



www.memcon.co.za

customised

FILTRATION PROCESSES BASED ON

MEMBRANE TECHNOLOGY

MICROFILTRATION | ULTRAFILTRATION | NANOFILTRATION | REVERSE OSMOSIS | MBR

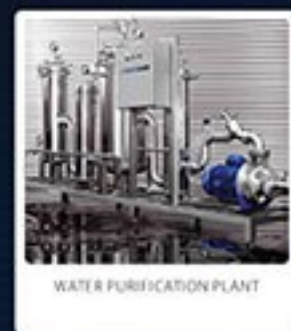
STATE OF THE ART FILTRATION TECHNOLOGY

MEMCON engineers and manufacturers customised membrane technology solutions for liquid / liquid and liquid / solid separation. Our membrane systems mechanically extract unwanted or valuable substances from any kind of liquid. They maximise the full capacity of your industrial value chain and at the same time minimise the environmental impact.

MEMCON is your qualified partner for all liquid separation tasks. Our membrane technology solutions are used for clarification, fractionation and/or concentration of liquids. The end product can be found either on the filtrate-side (i.e. water) or on the concentrate-side (i.e. valuable substance).

FROM STANDARD SYSTEMS...

MEMCON is a solution-orientated engineering company with extensive international experience in designing and fabricating membrane filtration systems and components thereof. MEMCON has developed standardized, compact pilot plants for various applications with recurrent features in the producing industries as well as in research facilities. From Microfiltration to Reverse Osmosis, MEMCON supplies plants for almost any filtration problem.



WATER PURIFICATION PLANT



R/O ULTRAFILTRATION/
MICROFILTRATION LAB PLANT



ULTRAFILTRATION/
MICROFILTRATION PILOT PLANT



FOOD & BEVERAGE

- Fresh water treatment (i.e. demineralization)
- Borehole water / dam water / river water treatment (i.e. removal of pesticides, organics, inorganics)
- Water recovery from waste water
- BOD / COD removal from waste water
- Clarification of liquids (i.e. fruit juices)
- Separation / concentration of liquids
- Recycling of CIP liquids
- De-aeration of liquids (i.e. removal of dissolved oxygen from water)
- Carbonation of liquids

DAIRY INDUSTRY

- Concentration of (skim) milk (i.e. for yogurt, cheese production)
- Treatment of cheese whey (recovery of proteins, lactose, minerals)
- Standardization of milk
- Clarification of cheese brine
- Concentration of butter fat
- Water / Waste Water treatment
- Purification of evaporator condensate

COSMETIC/PHARMA INDUSTRY

- Fresh water treatment (i.e. demineralization)
- Production of purified water (HPW and WFI)
- Treatment of emulsions and suspensions
- Clarification of fermenter broth
- Purification and concentration of proteins, vitamins and enzymes
- Waste water treatment



...TO PERFECT INDUSTRY-SPECIFIC SOLUTIONS



ULTRAFILTRATION PLANT FOR
POLYMER RECOVERY FROM
ORGANIC SOLVENT SOLUTION

MEMCON's customised membrane filtration plants are developed in close cooperation with our clients.

We establish the User Requirements Specifications (URS) and typically conduct feasibility studies, using our lab and pilot plant equipment. The obtained data is then used for upscale to industrial sized plants.

The industrial plants are then designed, constructed and built by MEMCON. After installation and commissioning on site, our long-term after-sales service ensures that our system complies with your separation requirements over the years. Turn-key solutions from one source.



REVERSE OSMOSIS FOR PROTEIN
RECOVERY FROM CHEESE WHEY



ULTRAFILTRATION PLANT
FOR ENZYME PURIFICATION &
CONCENTRATION



METAL & STEEL INDUSTRY

- Cleaning of degreasing baths and rinsers (oil water separation)
- Cleaning of pickling baths
- Cleaning of galvanic baths
- Removal of heavy metals from effluents
- Acid filtration / recycling
- Drilling and cutting oil removal from waste water
- Waste Water Treatment

SUGAR & STARCH INDUSTRY

- Clarification of glucose solutions
- Treatment of evaporator condensates
- Decolourising of refinery streams
- Molasses clarification
- Recovery of proteins from CSL / Wash water
- Purification of raw cane sugar solutions
- Waste water treatment / COD removal

VARIOUS

- Removal of paint pigments and dye stuff from effluent
- Desalination of dye stuff and optical brighteners
- Separation of suspensions and emulsions
- Removal of COD / BOD load from effluent
- Sea water desalination
- Purification and concentration of plant extracts
- De-aeration / aeration of water



INNER VALUES, PERFECTION IN DETAIL

The core of MEMCON separation plants are the membranes which get verified in pilot studies. Ceramic membranes or polymeric membranes as tubular, hollow fibre or spiral wound elements are used according to the separation task.

The high standards of the MEMCON-specialists and the substantial experience in the different industry branches is to the benefit of our customer satisfaction.

In close corporation with the client we supply individually designed separation systems according to the client's separation task. These systems are fully automated and comply with the latest safety and environmental requirements.

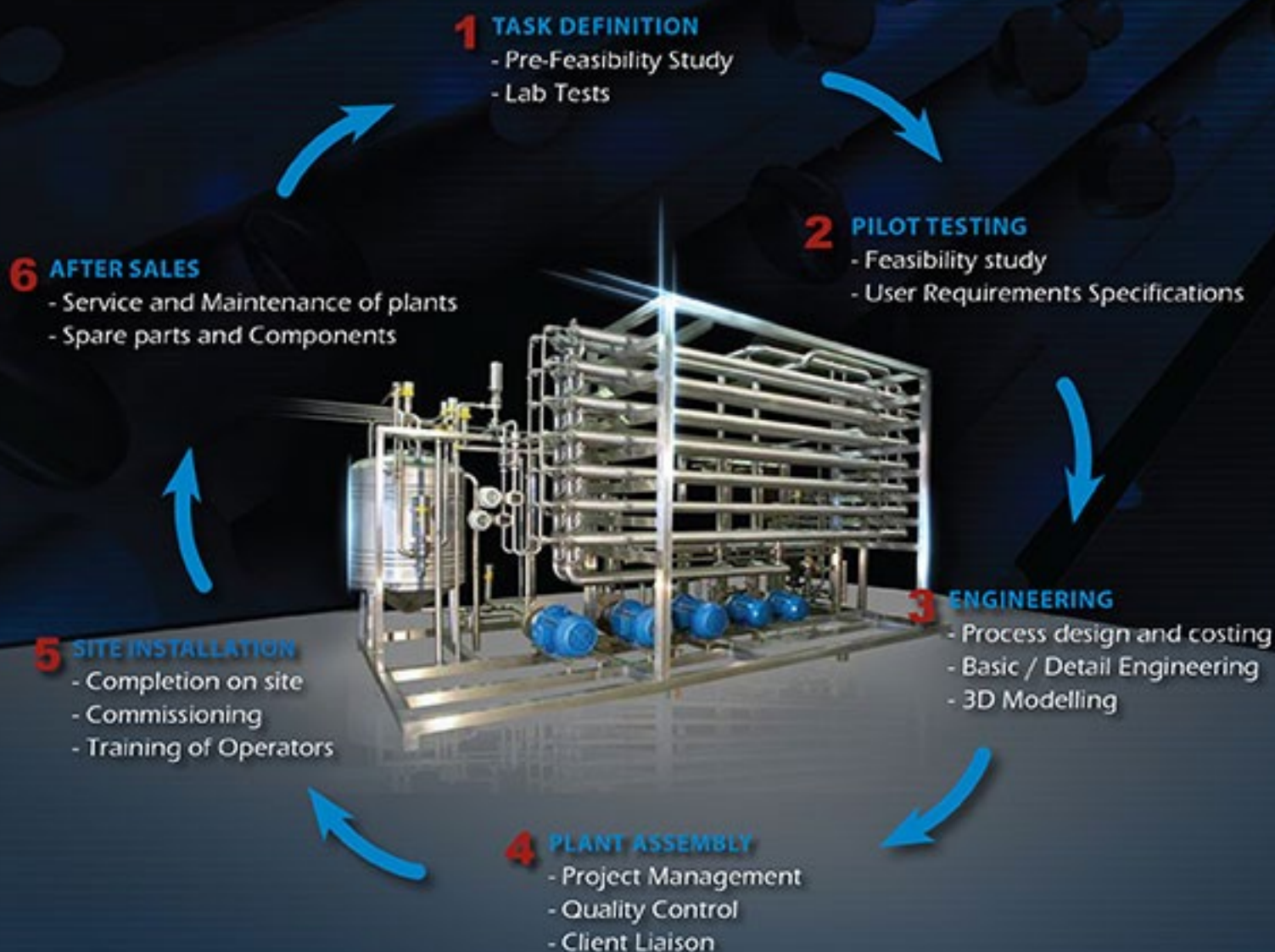
We supply core components for membrane applications such as:

- Ceramic membrane elements (NF / UF / MF)
- Spiral membrane modules made of polymeric materials (RO / NF / UF / MF)
- Tubular/ hollow fibre/ capillary membrane modules made of polymeric materials (UF / MF)
- Membrane Bioreactor (MBR) modules (UF)
- Hollow fibre membrane modules for Gas/Water separation
- Housings and pressure casings made of different materials for all types of membranes



MEMCON IS YOUR QUALIFIED PARTNER FOR THE

TOTAL PROCESS SOLUTION



MEMCON (Pty) Ltd.

PHYSICAL: 58 Concorde Road East, Bedfordview, 2007, South Africa

POSTAL: P.O. Box 1137, Bedfordview, 2008, South Africa

TEL: +27 (0)11 534 3938

FAX: +27 (0)86 680 9025 / +27 (0)11 534 3937

E-MAIL: info@memcon.co.za

INTERNET: www.memcon.co.za



OUR
ENVIRONMENT
we care for it

MEMCON IS THE LOCAL REPRESENTATIVE OF:

Microdyn-Nadir GmbH (Germany)

Membrana-Charlotte / Liqui-Cel[®] (Division of Celgard LLC)

Atech Innovations GmbH (Germany)

- Polymeric NF / UF / MF membrane modules

- Membrane Contactors for Gas transfer

- Ceramic Membrane Modules



WISA MEMBER