

**FORM QEXP-2 SUGGESTED FORMAT FOR TUBE-TO-TUBESHEET EXPANDING  
PROCEDURE QUALIFICATION RECORD FOR TEST QUALIFICATION (TEPQR)**

Company name \_\_\_\_\_

Procedure Qualification Record no. \_\_\_\_\_ Date \_\_\_\_\_

TEPS no. \_\_\_\_\_

Expanding process(es) \_\_\_\_\_ Driver types \_\_\_\_\_  
(Rolling, hydroexpanding, explosive expanding, hybrid expanding) (Electric, air-driven, hydraulic, other)

Expanded tube length \_\_\_\_\_ Tube pitch \_\_\_\_\_  
(If there is a gap in the expanded zone, record the total expanded length)

Joints (HH-7) \_\_\_\_\_

Sketch of Test Array

Tubesheet Material(s) \_\_\_\_\_  
Material spec. \_\_\_\_\_ Type or grade \_\_\_\_\_

Diameter and thickness of test specimen \_\_\_\_\_ Hole diameter and pitch arrangement \_\_\_\_\_

No. and location of joints to be tested \_\_\_\_\_

No. and description of annular grooves \_\_\_\_\_

Hole surface finish \_\_\_\_\_

Yield stress (from mill test report) \_\_\_\_\_

Other \_\_\_\_\_

Testing Apparatus \_\_\_\_\_  
(Manufacturer, type, calibration date)

Rate of loading to avoid impact \_\_\_\_\_  
[Maximum 1/2 in, (13 mm) per minute]

Tube Material(s) \_\_\_\_\_  
Material spec. \_\_\_\_\_ Type or grade \_\_\_\_\_

Hole surface finish \_\_\_\_\_

Yield stress (from mill test report) \_\_\_\_\_

Other \_\_\_\_\_

[illegible]

Standard deviation. \_\_\_\_\_ Standard deviation \_\_\_\_\_ Satisfactory  
(see Appendix A, A-5)

Operator's name \_\_\_\_\_ Clock no \_\_\_\_\_

Manufacturer

Date \_\_\_\_\_ By \_\_\_\_\_

Remarks: