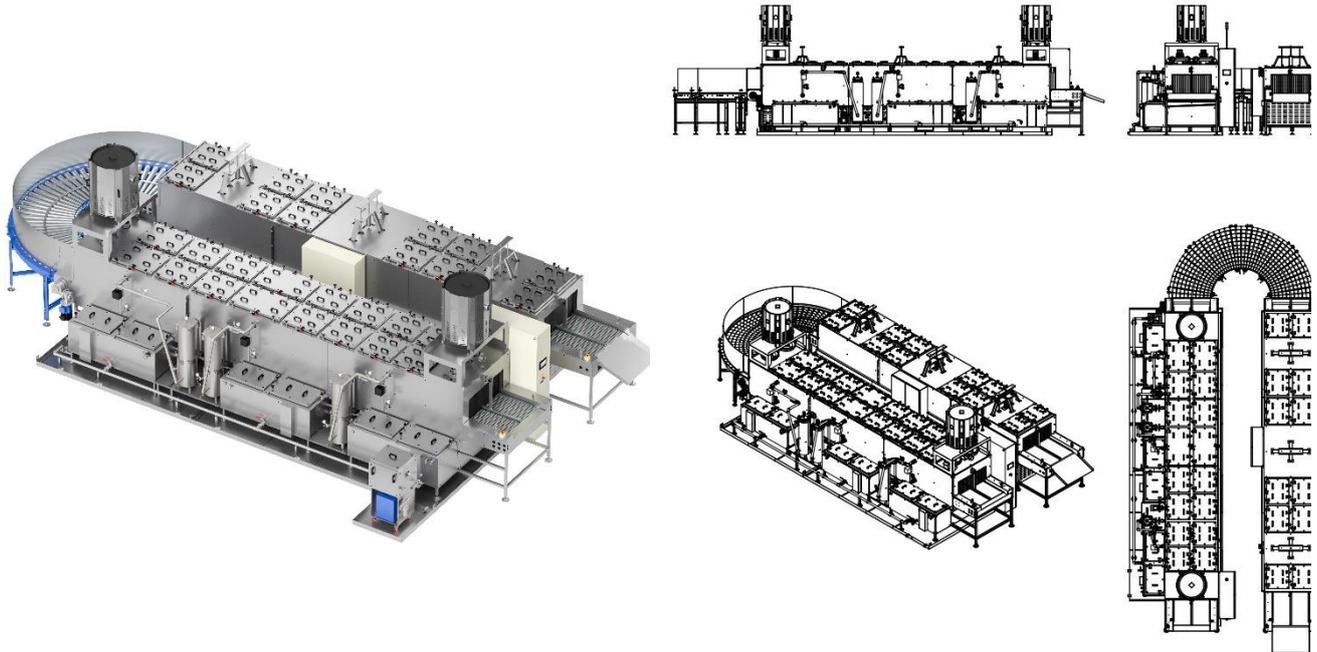# TUNNEL U

Tunnel plants are characterized by high productivity and flexibility. They are usually used in production where the quantity of pieces to be treated is very high and speed is a fundamental parameter.

This plant is composed of several consecutive phases where the pieces pass through thanks to a motorized transport system.

This version of Tunnel has a U-shaped motorized transport system, therefore useful when loading and unloading must be done in the same area.

The machine is available in HT version (insulated, maximum and adjustable temperature up to 80°C).

Dimensions and layout	ITU
noise HT (RU_HT)	70/80 dBa

Connections	ITU
Compressed air blower solenoid valve	F 1"
Compressed air intake	F 1/4"
Deoiling oil drain	M 1/2"
Emptying pump	F 1"
Steam extraction	Ø80-Ø100 mm
Tank liquid drain	F 1" 1/4
Water filling solenoid valve	F 1/2"

Technical features	ITU
Adjustable feet +/- 50mm	★
Aisi 304 stainless steel filter in pump intake	★
AISI 304L stainless steel washing pipelines with professional stainless steel flat nozzles	★
Automatic calculation of electricity consumption in real time	★
Box filter	★
Color 7″ touchscreen display for settings and programs	★
Drain valves for emptying tanks	★
Forward progress via gearmotor (speed adjustable by inverter)	★
Heating of the liquid with stainless steel electric heating element	★
HT Version	★
Internal ed external welding bleaching	★
IP55 main electrical box, management with touchscreen PLC (DGT V4)	★
Manual water filling valve	★
Manually adjustable washing pressure	★
Minimum level switch	★
Pressure gauge for control of pressure delivered	★

Technical features	ITU
Safety limit switch on cover opening	★
Siemens electric power parts	★
Signal tower for indicating system status	★
Stainless steel bottom section load-bearing structure	★
Stainless steel electric pump with special seals	★
Structure and sheet metal in contact with liquid in AISI 304L stainless steel	★
Tanks accessible from the outside	★
Timed electric exhaustion of steam	★
Weekly programming to start heating and deoiler (if installed)	★

Accessories	ITU	Cod.
Automatic chemical product dispenser, installed in bath 1	✓	DAD#1
Automatic chemical product dispenser, installed in bath 2	✓	DAD#2
Automatic chemical product dispenser, installed in bath 3	✓	DAD#3
Automatic chemical product dispenser, installed in bath 4	✓	DAD#4
Bag filter in stainless steel, installed in the bath 1	✓	FS#1
Bag filter in stainless steel, installed in the bath 2	✓	FS#2
Bag filter in stainless steel, installed in the bath 3	✓	FS#3
Bag filter in stainless steel, installed in the bath 4	✓	FS#4
Centrifugal steam condenser M [D]	✓	CCE_M
Centrifugal steam condenser S [D]	✓	CCE_S
Circulating pump from tank 2 (most clean) to tank 1 (most contaminated)	✓	PRI#1
Circulating pump from tank 3 (most clean) to tank 2 (most contaminated)	✓	PRI#2
Circulating pump from tank 4 (most clean) to tank 3 (most contaminated)	✓	PRI#3
Detergent suction tank for automatic dispenser	✓	SDAD
Device for remote connection and remote support for PLC Siemens	✓	TELSIE
Device remote connection and remote support for HMI Weintek	✓	TELWEI
Disc oil separator with dedicated motorization	✓	DB1
Emptying pump	✓	SV
External pneumatic oil separator with stainless steel floats	✓	DHT
Heating with diesel burner	✓	RBG
Heating with natural gas burner	✓	RBM
HMI Siemens KTP - Display (only for Siemens PLC)	✓	HMIS
Industry 5.0 Ready (Energy Meter)	✓	IND5
Interface with the loading system (robot, conveyor, etc.)	✓	RBC
Interfacing with unloading system (robot, conveyor, etc.)	✓	RBS
Kit for Industry 4.0 for HMI Weintek	✓	IND4WEI
Kit for Industry 4.0 for PLC Siemens	✓	IND4SIE
Led light tower with 3 lights and sound alarm	✓	TL3
Loading/unloading area photocell barrier system	✓	BFCS
Magnetic spark plug for bag filter size 2 for ferrite powder	✓	MAGFS2
Maximum liquid level control in tank 1 and filling solenoid valve	✓	RIEMP#1
Maximum liquid level control in tank 2 and filling solenoid valve	✓	RIEMP#2
Maximum liquid level control in tank 3 and filling solenoid valve	✓	RIEMP#3
Maximum liquid level control in tank 4 and filling solenoid valve	✓	RIEMP#4
Mixed resin demineralizer M50 with conductivity meter	✓	ADD
Photocell barriers in loading phase	✓	BFC
Photocell barriers in unloading phase	✓	BFS
PLC Siemens S7 1200 - HMI touchscreen Weintek	✓	PLS
Tanks emptying pump (2)	✓	SV2
Tanks emptying pump (3)	✓	SV3
Tanks emptying pump (4)	✓	SV4
Workpiece presence photocell for loading area	✓	FT_PPC
Workpiece presence photocell for unloading area	✓	FT_PPS

★ = included in the basic model, ✓ = available on request, ✗ = not available