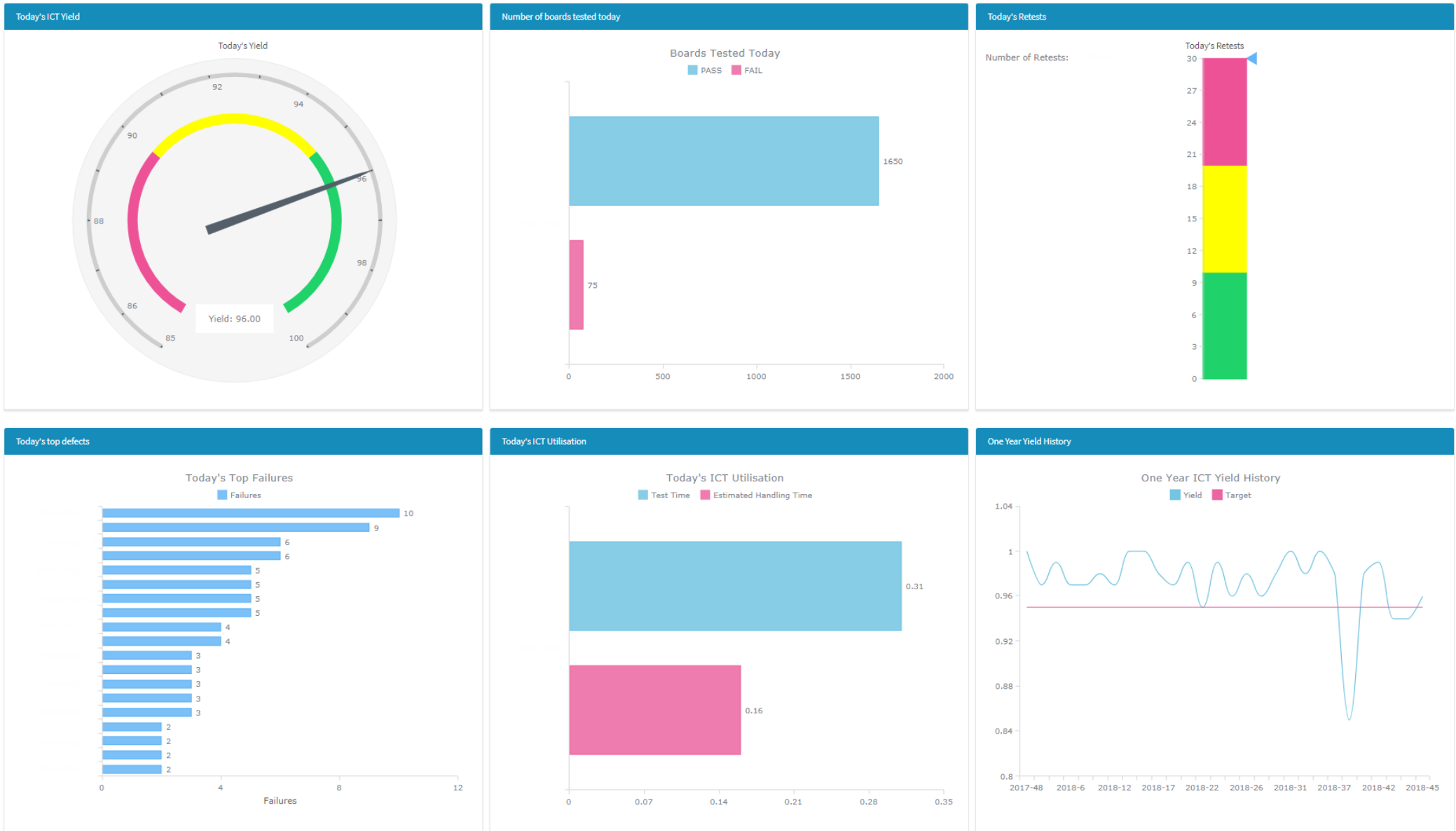
PRODUCT NAME ▲

Product X
IFR1 (7720)

Multiselect



NS-HPDCA: HPDA – web based app



NS-HPDCA: HPDA – web based app

Comprehensive Search - Advanced search

| | | |
|-----------------|---------------------------------------|----------------------------------------------------------------|
| Machine Name | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| Machine SN | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| PRODUCT NAME | <input type="text" value="Equals"/> | <input type="text"/> |
| Fixture SN | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| PROGRAM | <input type="text" value="Equals"/> | <input type="text"/> |
| VERSION | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| Serial Number | <input type="text" value="Contains"/> | <input type="text"/> |
| FAIL NAME | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| Test Type | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| SUB TEST NAME | <input type="text" value="Contains"/> | <input type="text"/> |
| Sub Test Result | <input type="text" value="Equals"/> | <input type="text" value="Please select"/> |
| Start Test | <input type="text" value="Equals"/> | <input type="text"/> <input type="text"/> <input type="text"/> |

NS-HPDCA: HPDA – web based app

HPDA Reports Charts Unit History Any field Contains search

[Home](#) > Reports > Comprehensive Search

Displaying 1 - 50 of 3268 50

| Machine Name | Machine SN | PRODUCT NAME | Fixture SN | PROGRAM | VERSION | Operator ID | Serial Number | FAIL NAME | Test Type | SUB TEST NAME | Sub Test Result | Duration | Start Test | Measurement | Nominal Value | High Value | Low Value |
|--------------|------------|--------------|------------|---------|---------|-------------|---------------|-----------------------|-----------|-------------------------|-----------------|----------|------------|-------------|---------------|------------|-----------|
| IFR1 | | | | | REV5.26 | | 170011 | Uncategorized Failure | ifr | Q64_GS_Cap | Hi | 55.00 | 5/4/2017 | 6.13281e-09 | 0 | 6e-09 | 4e-09 |
| IFR1 | | | | | REV5.26 | | 170020 | Uncategorized Failure | ifr | U34_44 | Hi | 55.00 | 5/4/2017 | 1.16374 | 0 | 0.84 | 0.79 |
| IFR1 | | | | | REV5.26 | | 170020 | Uncategorized Failure | ifr | U34_44 | Hi | 55.00 | 5/4/2017 | 1.16374 | 0 | 0.84 | 0.79 |
| IFR1 | | | | | REV5.26 | | 170054 | Uncategorized Failure | ifr | +VBATT_Hi_AfterChrgStsB | Lo | 125.00 | 5/4/2017 | 0.204935 | 0 | 17.64 | 15.96 |
| IFR1 | | | | | REV5.26 | | 170020 | Uncategorized Failure | ifr | U34_44 | Hi | 55.00 | 5/4/2017 | 1.16399 | 0 | 0.84 | 0.79 |
| IFR1 | | | | | REV5.26 | | 170020 | Uncategorized Failure | ifr | U34_44 | Hi | 56.00 | 5/4/2017 | 1.16374 | 0 | 0.84 | 0.79 |
| IFR1 | | | | | REV5.26 | | 170059 | Uncategorized Failure | ifr | L6_res | Lo | 54.00 | 5/4/2017 | 0.0289661 | 0 | 0.15 | 0.05 |
| IFR1 | | | | | REV5.26 | | 170059 | Uncategorized Failure | ifr | L6_res | Lo | 55.00 | 5/4/2017 | 0.0288443 | 0 | 0.15 | 0.05 |
| IFR1 | | | | | REV5.26 | | 170041 | Uncategorized Failure | ifr | C231 | Lo | 54.00 | 5/4/2017 | 1.19824e-09 | 0 | 1.12e-07 | 8.8e-08 |
| IFR1 | | | | | REV5.26 | | 170004 | Uncategorized Failure | ifr | U16_A_Hi | Lo | 123.00 | 5/4/2017 | 0.898522 | 0 | 5.5 | 0.9 |
| IFR1 | | | | | REV5.26 | | 170010 | Uncategorized Failure | ifr | +VBATT_Hi_AfterChrgStsB | Lo | 124.00 | 5/4/2017 | 0.204935 | 0 | 17.64 | 15.96 |
| IFR1 | | | | | REV5.26 | | 170029 | Uncategorized Failure | ifr | Q79_B_ON | Hi | 54.00 | 5/4/2017 | 0 | 0 | 0.2 | 0 |
| IFR1 | | | | | REV5.26 | | 170029 | Uncategorized Failure | ifr | Q79_B_ON | Hi | 55.00 | 5/4/2017 | 0 | 0 | 0.2 | 0 |

NS-HPDCA: HPDA – web based app

HPDA Reports Charts Unit History Any field Contains search NICK NICULITA

[Home](#) > [Reports](#) > [Top Defects Report](#)

Displaying 1 - 20 of 442 20

| Machine Name | PRODUCT NAME | PROGRAM | VERSION | Test Type | SUB TEST NAME | Failures ↓ |
|--------------|--------------|---------|---------|-----------|---------------|------------|
| IFR1 | | | REV5.28 | ifr | U16_A_Hi | 168 |
| IFR1 | | | REV5.28 | ifr | D13_B_ON | 123 |
| IFR1 | | | REV5.28 | ifr | R209 | 110 |
| IFR1 | | | REV5.27 | ifr | R209 | 77 |
| IFR1 | | | REV5.28 | ifr | D30_Zener | 74 |
| IFR1 | | | REV5.28 | ifr | R246 | 73 |
| IFR1 | | | REV5.28 | ifr | D31_OFF | 67 |
| IFR1 | | | REV5.27 | ifr | R246 | 61 |
| IFR1 | | | REV5.26 | ifr | U16_A_Hi | 55 |
| IFR1 | | | REV5.28 | ifr | D12_Zener | 50 |
| IFR1 | | | REV5.28 | ifr | D14_Zener | 46 |
| IFR1 | | | REV5.28 | ifr | F3_res | 42 |
| IFR1 | | | REV5.28 | ifr | R28 | 42 |
| IFR1 | | | REV5.28 | ifr | R239 | 39 |
| IFR1 | | | REV5.28 | ifr | Q63_OFF | 39 |

NS-HPDCA: HPDA

- ▶ Check the video below for more details about HPDA
 - <https://youtu.be/wcwfMPhD-4w>

NS-HPDCA: Last Test Result

- ▶ LTR checks the last test results for a serial number of any PCBA tested at ICT
- ▶ If last test was a FAIL or board was not tested at all, application will warn the operator with a clear message
- ▶ Monitor your “Last Test Result” at FQC (Final Quality Control) to make sure that what is shipped out has passed the test.

NS-HPDCA: Last Test Result

Last Test Result

Scan or type in the Serial Number:

Last Test Result:

31313243
PASS

Last Test Result

Scan or type in the Serial Number:

Last Test Result:

30992576
FAIL

Last Test Result

Scan or type in the Serial Number:

Last Test Result:

39000001
NOT TESTED!

NS-HPDCA: Demo Available

- ▶ For a DEMO
 - Please contact us at customDB@nicks-software.com
 - We offer a fully functional DEMO valid for 30 days
 - We also help with installation and configuration, if needed
 - We'll get you going quickly, via remote access

NS-HPDCA: Pricing

- ▶ HPDCA offers a powerful suite of tools for analysing the ICTs
- ▶ HPDCA offers for better line supervision
- ▶ HPDCA offers reports for more in depth engineering analysis
- ▶ HPDCA offers a well organized and easily accessible storage solution for all the relevant data contained in the log files
- ▶ HPDCA simply improves PCBAs status visibility during manufacturing
- ▶ **For RFQ contact us at:**
 - customDB@nicks-software.com
- ▶ **For more details visit us at:**
 - <https://custom-database-software-development.com.au/>
 - Or
 - <https://nicks-software.com/>

Thank you!



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