

# Regeneration Skid for NGV Fuel Gas Dryers

# NGR



**NG series**    



**PSB INDUSTRIES INC.**  
*ISO 9001:2008 CERTIFIED*

**MADE IN THE U.S.A.**

# Natural Gas Regeneration Skid (NGR)

PSB regeneration skids are used to regenerate single tower natural gas dryers that do not have an on board regeneration system.

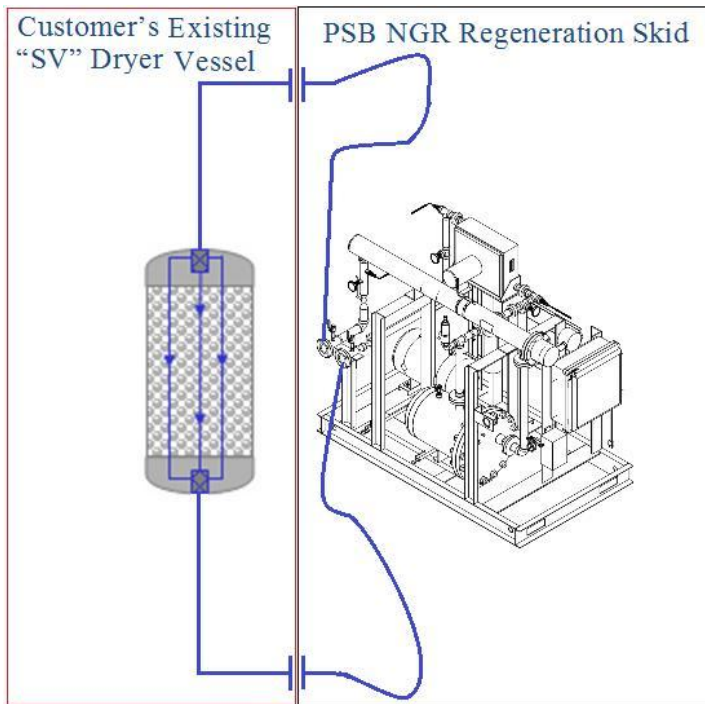
The system operates in a closed loop, utilizing a captive volume of natural gas. Once connected to the dryer vessel and properly vented, natural gas will begin flowing when the regeneration start button is initiated by the operator. A blower pushes gas to the electric heater and the hot gas flows to the vessel to be heated. The moisture held up on the desiccant will then be carried back with the gas and flows to the regeneration skid. A heat exchanger then cools the gas and condenses the water. The water is then efficiently removed from the gas stream and drains to the condensate sump. Cool gas then flows to the blower to be circulated to the heater again.

After the desiccant has been adequately heated, the electric heater is de-energized and the blower continues to recycle gas to reduce the desiccant temperature. Once cooled, regeneration is complete.

PSB Model	FLA @ 460/3/60	Regeneration Connections Inches	Dimensions Inches			Package Weight lbs.
			L	W	H	
NGR21U	44.3	2" FLG	114	48	81	2400

Specifications and data subject to change

## DESIGN FEATURES



- NGR21U is designed to regenerate medium and small single vessel dryers (PSB model SV21 and smaller).
- Compact design to ease transportation between sites
- Regeneration blower is hermetically sealed in an ASME code stamped vessel
- Electric regeneration heater, flanged immersion type, low watt density and heater sheath thermocouple included for safety shutdown
- Air-cooled fin tube after cooler with motor
- High efficiency separator and condensate sump
- Pressure relief valve, 200 mwp
- High heater sheath chamber and outlet temperature control and alarms are provided.
- High after cooler outlet temperature alarm is provided
- NEMA 4 electrical control panel contains the PLC which automatically controls the heating and cooling cycle upon operator initiation
- NEMA 7 control panel contains high voltage items
- Electrical rating is Class 1, Div 2 Group D

### Options:

**Connection Kit includes: 25' Cable with Plug (shown in photo) and (2) 15' flexible hoses for supply and return to customers vessel.**

**Cold Weather Package includes: Enclosure heater and heat tracing/insulation on condensate drain line and sump.**



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