

Two-component mixing unit



innovative
intelligent

i4 Mixer

interactive
integrative

Mixing Solution

Questions for customers who use two-component paints:

- Are you discarding a lot of paint or cleaning thinner?
- Are you suffering from lower productivity due to time loss from preparation, cleaning or color changes?
- Is there any variation in the paint mixing ratio?
- Are you spending too much time on maintenance of pump and paint hose?

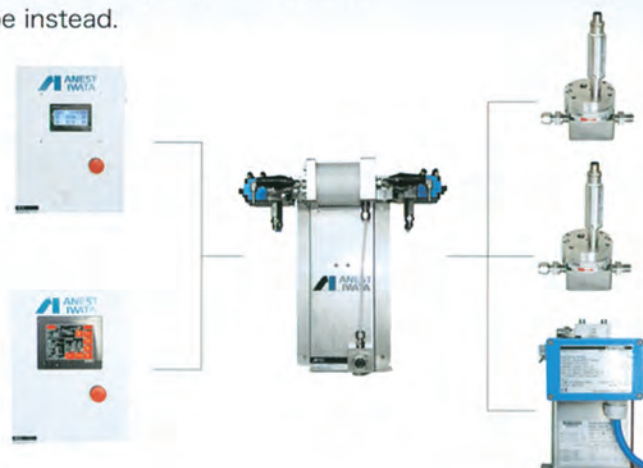
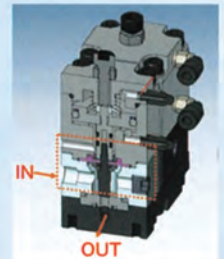
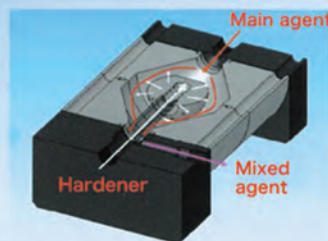
i4 Mixer always maintains a highly accurate mixing ratio, resulting in large cost reduction of labor and materials.

Features *i4 Mixer* can help solve customers' problems through the 4 'i's.

innovative

- Anest Iwata has developed its original new mixing unit called PRE-MIX (patent pending), whose mixing accuracy of two-component urethane paints has been improved to the highest possible standard.
- Can handle water-based paints(actual paint test is necessary)
- Built-in, newly developed control valve is light-weight, compact-sized, and highly durable, all without using packing.
- Can freely combine the control panel and flowmeter (choosing from among different models) in accordance with installation place and needs.

※Can select a unified type instead.



Mixing controller	Mixing unit	Flowmeter (for main agent)	Flowmeter (for hardener)
TEC-SC1 (standard type)	TEC-MU1	TEC-FM1 (standard type)	TEC-FM1 (standard type)
TEC-SC2 (high-performance type)		TEC-FM2 (Low-flow type)	TEC-FM2 (low-flow type)
		TEC-FM3 (super-low-flow type)	TEC-FM3 (super-low-flow type)

*We recommend super-low-flow type for metallic paints.

intelligent

- Multilingual controller to allow for simple and global operability. (Japanese/English/Chinese/Korean/Spanish)
- Can precisely control mixing ratio from 1 : 1 to 1 : 20.
- Can handle 40 kinds of recipes.
- Can load 50 inputs and 64 outputs (TEC-SC loads 36 inputs and 32 outputs)
- Can regulate up to 28 color changes (TEC-SC1 regulates 2 color changes)
- Built-in alarm warns of mixing problems (pot-life, mixing ratio, flow control, paint quantity below minimum level, leakage, clogging, etc.)



TEC-SC1

運転		ガン塗料	
運転中 (ワークNo.)	00000101	運転中 (ワークNo.)	00000101
主剤	00000001	主剤	00000001
硬化剤	00000001	硬化剤	00000001
混合比率	1:1	混合比率	1:1
流量	0.1/min	流量	0.1/min
混合比	0.999	混合比	0.999
流量	0.1/min	流量	0.1/min
混合比	0.999	混合比	0.999
タンク残量 (%)	100	タンク残量 (%)	100
主 機 型 番	00000001	主 機 型 番	00000001

TEC-SC2

interactive

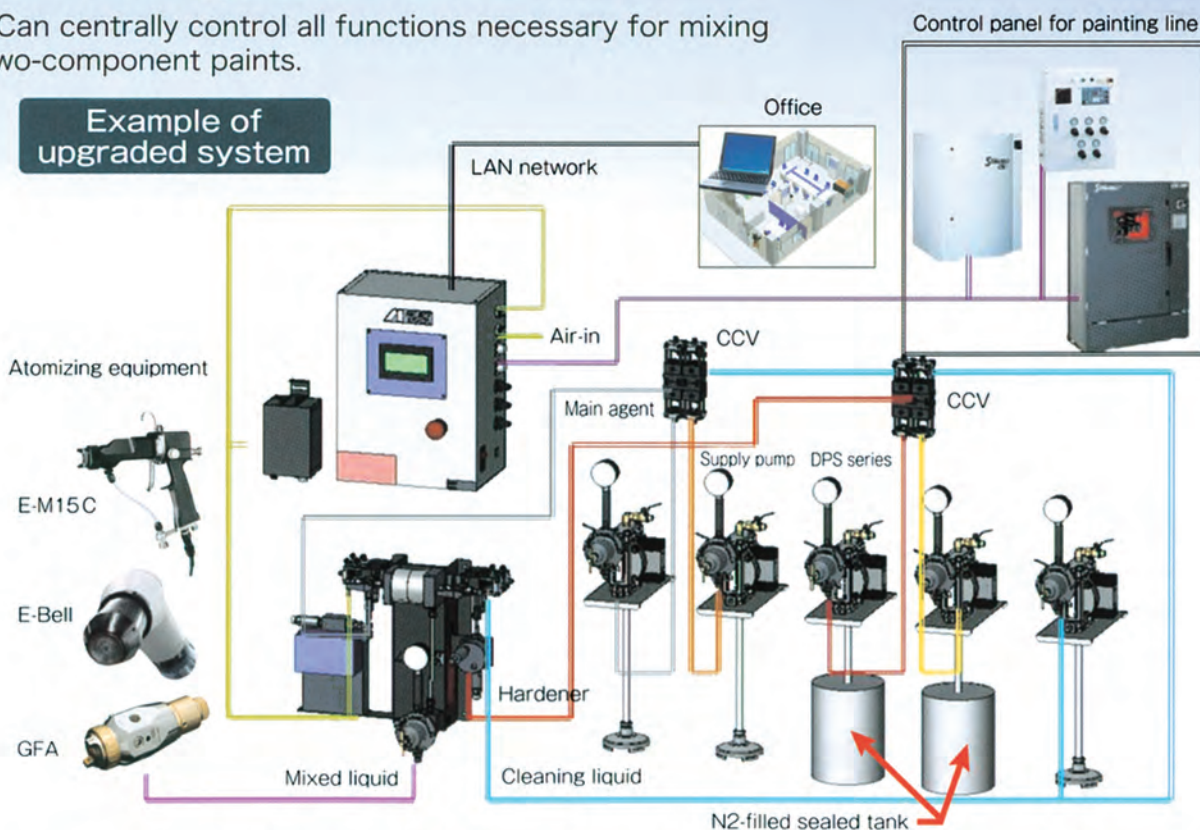
- Can control remote operation/monitoring/painting data by LAN on the internet.



integrative

- Can centrally control all functions necessary for mixing two-component paints.

Example of upgraded system



i4Mixer is an electronically controlled mixing device developed exclusively for two-component reactive hardening type polyurethane and acrylic urethane paints.
 i4 Mixer cannot be used with other two-component paints (unsaturated polyester paints, epoxy, etc.) due to the difference in mixing ratio and aging time after mixture

Mixing controller



Items	Specifications		Remarks
	TEC-SC1 (standard type)	TEC-SC2 (High-performance type)	
Applicable paints	Two-component polyurethane and acrylic urethane paints		
Mixing ratio	1:1 ~ 20:1		possible to freely set ratio
Mixing accuracy (%)	Within ± 5		
Supply air pressure (MPa)	0.4 ~ 0.7		
Multi-color capability	2 colors for main agent 2 colors for hardener	up to 28 colors	
Electric source voltage (V)	AC-100 ~ 240		Ten-key numeral input
Date input type	Touch-panel type		
Screen display	3.7inch (black and white)	5.7 inch (color)	Liquid crystal with backlighting
Memory of various conditions	Number of settable workpieces	6	40
	Number of mixed recipes	40	40
Number of I/O points	input 36	input 50	
	output 32	output 64	
Electric consumption (W)	150		
Ambient temperature (°C)	5 ~ 40 (no condensing)		
Ambient humidity (%RH)	35 ~ 85		
Dimensions W x H x D (mm)	350 x 450 x 200		
Mass (kg)	10		

Mixing unit



Items	TEC-MU1
	Specifications
Applicable paints	Two-component polyurethane and acrylic urethane paints
Supply air pressure (MPa)	0.5 ~ 0.7
Materials for wetted area	Stainless steel SUS303, POM PTFE, fluoro-rubber
Number of valves	4
Static mixer	12 elements x 2
Ambient temperature (°C)	5 ~ 40 (no condensing)
Ambient humidity (%RH)	35 ~ 85
Dimensions W x H x D (mm)	360 x 350 x 162
Mass (kg)	7.5

Flowmeter

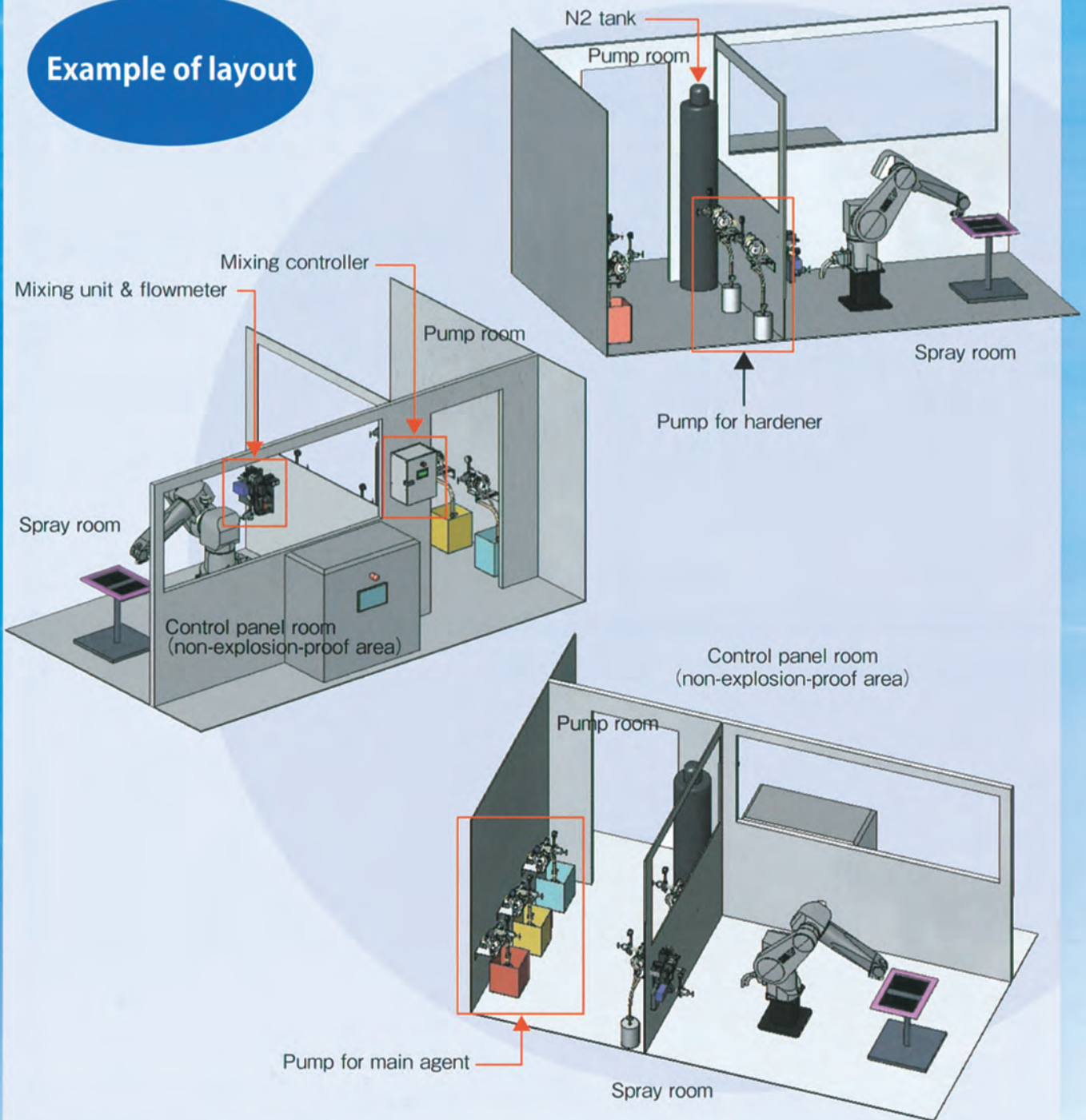


Enlarged view of vibration & detection section



Items	Specifications		
	TEC-FM1 (Standard type)	TEC-FM2 (Low-flow type)	TEC-FM3 (Super-low-flow type)
Body of flowmeter			
Type of flow	Positive displacement flowmeter	Coriolis flowmeter	
Measuring range (ml or g/min)	100 ~ 2,000	50 ~ 1,000	20 ~ 1,000
Measuring accuracy (%)	± 1.0	± 1.0	± 0.5
Repeatability(%)	± 5	± 5	± 0.1
Working pressure (Mpa)	20	20	30
Working temperature range (°C)	5 ~ 40 (no condensing)		
Material of body	Housing : stainless steel SUS316 Gears : stainless steel SUS321 Bearings : WC O ring : PTFE, NBR	Measuring pipe: stainless steel SUS904L Block : stainless steel SUS316 Housing : stainless steel SUS304	
Mass (kg)	740	760	2,000
Sensor section			
Output	NPN output (open connector)		
Number of pulses (p/Lit or kg)	8,800	30,000	100,000
Electric source voltage (V)	8 ~ 30		8 ~ 24
Working temperature range (°C)	5 ~ 40 (no condensing)		
Protection class	IP54		IP20

Example of layout



Basic performance

Basic operating functions

- Mixing, cleaning, color change, filling
- Control of various types of settable data (mixing ratio, cleaning time, pot-life, etc.)

Alarm functions

- Pot-life ● Mixing ratio ● Flow control ● When paint quantity goes below minimal level
- Leakage, clogging

External operating functions

- External operation for mixing, cleaning, color change, filling
(Automatic remote control is made possible through connection to integrated control panel for painting line)

Control functions

- Paint consumption ● Tank capacity ● Alarm log

Monitoring function from PC

- Mixing ratio, flow volume, remaining time of pot-life ● Alarm log ● Remote control from PC



Safety precautions

Pay attention to the following:

Products in this catalog are two-component paint mixing units. Be sure to contact us when you want to use them for application other than painting purposes.

Products in this catalog are supposed to be used in Japan. When you purchase them in Japan and try to export them overseas, first check that they comply with the domestic regulations and safety standards in each country before exporting.

Models, specifications and photos are subject to change without notice.



This catalog uses paper certified by the FSC to protect forested areas and also adopts the "printing without water" system, which uses vegetable ink mainly made of soy bean oil that does not generate poisonous waste liquid which contaminates water.



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