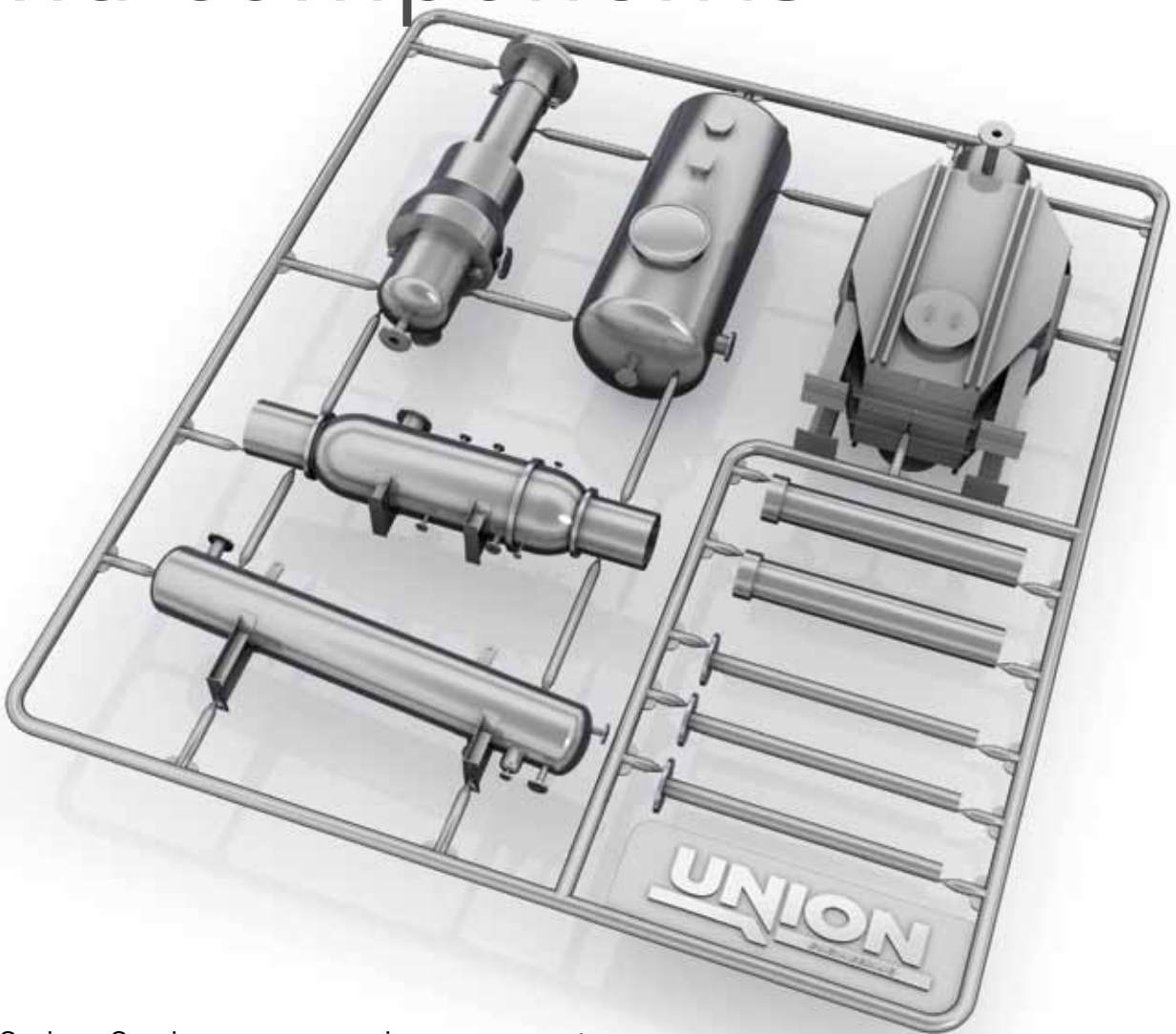


UNION ENGINEERING

CO₂ auxiliary equipment and components



Our Serious Service programme is your guarantee for a high performing plant.

Whether you want to maintain your CO₂ plant, or to perform a large overhaul or an upgrade we can provide you the technology, components and spare parts necessary.



ReVap cuts CO2 production costs by 30%
 ReVap is our technology designed to minimise both CO2 evaporation and glycol refrigeration costs in your process:

- Plug & Play - 100% stand-alone unit
- Efficient reuse of existing resources
- ROI within approx. 12 months



Continuous and reliable evaporation
 You obtain continuous evaporation by our set-up with 2 separate heat exchangers:

- One operating and one defrosting
- Easy installation and maintenance
- Low power consumption



Energy saving Vaporizer

Water Heated CO2 vaporizer is a shell and tube heat exchanger in which circulating water gives off its heat to vaporize liquid CO2:

- Saves up to 25% energy
- Fully automatic operation - no freeze-up
- A minimum of maintenance



Avoid the use of Potassium Permanganate

The NOx polisher replaces the traditional use of scrubbing with Potassium Permanganate (PPM) in your CO2 production plant:

- More plant up-time
- No hazardous handling of chemicals
- No environmental impact and water consumption from use of PPM



Increased CO2 purity

Adding a CO2 Purification Unit to your existing recovery system secures:

- CO2 purity exceeding the industry standard
- Increased shelf-life by reduction of oxygen in your final product
- Earlier recovery



58% reduction of power consumption

ReCon utilises the cooling energy from your CO2 evaporation to liquefy the CO2 produced:

- Green footprint as it uses CO2 as refrigerant
- Fully automatic operation
- Can be retro-fitted into most existing CO2 recovery plants





Cooling Water Filter improves your bottom line
Dust in the atmosphere is often known to settle in open cooling towers and cooling systems with the risk of breakdowns. You can avoid these problems by mounting a cooling water sandbag filter:

- Effective removal of particles
- Maximising plant performance
- Minimising maintenance costs



75% reduced water consumption
Efficient removal of water-soluble impurities with the new state-of-the-art water scrubber:

- Water consumption minimised to 0.25 liter per kg CO₂
- Can be retro-fitted into most existing CO₂ recovery plants
- Prepared for CIP – “Clean In Place”



Safe loading and unloading of liquid CO₂
The Truck Filling Unit is equipped with a two-way pump which enables it to transfer CO₂ to and from a storage or transport tank:

- High pressure CO₂ pump
- Pump capacity 20 ton/hr
- Fully equipped frame mounted unit



Easy CO₂ cylinder filling
The Cylinder Filling Unit allow you easy filling of 6-40 kg type cylinders:

- Plug & play - easy installation
- Electronic weighing control system
- Optionally, two weighing scale systems



Bulk storage of liquid CO₂
We can supply you with any size or any type of CO₂ storage tanks including:

- PU insulated
- Vacuum insulated
- Stand-alone tanks with refrigeration unit



Safeguard filter for in-line protection
The Polishing Filter is designed to ensure you a final, valuable safeguard to remove traces or peaks of impurities, that might be present in the carbon dioxide gases:

- increased activated carbon bed for optimised performance capability
- Consistent CO₂ quality
- Broad capacity range filters





Dedicated and special designed H2S filter
A H2S filter containing our Carbonblend specifically designed for adsorption of hydrogen sulfide from your CO2 gas stream:

- H2S reduced to less than 0.1 ppm (v/v)
- Single bed with easy installation or retrofit
- Sized for up to 8000 hr before replacement of the Carbonblend



High efficient DMS removal
The DMS polisher is a proprietary molecular sieve that will reduce dimethyl sulfide to a very low level by adsorption:

- DMS reduced below odour threshold
- As retrofit or new filter solution
- Regenerability insures long lifetime



On-site Dry Ice Production
By installing a well proven dry ice press at your site, you can produce dry ice in blocks, slices or pellets:

- Simple and easy-to-operate design
- Option for revert gas recovery
- Stand alone unit



Dry Ice Recovery - doubles your dry ice
Install a recovery unit in connection with your dry ice press and you can collect all revert gas and thereby double your dry ice production:

- Easy to install
- Short ROI
- Stand alone unit
- Operator friendly



High efficiency in carbonation
The Pinpoint Carbonator is primarily designed and suited for carbonation of beer, water, soda, wine, and other qualifying liquids but also used for nitrogen injection and wort aeration:

- Designed for highest CO2 saturation
- The product portfolio has a full range of available capacities
- Lowest pressure drop of any in-line or similar carbonating device



Legend:



Suitable for Union plants only



Suitable for any plants



Breweries



Soft drink bottlers



Industrial gases

What can we do for you?

Further to our CO2 equipment, we can also offer you a long list of highly efficient and well-tested adsorbents based on our knowledge and experience in the CO2 business.

Our global team is standing by to handle site service visits including maintenance and larger overhauls.

Our expert after-sales team is ready to advise on the correct spare parts and consumables and a 24/7 team of professionals can assist you in optimum CO2 purification and production with our Remote Service option.

Contact us:
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Want to stay informed
about CO2?
Then sign up for our
newsletter at union.dk

