

## Charcoal Adsorber Housings Nowata C Series, 1 and 2 Canister Models

### 1. Features

Charcoal filtration is required to remove oils, dissolved hydrocarbons, well inhibitors and degradation compounds from glycol or amine systems. The Nowata C Series activated carbon adsorber, canister type filter is designed to purify glycol and amine streams which minimizes fouling and keeps operating efficiency high. Canister type carbon cartridges are the most economical type of activated carbon adsorbers for flow rates up to 3 gallons per minute. The canister makes charcoal replacement much easier and disposal much cleaner than loose charcoal.

#### Standard Design

- 1 and 2 Canister Models Available
- 150 PSI Working Pressure Rating
- Bolted Closure for Fast, Easy Canister Replacement
- Buna O-Ring Seal
- Glycol / Amine Flow Rates to 180 GPH
- Carbon Steel Construction
- ASME Code Stamp Available Upon Request



## 2. Standard Construction

The Nowata 1 and 2 Canister "C" Series Charcoal Filter Housings are designed for low pressure charcoal treatment of triethylene glycol and amine, natural gas dehydrators and sweeteners. These units are constructed from welded carbon steel. Internal canister support, screw and seal washer are plated carbon steel. The flat top closure uses four 3/4" diameter bolts attached to the vessel wall which swing away from the top during canister removal. The 1" internal pipe thread inlet and outlet connections are standard. Internal pipe thread vessel drain and vent are also provided.

### ASME Code

The Nowata "C" Series filters are designed in accordance with the Pressure Vessel Code of the American Society of Mechanical Engineers. When required, each unit can be stamped with the "UM" or "U" symbol, denoting fabrication and testing performed by specific procedures.

## 4. Dimensional Information

Housing Model Number	Max. Working Pressure (psi)	Approx. Shipping Weight (lbs.)	Number of Canisters	Glycol and Amine Flow Rate (gpm/gph)
C1N15N1C	150	255	1	1.5 gpm / 90 gph
C2N15N1C	150	325	2	3 gpm / 180 gph

## 5. Charcoal Canister Design

The all steel charcoal canister is 11" O.D. x 22" long. The granulated charcoal is held in place by a fabric outer sleeve just inside the perforated steel shell. The charcoal will not migrate downstream due to a cloth inner seal and perforated rigid metal core. Each canister has gaskets attached to both ends, plus a lifting handle for ease of replacement. Each canister contains approx. 31 pounds of granulated charcoal. Charcoal adsorbers operate most efficiently when the operating temperature is less than 120°F. Operation at a temperature greater than 220°F is not recommended. The Nowata Model 11NC22 replacement canisters are shipped in individual cardboard boxes which can be used for handling and disposal of spent canisters. The Nowata 11NC22 charcoal canister is a replacement for industry standard activated charcoal elements that are 11" O.D. x 22" long.

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## 3. Optional Construction

### Seal Material

The Standard Buna o-ring seal will operate to 220°F. Viton and Ethylene Propylene o-ring seal materials are available for special service.

### Connections

Inlet and outlet connections are available in smaller than standard sizes to fit customer requirements. 150# RF ANSI flanges are available by special order. Internal pipe thread drain and vent connections are standard. Flanged or external pipe thread, and non-standard sizes are available by special order. Special purpose connections such as relief valve fittings and pressure taps are available to meet a customer's specific requirements. Non-standard connection locations, unusual mounting heights and/or dimensions are also available.

## 6. Housing Dimensions

