

**BRAND INDIA ENGINEERING  
E-CATALOGUE**

Date: 23-02-2025

# UNITOP AQUACARE

**501 DOSTI  
PINNACLE, PLOT E/7,  
ROAD 22, MIDC  
WAGLE  
THANE  
PIN - 400604**

**ASHISH MONDKAR / SANJAY SAWANT /  
SANJAY PAL /SUSHIL KUMBHAR  
PHONE - +91 22 41929300  
EMAIL -  
[MARKETING@UNITOPAQUACARE.COM](mailto:MARKETING@UNITOPAQUACARE.COM)  
WEB - [WWW.UNITOPAQUACARE.COM](http://WWW.UNITOPAQUACARE.COM)**

UNITOP AQUACARE, is an ISO 9001:2008 certified leading engineering organisation with four decades of experience in Heat Transfer and Process Engineering projects for design, manufacturing, supply, installations and services. UNITOP AQUACARE is a trusted name in the field of Industrial Evaporation & Drying Technologies having more than 250 clientele worldwide with number of repeated orders. The Company is promoted by Mr. S N Mondkar, a Chemical Engineering graduate from IIT Mumbai having vast experience over 45 years in the Process Engineering Industry.

## Products Description

### CAUSTIC RECOVERY PLANT

Technical Details	Recovery of 90% caustic from weak lye & recycle back to Merceriser CRP results in substantial reduction in the size of effluent treatment systems like ETP, RO, Evaporators Payback within 6-9 months
ITC HS Codes	8442 30
Certification/ Standard	ISO
Issuing Agency	---
Date of Issue	12-12-2012

## BRAND INDIA ENGINEERING E-CATALOGUE

Date of Expiry  
End Use Sectors  
Product Images

### HOW CAUSTIC RECOVERY PLANTS HELP TEXTILE MILLS ?

- Reuse of Caustic back to Merceriser, to reduce Caustic Soda consumption.
- Hot water if produced can be used in process / boiler, to reduce Live Steam consumption.
- Reuse of Hot condensate in Merceriser, to reduce steam / water consumption.
- Recovers & Recycles Good Quality Water, to reduce water requirement.
- Reducing alkaline contents of effluent, to reduce acid consumption at ETP.
- Reducing TDS of effluents, to reduce the size of ETP and its operating cost.
- Meeting environmental standards, to enter global competition.

#### ORGANISATION

We are in business with textile mills with over 30 years and have brought many a process to the best of Evaporation, Engineering and Heat Recovery Systems with more than 50 Evaporation Plant world wide. Our efforts are aimed to make the paper highly strong, efficient and well designed. Low effluents match to the best of Indian, Chinese, British.

We also design Caustic Recovery Plant to suit the individual requirement and select the equipment from our standardized range to optimize plant design with respect to consumption of Steam, Power, Water and guarantee excellent yields without degradation of quality. Our name on Equipments are a guarantee of these to Textile Mills/Research Associates.

We supply plants loaded with these excellent features & supporting Documentation: the reason why we have in our LIST OF CUSTOMERS the reputed customers in India & in other countries like Sri Lanka, Japan, South Africa, Indonesia, South Africa. We are preferred even in Global Competition.

And our after sales service is what our customers like the most. Apart from this, list of Heat Exchangers which includes: preheaters, Condensers, Thermal Storage Tanks, Coolers, CSTRs, V, D, Drums, Mixers, Reactors, Thermal Purifiers, Heating, Air Heaters, Control, Rectifiers. The nature and operation are used, under our watch eyes.

We get totally involved with the customer on the well being of the plant. This is reflected in our specially designed computer based Operator's Training Program. On request we also undertake Annual Maintenance / Operator & Maintenance contracts.


#### FEW OF OUR LARGE INSTALLATIONS

PLANT	CAPACITY LFD FEED	HEAT SOURCE	MERCERISER BRAND
Blue Denary	1,75,000	2nd pass	Kulere
Mitsui Text & Textile	2,80,000	3rd pass	Kulere
Pharmax Polyester	1,40,000	3rd pass	Kulere
Shangri-La	3,50,000	3rd pass	Feed
PT Garuda Indonesia	2,40,000	3rd pass	Denier
PT Hensel Indonesia	300,000	3rd pass	Denier
NSL	1,50,000	Refrigerator	Refrigerator
Kangaroo Textiles	2,50,000	Refrigerator	Refrigerator
Shangri Textiles	1,80,000	3rd pass	Culter
Merceriser Textiles	1,80,000	3rd pass	Culter

**UNITOP**  
Evaporation & Drying Systems  
G/F FLOOR, SECTOR 14, G. ROAD, SAHIBGA, THANE (W) 400 602, INDIA.  
TEL: 022-2544-4811 / 022-2544-5011 / 022-2544-5011 / 022-2544-4811  
MOBILE: 9224426091 / 9222393953  
E-MAIL: info@unitop.org  
WEB: www.unitop.org

### Get best from the waste !

Recover huge profits draining with your effluents



**CAUSTIC RECOVERY PLANT**

**FOR MERCERISERS**

PRODUCT RANGE:

- CAUSTIC RECOVERY PLANT
- ZERO EFFLUENT DISCHARGE SYSTEMS
- FLASH HEAT RECOVERY SYSTEM
- VACUUM / SPRAY DRYERS
- HERBAL EXTRACTION SYSTEMS
- ICED/SALT MANUFACTURING

**UNITOP**  
Evaporation & Drying Systems  
In Organisation with a difference

#### NEED OF CAUSTIC RECOVERY

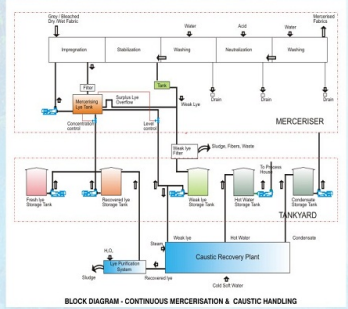
Mercerisers in Textile mills are used to mercerise desized / scoured / bleached / dyed yarn / knit / fabric. Depending on the design of Merceriser they generate substantial quantity of dilute caustic liquor - wash liquor of concentration of about 20 - 60 g/l, containing impurities of various nature. If drained to effluent treatment plant, it creates substantial loss of caustic soda and also severe problems in meeting the environmental standards.

Caustic Recovery Plant concentrates wash liquor and allows recycle of Caustic Soda Lye to Merceriser and also recovers water to reuse. This makes the Plant highly profitable venture.

#### HOW CAUSTIC IS RECOVERED ?

Weak liquor containing caustic at low concentration is heated to its boiling point with the help of heat source like Steam, Thermal Oil or even waste heat. Boiling liquor is flashed at lower pressure / temperature and its vapors so generated are re-used in the next stage. By repeating this process in multiple stages, water from weak liquor is evaporated to achieve product with caustic concentration at 250 to 350 g/l in case of dry cloth merceriser or 400 - 450 g/l in case of wet cloth merceriser. The final concentration is selected to eliminate the possibility of excess weak lye overflow.

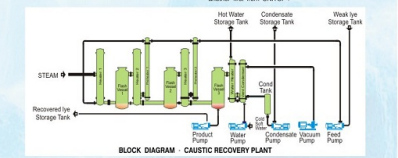
IT IS ALL ABOUT CAUSTIC HANDLING, RECOVERY & PURIFICATION - AT SINGLE SOURCE



#### WHY UNITOP CAUSTIC RECOVERY PLANT ?

Unitop Associates has earned a name in Caustic Recovery Plant technology, thanks to its super engineering plant design. We are largest supplier of Caustic Recovery Plants, world wide. Our strength is many folds:

- OPTIMISATION**  
Depending on the process conditions, we design proper circuitry to optimize the Conversion conditions and resultant Material of Construction.
- SELECTIVE USE OF MATERIAL OF CONSTRUCTION**  
We supply the plant in Material of Construction which can last the investment while accommodating the quality requirements.
- TALOR - MADE DESIGN**  
UNITOP design tailor - made systems to suit individual customer's needs & the local conditions like fuel prices, quality of water & even the space constraints.
- LOWEST STEAM CONSUMPTION**  
Our unique selection of Parameters & steam saving innovations improve the steam economy to as high as 6.5 kg evapn / kg of steam. This is possible because of provision of:  
  - Optimum Number of Stages
  - Multiple Condensate Flashing System
  - Feed Preheating system
  - Thermo compressor (TRC) when necessary
 The steam consumption is 20% - 30% lower than other manufacturer. Unbelievable but True! Optimum Heat Economy for every plant works out to ensure value for money.
- CONDENSATE QUALITY**  
Condensate provided in Flash Tanks ensure good quality of condensate with pH in the range of 7 - 8, resulting in minimum loss of caustic through condensate & in the being of Pollution Control Boards.
- EFFICIENT AUTOMATION**  
Entire plant operations is automated and hence the plant can be monitored & controlled by a single person. Advanced plants are equipped with Level, density, pH controllers along with safety modules and PLC controlled operations with DASSCAD. Trouble shooting modules - another first from UNITOP!



Sectors of Interest  
Countries of Exports

TEXTILE , PHARMA  
BANGLADESH, BRAZIL, CHINA, HUNGARY, INDONESIA, PAKISTAN, SPAIN, THAILAND, TURKEY

## BRAND INDIA ENGINEERING E-CATALOGUE

Foreign Collaboration	NIL
Is OEM Supplier?	Yes
Is After Sales Service Provider?	Yes
Importance of niche products	
Potential market of niche products	
Product Supply Record	
Patented Technologies	
Awards/Accolades	