CASE STUDY

CorrSolutions

DATA VALIDATION LEADS TO AN EFFECTIVE RBI INSPECTION PROGRAM

Typical risk-based inspection (RBI) projects assess multiple process units that may include thousands of pieces of equipment. Each piece of equipment and its components require hundreds of data input parameters that need validation.

APPROACH: QUALITY CHECK

With the high number of parameters, it is easy to overlook potentially erroneous data. CorrSolutions developed a set of quality control tools to help project managers review all data required in an RBI analysis.

RBI Quality Check Best Practices:

Mechanical data • Operating data • Inspection history
Damage review • Pressure relieving devices (PRDs)

Each quality check validates multiple data points pertaining to its respective category. For our client, we conducted an inspection history check to compare furnished wall thickness against field-measured wall thickness to identify inspection data that may require further review. In addition, we compared design pressure to operating pressure to ensure the equipment was not exceeding its design specifications.

EQUIPMENT	COMPONENT	DESIGN PRESS (PSIG)	OPERATING PRESS (PSIG)	FLAG	DESIGN TEMP (°F)	OPERATING TEMP (°F)	FLAG
T-101	T-101-BTM	285	300	NEEDS REVIEW	500	560	NEEDS REVIEW
T-101	T-101-TOP	285	280		500	480	
D-111	D-111	170	110		400	520	NEEDS REVIEW
D-222	D-222	50	60	NEEDS REVIEW	100	79	

Figure 1 - Operating data quality check comparing design pressure with operating pressure

RESULT

Using the quality checks, we worked with the client to identify and resolve any potential data discrepancies to create a more accurate inspection plan. The data validation also detected problem areas outside of RBI that required further evaluation. As seen in Figure 1, the data validation process identified that the client should consider mitigation techniques such as an operational change or rerate of the D-111 vessel.

Data validation is an integral component of our RBI process and helps maintain the accuracy and integrity of our clients' data.

Contact us to learn how CorrSolutions can help implement an effective RBI program at a facility.

GOAL

Develop more accurate inspection plan

SERVICES

Validation of operating data

BENEFITS

Data accuracy

Integrity

INDUSTRY

Oil & Gas

COUNTRY

USA

TOTAL ASSET SUPPORT

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