EXECUTIVE SUMMARY

External walkdown of the CleanSwitch RTO found no abnormalities on the housing, ductwork, gas train, dampers, or access structures. Nameplate data was captured for two units (CS-650 shipped 03/2016 and CS600 shipped 09/2010), and safeties tested OK during the electrical and pneumatic check. Given the 14+ year service age on the older unit, schedule an internal media bed and switching valve inspection at the next planned outage.

PRIORITIZED ACTIONS

1	Plan internal media bed and switching valve inspection at next scheduled outage on CS1123. TARGET: NEXT PLANNED OUTAGE	INFO
2	Archive captured nameplate data (CS1217 and CS1123) in equipment master record for traceability. TARGET: WITHIN 30 DAYS	INFO
3	Verify exhaust fan vibration and bearing temperature trends against baseline at next PM. TARGET: NEXT QUARTERLY INSPECTION	INFO
4	Continue routine external walkdowns of ductwork, gas train, and damper actuators. TARGET: NEXT QUARTERLY INSPECTION	GOOD

FINDINGS

01 Overall picture of unit

GOOD

— LEGEND

1 **Inlet Ductwork**
Insulated process inlet duct to RTO

2 **Gas Train**
Yellow natural gas piping and valves

3 **Access Platform**
Maintenance platform with ladder access

4 **Control Enclosure**
Control cabinet with cooling unit attached

— DISCUSSION

Exterior of the CS300 housing, insulated process inlet duct, yellow natural gas train, and yellow access ladder/platform all present as installed with no visible deformation, coating failure, or leakage. Control enclosure with side-mount cooling unit is intact.

— RECOMMENDATION

No action. Maintain on standard external walkdown cadence.

02 Front side view

GOOD

— LEGEND

1 **Isolation/Fresh Air Damper**
Damper actuator assembly intact, no leakage

2 **Tee Damper Junction**
Tee damper ductwork seams sound

3 **Exhaust Fan Housing**
Fan housing exterior shows no deformation

— DISCUSSION

Front-side view of the isolation/fresh air damper actuator, tee damper junction, and exhaust fan housing shows sound seams and no actuator leakage or housing deformation. Galvanized ductwork is in serviceable condition.

— RECOMMENDATION

Trend exhaust fan vibration and damper stroke times at the next PM to confirm continued health.

03 Untitled finding

INFO

— LEGEND

1 **Unit Identification**
Unit and project numbers documented for traceability

2 **Model And Ship Date**
CS-650 model, shipped March 2016

3 **Manufacturer**
B&W MEGTEC Systems nameplate legible

— DISCUSSION

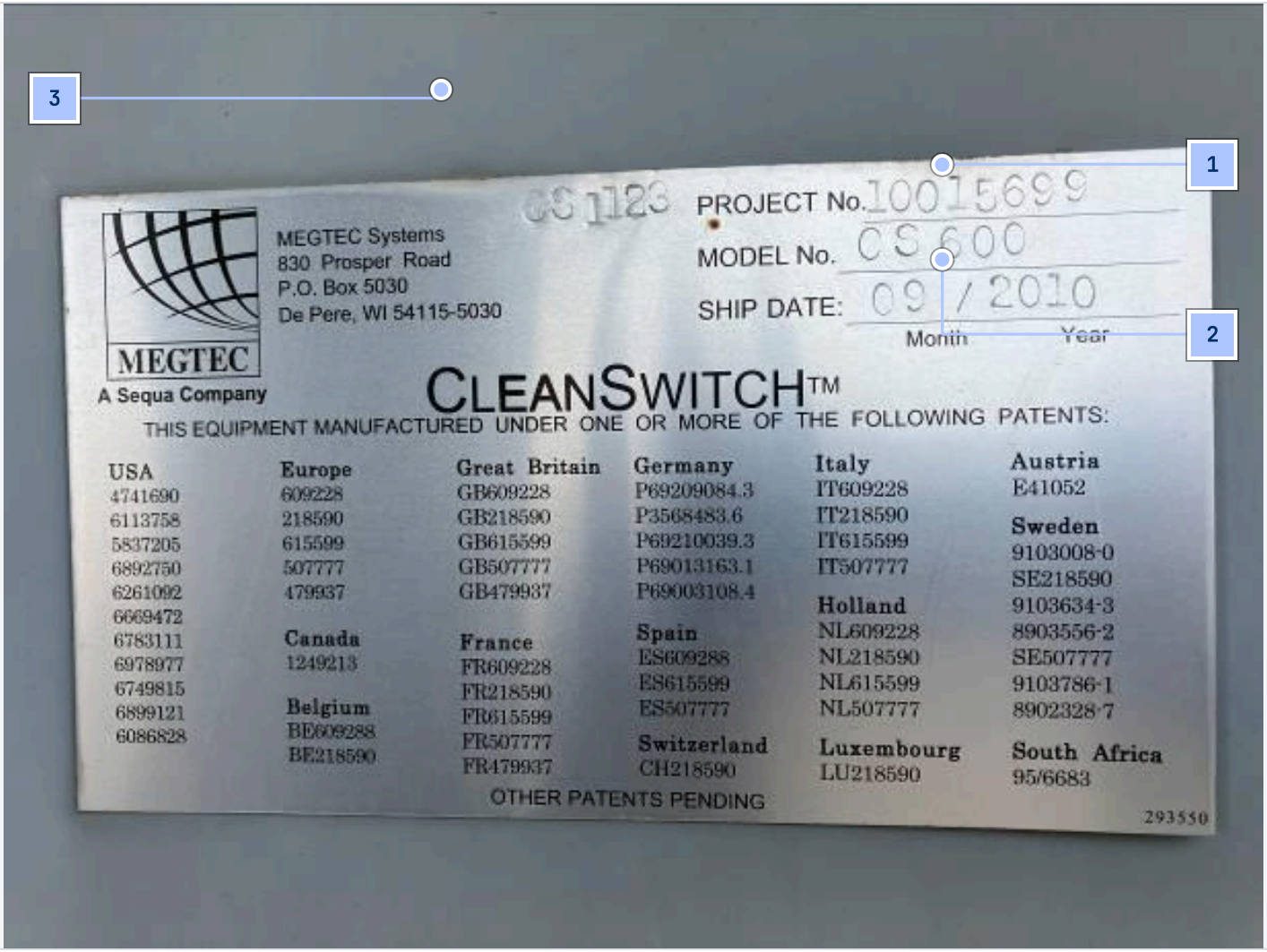
B&W MEGTEC nameplate is legible: Unit CS1217, Model CS-650, shipped 03/2016. Unit and project numbers recorded for the equipment file.

— RECOMMENDATION

Log nameplate data in the asset register and link to this walkdown record.

04 Job Tag

INFO



— LEGEND

1 **Model & Project**
Model CS600, Project 10015699 identified

2 **Ship Date**
Ship date 09/2010, ~14 year service age

3 **Unit Serial Tag**
Handwritten unit ID CS1123 noted

— DISCUSSION

Job tag confirms Model CS600, Project 10015699, ship date 09/2010, handwritten unit ID CS1123 — approximately 14 years in service. Electrical and pneumatic safeties tested OK at the time of walkdown.

— RECOMMENDATION

Given service age, schedule an internal inspection of media beds, poppet shafts, and switching valve seats at the next planned outage.

05 Overall picture of unit

GOOD

— LEGEND

1 **Process Duct Connection**
Main process inlet ductwork intact

2 **Natural Gas Header**
Burner fuel gas piping run, no leaks visible

3 **Media A Access Door**
Inspection hatch for Media A bed

4 **Access Ladder/Platform**
Service platform and ladder appear secure

— DISCUSSION

Internal-inspection-day overview shows the main process inlet duct connection, natural gas header to the burner, Media A access hatch, and service platform/ladder all in sound condition with no visible leaks or structural concerns.

— RECOMMENDATION

Proceed with planned internal media bed inspection; no external corrective action required.