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EST Group



Qualification criteria for
 Smart Ram Plus

Installation Force:
 5304lbf/23.59kN

Certificate of Test & Inspection

Certificate No: **02442452-Commercial**

Mfg. Date: **March 31, 2025**

P/N	Description
V584C	Pop-A-Plug® CPI/Perma Kit .584" Carbon Steel. For Tube ID 0.585-0.649" (14.86-16.48mm). Max Pressure: 1000 PsiG (68.9 BarG). Max Temperature: 700°F (371°C). Max Hydrostatic Test Pressure : 1500 PsiG (103 BarG) at ambient temperature. Kit contains (10) plugs with (1) Threaded Go/No-Go Gage.

Lot Number	02442452	Dimensional Inspection	PASS
Test Technician	Sultan	Quality Inspection	PASS
Test Stand ID	CW1	Installation Verification	PASS
Pin Material Heat	20888280	High Pressure Leak Test	PASS
Ring Material Heat	800002686862	Ring Compression Verification	PASS
Number of Tests	05	Min Expansion Range Test	PASS
		Max Expansion Range Test	PASS
		Performance Pressure Test	PASS

These Pop-A-Plugs were manufactured, sampled, inspected and tested in accordance with Curtiss-Wright EST Group's Quality Assurance Program registered to ISO9001-2015. This certificate is based on the evaluation and destructive testing from the specific lot stated above. This confirms that listed component(s) and/or material(s) conform to codes, standards, test and Quality Assurance requirements specified by Curtiss-Wright EST Group.

EST Group's Pop-A-Plug Tube Plugging System provides a complete range of tube leak detection and repair products, services and replacement parts, covering the life cycle of shell and tube heat exchangers and condensers. Pop-A-Plug Tube Plugs conform to ASME PCC-2 recommended tube plugging repair methods, offering a permanent mechanical solution to safely seal leaking heat exchanger tubes without welding.*

**Inspection and Repair of Shell and Tube Heat Exchangers, The American Society of Mechanical Engineers (ASME) PCC-2, Article 312.*



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