







Albrigi is offering you his 30 years of technical evolution and experience, to improve your winery. Albrigi proposes you 8 new fermentation technologies that develop traditional methods to improve every phase of wine-making process, both for white and red grapes.

Please do non hesitate to ask for any technical documentation.

# CALL US DIRECTLY

Our engineers are at your disposition



# DIAMOND



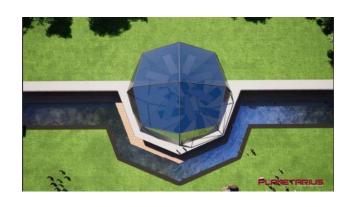










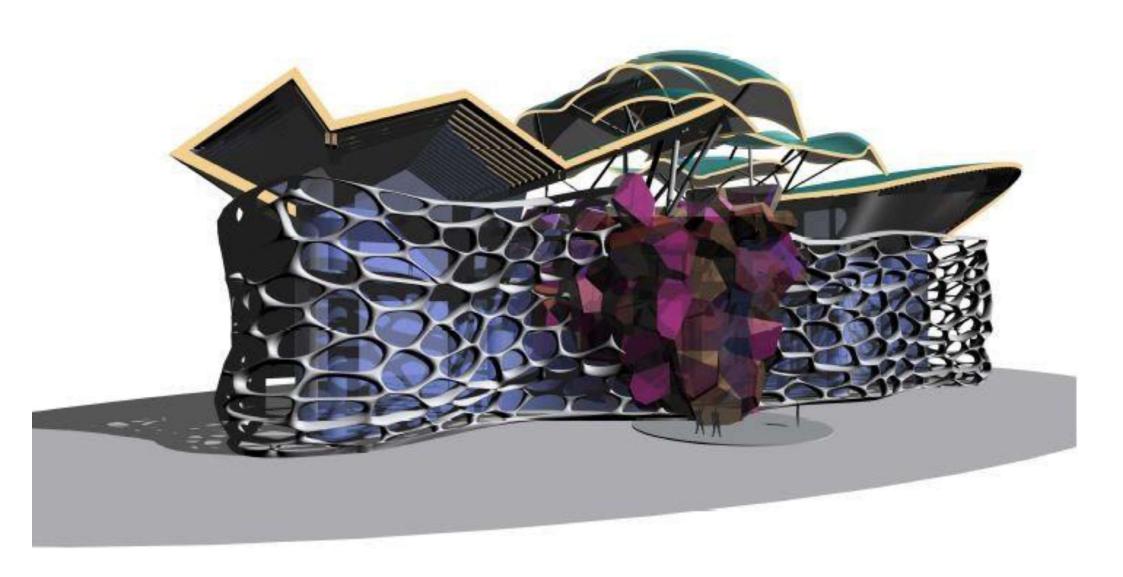




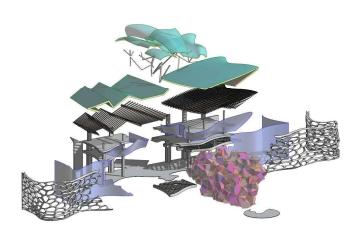




# VINEYARD RESORT

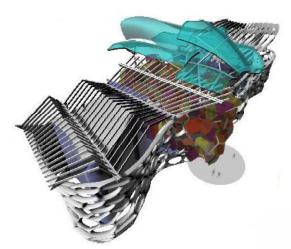


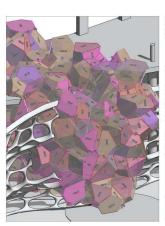


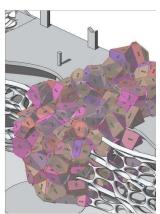












# SHELL RESORT







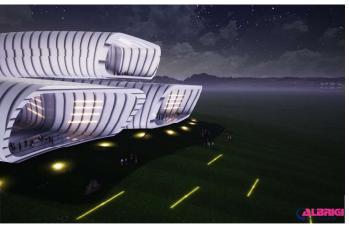






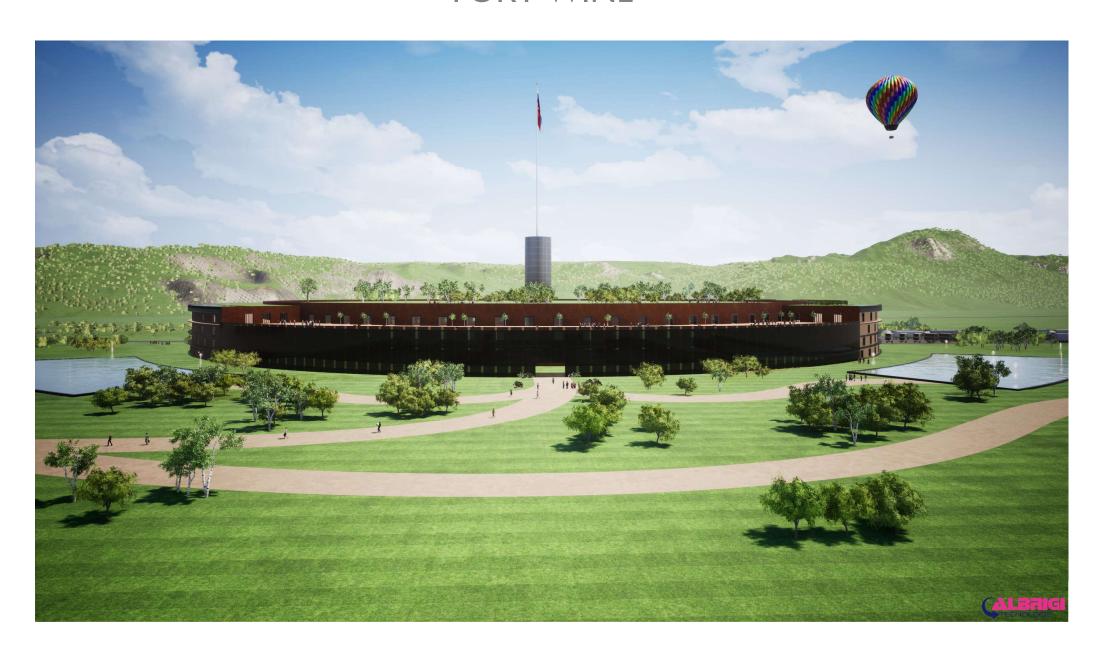


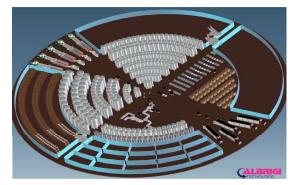


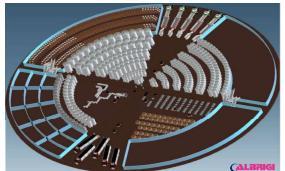




# **FORT WINE**

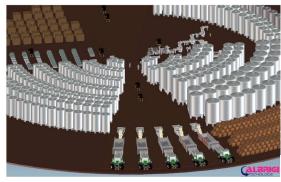








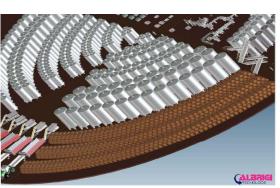


















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### color: ANTHRACITE



color: ORO - GOLD



color: BRONZO - BRONZE



### ACCESSORIES

It is possible to apply the PALITANK / DÉLESTAGE cap breaking system to the fermentation tanks mod. INNOTERMOT ANK e TINOTERMOT ANK. Thus the break of marc cap is guaranteed during





### ACCESSORIES

The use of SEPARTANK in the délestage process helps the settling and separation by gravity of skins and seeds from the circulating must: moreover it is possible to control must temperature (cold délestage) and the content of oxygen (oxicontrol)

All the technologies proposed above by

are studied to emphasize the natural winemaking process, reducing as much as possible process times manpower and the use of chemical products.



### PLANETARIUS: THE EXCELLENCE FOR RED WINES (AND WHITE WINES)

PLANETARIUS is a new fermentation room for red wines (and white wines), specifically studied for saving time and costs, producing high quality wines and making tests and research for the development of new exclusive kinds of wines, according to the strictest optimization and saving rules and the strictest food and ecological standards.

La winery is composed of three element (Industry 4.0 financeable)

A) a "cloud" management and control system

B) an innovative winemaking system, complete with all services;

C) a winery suitable for performing high quality winemaking processes for high quality wines, for making research, for saving time, costs and setbacks.

PLANETARIUS is user-friendly with only little staff and highly automated: it rationalizes and controls the whole process, it reduces working times, risks of product contamination and for workers, it helps saving energy and chemical products both for the process and the cleaning

The figures speak for themselves 100% process OPTIMIZATION;

100% SAFETY against product contamination / pollution;

80% time SAVING for product transfer, cleaning and sterilisation;

70% manpower SAVING

30% INCREASE of production

30% energy SAVING;

100% QUALITY of the product 100% STYLING & DESIGN:

100% to be VISITED by customers during the fermentation.

PLANETARIUS can be equipped with special fermentation tanks mod. TOP-FLY (special for red grapes and for white wines too), mod. INNOTERMOTANK-FLY (special for slow dry délestage) or mod. TINOTERMOTANK-FLY (special for fast moist délestage), all studied by

PLANETARIUS fermentation room allows the total control of the winemaking process of red grapes, beginning with the incoming grapes treatment, up to the filtration before bottling. The incoming grapes are selected — washed if required — and taken care of through a highly specialized machines line; thereafter the grapes are crushed and transferred to the fermentation tanks mod TOP-FLY (for white wines too), mod. INNOTERMOTANK-FLY (special for délestage) or mod. TINOTERMOTANK-FLY (special for délestage) by means of gravity chutes and conveyers and without pumps, therefore matching also biodynamic processing approach. The special and highly technological fermentation tanks mod. TOP-FLY by

filtration before bottling. Our special fermentation tanks mod. TOP-FLY are perfect for performing personalized processes, researching and testing innovative procedures on different types of grapes, to obtain high quality red wines (and white wines). Our special fermentation tanks mod. TOP-FLY allow to best emphasize the potentiality of natural processes and reduce the use of both winemaking and cleaning chemical products

### PLANETARIUS fermentation room PURPOSES AND ADVANTAGES:

- the main purpose is to obtain "VINUM OPTIMUM"
- PLANET ARIUS is a new revolutionary fermentation room for red grapes: a technological, innovative and safe winery system;
- it allows to rationalize and control the whole productive process and to manage it in an interactive and automatic way;
- it is user-friendly and highly automated: advanced technology never gets obsolete;
- it allows to increase productivity 24 hours a day and reduce working times; therefore it allows to perform more fermentation cycles also during production peaks;
- it is studied to maintain the highest standard of workplace safety and hygiene most of all during production peaks;
- it complies with the strictest food and ecological standards;
- it is studied to take care of the product (crushed grapes, must, red wine, white wine) in all processing phases in order to prevent any alteration / contamination and to guarantee high hygiene standards, even reducing the use of chemical products:

- thanks to its fast gravity conveyers for grapes / musts / wines and the absence of pipes and pumps, it is also ideal for biodynamic processes and prevents the hazard of contamination / pollution / deterioration of the product due to previous cycles leftovers in the pipes:

- it is conceived to produce high quality wines and it is ideal to emphasize the natural peculiarity of red grapes, to test new procedures and to develop new high quality products;
- thanks to its special fermentation tanks, it is ideal to emphasize the innate potentiality of the natural fermentation process;
   it allows to save 30% of energy and winemaking chemical products;
- all the products and by-products / wastes are transferred / removed immediately, since the transfer is managed by specific systems / machines that are all equipped with automatic cleaning systems;
- thanks to its automatic removing systems of by-products, it allows to always maintain high hygiene standards;
- the cleaning systems installed on every part (machines, pipes, fermentation tanks etc.) keep the winery always clean and safe in every production cycle - thanks to its simple and automatic systems, it allows to rationalize the process and avoid dead times and can be managed also with reduced staff;
- it allows to save 100% of dead-time (loading / unloading / cleaning) and to work 24/7 on three work shifts, with one only person dedicated to fermentation control;
- workers can work comfortably and safely, mostly on the floor with no need to work at a height: the little stairs and platforms reach small heights, are fixed to rails, protected by railings and designed with the
- every element / equipment is easy, comfortable and safe to reach: the staff can easily keep everything under control taking samples, inspecting tanks through manholes, using automatic systems

- the simple automatic management of recurring processes allows the staff to be dedicated mainly to the critical phases of the process, such as grapes selection and most of all fermentation process etc., since it offers all the operational instruments and tools to interactively control and manage the process:

- the high organization of the process allows to manage the grapes income-selection- fermentation cycles in order to perfectly match and program the ripening and harvesting phases in the vineyard in order to intervene at the right moment;

- thanks to the processing high speed it is possible to absorb and work with maximum care unexpected increases of incoming grapes from the vineyard, perfectly matching

the harvest needs also in extreme situations such as after unexpected hail or due to a fast ripening. THREE DIFFERENT FERMENTATION TANKS AT YOUR CHOICE

### **PLANETARIUS COMPLIES WITH ALL NEEDS**

### PLANETARIUS fermentation room is proposed with the following outfittings:

### PLANETARIUS-TOP with TOP-FLY fermentation tanks (red and white granes)

TOP-FLY: IS A NEW CONCEPT OF FERMENTATION TANK, TOTALLY AUTOMATED, MULTI-FUNCTION, IDEAL FOR ALL KINDS OF GRAPES

TOP-FLY is the top fermentation tank by Top-FLY is the top-FLY is

The customized combination of its equipment allows to perform a high number of fermentation and winemaking processes on crushed grapes and musts for white wines and in particular for great red wines, emphasizing as much as possible the natural peculiarity of the product. The automatic control system allows to perform the whole process; from the phase of must to the phase of finished red or white wine, ready for the filtration before bottling, reducing considerably the number of transfers.

### PLANETARIUS COMPLIES WITH ALL NEEDS

PLANETARIUS-INNO with INNOTERMOTANK-FLY fermentation tanks (délestage). INNOTERMOTANK-FLY is a reverse conical fermentation tank (the wide side is at the top)

A) Ideal for soft skin red grapes

B) ideal for performing délestage process, both manually and automatically;

C) beyond délestage process, it is ideal for different fermentation processes of red grapes;

D) it naturally helps the natural rise of the marc cap during the fermentation

E) in the rise, the marc cap expands, spreads and brakes naturally and softly, and gets thinner;

F) ideal for the must pump over on a wider and thinner marc cap:

G) ideal for a natural, intensive and dynamic extraction of color and natural properties of the grapes;

H) ideal for performing dry délestage process, with almost dry marc; when the marc cap descends to the lower part of the cone, which is the narrowest one, the marc gets compressed and dry (dry délestage)

I) it helps the settling of the seeds on the bottom:

J) due to its particular shape, after the fermentation it is perfect for wine storage, helping the natural settling.

### **PLANETARIUS COMPLIES WITH ALL NEEDS**

PLANETARIUS-TINO with TINOTERMOTANK-FLY fermentation tanks (délestage), TINOTERMOTANK-FLY is a conical fermentation tank (the wide side is at the bottom) A) Ideal for soft skin red grapes;

B) ideal for performing délestage process, both manually and automatically;

C) beyond délestage process, it is ideal for different fermentation processes of red grapes;

D) during the fermentation and the natural rise of the marc cap, it keeps the marc cap slightly compressed reducing its floating:

E) ideal for performing fast délestage process, with moist marc: when the marc cap descends in the wide part of the cone, it expands and spreads staying moist (fast délestage)

F) ideal for an natural, intensive and dynamic extraction of color and natural properties of the grapes;

G) due to its particular shape, after the fermentation it is perfect for wine storage, helping the natural bâtonnage.







**TRAINING** 

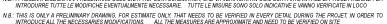
TAV. 1b

TOP-FLY

INNO-FLY

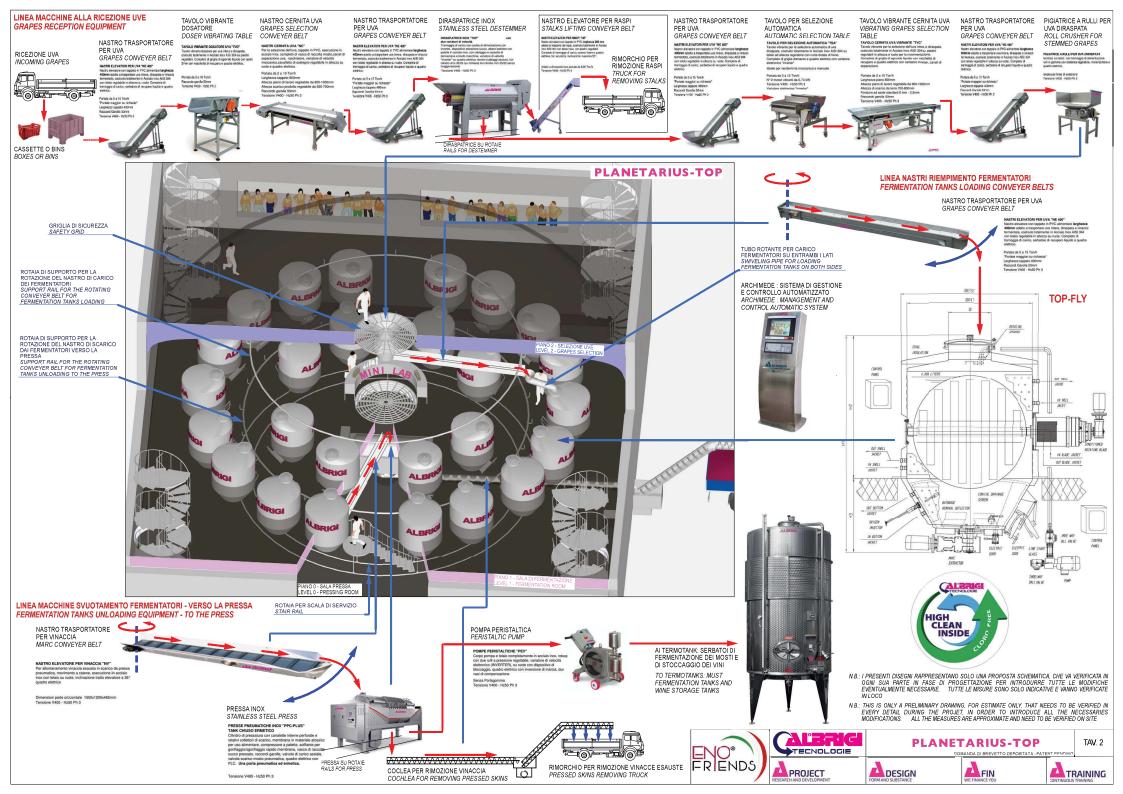
TINO-FLY

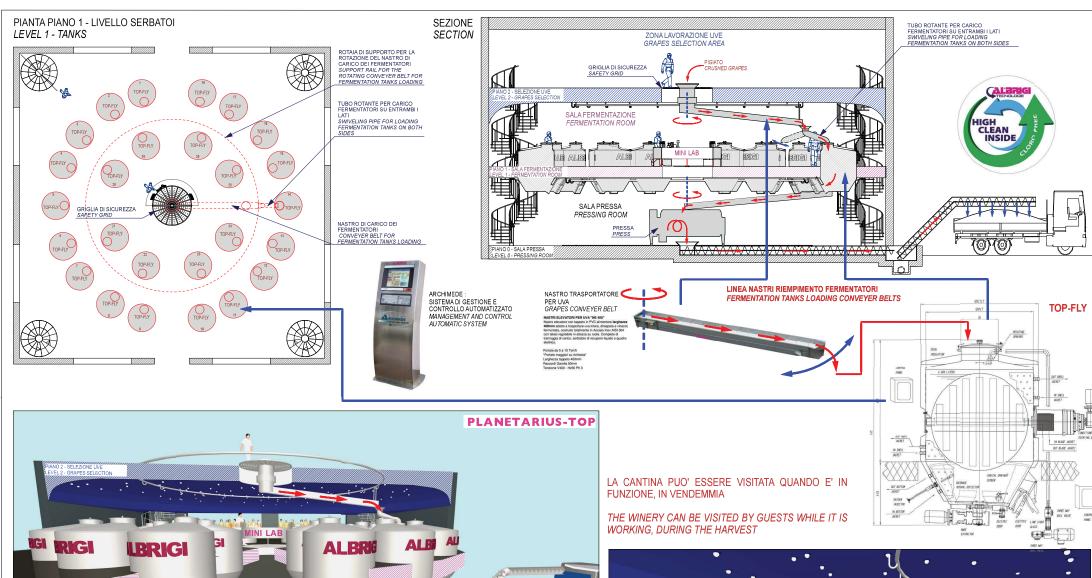
ALBRIG













DESIGN

N.B.: I PRESENTI DISEGNI RAPPRESENTANO SOLO UNA PROPOSTA SCHEMATICA, CHE VA VERIFICATA IN OGNI SUA PARTE IN FASE DI PROGETTAZIONE PER INTRODURRE TUTTE LE MODIFICHE EVENTUALMENTE NECESSARIE. TUTTE LE MISURE SONO SOLO INDICATIVE E VANNO VERIFICATE INLOCO

IANO 0 - SALA PRESSA EVEL 0 - PRESSING ROOM

N.B.: THIS IS ONLY A PRELIMINARY DRAWING, FOR ESTIMATE ONLY, THAT NEEDS TO BE VERIFIED IN EVERY DETAIL DURING THE PROJET, IN ORDER TO INTRODUCE ALL THE NECESSARIES MODIFICATIONS. ALL THE MEASURES ARE APPROXIMATE AND NEED TO BE VERIFIED ON SITE



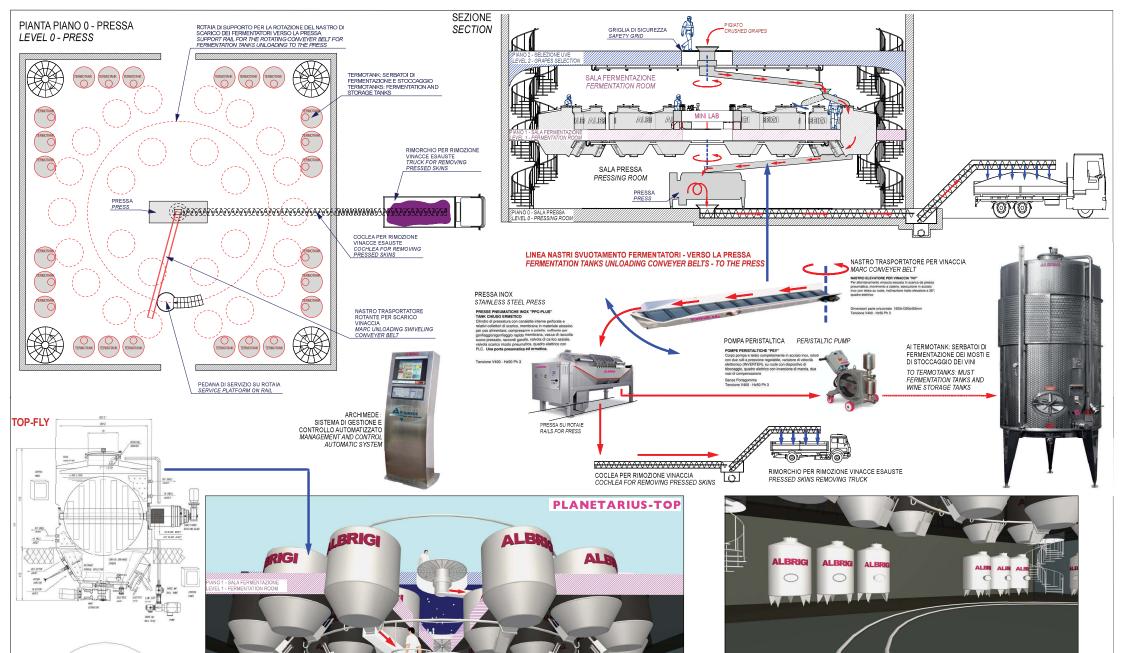




FIN



TAV. 3



HIGH

CLEAN



N.B.: THIS IS ONLY A PRELIMINARY DRAWING, FOR ESTIMATE ONLY, THAT NEEDS TO BE VERIFIED IN EVERY DETAIL DURING THE PROJET, IN ORDER TO INTRODUCE ALL THE NECESSARIES MODIFICATIONS. ALL THE MEASURES ARE APPROXIMATE AND NEED TO BE VERIFIED ON SITE





DESIGN





TAV. 4

# **VOLVOTERMOTANK** e TOP-FLY

# VOLVOTERMOTANK



# TOP-FLY UP







# TOP TANK: IL FERMENTATORE MULTIFUNZIONE AUTOMATICO

NUOVO FERMENTATORE MULTI FUNZIONE NOSTRO MODELLO AL TOP DELLA GAMMA

TOP TANK È UNA NUOVA FILOSOFIA, È UN FERMENTATORE AUTOMATICO CHE PUÒ SVOLGERE TUTTI I TIPI DI OPERAZIONI DI FERMENTAZIONE E LAVORAZIONE DEI MOSTI E DEI VINI IN CANTINA = TOP TANK È ILTOP DEI FERMENTATORI

TOP TANK È UN SERBATOIO FERMENTATORE MULTIFUNZIONALE CHE PUÒ SVOLGERE TUTTE LE SEGUENTI OPERAZIONI CON ESTREMA PRECISIONE PER FARE VINI DI ALTA QUALITÀ

- FERMENTAZIONE PIGIATI / MOSTI
- CONTROLLO TOTALE DELLA MASSA MOSTO-BUCCIA IN FERMENTAZIONE - SCARICO DELLA VINACCIA ANCHE DIRETTAMENTE IN PRESSA PER GRAVITÀ
- CRIOMACERAZIONE UVE BIANCHE E ROSSE
- RIFERMENTAZIONE UVE INTERE O DIRASPATE FRESCHE O APPASSITE
- DÉLESTAGE UMIDO O SECCO
- BÂTONNAGE
- SEPARAZIONE E SCARICO DEI VINACCIOLI
- CHIARIFICA A FREDDO DEI MOSTI (SENZA VINACCIA) BIANCHI O ROSSI
- RISCALDAMENTO DEI MOSTI CON LIEVITI
- MALOLATTICA
- RIMONTAGGIO DEL MOSTO IN AUTOMATICO DURANTE LA ROTAZIONE DELLA PALA E DURANTE LA FERMENTAZIONE OLTRE CHE NEL DÉLESTAGE
- FLOTTAZIONE
- OSSIGENAZIONE DEI MOSTI
- STABILIZZAZIONE TARTARICA O FERMENTAZIONE MALOLATTICA
- GESTIONE CON IPAD O IPHONE O TELECOMANDO
- TRAVASO VINI E MOSTI
- LAVAGGIO AUTOMATICO
- ISOLAMENTO TOTALE DEL FERMENTATORE

**CON TOP TANK** SI PRODUCONO VINI GIA' FINITI, PRONTI PER ESSERE

FILTRATI E IMBOTTIGLIATI

# TOP TANK IS INNOVATION

WITH TOP TANK

YOU CAN PRODUCE FINISHED

WINES, READY TO BE

FILTERED AND BOTTLED

### MULTIFUNCTION FERMENTATION TANK OUR MODEL TOP TANK = IT IS A NEW PHILOSOPHY

TOP TANK: THE AUTOMATIC MULTIFUNCTION FERMENTATION TANK

TOP TANK IS A NEW PHILOSOPHY, IT IS AN AUTOMATIC FERMENTATION TANK THAT CAN PERFORM ALL KINDS OF OPERATIONS

TOP TANK IS A MULTIFUNCTION FERMENTATION TANK THAT CAN PERFORM ALL THE FOLLOWING OPERATIONS WITH

- AUTOMATIC PUMP OVER OF THE MUST TOGETHER WITH THE ROTATION OF BLADE AND WITH THE FERMENTATION, MORE THAN DURING THE DÉLESTAGE

OF FERMENTATION AND MUST/WINE PROCESSING IN THE WINERY = TOP TANK IS THE TOP OF FERMENTATION TANKS

NEW MULTI FUNCTION FERMENTATION TANK, OUR TOP OF THE RANGE

- RE-FERMENTATION OF INTACT GRAPES OR DESTEMMED GRAPES, BOTH FRESH OR DRIED

EXTREME PRECISION TO PRODUCE HIGH QUALITY WINES

- FERMENTATION OF MUSTS AND CRUSHED GRAPES

- CRYOMACERATION OF WHITE AND RED GRAPES

- DÉLESTAGE : DRY OR MOIST MODE

- HEATING OF MUSTS WITH YEASTS

- MALOLACTIC FERMENTATION

- WINES AND MUSTS TRANSFER

- TOTAL INSULATION OF THE TANK

- MUSTS OXYGENATION

- AUTOMATIC CLEANING

- GRAPE PIPS SETTLING AND UNLOADING

- REMOTE CONTROL, OR WITH IPAD/IPHONE

- BÂTONNAGE

- FLOTATION

- TOTAL CONTROL OF THE MUST-SKIN FERMENTING MASS

- MARC UNLOADING EVEN DIRECTLY INTO THE PRESS BY GRAVITY

- COLD CLARIFICATION OF RED OR WHITE MUSTS (WITHOUT MARC)

- TARTARIC STABILIZATION OR MALOLACTIC FERMENTATION

TOP TANK CAN PERFECTLY CONTROL THE MASS OF CRUSHED GRAPES/MUST/SKINS AND CAN UNLOAD THE MARC MECHANICALLY, IT CAN BE EQUIPPED WITH LEGS OR MOUNTED BETWEEN TWO FLOORS. INTO A SUITABLE HOLE MADE IN THE SLAB: THUS CRUSHED GRAPES CAN BE LOADED FROM ABOVE. WORKING ON THE UPPER FLOOR, AND THE MARC CAN BE UNLOADED FROM BELOW, WORKING ON THE LOWER FLOOR.

TOP TANK IS A FERMENTATION TANK THAT CAN PERFORM ALL THE OPERATIONS OF FERMENTATION AND MUST / WINE PROCESSING IN THE WINERY

### TOP TANK IS A MULTIFUNCTION FERMENTATION TANK = TOP TANK IS THE TOP OF FERMENTATION TANKS

FERMENTING MASS = THANKS TO THE CONDOTIONED ROTATING BLADE, A FEW ROTATING CYCLES PER DAY ARE ENOUGH TO PERFECTLY CONTROL THE TEMPERATURE EVEN IN THE MIDDLE OF THE MASS OF MUST/SKINS DURING THE FERMENTATION: THUS THE MASS OF MUST/SKINS REMAINS HOMOGENIZED, THE TEMPERATURE CAN BE CONTROLLED, PREVENTING THE STRATIFICATION OF THE SKINS IN THE MUST AND FAVOURING AT MOST THE CONTACT BETWEEN MUST AND SKINS

HANGING IN SUITABLE HOLES MADE IN THE SLAB, IT CAN UNLOAD THE MARC DIRECTLY INTO THE PRESS BY GRAVITY = MOREOVER BY AUTOMATIZING THE SYSTEM IT IS NOT NECESSARY TO OPERATE MANUALLY BUT IT IS POSSIBLE TO MANAGE IT WITH A REMOTE

MACERATIONS, SPECIAL FERMENTATIONS, SAIGNÉE = WHITE / RED GRAPES WITHOUT STALK, CRUSHED BOTH FRESH OR VERY DRY, WITH TOTAL REVOLUTION OF THE MASS BY MEANS OF THE ROTATING BLADE FOR MAKING AMARONE WINE, RIPASSO WINE, ICE WINE, SAIGNÉE OR DOUBLE FERMENTATION

CRYOMACERTAION = WITH DESTEMMED CRUSCHED WHITE AND RED GRAPES, AT CONTROLLED TEMPERATURES

RE- FERMENTATION = OF ADDED DESTEMMED GRAPES WITH HOLE BERRIES INTO FERMENTATIN MUST (ALCOHOLIC MALOLACTIC FERMENTATION)

MARC, UNLOAING THE MARC DIRECTLY INTO OUR SETTLING TANK SEPARTANK TOSEPARATE GRAPE PIPS AND MARC

DÉLESTAGE = TOTAL DÉLESTAGE, BY GRAVITY. IT CAN BE DONE MANUALLY OR AUTOMATICALLY, WITH BOTH DRY MARC OR MOIST

BÂTONNAGE = IT IS POSSIBLE TO DO BÂTONNAGE OF WINES ON ALL THE LIQUID MASS. LIFTING THE YEASTS UP TO THE TOP OF THE

DISCHARGE OF GRAPE PIPS = SPECIAL DEVICE FOR THE EXTRACTION OF GRAPE PIPS SETTLED ON THE BOTTOM OF THE

COLD CLARIFICATION OF WHITE AND RED MUSTS (WITHOUT MARC) = AT CONTROLLED TEMPERATURES +4°C TO +12°C OF THE WHOLE MASS, AT HOMOGENEOUS TEMPERATURE

HEATING OF YEASTS OR WINES = IT IS POSSIBILE TO HEAT UP THE BOTTOM CONE TO HELP THE FERMENTATION START IN THE PLACE WHERE YEASTS ARE POSITIONED, OR TO HEAT UP WINES FORTHE MALOLACTIC FERMENTATION

TRANSFER OF MUSTS AND WINES = IT IS POSSIBLE TO AUTOMATICALLY PERFORM EVERY KIND OF TRANSFER OF MUSTS AND WINES

OXYGENATION OF MUSTS AND CRUSHED GRAPES = IT IS POSSIBLE TO OXYGENATE WHITE AND RED MUSTS AND CRUSHED GRAPES

AUTOMATIC PUMP OVER OF THE MUST TOGETHER WITH THE ROTATION OF THE BLADE, BOTH DURING THE FERMENTATION AND DURING THE DÉLESTAGE = IT IS POSSIBLE TO PUMP OVER THE MUSTS DURING EVERY PHASE

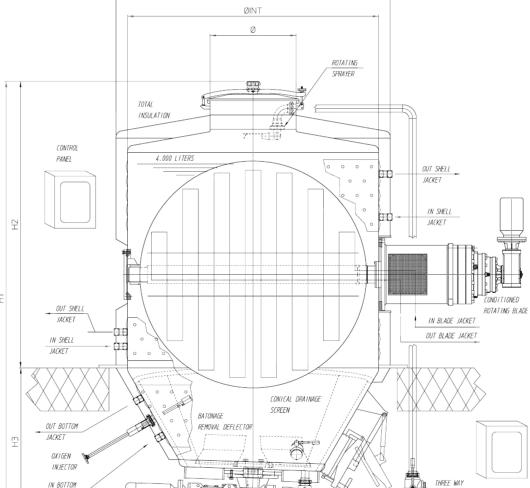
FLOTATION = IT IS POSSIBLE TO DO THE FLOTATION

TARTARIC STABILIZATION OR MALOLACTIC FERMENTATION = COOLING WINES DOWN TO - 5° C TO HELP THE SETTLING OF THE TARTARIC ACID AND HEATING WINESUP TO + 30° C FOR THE MALOLACTIC FERMENTATION

CLEANING = FIXED AUTOMATIC CLEANING SYSTEM

REMOTE MANAGEMENT AND CONTROL = IT CAN BE MANAGED WITH A REMOTE CONTROL OR BY I PAD OR IPHONE

TOTAL INSULATION OF THE FERMENTATION TANK = WITH THE POSSIBILITY TO CHOOSE THE COLOUR OF THE INSULATION = STAILNELSS STEEL - GOLD -



EXTRACTOR

HIGH

CLEAN

INSIDE

TECNOLOGIE

TOP-FLY ØEST

# TOP TANK È INNOVAZIONE

### SERBATOIO FERMENTATORE MULTIFUNZIONE NOSTRO MODELLO TOP TANK = È UNA NUOVA FILOSOFIA.

TOP TANK CONTROLLA PERFETTAMENTE LA MASSA PIGIATO/MOSTO/BUCCIA E SCARICA LE VINACCE MECCANICAMENTE. PUO' ESSERE FORNITO CON PIEDI O MONTATO A CAVALLO DI DUE PIANI INSERITO IN UN APPOSITO FORO RICAVATO NEL SOLAIO: IN QUESTO MODO SI CARICA IL PIGIATO DA SOPRA OPERANDO DAL PIANO SUPERIORE E SI SCARICA LA VINACCIA DA SOTTO MECCANICAMENTE OPERANDO DAL PIANO

TOP TANK È UN SERBATOIO FERMENTATORE COMPLETO E INNOVATIVO, CHE PUÒ SVOLGERE TUTTE LE OPERAZIONI DI FERMENTAZIONE E LAVORAZIONE DEI MOSTI E DEI VINI IN CANTINA :

# TOP TANK E' UN FERMENTATORE MULTIFUNZIONE = TOP TANK È IL TOP DEI FERMENTATORI

MASSA IN FERMENTAZIONE = CON LA PALA ROTANTE TERMOCONDIZIONATA BASTANO POCHI GIRI AL GIORNO PER CONTROLLARE PERFETTAMENTE LA TEMPERATURA ANCHE AL CENTRO DELLA MASSA MOSTO/BUCCIA IN FERMENTAZIONE : IN TAL MODO LA MASSA MOSTO/BUCCIA RESTA TUTTA OMOGENEA E A TEMPERATURA CONTROLLATA, EVITANDO LA STRATIFICAZIONE DELLE BUCCE NEL MOSTO E FAVORENDO AL MASSIMO IL CONTATTO MOSTO-BUCCIA

SOSPESO AL SOLAIO PUÒ SCARICARE LA VINACCIA DIRETTAMENTE IN PRESSA PER GRAVITÁ = INOLTRE AUTOMATIZZANDO IL SISTEMA NON SERVE AGIRE MANUALMENTE MA SI PUO' COMANDARE CON RADIOCOMANDO

MACERAZIONI, FERMENTAZIONI SPECIALI, SALASSI = UVE BIANCHE/ROSSE DIRASPATE INTERE, PIGIATE FRESCHE O MOLTO APPASSITE, CON ROTAZIONE TOTALE DELLA MASSA PER FARE AMARONI, RIPASSI, ICE WINE, SALASSI O

CRIOMACERAZIONE = CON PIGIATI DIRASPATI DI UVE BIANCHE E ROSSE A TEMPERATURE CONTROLLATE

RIFERMENTAZIONE = DI UVA AGGIUNTA GIÁ DIRASPATA A CHICCO INTERO, SU PIGIATI IN FERMENTAZIONE (FERMENTAZIONE MALOLATTICA IN ALCOLICA)

DÉLESTAGE = DÉLESTAGE TOTALE PER GRAVITÀ, IN MANUALE O IN AUTOMATICO, CON LA POSSIBILITÁ DI PORTARE LA VINACCIA SIA A SECCO CHE IN UMIDO, CON SCARICO DEL MOSTO DIRETTO NEL NOSTRO DECANTATORE SEPARTANK PER SEPARARE VINACCIOLI E VINACCE

BÂTONNAGE = È POSSIBILE ESEGUIRE IL BATONNAGE DEI VINI SU TUTTA LA MASSA LIQUIDA, SOLLEVANDO I LIEVITI FINO ALLA PARTE ALTA DEL FERMENTATORE

SCARICO DEI VINACCIOLI = DISPOSITIVO DI ESTRAZIONE DEI VINACCIOLI DEPOSITATI SUL FONDO DEL FERMENTATORE

CHIARIFICA A FREDDO DEI MOSTI (SENZA VINACCIA) BIANCHI O ROSSI = A TEMPERATURE CONTROLLATE DA +4C° A +12°C DI TUTTA LA MASSA, MANTENENDOLA A TEMPERATURA OMOGENEA

RISCALDAMENTO DEI LIEVITI O DEI VINI = POSSIBILITÁ DI RISCALDARE IL CONO DEL FONDO PER FAVORIRE LA PARTENZA DELLA FERMENTAZIONE NELLA ZONA DOVE SONO POSIZIONATI I LIEVITI, O DI RISCALDARE I VINI PER FARE LA FERMENTAZIONE MALOLATTICA

TRAVASO MOSTI E VINI = SI PUÒ ESEGUIRE QUALSIASI OPERAZIONE DI TRAVASO IN AUTOMATICO

OSSIGENAZIONE DEI MOSTI E PIGIATI = È POSSIBILE FARE L'OSSIGENAZIONE DEI MOSTI E PIGIATI BIANCHI / ROSSI

RIMONTAGGIO DEL MOSTO IN AUTOMATICO IN CONTEMPORANEA CON LA ROTAZIONE DELLA PALA DURANTE LA FERMENTAZIONE OLTRE CHE NEL DÉLESTAGE = È POSSIBILE ESEGUIRE IL RIMONTAGGIO DEI MOSTI IN OGNI PROCESSO

FLOTTAZIONE = È POSSIBILE ESEGUIRE LA FLOTTAZIONE

STABILIZZAZIONE TARTARICA O FERMENTAZIONE MALOLATTICA = PORTANDO I VINI A -5°C PER FARE DECANTARE IL TARTARICO E A +30°C

LAVAGGIO = IMPIANTO FISSO DI LAVAGGIO AUTOMATICO

GESTIONE E CONTROLLO DA REMOTO = PUÒ ESSERE COMANDATO CON UN TELECOMANDO A DISTANZA, DA IPAD O IPHONE

ISOLAMENTO TOTALE DEL FERMENTATORE = CON LA POSSIBILITÀ DI SCEGLIERE IL COLORE DELL'ISOLAMENTO = INOX - ORO -ANTRACITE - BLU - BRONZO - VINACCIA ECC. ECC.



BALL VALVE



PROJECT





DOMANDA DI BREVETTO DEPOSITATA - PATENT PENDING

PLANETARIUS-TOP



TAV. 5

N.B.: I PRESENTI DISEGNI RAPPRESENTANO SOLO UNA PROPOSTA SCHEMATICA, CHE VA VERIFICATA IN OGNI SUA PARTE IN FASE DI PROGETTAZIONE PER INTRODURRE TUTTE LE MODIFICHE EVENTUALMENTE NECESSARIE. TUTTE LE MISURE SONO SOLO INDICATIVE E VANNO VERIFICATE IN LOCO

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# TINOTERMOTANK : IL FERMENTATORE IDEALE PER FARE IL DÉLESTAGE MANUALE O AUTOMATICO, VELOCE E UMIDO THE IDEAL FERMENTATION TANK FOR MANUAL OR AUTOMATIC, FAST MOIST DÉLESTAGE

# **TINOTERMOTANK**



# TINOTERMOTANK-FLY UP



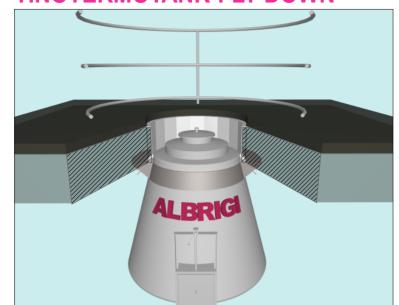


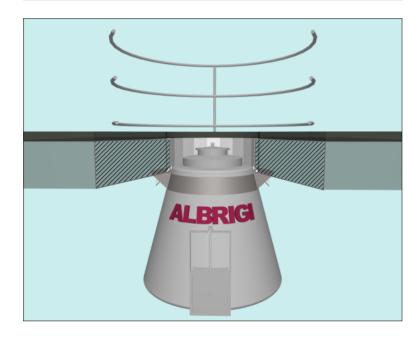
TINOTERMOTANK-FLY UP OFFRE LA POSIZIONE PIU' COMODA PER FARE I CONTROLLI DALL'ALTO DURANTE LA FASE DI

TINOTERMOTANK-FLY UP OFFERS THE MOST COMFORTABLE POSITION TO MAKE CHECKS FROM ABOVE DURING THE FERMENTATION

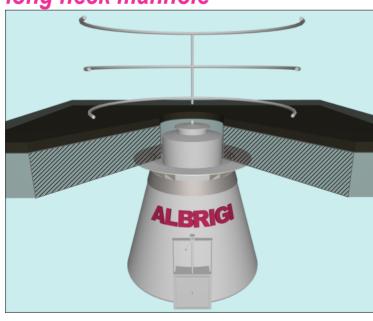


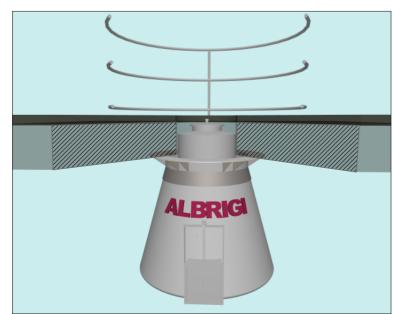
# **TINOTERMOTANK-FLY DOWN**





**TINOTERMOTANK-FLY DOWN** chiusino a collo alto long neck manhole





# TINOTERMOTANK con PALITANK (DÉLESTAGE)

PRINCIPALI CARATTERISTICHE DEL FERMENTATORE

# IDEALE PER FARE IL DÉLESTAGE VELOCE E UMIDO

A) durante la fermentazione delle uve rosse il cappello di vinacce è contrastato dalla sagoma conica nella sua risalita naturale e si compatta mantenendo il contatto con il mosto sottostante;

B) durante il délestage il cappello di vinaccia scende e grazie a PALITANK si rompe:

C) arrivando sul fondo, nella parte più larga del serbatoio, il cappello di vinaccia si allarga e si distende: si può pertanto fare il délestage umido (con un po' di mosto);

D) la sagoma del serbatoio, conica con la parte più larga in basso, favorisce la distensione del cappello di vinaccia e la sua irrorazione nella successiva fase di rimontaggio del mosto.

# FASI DEL DÉLESTAGE

# **TINOTERMOTANK** 1° FASE:

INIZIO DELLA FERMENTAZIONE: All'inizio della fermentazione con uve rosse il cappello di vinaccia è sciolto nel mosto

# **TINOTERMOTANK** 2° FASE:

**DURANTE LA FERMENTAZIONE:** INNALZAMENTO CONTRASTATO E COMPATTAZIONE DEL CAPPELLO DI VINACCIA IN MODO NATURALE: il cappello di vinacce viene mantenuto bagnato, a contatto con il mosto sottostante in fermentazione.

# **TINOTERMOTANK** 3° FASE:

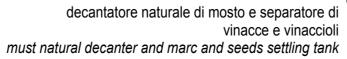
DÉLESTAGE VELOCE UMIDO:

ROTTURA DEL CAPPELLO DI VINACCIA ALLARGAMENTO E DISTENSIONE DELLE VINACCE SUL FONDO IN UMIDO, IN MODO **NATURALE** 

le vinacce sul fondo sono disgregate e distese, leggermente umide di mosto. In questo modo si raffreddano leggermente in modo naturale prima di ricevere il mosto tiepido o raffreddato e

Successivamente viene rimontato il mosto fresco o raffreddato che provoca uno shock termico sulla vinaccia calda e la fa risalire; ripassando attraverso i pali rompicappello. il cappello di vinaccia si rompe e si disgrega ulteriormente.

# **SEPARTANK**



# TINOTERMOTANK with PALITANK (DÉLESTAGE)

# MAIN FEATURES OF THE FERMENTATION TANK

# IDEAL FOR PERFORMING FAST MOIST DÉLESTAGE

A) during the fermentation of red grapes the natural rise of marc cap is opposed by the conical shape and compacts, staying in contact with the underlying must;

B) during the délestage the marc cap descends and breaks thanks to PALITANK:

C) getting down to the bottom, in the widest part of the cone, the marc cap expands and extends: it is therefore possible to perform moist délestage (with some must)

D) the shape of the tank (the wide side of the cone is at the bottom) helps the cap extension and its wetting in the following phase of must pumping over.

# DÉLESTAGE PHASES

# **TINOTERMOTANK 1st PHASE:**

START OF THE FERMENTATION: At the beginning of the fermentation of red grapes the marc cap is spreaded in the must

# **TINOTERMOTANK 2nd PHASE:**

DURING THE FERMENTATION: NATURAL RISING, CONTRAST AND COMPRESSION OF THE MARC CAP: the marc cap keeps moist, staying in contact with the underlying fermenting must

# **TINOTERMOTANK** 3rd PHASE:

FAST MOIST DÉLESTAGE:

BREAK OF THE MARC CAP, NATURAL **EXPANSION AND EXTENSION OF THE MOIST** MARC ON THE BOTTOM

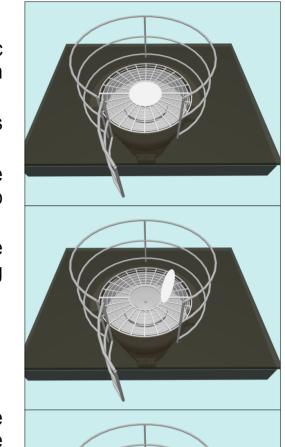
the marc on the bottom breaks and expands, staying slightly moist with must. Thus they naturally and slightly cool down, before the lukewarm or cooled must inlet raises it again. Thereafter the fresh or cool must pumping over causes a thermal shock to the warm marc and raises it; passing through the cap-breaking poles the marc cap breaks and spreads further.



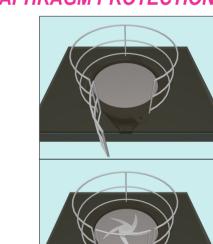


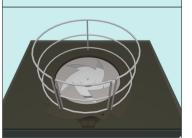
DESIGN

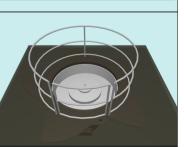
# **CHIUSURE DI SICUREZZA SAFETY PROTECTIONS** CHIUSURA A DOPPIA GRIGLIA **DOUBLE GRID**



CHIUSURA A DIAFRAMMA DIAPHRAGM PROTECTION









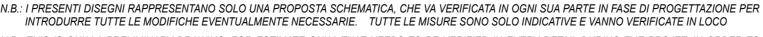




**FIN** 



TAV. 6



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# INNOTERMOTANK : IL FERMENTATORE IDEALE PER FARE IL DÉLESTAGE MANUALE O AUTOMATICO, LENTO A SECCO THE IDEAL FERMENTATION TANK FOR MANUAL OR AUTOMATIC, SLOW DRY DÉLESTAGE

# **INNOTERMOTANK**



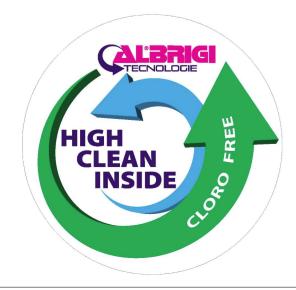
# INNOTERMOTANK-FLY UP



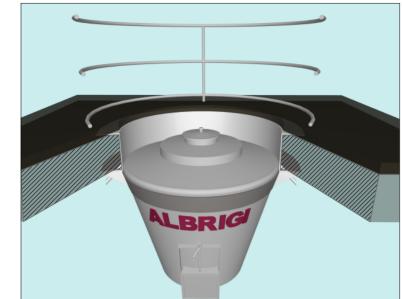


INNOTERMOTANK-FLY UP OFFRE LA POSIZIONE PIU' COMODA PER FARE I CONTROLLI DALL'ALTO DURANTE LA FASE DI

INNOTERMOTANK-FLY UP OFFERS THE MOST **COMFORTABLE POSITION TO MAKE CHECKS** FROM ABOVE DURING THE FERMENTATION



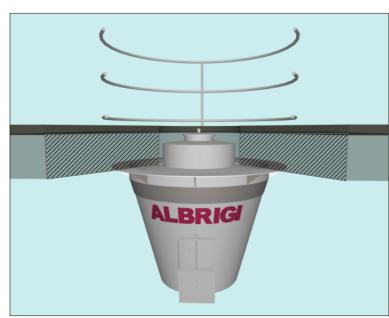
# **INNOTERMOTANK-FLY DOWN**



# ALBRIG

**INNOTERMOTANK-FLY DOWN** chiusino a collo alto long neck manhole





# INNOTERMOTANK con PALITANK (DÉLESTAGE)

PRINCIPALI CARATTERISTICHE DEL FERMENTATORE

# IDEALE PER FARE IL DÉLESTAGE LUNGO / LENTO A SECCO

A) durante la fermentazione delle uve rosse il cappello di vinacce è facilitato a salire in modo naturale e continuo, cosicché la vinaccia si distende e si disgrega e il rimontaggio del mosto sul cappello di vinaccia risulta più facile e molto più efficiente;

B) durante il délestage il cappello di vinaccia scende e grazie a PALITANK si rompe:

C) arrivando sul fondo, nella parte più stretta del serbatoio, il cappello di vinaccia si compatta, si spreme e si asciuga: si può pertanto fare il délestage a secco (senza mosto);

D) la sagoma del serbatoio, conica con la parte più stretta in basso, favorisce la raccolta e la concentrazione dei vinaccioli sul fondo.

# FASI DEL DÉLESTAGE

# **INNOTERMOTANK 1° FASE:**

INIZIO DELLA FERMENTAZIONE: All'inizio della fermentazione con uve rosse il cappello di vinaccia è sciolto nel mosto

# **INNOTERMOTANK 2° FASE:**

**DURANTE LA FERMENTAZIONE:** INNALZAMENTO, ALLARGAMENTO. ASSOTTIGLIAMENTO DEL CAPPELLO DI VINACCIA IN MODO NATURALE

# **INNOTERMOTANK** 3° FASE:

DÉLESTAGE LUNGO-LENTO A SECCO: ROTTURA DEL CAPPELLO DI VINACCIA E CONCENTRAZIONE DI VINACCE SUL FONDO A SECCO, CONCENTRAZIONE DEI VINACCIOLI SUL FONDO, IN MODO NATURALE

Le vinacce devono riposare sul fondo da 2 a 4 ore con poco mosto, quasi asciutte; qui si riscaldano naturalmente per permettere ad alcuni tipi di lieviti di lavorare a temperatura più elevata.

Successivamente viene rimontato il mosto fresco o raffreddato che provoca uno shock termico sulla vinaccia calda e la fa risalire; ripassando attraverso i pali rompicappello, il cappello di vinaccia si rompe e si disgrega ulteriormente.

# **SEPARTANK**

decantatore naturale di mosto e separatore di vinacce e vinaccioli must natural decanter and marc and seeds settling tank

# INNOTERMOTANK with PALITANK (DÉLESTAGE)

# MAIN FEATURES OF THE FERMENTATION TANK

# IDEAL FOR PERFORMING LONG / SLOW DRY DÉLESTAGE

A) during red grapes fermentation the marc cap is helped to rise naturally and continuously, thus the marc expands and expands and brakes naturally and softly, and the must pump over onto the cap gets easier and much more efficient;

B) during the délestage the marc cap descends and breaks thanks to PALITANK;

C) getting down to the bottom, in the narrowest part of the cone, the marc cap is compressed, squeezed and gets dry: it is therefore possible to perform dry délestage (without must)

D) the shape of the tank (the wide side of the cone is at the top) helps the settling and gathering of the seeds on the bottom.

# DÉLESTAGE PHASES

# **INNOTERMOTANK 1st PHASE:**

# START OF THE FERMENTATION:

At the beginning of the fermentation of red grapes the

# **INNOTERMOTANK** 2nd PHASE:

DURING THE FERMENTATION: NATURAL RISING, EXPANSION, THICKNESS REDUCTION OF THE MARC CAP

marc cap is spreaded in the must

# **CHIUSURA A DIAFRAMMA** DIAPHRAGM CLOSURE

**CHIUSURE DI SICUREZZA** 

CHIUSURA A DOPPIA GRIGLIA

**DOUBLE GRID CLOSURE** 

**SAFETY GRIDS** 

# **INNOTERMOTANK 3rd PHASE:**

LONG-SLOW DRY DÉLESTAGE : BREAK OF THE MARC CAP AND NATURAL CONCENTRATION AND DRYING OF THE MARC ON THE BOTTOM, CONCENTRATION OF THE SEEDS ON THE BOTTOM

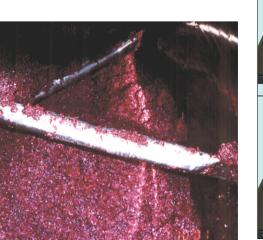
The marc needs to rest 2 to 4 hours on the bottom with a little quantity of must, almost dry; thus they warm up naturally to allows certain kinds of yeast to work at higher temperature.

Thereafter the fresh or cool must pumping over causes a thermal shock to the warm marc and raises it; passing through the cap-breaking poles the marc cap breaks and spreads further.

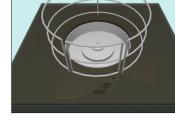
















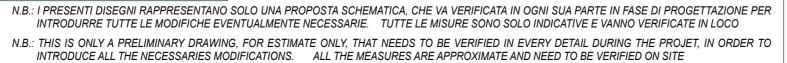




PLANETARIUS-INNO

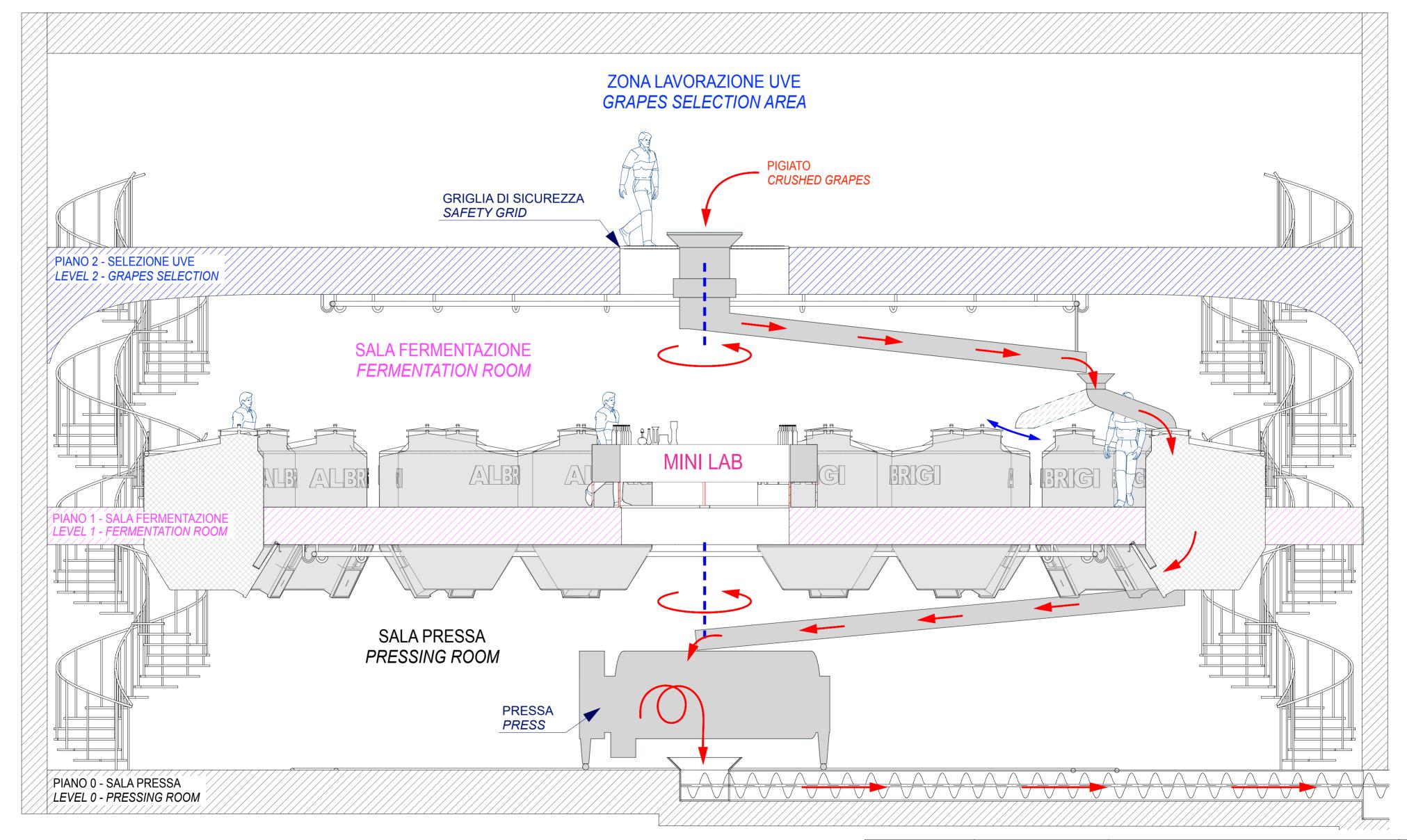


TAV. 7





# PLANETARIUS





PROJECT



TAV. 8.en

DOMANDA DI BREVETTO DEPOSITATA - PATENT PENDING

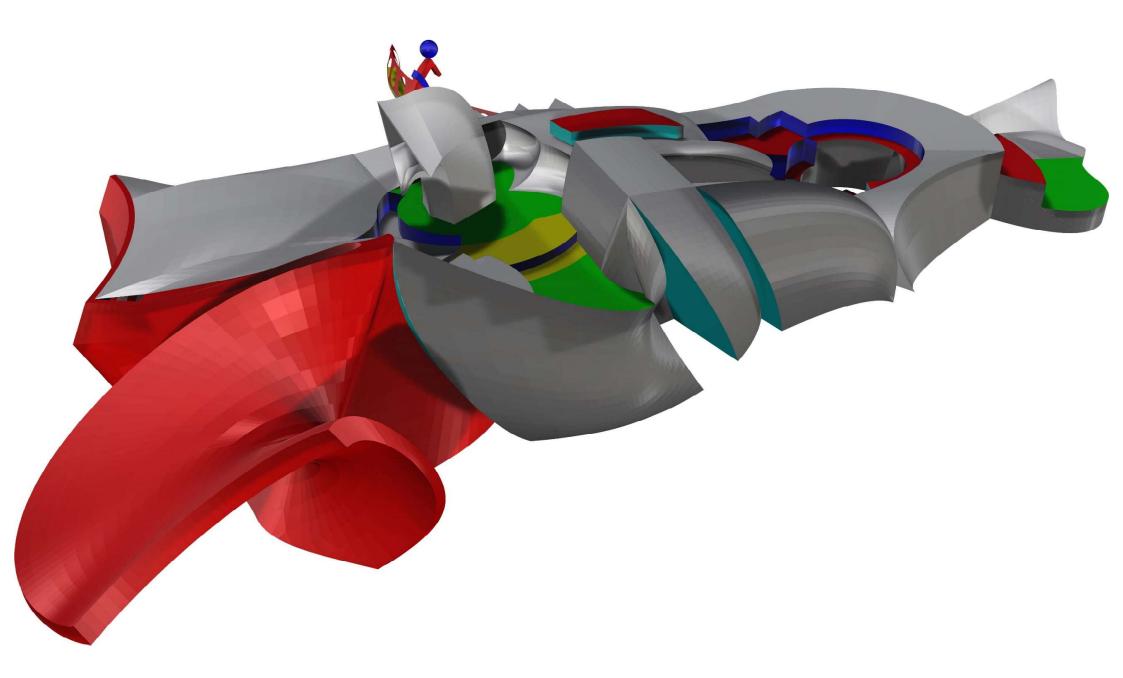
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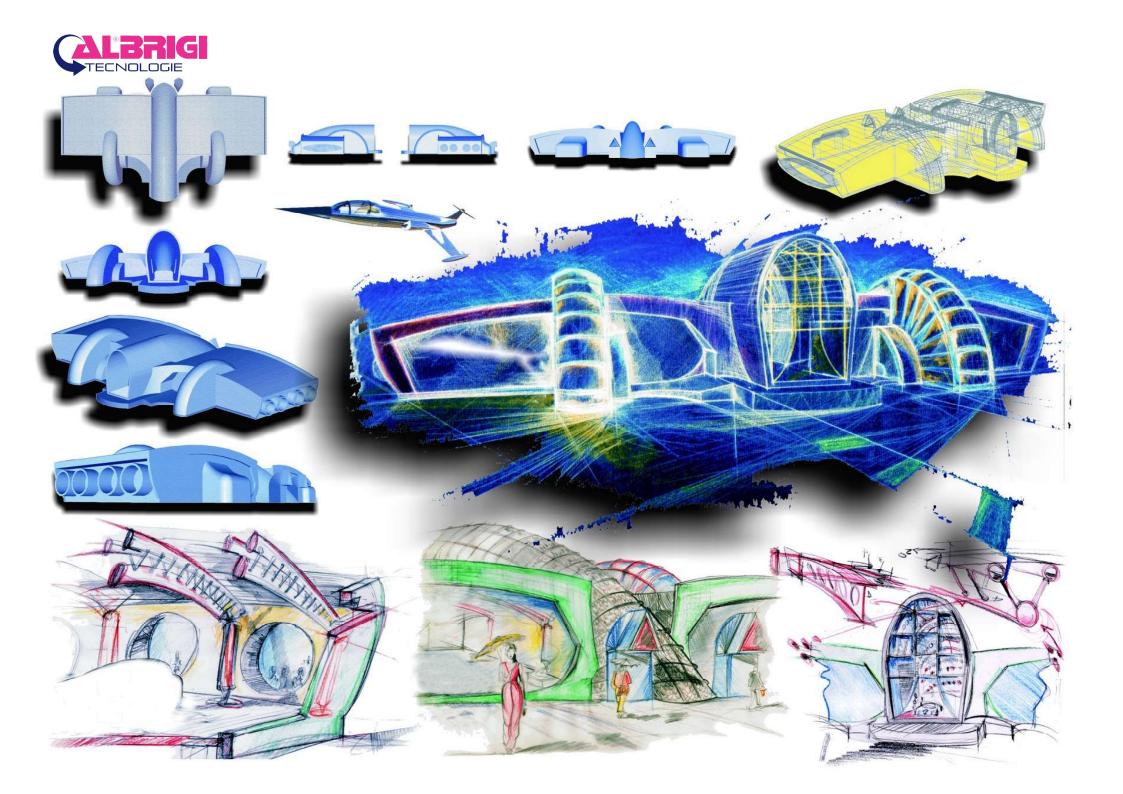
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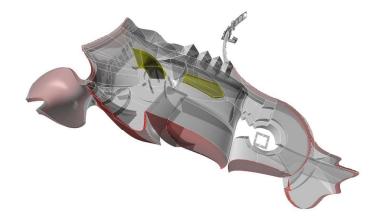


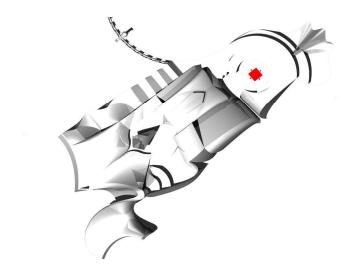


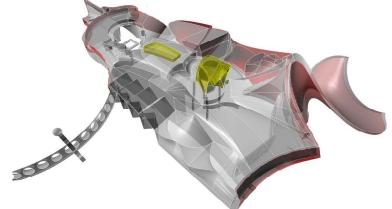












# your winery designed by US

Since more than 30 years we have been studying fermentation process and designing innovative technologies to develop the natural processes of wine making in accordance with tradition and modern efficiency.

We designed and realized the plants to produce the best wines.

Our engineers are offering you their experience and knowledge to design the next great winery: your winery.

# **Preliminary visit**

Our engineers will visit your company to know your needs and check available spaces, in order propose you the best structure and plant solutions meeting your specific requirements.



### Consulting

The design is developed with an in-depth study of your requirements, in order to find solutions meaning quality, user friendliness, logistics optimization and rational use of spaces: the union between right design and new technologies.



### Design

Thanks to our thirty years of experience, our engineers will be able to develop the right planning of your project since the design stage, which is a precondition for the installation of the latest state of the art technologies.



## Manufacturing

We work the best steel with the best tools.

Our qualified personnel will follow the development of your project in order to obtain an unique plant, specifically made for you.



your winery designed by US



it's a service offered by Albrigi Tecnologie

# THE NEW WINERY

### GENERAL GUIDE LINES ABOUT FACILITIES AND TECHNOLOGIES OF THE WINERY OF THE PRESENT AND THE FUTURE

### **ALBRIGI TECNOLOGIE IS A PHILOSOPHY**

For the last 30 years Albrigi Tecnologie has been designing and manufacturing wine-making systems for processing both small and large masses of wine, focusing specifically on the development of new technological solutions and on the relentless pursuit of the highest quality. To achieve this Albrigi has established an ongoing collaboration with wine-making experts, agronomists, university professors and, of course, the customers to find the most suitable methods for optimising each single grape type.

Albrigi Tecnologie offers its customers new fermentation technologies that complement natural and traditional wine-making processes with special emphasis on aspects such as organic production, energy and cost saving measures, and knowing how to make the best use of the internal spaces of a winger.

Today modern wineries can e designed to utilize cutting-edge, eco-sustainable technologies while fully respecting and enhancing the grape and developing traditional processing methods.

For this purpose Albrigi Tecnologie offers a comprehensive range of machinery and equipment (customizable options available) for every stage of the wine making process starting with the reception of the grapes at the winery, and including fermentation, conditioning, filtration and storage.

Albrigi Tecnologie systems offer the following 5 advantages:

- time saving (with our technologies the processing stages are fast and efficient),
- temperature control (our systems allow you to control the cold and hot conditioning of the must and wine masses),
- cleanliness (our easy-to-clean plants are eco-friendly as they can be sanitized with little or no cleaning agents),
- automation (use of highly technological systems help the enologist and winery technician perfect performance of the various operations by eliminating errors and loss of time),
- research and experimentation of the various wine-making processes (wines cannot be improved without experimentation and research into wine-making processes). The data [e.g. relating to cultivation of the vineyard, winery operations and the various types of wine produced] is collected and stored using our Archimede data management system, then analysed and transmitted to provide the operator with a record of the wine-making process used for the grapes from each separate vineyard.

Each vintage is unique, each grape variety has its own particular characteristics and properties. Therefore every winery needs a staff of expert technicians that have a thorough understanding of winemaking processes and the available equipment in order to bring out the best in their particular grapes. This ensures that even very large wineries with automated processing and computerised systems for huge masses of grapes are capable of producing top quality wines. On the other hand small to medium sized wineries that produce small or medium sized selected lots of grapes using customised or sophisticated fermentation processes, manage to obtain exclusive and very particular wines of unique taste and refined aromas and consequently to place top quality bottles on the market.

Albrigi's primary aim is to respond to the customer's needs, to understand the type of wine he wants to produce, to propose an ideal process designed specifically for his grapes by identifying the most appropriate equipment that is compatible with the available space, the cost, the time and the personnel engaged by the company during the grape harvest and the subsequent wine processing stage.

Obviously the best results are obtained when the company's wine-making expert has the lime to personally follow all the wine-making stages (fermentation, filtration, storage, etc...) or when a PLC is installed in the winery to ensure that the machines punctually perform the required operations programmed by the technician; this means that the winery technician has only to check that all is proceeding according to the enologist's instructions. Unfortunately however, as we are well aware, during the hectic harvesting period the enologist does not have sufficient time to personally oversee the crucial wine-making stages such as pumping over, pigeoge, rack-and-return etc. to make sure that they are carried being out perfectly; the unexpected is always just around the corner to shift attention to other activities. Moreover, in the later part of the harvesting period, often the parameters of the grapes being processed tend to change according to the time, availability and energy of the people involved in the wine-making process, computer-controlled processes help prevent this situation by punctually adjusting and controlling the wine-making process parameters thereby delegating to staff the sole task of programming and management.

Top quality is like the vertex of a pyramid - you may reach it after a long, complex path made up of many small technological details and processing procedures that combined lead to the achievement of an excellent product.

Albrigit Tecnologie's primary objective has always been to propose ideas and concepts intended to improve the customer's product by designing and constructing systems that will lead them to the topmost point of the pyramid; otherwise our company, as it stands, would have no reason to exist. Every single day we strive to grow, know, understand and impart to our customers all the know-how that we have built up over thirty years in the business with the collaboration of laboratory technicians, agronomists, researchers, and above all our very own customers who have always provided the input that has stimulated us to produce very special systems.

In this light Albrigi has organized a technical staff capable of offering a comprehensive consultancy service for the design and construction of your winery, covering all aspects from the architectonic concept to the installation of plants and machinery, and encompassing the latest energy saving and renewable energy technologies.

### Our modern, natural technologies for quality fermentation of red and white grapes

- A. The quality of the wine starts from the vineyard with the correct cultivation of the vines and making the best use of the natural resources such as soil, air, sun and water;
- . Grape harvesting is an extremely delicate process whether the grapes are picked into crates, or bins on trailers;
- C. Handling of the grapes during transportation from vineyard to winery is important; time and a cool environment are crucial for the good preservation of the grapes during transit;
- D. Grape cleaning and selection are fundamental for grading the grapes into first and second choice in order to differentiate production;
- E. Management of the destemming and crushing stages is important to ensure that the must and crushed grapes respond to your requirements;
- F. The fermentation stage must be examined and planned according to the type of grape to be processed (e.g., if hard or soft skin variety, if the grape gives more or less intense colour to the wine, etc...);
- . We recommend a specific type of fermentor and a well-defined fermentation process for each grape variety:
- H. We separate white and red grape varieties;
- I. For white grapes without skins we recommend cryo-maceration, cold clarification, bâtonnage;
- . We recommend 6 different technologies for the fermentation of red grapes with skins, depending on whether the skin is hard or soft, whether large or small masses are to be processed, how much height and width space is available, how much time is available to carry out all the opera
- Rack and return
- b. Rotating disk fermentor
- c. Punching down
- d. Cascade fermentation
- e. Turbin
- f. Submerged cap fermentation

Each fermentation process requires the implementation of a number of specific measures to ensure that the process is truly effective. Our experience in this regard and our technicians are at the complete disposal of customers, enologists and winery technicians to transfer the know-how we have accumulated over years of analyses, research and experimentation on many different grape varieties, and thanks to which we are capable of obtaining impressive yield and quality from each single process and type of fermentor.

Nowadays a company like ours, that aims to achieve the best quality, must ensure that customers have access to all available information to enable them to take full advantage of our systems and our equipment for the production of great wines in as short a time as possible, without wasting time and energy.

Only in this way can Albrigi Tecnologie be considered "ahead of its time"!



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### 1. FACILITIES FOR THE WINERY

### 1.1 WASTE WATERS (equipments and floor washing waters, vinification wastes)

- ducts, manholes and wells in every department;
- suction pumps for suction of waste waters from wells to the waste waters collecting tank;
- waste waters collecting tank (the tanks can be differentiated for each kind of product or waste);
- suction pumps for suction of waste waters to empty the collecting tank (e.g. to the tanktruck);
- electric system for suction pumps.

### 1.2 ELECTRIC SYSTEM

### 1.2.1 BARREL ROOM

- 1 electric panel every 20 m with 3 sockets (380 V, 220 V, 24 V), placed on the ways and in places free from the wooden barrels;
- led lighting system, to avoid introducing heating sources, with possibility of changing brightness and colour of the light ( bright and strong light for working, dark and warm light for visits);
- emergency lighting system;
- suction system for CO<sub>2</sub> in the stagnation points of the barrel room, with automatic alarms station;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- electric system dedicated to micro-oxygenation system;
- fire extinguishing system;
- conditioning and humidification system to keep the right climate for the rest of wooden barrels (humidification and steaming).

### **1.2.2** "FRUTTAIO"

- 1 electric panel every 20 m with 3 sockets (380 V, 220 V, 24 V), placed on the passage ways and in places free from the boxes of grapes rest;
- led lighting system, to avoid introducing heating sources, with possibility of changing brightness and colour of the light ( bright and strong light for working, dark and warm light for visits);
- emergency lighting system;
- automatic windows opening and closing;
- control station for hygrometric conditions and fanning;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- fire extinguishing system;
- air recirculation and drying system to dry up the grapes

N.B.: Since the "Fruttaio" is a wide room, available for about 8 months a year, (if it's not used as warehouse for empty boxes), it can be used as meeting-hall or dinig-hall; in this case you should arrange:

- wide stairs,
- toilettes,
- lifts,
- lighting system,
- emergency doors,
- air-heating/cooling system, designed for the right number of guests,
- fire extinguishing system, designed for the right number of guests,
- wardrobe,
- kitchen,
- multimedia system,
- amplifier system,
- direction room,
- interpreters room,
- simultaneous translation circuit,
- etc

### 1.2.3 PRESSING ROOM

- general electric panel, from which the fixed eletric lines dedicated to pressing machines start (1 grapes collection tank, 1 grapes crusher, 1 marcs pump, 1 wine-press);
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- fire extinguishing system;
- earth system for every machine and tank.

### 1.2.4 WEIGHING AND GRAPES SAMPLING

- weighing management room;
- grapes sampling machine;
- data system;
- intercom system.

### 1.2.5 FERMENTATION ROOM: musts and pressed grapes treatment

- wall general electric power panel, from which fixed eletric lines dedicated to fermentation tanks engines start (marc extractors, fixed pumps for fermentation tanks etc.);



- 1 electric panel every 20 m with 3 sockets (380 V, 220 V, 24 V), placed on the ways and in places free from tanks;
- suction system for CO<sub>2</sub> in the stagnation points of the fermentation room, with automatic signalling
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- fire extinguishing system;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- electric system for tank jackets conditioning (warm and cold) during the fermentation;
- micro and macro-oxygenation system;
- earth system for every machine and tank.

### WINE STORAGE ROOM: wine-working room 1.2.6

- general electric power panel, from which fixed eletric lines dedicated to wine fixed filters start;
- 1 electric panel every 20 m with 3 sockets (380 V, 220 V, 24 V), placed on the passage ways and in places free from tanks, dedicated to decanting pumps and mobile mass mixers;
- suction system for CO<sub>2</sub> in the stagnation points of the storage room, with automatic signalling station;
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- fire extinguishing system;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- electric system for tank jackets conditioning (warm and cold) during the storage of wine;
- earth system for every machine and tank.

### **BOTTLING ROOM** 1.2.7

- wide cabinet general electric power panel, placed in an easily accessible place, with 10-15 fixed eletric lines dedicated to bottling machines;
- 1 electric panel every 20 m with 3 sockets (380 V, 220 V, 24 V), placed on the ways and in places free from tanks, dedicated to pumps, cleaning machines etc.;
- neon lighting system to optimize visibility for workers;
- emergency lighting system:
- fire extinguishing system;
- suction pumps system for suction of waste waters from wells;
- data system with several connecting points;
- intercom system with several connecting points;
- conditioning system;
- air filtration system;
- automatic open/close system for doors, for the passage of forklitfs;
- earth system for every machine and tank.

### EMPTY BOTTLES STORAGE 1.2.8

- electric panels with 3 sockets (380 V, 220 V, 24 V);
- neon lighting system to optimize visibility for workers;

- emergency lighting system;
  - data system with several connecting points;
  - intercom system with several connecting points;
  - fire extinguishing system;
  - battery charger for forklitfs (outdoor);
  - automatic open/close system for doors, for the passage of forklitfs;
  - earth system for every machine.

### CARTONS, LABELS, CORKS, GLUES WAREHOUSE

- electric panels with 3 sockets (380 V, 220 V, 24 V);
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- data system with several connecting points;
- intercom system with several connecting points;
- fire extinguishing system;
- air drying system;

### 1.2.10 FULL BOTTLES WAREHOUSE

- electric panels with 3 sockets (380 V,220 V, 24 V);
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- data system with several connecting points;
- intercom system with several connecting points;
- fire extinguishing system;
- air conditioning and drying system (steady temperature 14°C);
- automatic open/close system for doors, for the passage of forklitfs
- electric lift;
- battery charger for forklitfs (outdoor);

### 1.2.11 ELECTRIC POWER ROOM

- electric transformer and safety system:
- electric panels with 3 sockets (380 V, 220 V, 24 V);
- neon lighting system to optimize visibility for workers;
- emergency lighting system;
- data system with several connecting points;
- UPS (uninterrupted power supply) for computers network and PLC equipped macchines;
- photovoltaic panels electric lines (inverter, batteries ...);
- 1 electric line for 1<sup>st</sup> underground floor;
- 1 electric line for 2<sup>nd</sup> underground floor:
- 1 electric line for fruttaio;
- 1 electric line for pressing room;
- 1 electric line for wine storage room;
- 1 electric line for fermentation room
- 1 electric line for bottling room;
- 1 electric line for every floor lighting system;
- 1 electric line for emergency lighting;



- 1 electric line for waste water wells pump;
- 1 electric line for fire extinguishing system;
- 1 electric line for car parking lighting;
- 1 electric line for parc;
- 1 electric line for lifts;
- 1 electric line for house etc.;
- 1 electric line for offices;

### 1.3 COOLING SYSTEM

- storage room: tank jackets conditioning;
- fermentation room: warm/cool tank jackets conditioning;
- full bottles warehouse: air-conditioning and drying system;
- bottling room: air-conditioning;
- offices and house: air-conditioning.

### 1.4 CONDITIONING SYSTEM

### THERMAL UNIT:

- water supplies;
- water autoclave pumps;
- water treatment;
- boiler;
- steam production facilities;
- compressed air system;
- nitrogen supply system;
- cooling unit;
- cleaning CIP;
- pressured water system.

### 1.5 HEATING SYSTEM (boiler)

- fermentation room: warm/cool tank jackets conditioning;
- bottling room: air-conditioning;
- offices and house: air-conditioning.
- wash water for tanks, machines, floors.

### 1.6 STEAM PRODUCTION SYSTEM (steam boiler)

In the following departments:

- storage room: tanks and floor washing;
- fermentation room: tanks and floor washing;
- filtration room: machines and floor washing;
- bottling room: machines and floor washing;
- humidification in barrel room with spray injector.

### 1.7 WASHING SYSTEM

- washing CIP connected to the hot water low pressure or high pressure circuit.

### 1.8 COMPRESSED AIR SYSTEM

- micro and macro oxygenation;
- pressing room;
- bottling room (for every machine);
- pneumatic valve control for liquids transfer;
- biological depuration system.

### 1.9 NITROGEN GENERATOR

In the following departments:

- barrel room: for wine decanting;
- storage room: to inactitanke wine tanks and wine decanting;
- pressing room: to decant musts and pressed grapes in inactive atmosphere;
- bottling room: for decanting, filtering and inactitankion of full bottles;
- filtration: for wine transfer.

### 1.10 DRY ICE

- to keep cool grapes picked with grape-gatherer machine from the vineyard to the winery

### 1.11 WATER SYSTEM

- pipelines for cool filtered water;
- pipelines for hot filtered wash water;

### 1.12 HIGH PRESSURE WATER SYSTEM

- water compressor for production of cool or hot high pressure water;

### 1.13 HIGH PRESSURE PIPELINES FOR CLEANER

- pipelines for high pressure hot wash water,
- pipelines for high pressure cool wash water;

### 1.14 CO<sub>2</sub> SUCTION

In the following departments:

fermentation room;





- pressing room;
- storage room.

### 1.15 VIDEO SURVEILLANCE

- thief-proof and accesses control outdoor cameras (high definition digital cameras, with motion/noise detection system and automatic recording start, with remote control via internet, with infrared night lighting);
- indoor cameras in each department for inspection and thief-proof control;
- NAS recording with automatic overwriting.

### 1.16 FILTRATION ROOM

- warm water;
- cold water;
- nitrogen.

### 1.17 FIXED STAINLESS STEEL PIPELINES

- warm water;
- cold water;
- nitrogen.

### 1.18 DATA SYSTEM "ARCHIMEDE"

- trough "Archimede" you can control the activities in each department and winemaking process;
- data monitoring stations and data managing panels for workers are installed in each department (office, fruttaio, barrel room, vineyard, fermentation room etc.);
- Archimede can process and manage many different datas, listed in detail in the following features card.





### 2. FACILITES FOR EACH DEPARTMENT

### 2.1 PRESSING ROOM:

- power supply;
- hot water;
- cold water:
- high pressure hot water
- high pressure cold water;
- nitrogen;
- waste waters collecting ducts;
- grape-stalk discharge;
- marcs storage;
- CO<sub>2</sub> suction;
- compressed air;
- data system;
- stainless steel pipelines for marcs and musts decanting.

### 2.2 FRUTTAIO:

- power supply;
- hot water;
- cold water;
- high pressure hot water
- high pressure cold water;
- air drying system;
- air conditioning;
- waste waters collecting ducts;
- data system;
- ducts for grapes transfer to the pressing

### 2.3 FERMENTATION ROOM:

- power supply;
- hot water;
- cold water;
- high pressure hot water
- high pressure cold water;
- steam;
- waste waters collecting ducts;

- grape-stalk discharge;
- lees discharge;
- CO<sub>2</sub> suction;
- compressed air;
- cold water for tank jackets;
- hot water for tank jackets;
- grape-stone regeneration;
- data system;
- micro and macro-oxygenation system;
- stainless steel pipelines for marcs and musts decantig.

### 2.4 STORAGE ROOM:

- power supply;
- hot water;
- cold water;
- high pressure hot water
- high pressure cold water;
- steam;
- nitrogen;
- waste waters collecting ducts;
- grape-stalk discharge;
- CO<sub>2</sub> suction;
- compressed air;
- cold water for tank jackets;
- hot water for tank jackets;
- data system;
- micro and macro-oxygenation system;
- stainless steel pipelines for wines decantig.

### 2.5 BARREL ROOM:

- power supply;
- hot water;
- cold water;
- high pressure hot water
- high pressure cold water,
- steam;
- nitrogen;

- humidification:
- air conditioning:
- waste waters collecting ducts;
- grape-stalk discharge;
- CO<sub>2</sub> suction;
- compressed air;
- data system;
- micro and macro-oxygenation system;
- stainless steel pipelines for wines decantig.

### 2.6 TARTRATE STABILIZATION

- power supply;
- hot water;
- cold water:
- high pressure hot water
- high pressure cold water;
- steam;
- nitrogen;
- waste waters collecting ducts;
- grape-stalk discharge;
- glycol liquid at -10°C for tartrate stabilization;
- data system;
- stainless steel pipelines for wines decantig.

### 2.7 FILTRATION:

- power supply;
- hot water;
- cold water;
- high pressure hot water
- high pressure cold water;
- steam;
- nitrogen;
- waste waters collecting ducts;
- discharge of filtration wastes;
- compressed air;
- data system;
- stainless steel pipelines for wines decanting.

### 2.8 EMPTY BOTTLES WAREHOUSE

- power supply;
- data system;

### 2.9 **BOTTLING ROOM**:

- power supply;
- hot water;
- cold water:
- high pressure hot water
- high pressure cold water;
- steam;
- air conditioning;
- air filtration;
- nitrogen,
- waste waters collecting ducts;
- compressed air;
- data system;

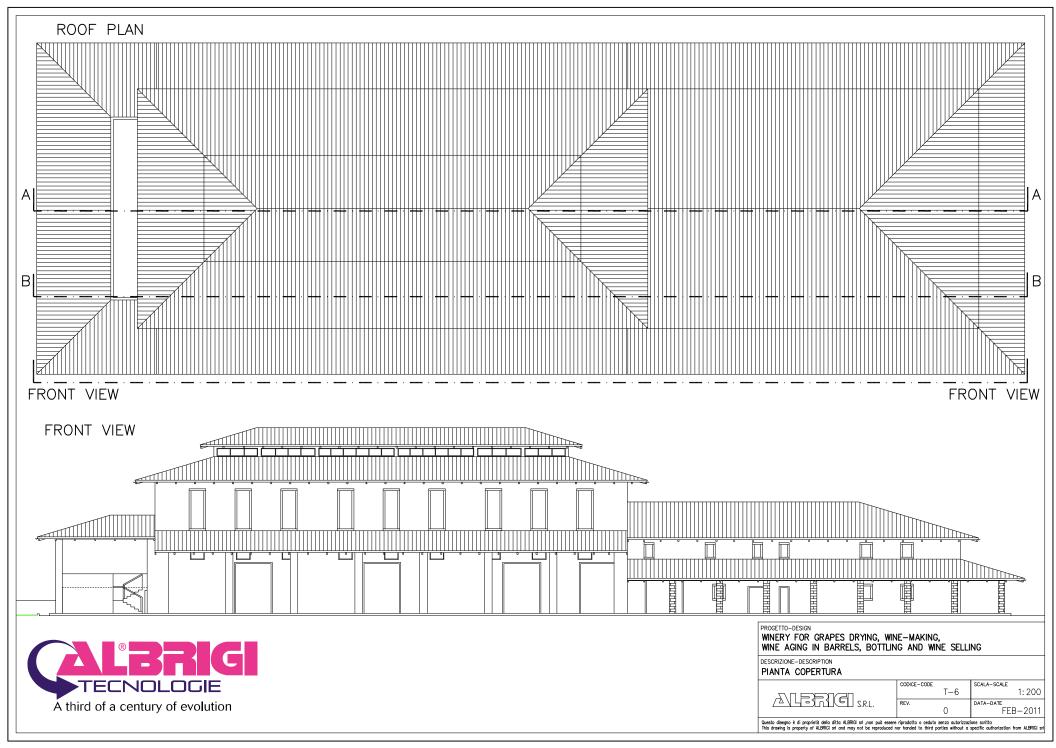
### 2.10 FULL BOTTLES WAREHOUSE

- power supply;
- air conditioning and drying;
- data system;

# 2.11 CARTONS, LABELS, CORKS, GLUES WAREHOUSE

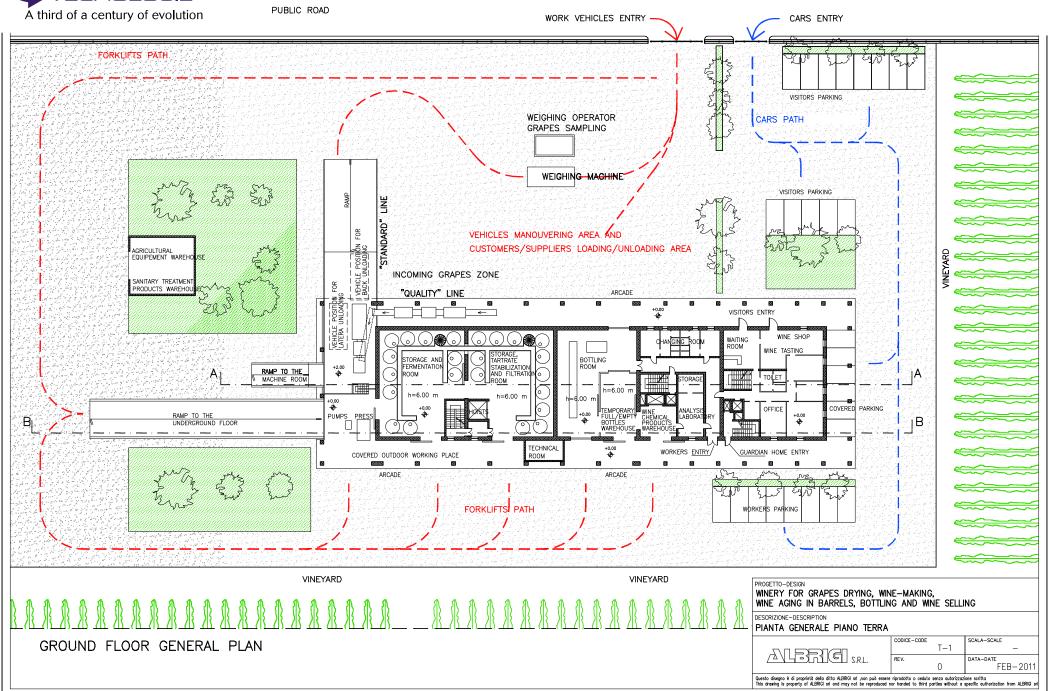
- power supply;
- air conditioning and drying;
- data system;



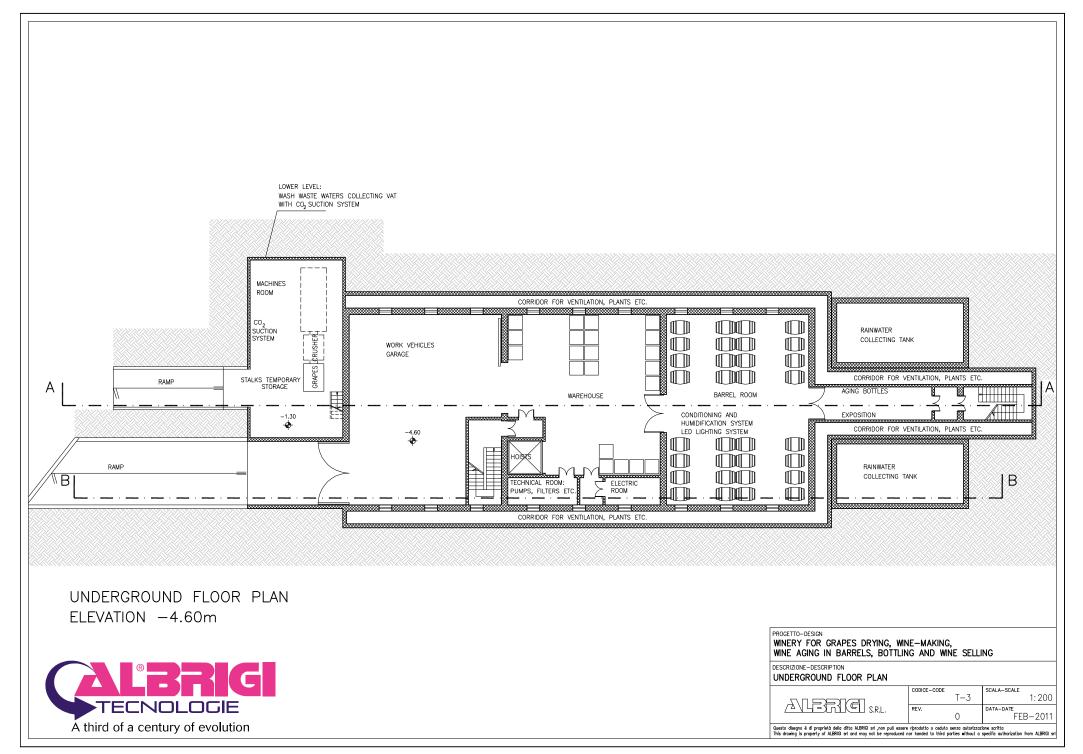


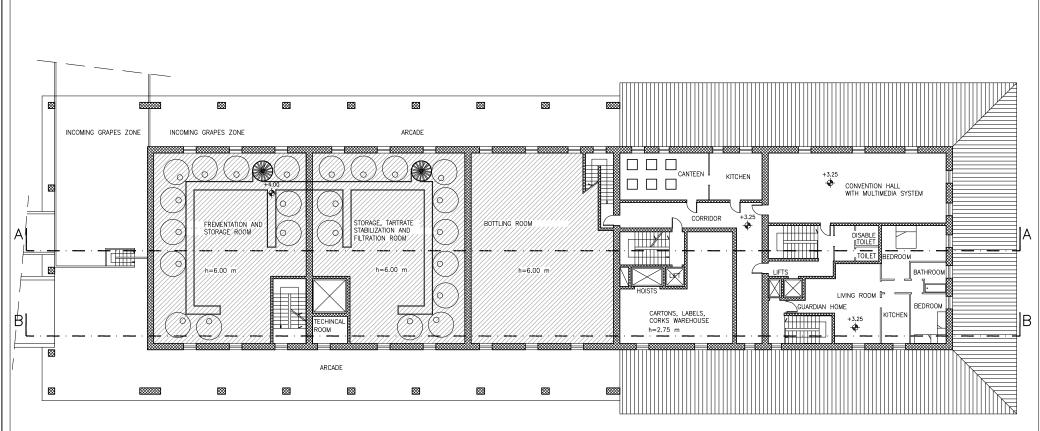












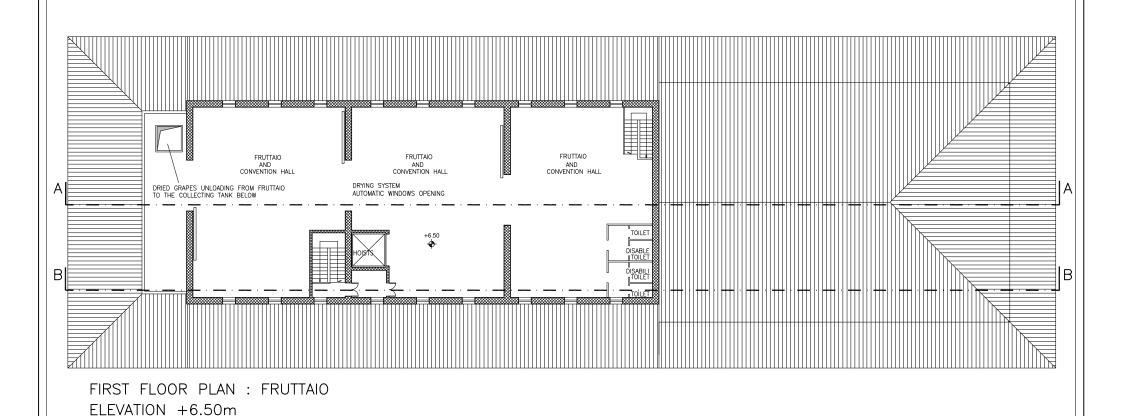
FIRST FLOOR PLAN: MEETING ROOM AND GUARDIAN HOME ELEVATION +3.25m



PROGETTO-DESIGN
WINERY FOR GRAPES DRYING, WINE—MAKING,
WNE AGING IN BARRELS, BOTTLING AND WINE SELLING
DESCRIZIONE-DESCRIPTION
PIANTA PIANO PRIMO (ABITATIVO)

CODICE-CODE
T-4
DATA-DATE
FEB-2011

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WINERY FOR GRAPES DRYING, WINE-MAKING, WINE AGING IN BARRELS, BOTTLING AND WINE SELLING

CODICE-CODE

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FEB-2011

DESCRIZIONE-DESCRIPTION

PIANTA PIANO PRIMO (PRODUTTIVO)

A third of a century of evolution

# TECHNOLOGIES AND FACILITIES FOR THE NEW ECO-FRIENDLY WINE INDUSTRY

Albrigi Tecnologie, thanks to the experience acquired with its engineers and consultants, proposes the best technical solutions for the new eco-friendly vine cultivation and wine industry.

Albrigi proposes to its customers the state of the art winery, with the best structural and technological solutions, coming from the historical tradition of wine-making and looking at the future for a production of highest quality, efficiency and respect of the environment.

The idea consists in an **integrated system**, energetically efficient for the present and the next future. The preconditions are created since the **design** of the winery – i.e. the shape and the orientation of the building - which is going to work with precise seasonal strategies, taking advantage of natural energy sources and aiming in particular at the internal efficiency of the system.

The need to reduce as much as possible the production costs and the environmental impact leads to the use of **renewable energy sources** – like solar, geothermal, wind energy aboundant in nature – and a set of solutions that involves every phase of the production. This starts from a **proper management of the vineyard and the winery**, with the construction of energy efficient buildings, the installation of specific energy-saving equipment (i.e. fermentation system, filtration without waste of flours or panels), the re-use of thermal energy and waste products. The **re-use** regards the heat exchangers, that can take advantage from thermal energy lost from the plants or the wine-making processes, the treatment of washing waste waters (re-used for irrigation), the biomasses obtained from agricultural activities (chipped branches and grapes stalks), products and additives of wine-making process.

This innovation is developed in accordance with in-depth studies on eco-friendly growth, made by public and private companies, universities and research institutes. Albrigi Technologies, working together with leading companies worldwide, propose to its customers the state of the art solutions in terms of product optimization.

The optimization of an efficient energy strategy is based on a strength integration of technological systems and the building that contains them. The **energy balance of sustainable system** depends on the right choice of specific design features and eco-friendly materials: it is advantageous, for example, to use natural lighting, to air-condition the rooms in summer or winter using geothermal system (possibly with drill arranged in the foundation piles), to collect rain waters, to provide buildings of efficient envelopes like double skin, radiant systems and using natural ventilation.

It is therefore essential to develop a right work plan since the design stage, both for the construction of a new winery or the renovation of an existing one or part of it, modernizing installations or tools.

For this purpose Albrigi Technologies created its own staff of experts in the different fields, which beyond consulting activities is able to study, design, construct and test installations and applications meeting the requirements of different customers. We have the know-how. The coordinator of our project is Mrs. Francesca Poli from Verona.

\*

In the following prospect and notes you can find a summary of the evolution of the new eco-friendly productive cycle in the large survey of available technologies – referred to vineyards cultivation, installations, treatment and re-use of working wastes – finalized to productive and environmental quality.



### ENERGY SAVING AND RE-USE OF PRODUCTS

#### 'FERTIRRIGATION'

This innovative way of fertilizing the vineyard consists in the distribution of fertilizers through irrigation water (with drip irrigation or sub irrigation); increasing the effectiveness of treatment, this method can save significant amounts of fertilizers, bringing economic and environmental benefits.

A further saving can be achieved by washing wine-making machines and pipelines with low or no amount of chemical products, in order to re-use washing waste water (within the parameters of the law).

#### VINEYARD DATA COLLECTION

In order to plan proper vineyard sanitary treatments, even considering the specific kind of treatment, it is essential to know in real time temperature and humidity in the vineyard. The control unit FAR SYSTEM detects and transmits the data continuously via GSM to the management system Archimede Albrigi, which archives data and sends the information to the operator.

#### INTEGRATED PEST MANAGEMENT AND ORGANIC FARMING

This is the new ecological philosophy aiming to reduce or eliminate as far as possible the use of pesticides harmful for the environment, promoting organic farming; the effectiveness of organic farming highly depends on the extension of territory involved in the practice and recently has been widely applied in many regions.

#### WIND ENERGY

The new mini or micro wind turbines, which are small and have low visual impact, produce electricity with higher efficiency than traditional wind turbines, because they can take advantage also from air turbulence.

#### ECO-FRIENDLY WORK VEHICLES

Work vehicles with Euro 5 or electrical engines reduce pollution in the vineyard and are widely used abroad.

#### ALBRIGI ARCHIMEDE

Albrigi's "Archimede" system, expandable and customizable, allows to manage and control every wine-making process and every machine, even through remote control: activities in the country (vineyard map, phytosanitaries treatments management etc.), wine-making plants in the winery (tank conditioning, fermentators programming, washing management etc.), wine-making and storage rooms (temperature and humidity control in the barrel room, ventilation in "fruttaio" etc.), energy saving systems (geothermal drills and heating pumps, lighting, solar panels and photovoltaic panels etc.), so that the systems features and product quality can be optimized.

#### SUNLIGHT CONCENTRATOR MIRRORS

This technology (that can achieve several hundreds degrees temperatures by concentrating sunlight on a tube placed on the focal line of the curved mirrors) is really suitable to the winery because it provides hot water and steam with small plants, much smaller than traditional solar panels, and consequently with low visual impact.

#### 3RD GENERATION PHOTOVOLTAIC PANELS.

According to the news, new cheap photovoltaic panels are being developed, with significantly higher efficiency compared to the traditional ones (up to 40%); at a parity of energy production, the necessary surface of panels is much lower than traditional panels, with obvious economic, managing and visual impact advantages.

#### SOLAR PANEL FOR WARM WATER

Besides the well known warm water production, solar panel, combined with new technologies, can be used to produce cold water. Kloben company produces special heat exchangers that can transform thermal energy in refrigerating energy, what is necessary in the cellar for fermentation tanks conditioning, storage rooms, office or residential areas conditioning.

#### HEATING PUMP

This is a largely developed technology, that uses heat and cold energy from the ground or from deep underground waters, through geothermal drills and heat exchangers working with air or water. Power supply for the heating pump can provided by solar panels, reducing pollution. As this are very silent machines, noise is definitively reduced.

#### BIOMASS BURNERS

Biomass burner is at this time evidently useful to produce hot water (for washing, rooms heating, fermentation tanks conditioning) and steam, what is necessary to sterilize filtration equipments, tanks, pumps and bottling machines.

#### **ECO-FRIENDLY ARCHITECTURE**

The target is ecosystem preservation, eliminating or reducing as much as possible, the impact of productive activities on the environment. Design takes up to energy self-sufficient buildings - with low polluting emissions - which are able to exploit natural sources and renewable energies.

# TECNOLOGIE A third of a century of evolution

#### **FRUTTAIO**

In the fruttaio, where are concentrated large quantities of grapes for drying, is often necessary to integrate natural ventilation with mechanical ventilation and drying systems, managed by an automatic control unit which detects and selects the right parameters for proper dry of grapes and automatically opens or closes windows.

#### BARREL ROOM

Traditional barrel rooms, with clay floor and breathable walls, are built to maintain naturally the ideal humidity and temperature for barrels rest. Due to the modern sanitary standards imposed by law – which require cleanable, non breathable, floor and walls coatings – barrel rooms need now special equipments for air conditions detection, which are able to manage specific air-conditioning systems and keep the right humidity and temperature for barrels rest.

#### ALBRIGI'S HIGHT CLEAN TANKS

Albrigi Tecnologie's tanks, thanks to a particular treatment of stainless steel that makes the inner surface completely free of bumps, can be cleaned with hot water or steam only, without chemical products; in this way you can reduce environmental pollution and re-use waste wash waters and regenerate cleaned tartaric acid for the next fermentation process.

#### GRAPES WASHING BEFORE CRUSHING

Grapes washing and drying before crushing eliminates residual impurities from the must.

#### INTEGRATED SYSTEMS FOR AIR CONDITIONING WITH FILTERED AIR

Room where alimentary products are treated need a heating-refreshing system with filtered sterile air. Using renewable energies you can use floors, walls and ceilings as heating exchangers for the heating system.

#### "ZERO KILOMETERS"

Reducing transportations and choosing, as far as possible, supplies and activities located near your company combines clear management advantages and a strong reduction of polluting emissions in the environment.

#### LIGHTING AND ENERGY SAVING

Led lighting technology perfectly fits with cellar needs, because led lamps have very much higher efficiency and life than the traditional ones, in addition to the possibility of varying light intensity and color. Led lamps are cool, and so ideal for rooms where you shouldn't introduce heating sources, like the barrel room.

#### WASTE COLLECTION

By separately collecting the differnt kinds of wastes or wine-making products, you can regenerate and re-use products that you are allowed to re-use, sparing money for companies specialized in wastes disposal.

#### REGENERATION OF BRANCHES AND GRAPE-STALKS

Branches and grape-stalks can be reused for heating production, upon chipping or pelletizing and storage in bins for automatic feeding of biomass burners.

#### REGENERATION OF WINE-MAKING PROCESS PRODUCTS

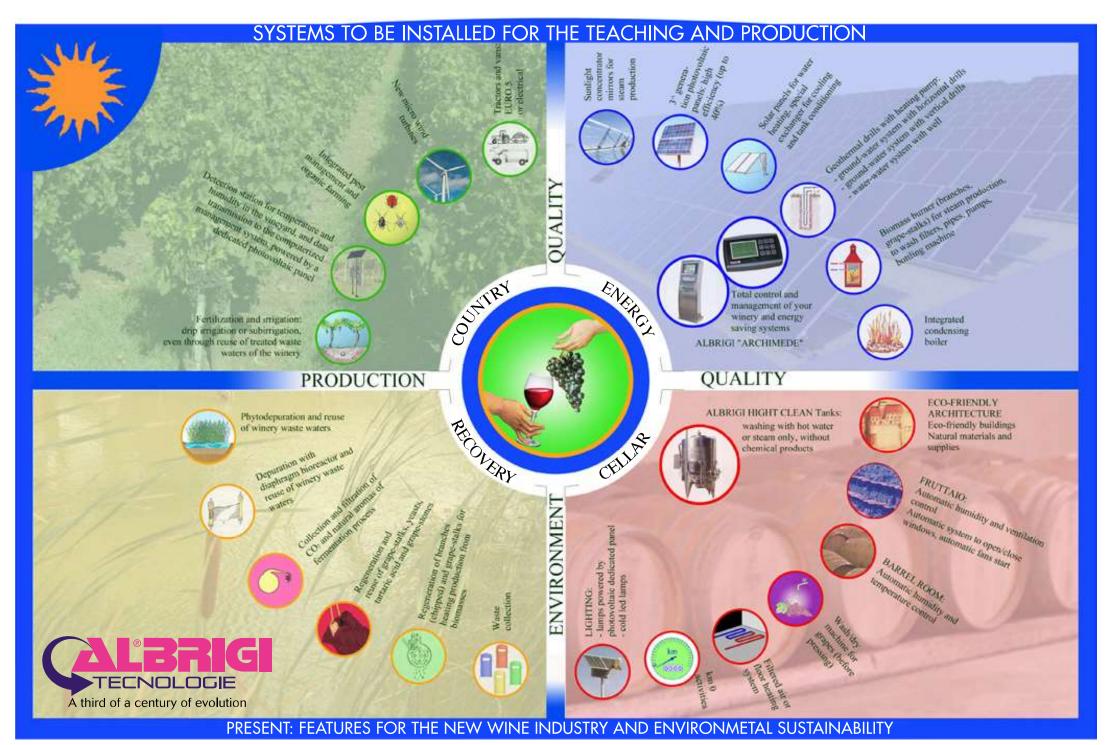
Washing the tanks with hot water, without chemical products, it is possible to regenerate cleaned products of wine-making process (grape-stalks, tartaric acid, grape-stones), which can be reused in the next fermentation process or in wine treatments. This is being studied at the University of Verona, by prof. Ferrarini.

#### COLLECTION AND FILTRATION OF CO2 AND NATURAL FERMENTATION AROMAS

Volatile substances produced during fermentation process can be collected and treated, reducing polluting emissions of CO2 (fixing it on special supports as a carbonate) and regenerating alcohol and natural aromas of the fermentation process, that can be re-used.

#### WASTE WATERS PHYTOPURIFICATION AND MEMBRANE BIOREACTORS PURIFICATION

Phytopurification and membrane bioreactors purification allows you to re-use waste waters, within parameters of law, for irrigation, 'fertirrigation', or to distribute sanitary treatments to the vines.





## SYSTEM FOR TOTAL MONITORING AND CONTROL OF CELLAR WINEMAKING **EQUIPMENT**

LIST OF THE MUST FERMENTATION AND PROCESSING PROCESSES IT **MONITORS AND MANAGES** 

The Archimede system consists of a leading-edge electronic console that connects to each appliance that produces power and services in order to manage it and monitor it, such as a fermentation tank to be programmed. This elegant steel control board independently carries out a myriad of procedures, setting up even complex work cycles or independent work recipes for each appliance or stainless steel container. It can automatically manage and monitor a great number of procedures such as loading and wei-

ghing the grapes, heating and cooling the various fermentation or process phases, schedule automatic washing cycles, carry out plant reset functions and many other services as described below. The system can

also be remote-controlled by sending SMS.

This is an open system that can be expanded to include new functions without having to replace the existing one. Each unit has a graphic display and a multifunction keyboard with push-buttons dedicated to each desired function.

Automation is basic because it achieves the highest processing quality levels by real-time measurements of process parameters, optimizing winemaking systems in function of the product being processed.

Sophisticated customized and exclusive supervision software makes it possible to customize and program all the many checks that need to be performed on existing equipment. You can also intervene immediately on each container or process equipment, directly from the console. The system can generate and recreate historical data, filing them for 10 years in a tabular and graphic format so that they can be compared with theoretical values and then interfacing these values with the system management.

And there's more: the system also monitors ambient parameters in the processing and storage areas so as to always keep temperature and humidity values at desired levels. And you can dialogue with the system from any point in the world, using a mobile phone or even using Skype, connecting directly to the system and making precise checks and variations in real time at the minimal cost of one SMS or one telephone call of just a few minutes.

The system can also implement "traceability".

In this way the world becomes even smaller and, thanks to Archimede, everything is under control.

# LIST OF SERVICES MONITORED IN THE **COUNTRYSIDE**

Company map Vineyard map (grape selection) Genetics and wine archive Irrigation Management and programming of vineyard treatments Remote monitoring of outdoor atmospheric conditions in vineyards by radio Video monitoring of vineyards by radio and filing of data

Pre-harvest Harvest

Weighing Grape selection

Management of motor vehicles in the vineyard

Management of wells or irrigation systems with monitoring of water supplies

RCHIMEDE

**ARCHIMEDE** minor wine

**ARCHIMEDE** major wine



info@albrigi.it • www.albrigi.it

Grape refrigeration Heat-treatment of musts and pressed grapes Cryomaceration (Criotank) Bâtonnage (Bâtontank) Processing of fine lees **Pumping over** Punching down (Monofolltank) Rotating blade (Volvotank) Submerged cap (Supertank) Cascade (Pluviatank) Pump over turbine (Turbotank) Mechanical délestage (Délestage) Carbonic maceration (Noveltank) Ice wine Cold clarification (Chiaritank) Cold malolactic Délestage (Délestage)

### MONITORING AND MANAGEMENT OF PROCESSES AND SERVICES

Management of supplier grapes Accounting management of grapes for passerillage raisining Grape passerillage raisining and climate control in the fruit warehouse Crushing - Pressing Monitoring, management and filing of fermentation data during the different phases General wine cellar management and control of the quantities of musts or wines in tanks or fermentation tanks Management of systems and equipment for pressing, filtering, pumps, racking, topping off Grape and wine refrigeration General wine cellar climate control Temperature and humidity management in the aging barrel cellar General heating CO2 suction from the wine cellar Air/nitrogen production Steam production Management of washing plant Management of bottling plant Label – carton – cork – bottle – cap – glue warehouse Monitoring of drain waters Management of lighting and ventilation in the wine cellar Operating costs

Accounting and warehouse management - Suppliers Invoicing - Customer management - Transport management Marketing management - Agent management Event management

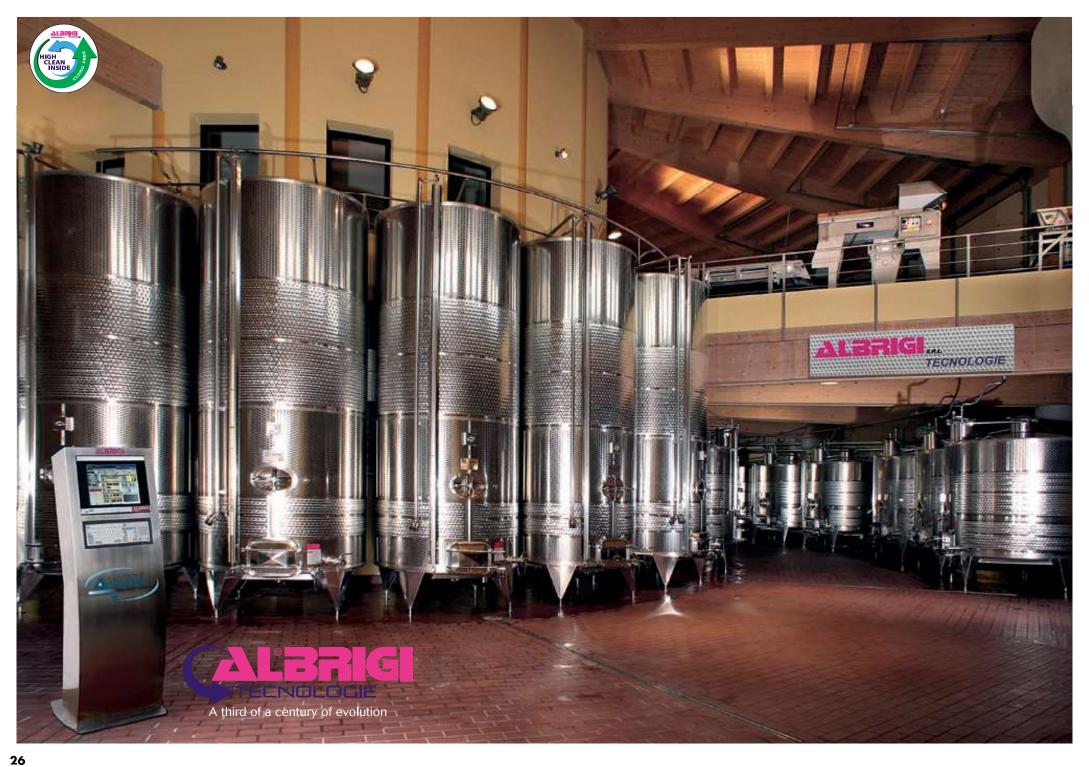
General management of energy productionsystems

in the wine cellar Monitoring of alternative energy sources Energy savings - Heat pumps, geothermal energy,

photovoltaic panels, mirror screens - Data transmission - Burglar alarm -In-house security monitoring - Kidnapping alarm Satellite monitoring of services and measurements

Plant alarm warned by mobile phone

**EVERYTHING IS UNDER CONTROL** 





# Albrigi means fantasy

in your winery with subject of your choice



# **Albrigi** srl

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