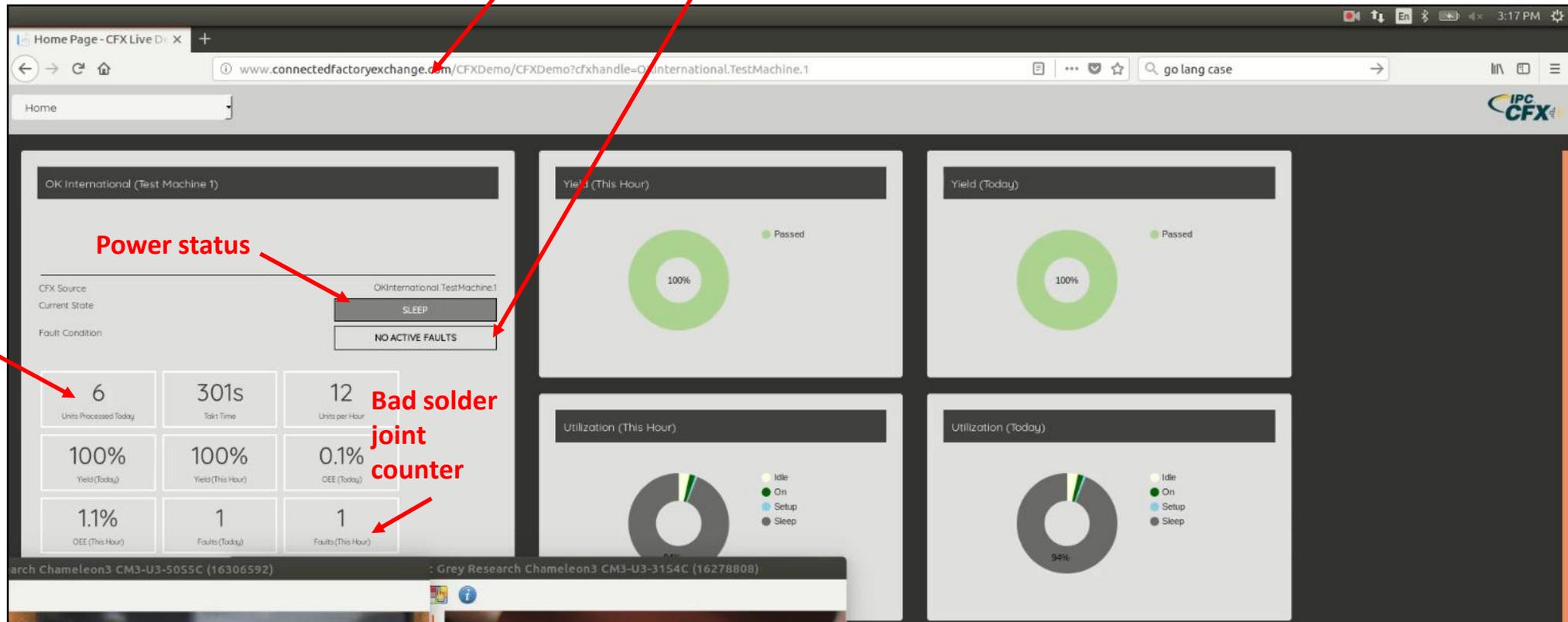IPC CFX Process Control and Traceability

Metcal Real Time Risk Mitigation in Hand Soldering Application

www.connectedfactoryexchange.com/CFXDemo/.. Metcal demo page

Traceability: Error status

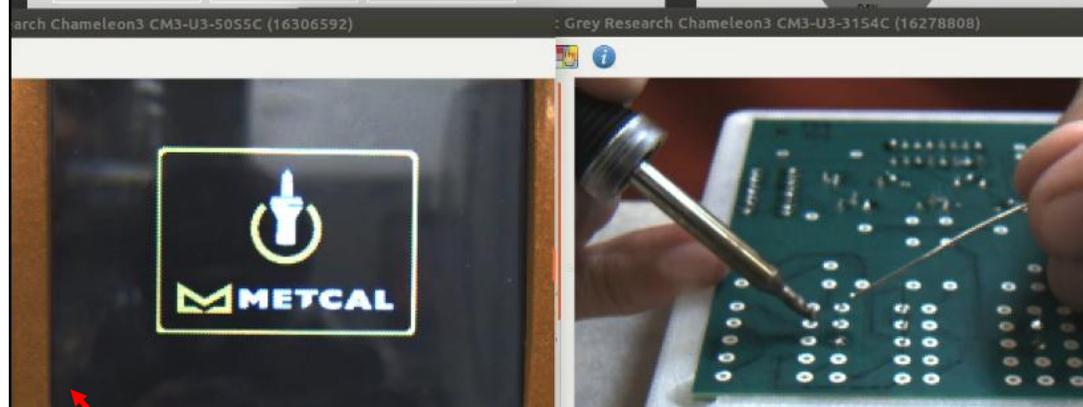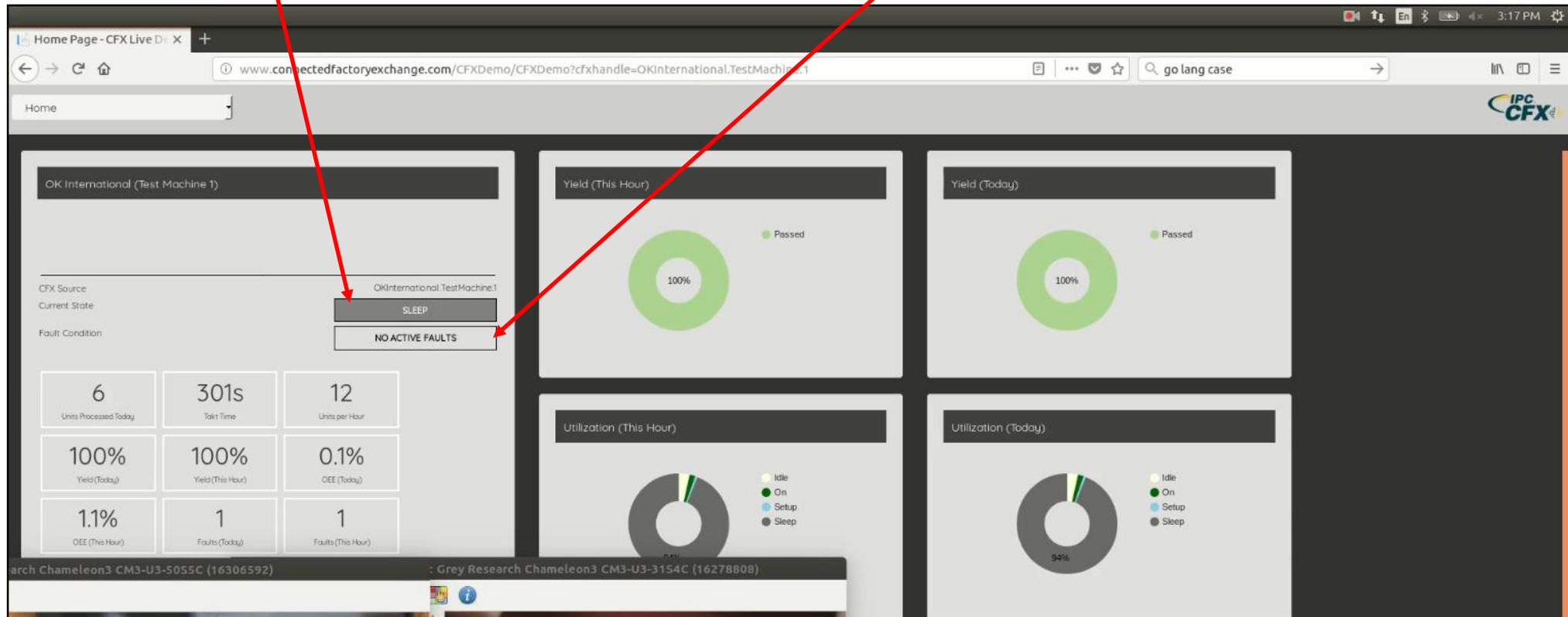
Power status

Good solder joint counter

Bad solder joint counter

Process control: after applying solder, operator will wait until LED result indicated before starting the next joint.

Demo work station

Traceability: Metcal Connection Validation CV-5200 Power Supply

Power saving SLEEP MODE

NO ACTIVE FAULT
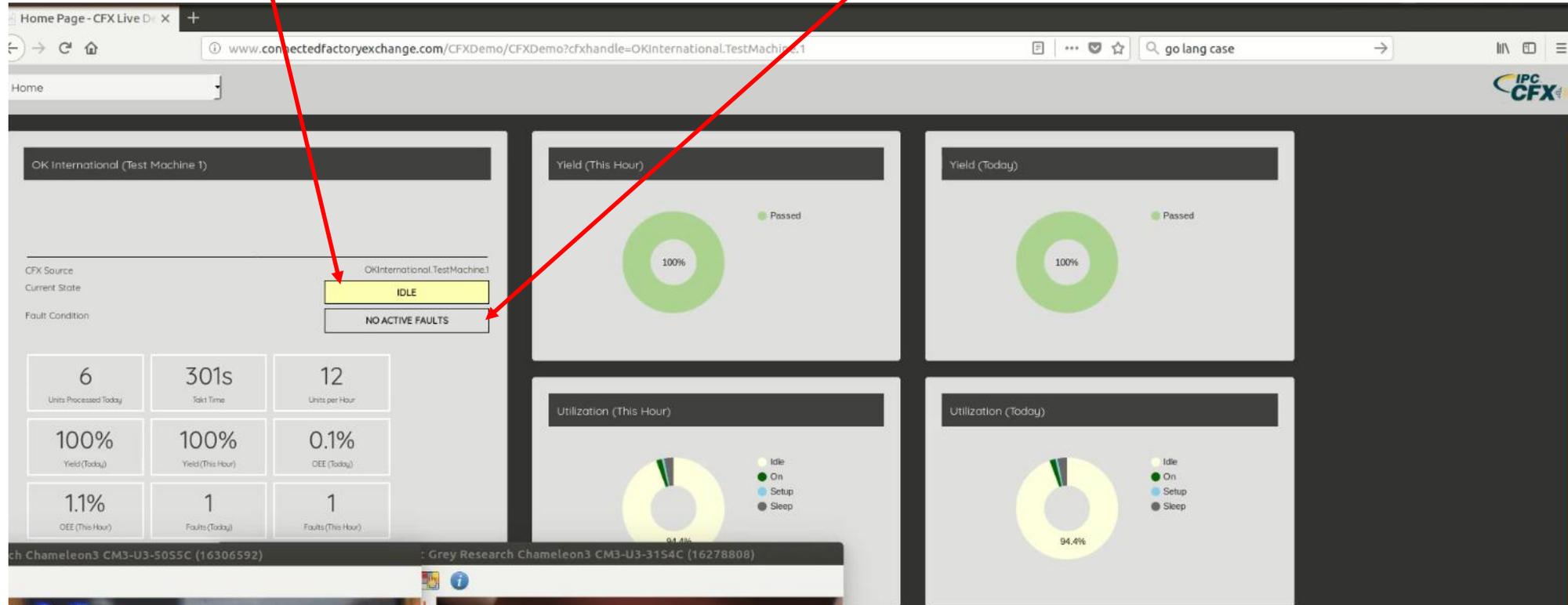
Power saving SLEEP MODE

After applying solder, operator will wait until LED result indicated before starting the next joint.
GREEN LED = good joint
RED LED = bad joint

IDLE MODE

NO ACTIVE FAULT

Home Page - CFX Live De × +

ⓘ www.connectedfactoryexchange.com/CFXDemo/CFXDemo?cfxhandle=OKInternational.TestMachine.1   🔍 go lang case →

Home

IPC CFX

OK International (Test Machine 1)

CFX Source   OKInternational.TestMachine.1
Current State   IDLE
Fault Condition   NO ACTIVE FAULTS

6	301s	12
Units Processed Today	Takt Time	Units per Hour

100%	100%	0.1%
Yield (Today)	Yield (This Hour)	OEE (Today)

1.1%	1	1
OEE (This Hour)	Faults (Today)	Faults (This Hour)

Yield (This Hour)
● Passed
100%

Yield (Today)
● Passed
100%

Utilization (This Hour)
○ Idle
● On
● Setup
● Sleep
94.4%

Utilization (Today)
○ Idle
● On
● Setup
● Sleep
94.4%

ch Chameleon3 CM3-U3-50S5C (16306592)   : Grey Research Chameleon3 CM3-U3-31S4C (16278808)

16
CVC-7CH0025S
745°F
A ⬚ + ⚙ B
ESD   CV

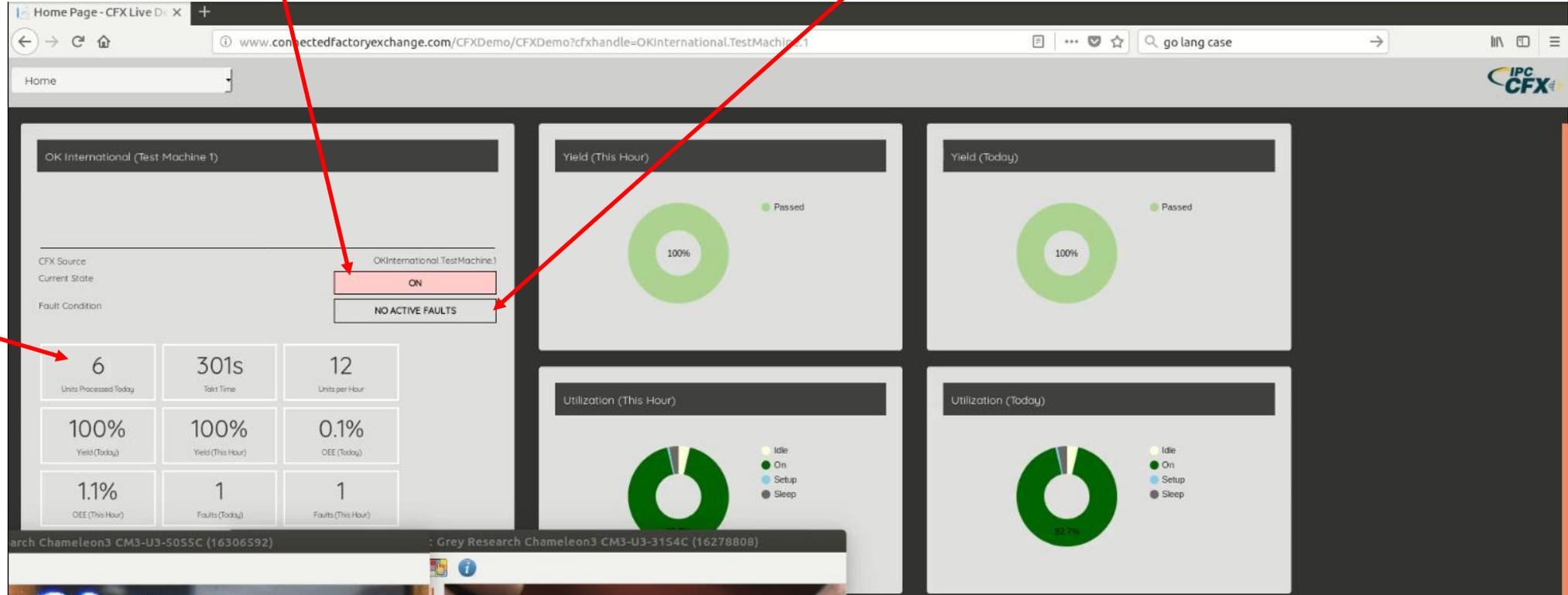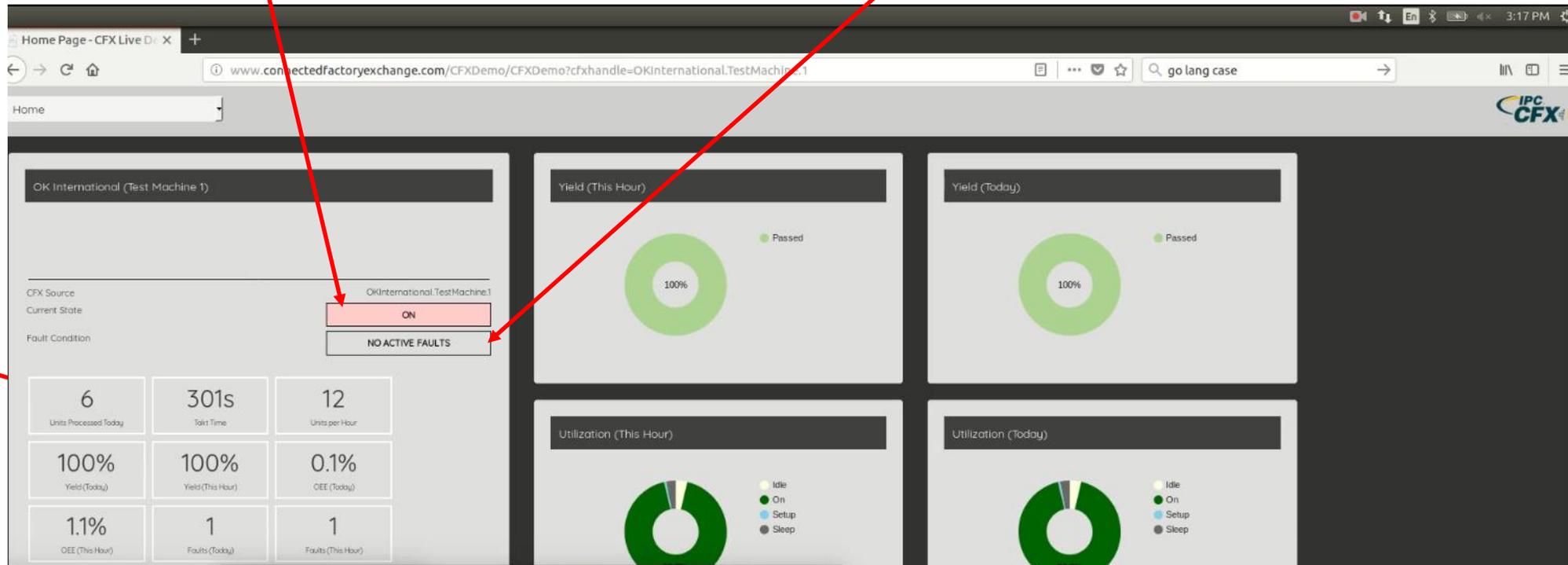**After applying solder, operator will wait until LED result indicated before starting the next joint.**
GREEN LED = good joint
RED LED = bad joint

IDLE MODE – Idle tip temperature: 745F – Idle power: 16W - Cartridge part number: CVC-7CH0025S

Solder event detected – Power is on

NO ACTIVE FAULT

Good solder joint

counter = 6

Home Page - CFX Live D

www.connectedfactoryexchange.com/CFXDemo/CFXDemo?cfxhandle=OKInternational.TestMachine.1

go lang case

IPC CFX

Home

OK International (Test Machine 1)

CFX Source — OKInternational.TestMachine.1
Current State — **ON**
Fault Condition — NO ACTIVE FAULTS

| 6 | 301s | 12 |
| Units Processed Today | Takt Time | Units per Hour |

| 100% | 100% | 0.1% |
| Yield (Today) | Yield (This Hour) | OEE (Today) |

| 1.1% | 1 | 1 |
| OEE (This Hour) | Faults (Today) | Faults (This Hour) |

Yield (This Hour) ● Passed 100%

Yield (Today) ● Passed 100%

Utilization (This Hour) ○ Idle ● On ● Setup ● Sleep

Utilization (Today) ○ Idle ● On ● Setup ● Sleep 92.7%

arch Chameleon3 CM3-U3-50S5C (16306592)

: Grey Research Chameleon3 CM3-U3-31S4C (16278808)

30
CVC-7CH0025S
709°F

A ⌐ + ⚙ B
ESD CV

After applying solder, operator will wait until LED result indicated before starting the next joint.
GREEN LED = good joint
RED LED = bad joint

Power is ON – Idle tip temperature: 709F – Idle power: 30W - Cartridge part number: CVC-7CH0025S

IMC calculation – Power is ON

NO ACTIVE FAULT

Good solder joint

counter = 6

GREEN LED

Power is ON – Idle tip temperature: 709F – Idle power: 30W - Cartridge part number: CVC-7CH0025S

Idle power – Ready for the next joint

NO ACTIVE FAULT

Good solder joint

counter = 7

LED is off

Idle power – Idle tip temperature: 744F – Idle power: 16W - Cartridge part number: CVC-7CH0025S

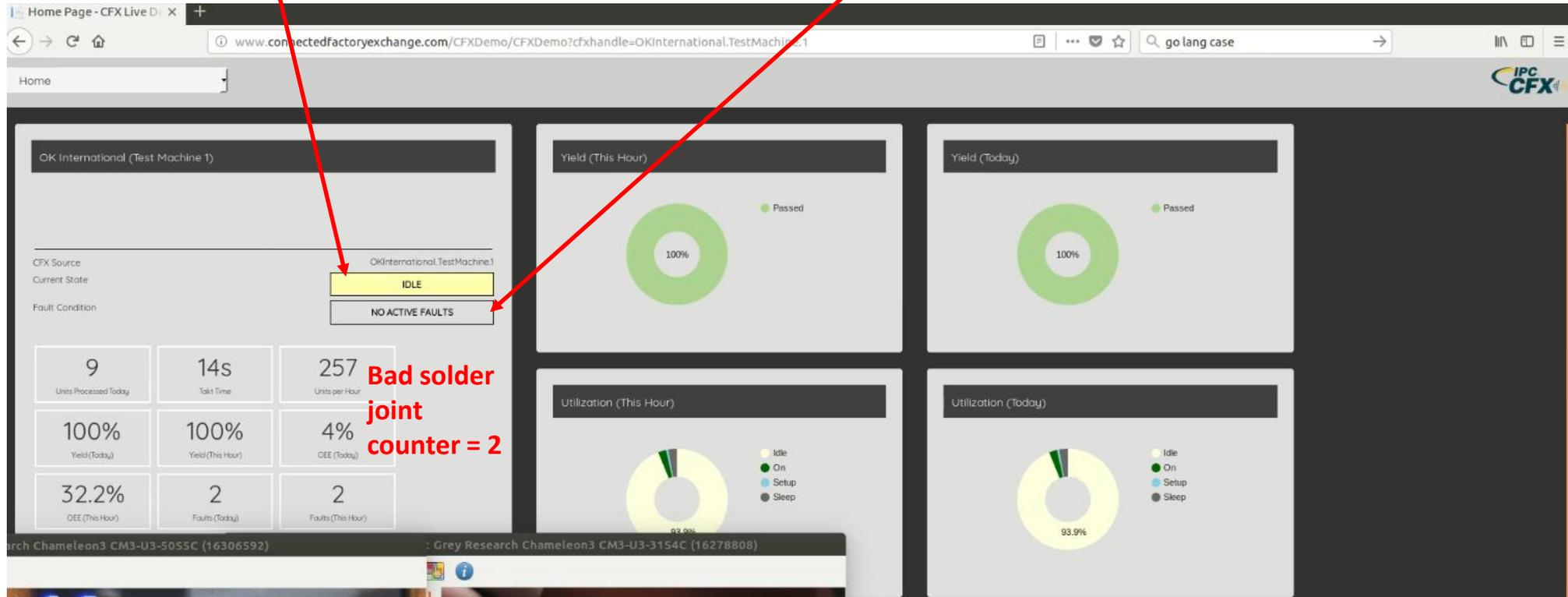**IMC calculation – Power is on**

NO ACTIVE FAULT

Bad solder joint counter = 1

RED LED

Power is on – Idle tip temperature: 725F – Idle power: 25W - Cartridge part number: CVC-7CH0025S

Idle power – Ready for the next joint

NO ACTIVE FAULT

Bad solder joint counter = 2

LED is off

Power is on – Idle tip temperature: 745F – Idle power: 16W - Cartridge part number: CVC-7CH0025S

ESD event detected

Bad solder joint counter = 2

ESD event detected