Simple and Reliable System

o The BC beer carbonating unit has a minimum of moving parts and the principle law of physics it uses in carbonation control means the system is inherently simple and reliable requiring minimum servicing.

• Inline process saves on

- o Preparation time
- o BBT tank specification and costs needs only 0.5 bar blanket pressure in BBT prior to the BC inline carbonator and filling. 3 bar pressure tank rating not required as is the case for in tank carbonation.
- o CO2 consumption gas atomise carbonation is 85% efficient compared to in tank carbonation is 65% efficient. No need to purge large volumes of CO2 into the BBT's which is required with in tank carbonation.

Easy operator use with automatic beer delivery system to the KEG filler

- o Automatic filler prime
- o Automatic filler run out by controlled gas purging reduces beer losses

• Full Automatic CIP control of carbonator (optional sterile filtration) and KEG filler

o The BC unit can take CIP solutions from the breweries central CIP system or Moravek can provide a dedicated CIP set for packaging. On the BC control panel you can select a number of CIP programmes which will then automatically control and monitor the cleaning process of the complete carbonating, (filtration) and KEG-filler to achieve repeatable sanitisation of the system, time after time. An important feature when handling beer.

• Optional Inline Sterile Beer Filtration – Moravek BF Module

- o Simpler process alternative to flash pasteurisation with low energy cost and compact space requirements
- o Sterile filtration located right at the point of filling which is technically the ideal location.
- o Integrated into the carbonator and KEG filler fully system automatic CIP system

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Dark stout nitrogenated for kegging on Moravek BC Beer Carbonator System and an m+f KEG-Technik filler, type MICROMAT M 2/2-b.







Inline Automatic BC Beer Carbonators & Kegging Bloc System Key Benefits

KEG-bloc®



The Moravek range of BC Inline Automatic Beer Carbonators and m+f KEG-Technik Kegging systems have combined their technical co-operation to offer the breweries a new concept KEG packaging that delivers consistent high final product quality as well as a reliable unit.

The Moravek BC Beer Carbonator is specifically designed to automatically inline

carbonate beer and can be used to carbonate other products such cider, hard cider, sparkling wines, soft drinks and mineral water in the CO2 content range of 2 to 8g/litre (1 to 4 volumes) CO2 content.

In conjunction with m+f KEG-Technik KEG filling the KEG bloc can also be used to nitrogenate stouts, porters and nitro KEG style ales, see photo on back page.

The Moravek BC Beer Carbonator range is well proven technology for the company having been in production for over ten years, with a highly satisfied brewery customer base around the world

The Moravek BC Inline Automatic Beer Carbonator uses the gas atomise method of carbonation which offers a number of **key final product quality benefits**;

- Smooth natural carbonated finish product taste and mouth feel smaller CO2 bubbles that result from efficient gas atomise carbonation gives beer, cider or wines a smooth natural carbonated finish
- Lower dissolved oxygen DO levels Product de aeration reduction in DO (Dissolved Oxygen) content is achieved through a process of gas stripping which takes place in the carbonating chamber as part of the carbonating process. When close coupled to the Moravek range of tribloc beer fillers ultra low DO contents are achieved see NUBC DO results below;

o Northern United Brewing Co. DO Results

- o Beer type: NUBC Siren Amber Ale:
- o Original bright beer in tank DO content = 0,2 mg/L
- o Final Bottle sample DO content: = 0,08mg/L
- o This represents a DO content reduction of 0.12mg/L across the bottling process against the typical industry norm of DO pick up of + 0.25mg/L





Greater head retention after pouring from KEGKegged beer from the same brew batch – glass on the right with Moravek's BC gas atomise

beer carbonation - glass on the left without. Ozzbeco Brewery Nairobi Kenya, beer type: Viennese Lager

- Consistent carbonation levels set temperature and carbonating pressure ensure
 consistent carbonation levels are maintained at all times and product cannot be over
 carbonated. By Boyles laws of physics; a set temperature and pressure achieves a set
 product saturation point which makes over carbonation impossible with the BC system.
- Improved filler performance The Moravek carbonator delivers stable efficiently carbonated product to the counter pressure m+f KEG filler resulting in efficient performance.

Moravek's standard high quality and robust construction along with careful attention to process engineering detail and inbuilt automation technology provides the brewer with a number of operational benefits for kegging;