

**DTX MODEL TARTARIC STABILIZATION  
pH REDUCTION SYSTEMS**



**DELLA TOFFOLA**  
**GROUP**

# DTX MODEL TARTARIC STABILISATION/pH REDUCTION SYSTEMS

Della Toffola DTX systems are based on the action on the action of ionic exchange resins (cation resins) that can be perfectly regenerated with a sulphuric acid solution. The product inside the resin containers undergoes ionic exchange during which the cations are withheld and the H<sup>+</sup> ions are released, and the pH level is reduced as a result. Exhaustive research at the Della Toffola laboratories has led to the selection of a specific resin for use in winemaking.

## DTX System composition

The DTX System is composed as follows:

- Feed pump
- Regeneration acid dosing injector
- N°2 tanks in steel or plastic reinforced by fibreglass containing the support required for ionic exchange
- N°2 pH-meters for the checks on the level of progress and pH value of product leaving the system
- Magnetic induction flowmeters
- Electric flow regulation modulation valves
- PLC with TOUCH SCREEN for automatism control

These systems can also be equipped with the following optionals: Regeneration water softener, - Regeneration water pH regulator



DTX60



## Operational principle

The operational principle is based on the treatment of a part of the product taken into consideration equal to 10-35% of the total volume depending on the reduction of potassium required for the stabilization of the wine to be subsequently remixed into the original product.

The quantity to treat depends directly on the conditions of the potassium, tartaric acid and pH contained in the product being processed.

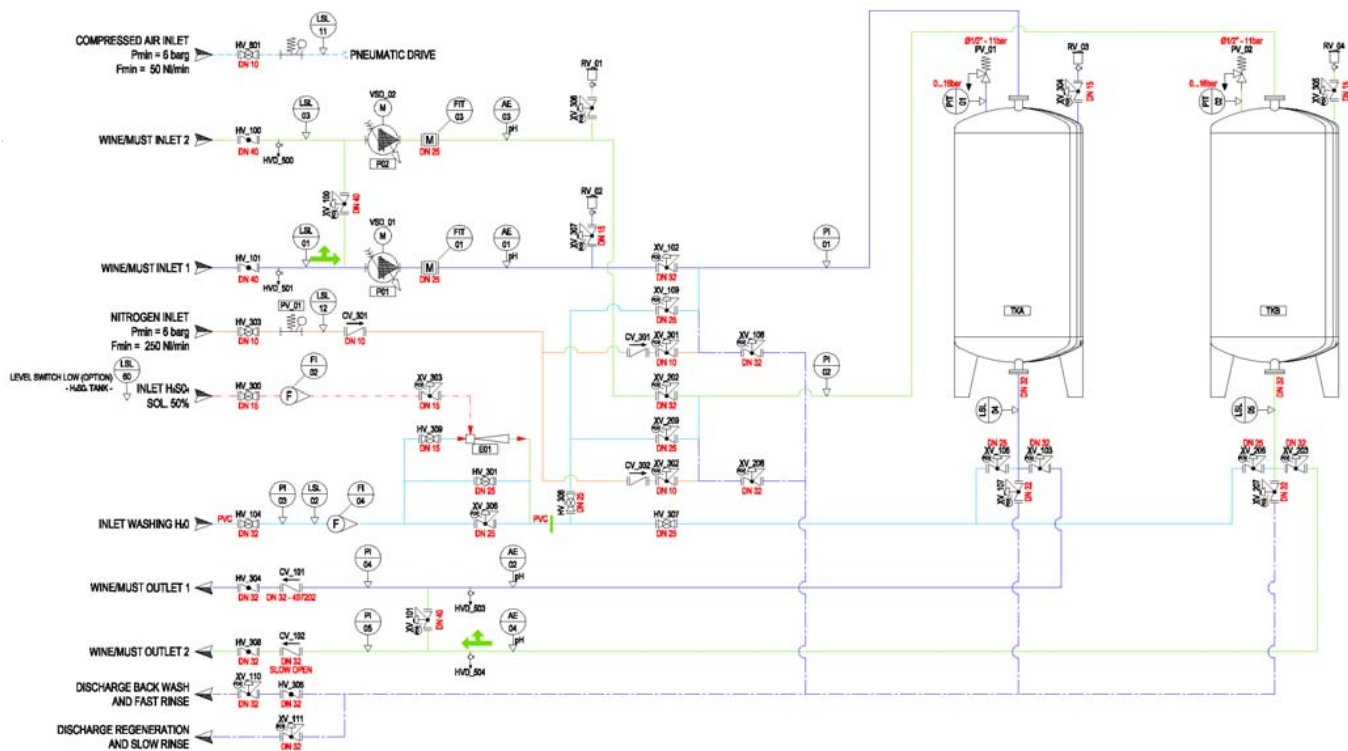
These systems can also be used for wines, various types of must, and fruit juice.

## Advantages for winemaking:

Stabilization of tartaric precipitation - Decreased pH improves the wine's aromatic ensemble - Resin selectivity in regard to Potassium and Calcium - Lowering of the wine's metal content - Increase in total acidity - Vast range of models.

## Economic advantages:

Brief regeneration times - Fully-automatic systems - PLC control.



Schema di flusso/ Flow chart

MODELLO MODEL	DTX 20	DTX 40	DTX 60	DTX 80	DTX 100
Temperatura di esercizio Work temperature	°C +5/+40	°C +5/+40	°C +5/+40	°C +5/+40	°C +5/+40
Pressione max di esercizio Max. work pressure	bar 4/6	bar 4/6	bar 4/6	bar 4/6	bar 4/6
Potenza pompa centrifuga P01 P01 centrifugal pump power	kW 1,3	kW 1,3	kW 1,3	kW 2,2	kW 2,2
Potenza totale installata* Total installed power	kW 2,2	kW 2,2	kW 2,2	kW 3	kW 3
Materiale costruttivo principale Principle constructive material	AISI 304 / FE 360 / PVC	AISI 304 / FE 360 / PVC	AISI 304 / FE 360 / PVC	AISI 304 / FE 360 / PVC	AISI 304 / FE 360 / PVC
Portata di prodotto Product flowrate	hl/h 20	hl/h 40	hl/h 60	hl/h 80	hl/h 100
Portata minima Minimum flowrate	m <sup>3</sup> /h 1,3	m <sup>3</sup> /h 2,4	m <sup>3</sup> /h 2,9	m <sup>3</sup> /h 4,7	m <sup>3</sup> /h 6,7
Portata massima Maximum flowrate	m <sup>3</sup> /h 2,6	m <sup>3</sup> /h 4,8	m <sup>3</sup> /h 5,8	m <sup>3</sup> /h 9,3	m <sup>3</sup> /h 13,5
Tempo di rigenerazione Regeneration time	min 81	min 81	min 81	min 81	min 81
Portata di acqua richiesta per rigenerazione Water flowrate required for re- generation	m <sup>3</sup> /h 1,6	m <sup>3</sup> /h 2,9	m <sup>3</sup> /h 3,5	m <sup>3</sup> /h 5,6	m <sup>3</sup> /h 8,1
Volume di acqua di rigenera- zione singola colonna Volume of regeneration water per column	litri 950	litri 1700	litri 2100	litri 3450	litri 5100
Volume acido solforico SOL 50% Volume of sulphuric acid solu- tion (50%)	litri 24	litri 43	litri 54	litri 90	litri 133

\*Configurazione minima, escluso opzioni - Minimum configuration, excluding options

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