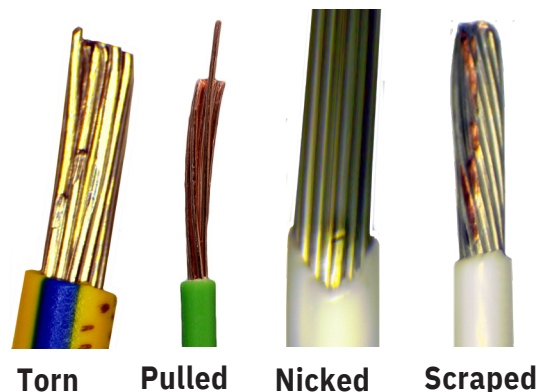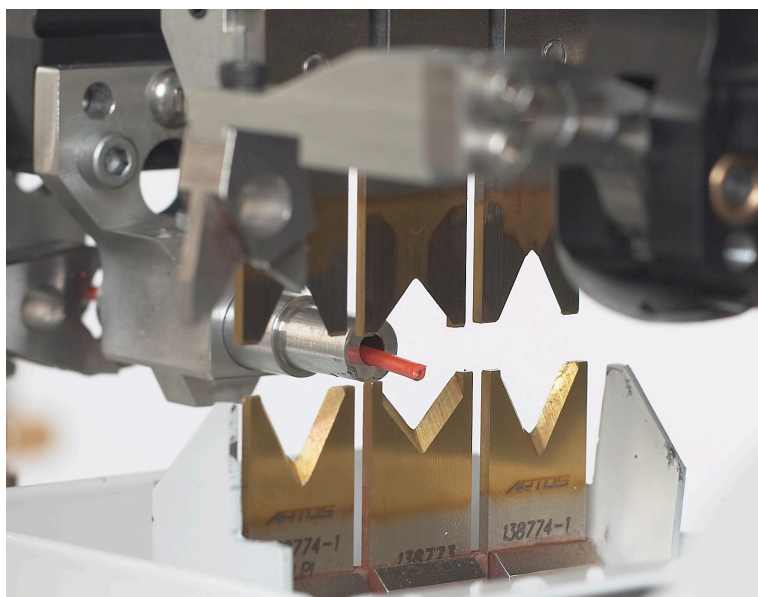# CQS CONDUCTOR QUALITY SENSOR
Detect conductor touch on automatic wire processing machines

OES TECHNOLOGIES

Torn   **Pulled**   **Nicked**   **Scraped**

Monitor, detect, and eliminate wire strip defects

Conductor Touch:

Is the root cause of common crimp defects. The result of conductor touch during insulation removal can be cut, nicked, pulled, torn, or scraped conductors. These quality defects are hidden inside the terminal crimp.

Causes of Conductor Touch:

- Wire quality – variation in concentricity.
- Wire type – thin wall, insulation material.
- Machine setup.
- Cutting/Stripping blade quality.
- Capability of the wire strip control unit.
- Stripping blade incompatibility.
- Combination of the above.

CQS for Conductor Touch

CQS Electrodes inject a signal onto the wire which is monitored during the wire stripping operation. Incidence(s) of conductor touch are detected during production. CQS algorithms analyze the conductor touch relative to control parameters for control of potential wire strip defects.

CQS Capabilities

Detection of conductor touch conditions that causes crimp defects:

- One or more missing or torn strands.
- Pulled strands
- Nicked strands
- Scraped strands
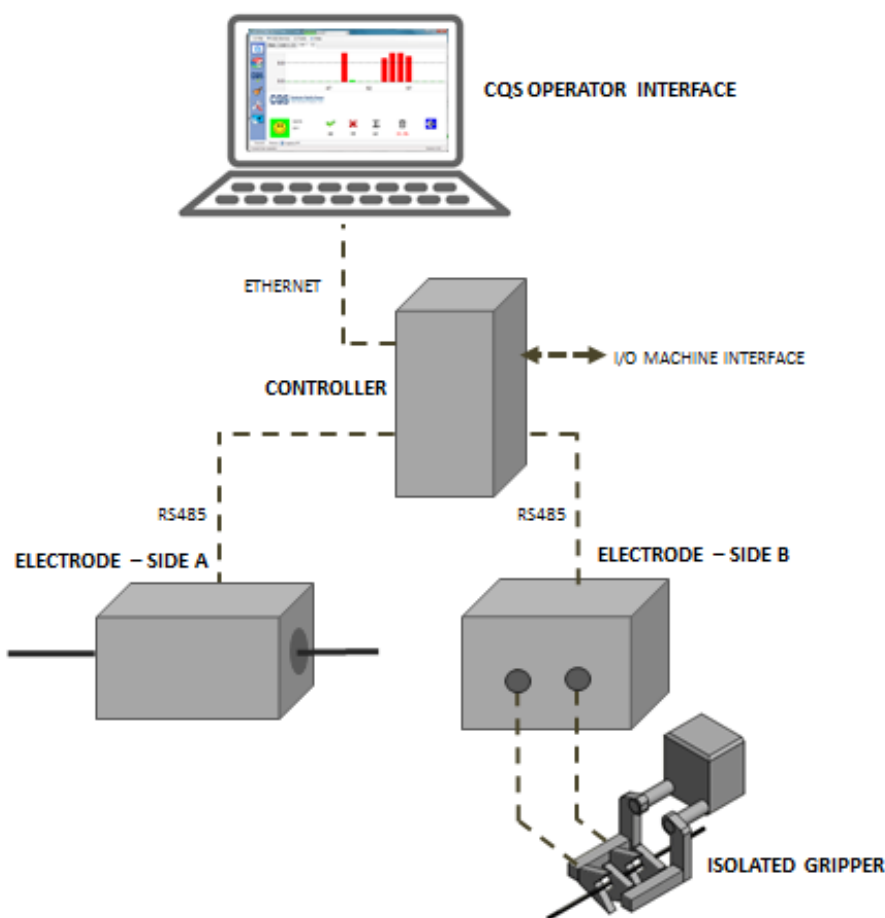
** Works equally for copper and aluminum wire

CQS

US Patent 9,880,213

CQS

Quick Facts

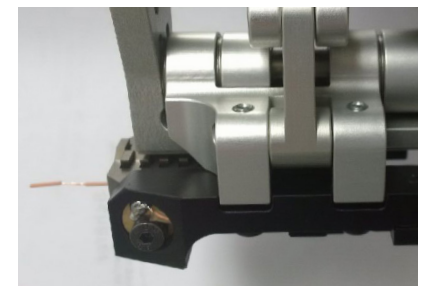| MODEL	APPLICATION
CQS	Automatic Crimp to Crimp Automatic Cut and Strip

Electrode - Side A

Operator Interface

• CQS Windows compatible application software for process monitoring of conductor touch

CQS OPERATOR INTERFACE

ETHERNET

CONTROLLER

I/O MACHINE INTERFACE

RS485

RS485

ELECTRODE – SIDE A

ELECTRODE – SIDE B

ISOLATED GRIPPER

Electrode - Side B

Isolated Gripper

Controller

Adaptable to a wide range of wire processing machines

OES TECHNOLOGIES