



TRUSTABLE
ECONOMICAL
INNOVATIVE



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COMPANY

- EFE EUROPE Boyama Kabinleri LTD. supplies its products from İLKE A.Ş. That is **first** and **biggest** professional painting and drying booth manufacturer, was established in **İzmir**, Turkey, in 1989.
- Current production is carried out in **9.000 m²** enclosed area, which is located in **15.000 m²** open land, continuing its production by using state of art technology CNC machinery systems and equipment for more than **27 years**.
- İLKE thousands of products has been established nearly everywhere in Turkey and more than 50 countries worldwide. By raising its exportation with the trust of being the first and the biggest company of its market, presently the company is exporting %50 of its production worldwide.



With it's 15000 m2 factory, latest tech advanced machinery park and over than 90 qualified staff, it's a big company proven in domestic and overseas market.

QUALITY ASSURANCE – CERTIFICATES



- EFE EUROPE providing the quality of it's products by having national and international quality certifications, provides perfect satisfaction by offering unique solutions to different consumer expectations.
- The products are manufactured to meet the CE markup.
- EFE believes that Quality can only be reached by continuous improvement of the process.



SPRAY BOOTHS



*Why are spray booths used?

- There are three critical reasons to use a spray booth.
- Reason 1: To supply a clear and no-dust environment conditioned specially for a perfect painting process.
- Reason 2: To operate in a controlled, internally clean-aired environment by removing the applied chemicals, which are harmful for health.
- Reason 3: To remove dangerous spray excess and volatiles by filtering them from surroundings and to prevent any kind of fire or explosion.



EFE EUROPE stands for **innovation**, top quality, intelligent technology and reliable service..

SPRAY BOOTHS



***Who needs a spray booth?**

- Are you waiting for hours for the paint to dry?
- Is your paint cost too much?
- Are your surfaces uneven after paint application?
- Is customer paint satisfaction and service quality important for you?
- Do you suffer from low productivity rates?
- Is there a deep smell of paint in your working environment?
- Is health of your employees important for you?
- Don't you want to have a contribution to prevent air pollution?

Briefly, if you want to have an excellent painting application with higher quality, lower cost in a shorter time you need a painting and drying spray booth.

SPRAY BOOTHS - Working Principle



Our one of references for tanks.

Definition

In the painting and drying booth, the surface is painted with a spray gun, afterwards flash off, drying and cooling phases are started. The air passes through several filters. The paint particles are separated by "Filtered Paint Stop Filter" from the air.

The Spray Booth is equipped with heating, fans and motor units in order to achieve the desired temperature and to ensure the multiple air changes in the painting and drying booth.



Our one of references.

Purpose

Purpose of Spray Booths provide a clean environment with suggested temperature for painting and drying by paint companies and provide a healthy environment to protect operators from solvent and similar harmful materials with a suggested air velocity which is determined by the paint producers according to the paint type.



Control Unit Technology

In ILKE Spray Booths, you will find a user friendly touch-screen, which will provide complete control of the spray booth, began to be used as a standard within products.

After user finishes the painting, user needs to press automatic start button and then whole process continues automatically according to the previously set temperature and time settings with the paint supervisor's password.

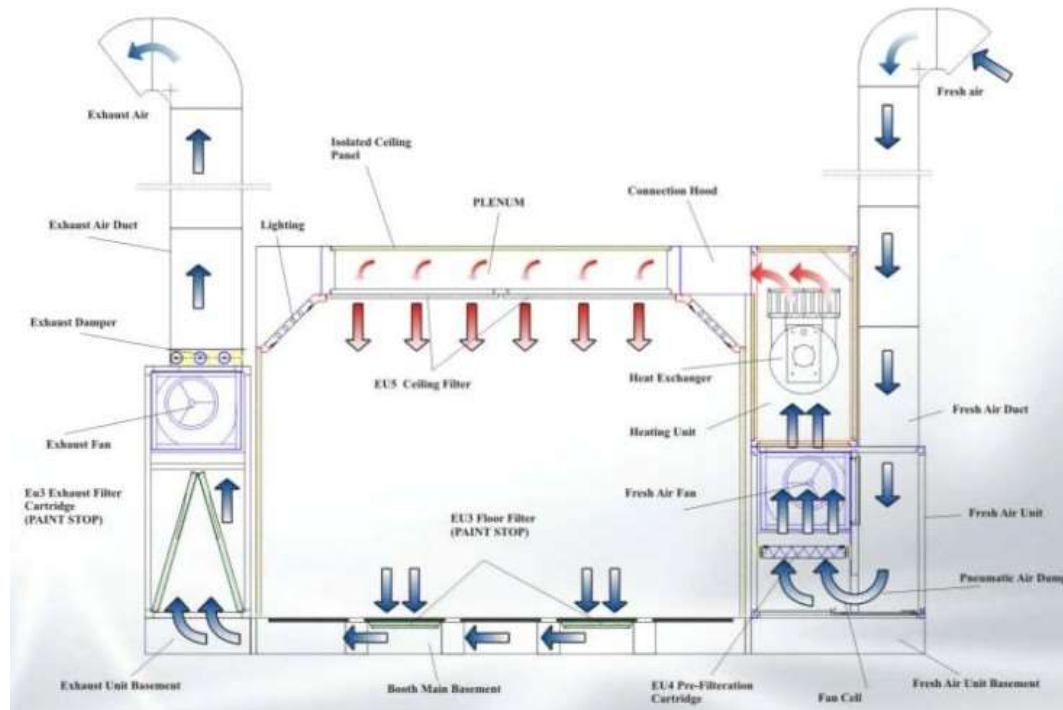
SPRAY BOOTHS - Working Principle

Painting Phase

At the painting moment, the fresh air which is shown with the blue arrows is absorbed from the fresh air absorption duct, meanwhile the fresh air unit damper is closed. The absorbed fresh air passes through the EU-4 pre-filter. The fresh air, will be heated by the heat exchanger and directed to plenum by fresh air fan. The heated air fills the plenum and the pressured air passes through the EU-5 ceiling filter and enters the cabin from the top. By the means of exhaust fan, the air mixed with the excess paint is absorbed from floor and passes through the EU-3 Paint-Stop filters, then transferred to exhaust unit. Afterwards the air is filtered again in the exhaust unit, and it will be thrown out through the exhaust duct.

Flash-Off Phase

After the painting, flash off phase with fresh air is started for removing volatiles before the drying phase to improve the paint quality.



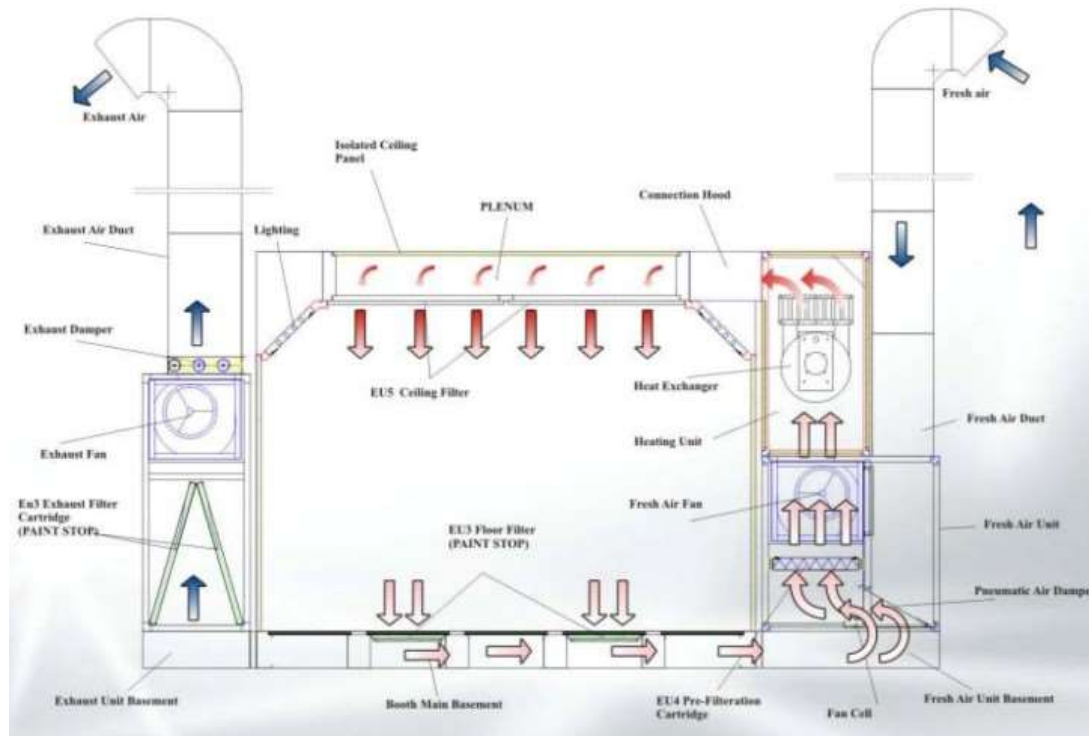
SPRAY BOOTHS - Working Principle

Drying Phase

During the drying phase, exhaust fan does not work, only the fresh air fan works in order to recirculate the hot air inside the booth and to throw out solvent by allowing the absorption of %10 fresh air (shown with blue arrows) from atmosphere. During drying phase, the fresh air damper is opened so that fresh air fan absorbs the heated air through the floor filters, takes %10 fresh air and re-directs the warm air to exchanger. The heated air by exchanger for the second time, will be sent to plenum and then from plenum to cabin. The solvent air which might occur in the cabin will be thrown out from the opened exhaust unit because of plus pressure inside the booth.

Cooling Phase

After drying a cooling phase is started.



PRODUCTS – Preparation Stations



Some of Our Preparation Station references.



Preparation Stations

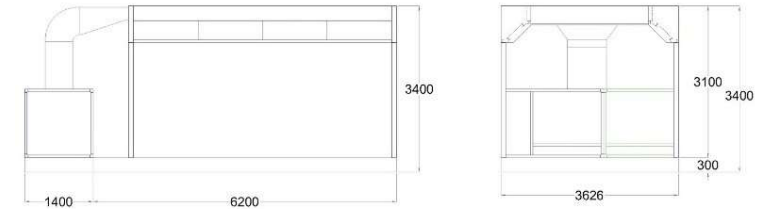
For assuring quality, the preparation must be done properly. FIRAT can provide the environment you need for the best surface quality.

With smartly designed preparation areas you can also repair small damages and paint small pieces of vehicles.

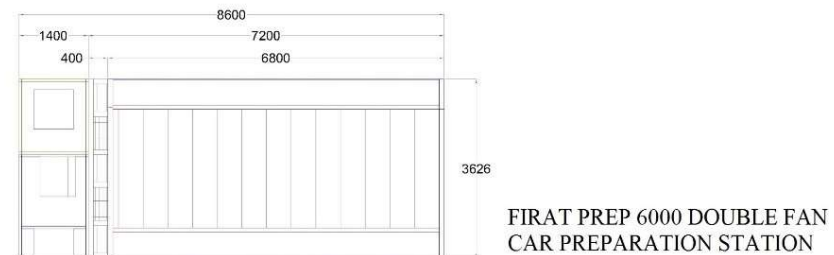
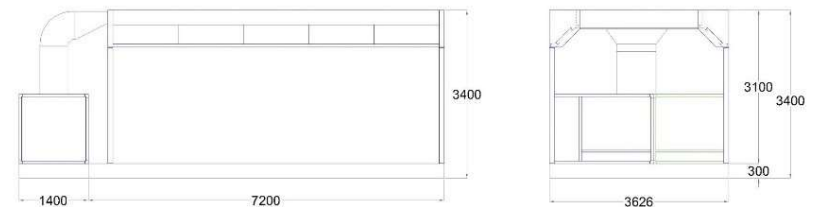
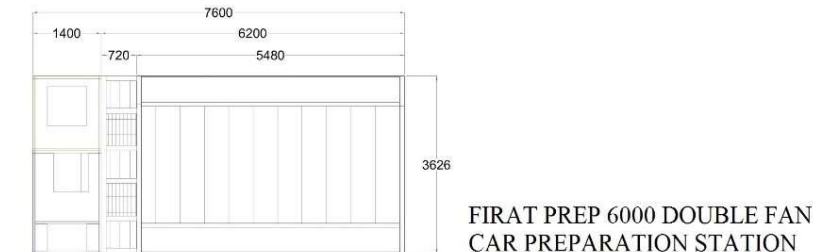
Prep Stations are available in full down draft or semi-down draft airflow configuration, with single-fan or double-fan designs.

PRODUCTS – Preparation Stations

PREPARATION STATION		PREP 6000	PREP 7000
		TECHNICAL DETAILS	TECHNICAL DETAILS
Internal Dimensions		6200(L) x 3626(W) x 2770(H) mm	7200(L) x 3626(W) x 2770(H) mm
External Dimensions		7600(L) x 3626(W) x 3400(H) mm (Units are included -- On back)	8600(L) x 3626(W) x 3400(H) mm (Units are included -- On back)
Entrance Door		NO	NO
Quantity of Entrance door leaf		NO	NO
Service Door		NO	NO
Lighting	Top Lighting	24 X 36 W	30 X 36 W
	Lower Lighting	NO	NO
Fresh Air and Heating Unit	Fan Motors	7,5 HP (5,5 KW)	7,5 HP (5,5 KW)
	Air Flow	18.000 m ³ /h -- ILKE Fan	18.000 m ³ /h -- ILKE Fan
	Burner	NO	NO
	Exchanger	NO	NO
	Max.Drying Temperature	-	-
Exhaust Unit	Fan Motors	10 HP (7,5 KW)	10 HP (7,5 KW)
	Air Flow	24.000 m ³ /h -- ILKE Fan	24.000 m ³ /h -- ILKE Fan
Floor Filter		EU3	EU3
Ceiling Filter		EU5	EU5
Grates		2 Lines Grates , 3 Lines Closed Plates	2 Lines Grates , 3 Lines Closed Plates
Max.Weight		500 kg/ tire	500 kg/ tire
Metal Basement		300mm	300mm
Plenum		300mm	300mm
Max.Electric Power		15 KW	15 KW
Panel	Power	380 volt	380 volt
	Command	24 volt	24 volt
Chimneys		Belong to the customer!!!	Belong to the customer!!!



FIRAT PREP 6000 DOUBLE FAN
CAR PREPARATION STATION



FIRAT PREP 6000 DOUBLE FAN
CAR PREPARATION STATION

PRODUCTS – Automobile Spray Booths



The SBK Model is our economical-class product



The FBK Model is our standard product

The economical-class product
 Highly Efficient Spray Booth
 Decreased Energy Consumption
 Improved Environmental Health

Car Spray Booth

Your health is worthy for us, we highly esteem your well-being. Special air filters for completely purified atmosphere from dust.

With its air recirculation system and intelligent control software, you can benefit higher efficiency rates and easy energy management, which are the key components for reducing operating costs.

FIRAT can provide the ideal temperature for painting and drying with its in-house production stainless steel heat exchanger.



Our one of references.



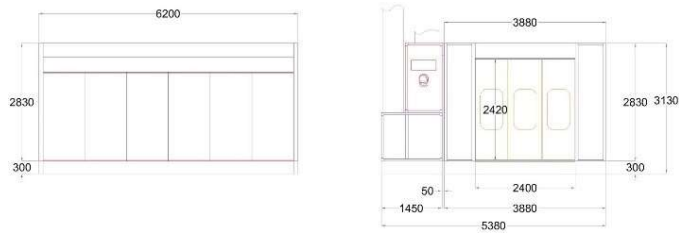
PRODUCTS – Automobile Spray Booths

PAINTING AND DRYING BOOTH		Model: SBK 6000 AUTO	Model: SBK 7000 AUTO	Model: FBK 6000 AUTO - 18.000 m3/h	Model: FBK 7000 AUTO - 18.000 m3/h
Internal Dimensions		6000(L) x 3800(W) x 2500(H) mm	7000(L) x 3800(W) x 2500(H) mm	6000(L) x 4000(W) x 2650(H) mm	7000(L) x 4000(W) x 2650(H) mm
External Dimensions		6200(L) x 3880(W) x 3130(H) mm (Units are excluded)	7200(L) x 3880(W) x 3130(H) mm (Units are excluded)	6200(L) x 4080(W) x 3400(H) mm (Units are excluded)	7200(L) x 4080(W) x 3400(H) mm (Units are excluded)
Entrance Door		2400 (W) x 2420 (H) mm	2400 (W) x 2420 (H) mm	3080 (W) x 2590 (H) mm	3080 (W) x 2590 (H) mm
Quantity of Entrance door leaf		3 PCS	3 PCS	4 PCS	4 PCS
Service Door		NO	NO	800 (W) x 2127 (H)	800 (W) x 2127 (H)
Lighting	Top Lighting	24 x 36 W	30 X 36 W	32 X 36 W	40 X 36 W
	Lower Lighting	No	No	No	No
Fresh Air and Heating Units	Fan Motors	7,5 HP (5,5 KW)	7,5 HP (5,5 KW)	7,5 HP (5,5 KW)	7,5 HP (5,5 KW)
	Air Flow	18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan
	Burner	150.000 Kcal/h - Diesel burner	150.000 Kcal/h - Diesel burner	150.000 Kcal/h - Diesel burner	200.000 Kcal/h - Diesel burner
	Exchanger	1200mm	1200mm	1200mm	1200mm
Exhaust Unit	Max.Drying Temperature	60°C / 80°C	60°C / 80°C	60°C / 80°C	60°C / 80°C
	Fan Motors	5,5 HP (4 KW)	5,5 HP (4 KW)	7,5 HP (5,5 KW)	7,5 HP (5,5 KW)
Air Flow		18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan	18.000 m3/h - ILKE Fan
Floor Filter		EU3	EU3	EU3	EU3
Pre Filter		EU4	EU4	EU4	EU4
Ceiling Filter		EU5	EU5	EU5	EU5
Grates		2 lines grates , 3 lines flat sheet	2 lines grates , 3 lines flat sheet	2 lines grates , 3 lines flat sheet	2 lines grates , 3 lines flat sheet
Max.Weight		500 kg/ tire	500 kg/ Wheel	500 kg/ Wheel	500 kg/ Wheel
Metal Basement		300mm	300mm	300mm	300mm
Standard Ramp		2 Pcs	2 Pcs	2 Pcs	2 Pcs
Plenum		300mm	300mm	400mm	400mm
Max.Electric Power		15 KW	15 KW	15 KW	15 KW
Panel Electric Voltage	Power	380 volt	380 volt	380 volt	380 volt
	Command	24 volt	24 volt	24 volt	24 volt
Chimneys		Belong to the customer!!!	Belong to the customer!!!	Belong to the customer!!!	Belong to the customer!!!
Unit Dimensions (L x W x H), mm	Fresh Air Unit	1470 x 1450 x 1160	1470 x 1450 x 1160	1470 x 1450 x 1430	1470 x 1450 x 1430
	Exchanger Unit	1470 x 880 x 1670	1470 x 880 x 1670	1470 x 880 x 1670	1470 x 880 x 1670
	Exhaust Unit	1370 x 880 x 2080	1370 x 880 x 2080	1370 x 880 x 2080	1370 x 880 x 2080
NATURAL GAS BURNER		OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
WITHOUT HEATING UNIT (BURNER & EXCHANGEUR)		OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
WITHOUT ONLY BURNER		OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
SIDE LIGHTING (HORIZONTAL)		N/A	N/A	OPTIONAL	OPTIONAL
SIDE LIGHTING (VERTICAL)		N/A	N/A	OPTIONAL	OPTIONAL
FULL GRATED (EXTRACTION FROM ONLY 2 LINE OF GRATES!!!)		N/A	N/A	OPTIONAL	OPTIONAL
ONE SIDE EXTRACTION (WITHOUT METAL BASEMENT)		N/A	N/A	OPTIONAL	OPTIONAL
DOUBLE SIDE EXTRACTION (WITHOUT METAL BASEMENT)		N/A	N/A	OPTIONAL	OPTIONAL
INTERIOR SELF RAMP (METAL BASEMENT 300mm)		N/A	N/A	OPTIONAL	OPTIONAL
MOBILE RAMP (METAL BASEMENT 400mm)		N/A	N/A	OPTIONAL	OPTIONAL
WITHOUT METAL BASEMENT (WITH ONE LINE TUNNEL)		OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
INVERTOR		N/A	N/A	OPTIONAL	OPTIONAL
SOFT STARTER		N/A	N/A	OPTIONAL	OPTIONAL
EXIT DOOR		N/A	N/A	OPTIONAL	OPTIONAL

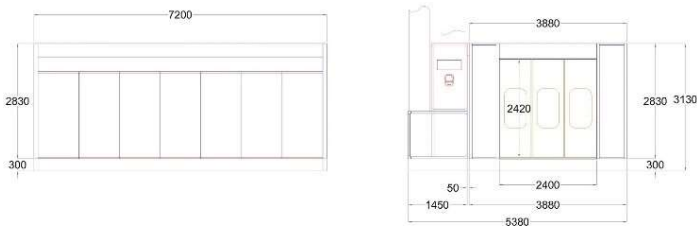
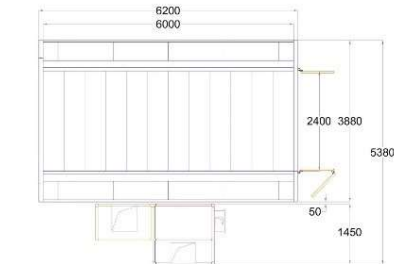


Our some of references.

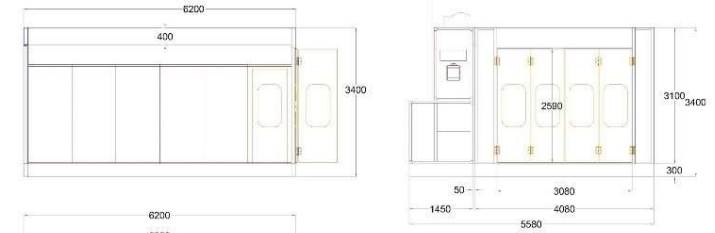
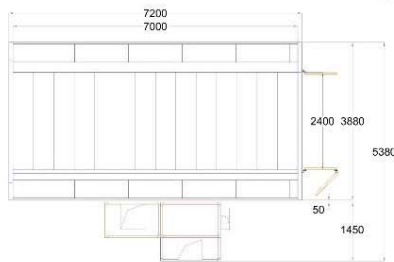
PRODUCTS – Automobile Spray Booths



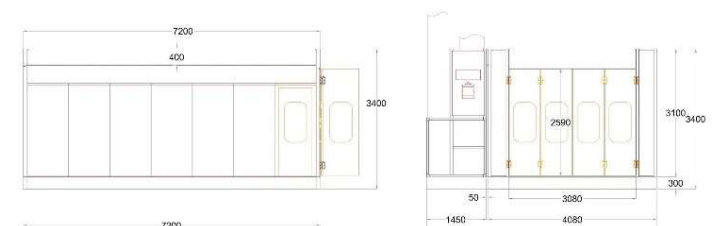
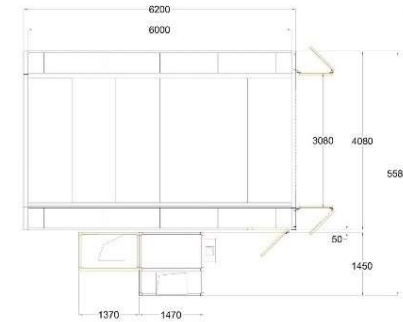
FIRAT SMYRNA 6000
CAR SPRAYBOOTH



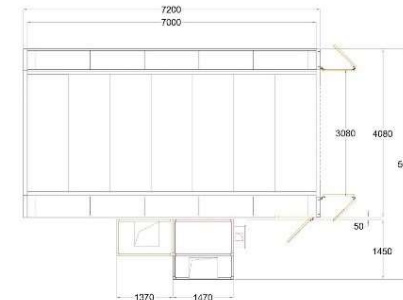
FIRAT SMYRNA 7000
CAR SPRAYBOOTH



FIRAT FBK 6000
CAR SPRAYBOOTH



FIRAT FBK 7000
CAR SPRAYBOOTH



PRODUCTS- Minibus Spray Booths



Our some of Minibus references.

Minibus Spray Booth

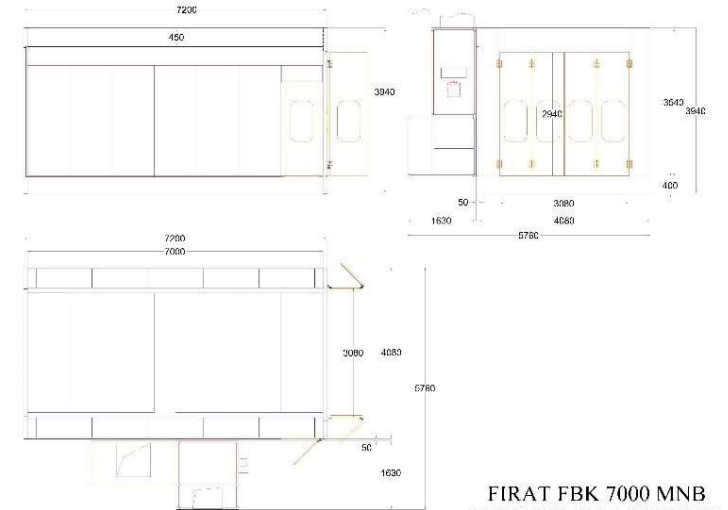
FIRAT provide you improved technology for highly creative solutions with heat resistant equipment and high quality fans with low noise level.

The are two standard model for minibus which are FBK-MNB 7000 and FBK-MNB 8000.

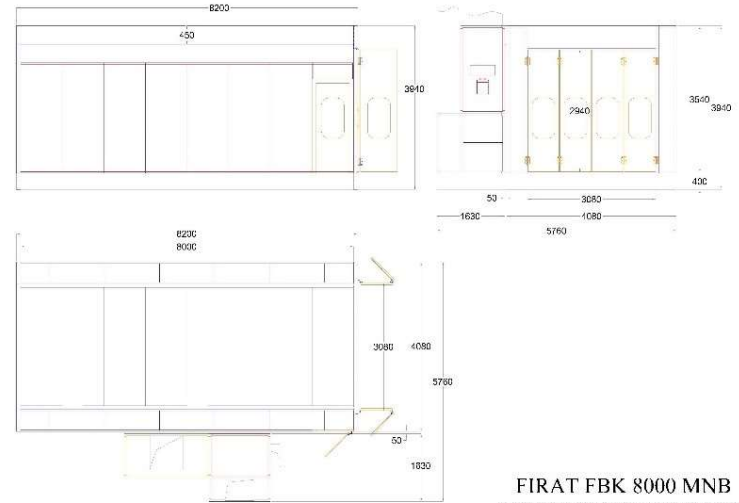
FBK-MNB series spray booth is designed to fulfil the requirements for the refinishing of Minibuses. The design and layout can be tailored to customer requirements in terms of extraction, access doors, unit positions and internal dimensions.

PRODUCTS – Minibus Spray Booths

MINIBUS SPRAY BOOTH		FBK 7000 MNB	FBK 8000 MNB
		TECHNICAL DETAILS	TECHNICAL DETAILS
Internal Dimensions		7000(L) x 4000(W) x 3065(H) mm	8000(L) x 4000(W) x 3065(H) mm
External Dimensions		7200(L) x 4080(W) x 3940(H) mm (Units are excluded)	8200(L) x 4080(W) x 3940(H) mm (Units are excluded)
Entrance Door		3080 (W) x 2940 (H) mm	3080 (W) x 2940 (H) mm
Quantity of Entrance door leaf		4 PCS	4 PCS
Service Door		800 (W) x 2127 (H) mm	800 (W) x 2127 (H) mm
Lighting	Top Lighting	40 x 36 W	40 x 36 W
	Lower Lighting	NO	NO
Fresh Air and Heating Units	Fan Motors	10 HP (7,5 KW)	10 HP (7,5 KW)
	Air Flow	24.000 m3/h -- ILKE Fan	24.000 m3/h -- ILKE Fan
	Burner	200.000 Kcal/h -- Diesel burner	200.000 Kcal/h -- Diesel burner
	Exchanger	1200 mm	1200 mm
	Max.Drying Temperature	60°C / 80°C	60°C / 80°C
Exhaust Unit	Fan Motors	10 HP (7,5 KW)	10 HP (7,5 KW)
	Air Flow	24.000 m3/h -- ILKE Fan	24.000 m3/h -- ILKE Fan
Floor Filter		EU3	EU3
Ceiling Filter		EU5	EU5
Grates		2 Lines Grates , 3 Lines Closed Plates	2 Lines Grates , 3 Lines Closed Plates
Max.Weight		650 kg/ tire	650 kg/ tire
Metal Basement		400mm	400mm
Plenum		450mm	450mm
Max.Electric Power		20 KW	20 KW
Panel Electric	Power	380 volt	380 volt
	Command	24 volt	24 volt
Chimneys		Belong to the customer!!!	Belong to the customer!!!



FIRAT FBK 7000 MNB
MINIBUS SPRAYBOOTH



FIRAT FBK 8000 MNB
MINIBUS SPRAYBOOTH

PRODUCTS- Commercial Vehicle Spray Booths



Commercial Vehicle Spray Booth

EFE EUROPE has enhanced the design of our large size spray booths for Commercial Vehicle.



Our some of Commercial references.

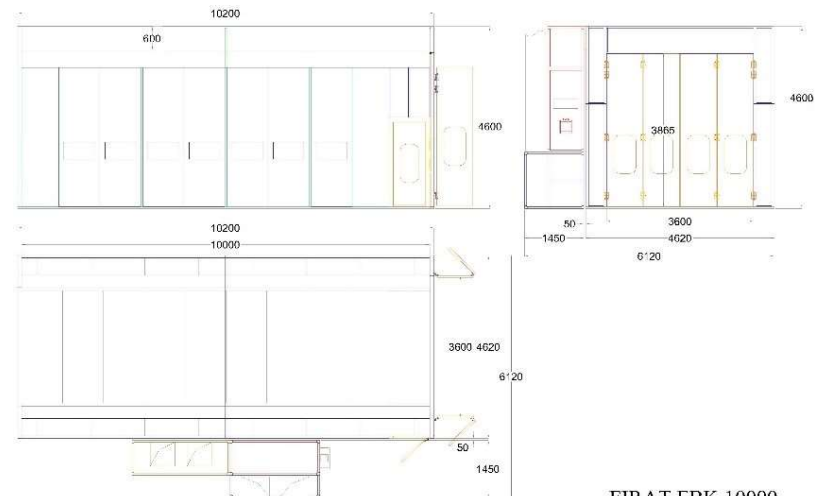
Completely under control
Easy reassembling, portable design
without weld...

PRODUCTS- Commercial Vehicle Spray Booths

COMMERCIAL VEHICLE SPRAY BOOTH		FBK 9000	FBK 10000
		TECHNICAL DETAILS	TECHNICAL DETAILS
Internal Dimensions		9000(L) x 4500(W) x 3970(H) mm	10.000(L) x 4500(W) x 3970(H) mm
External Dimensions		9200(L) x 4620(W) x 4600(H) mm (Units are excluded)	10.200(L) x 4620(W) x 4600(H) mm (Units are excluded)
Entrance Door		3600 (W) x 3850 (H) mm	3600 (W) x 3850 (H) mm
Quantity of Entrance door leaf		4 PCS	4 PCS
Service Door		800 (W) x 2127 (H) mm	800 (W) x 2127 (H) mm
Lighting	Top Lighting	48 X 36 W	56 X 36 W
	Lower Lighting	42 X 18 W	48 X 18 W
Fresh Air and Heating Units	Fan Motors	2 x 7,5 HP (2 x 5,5 KW)	2 x 7,5 HP (2 x 5,5 KW)
	Air Flow	36.000 m3/h -- ILKE Fan	36.000 m3/h -- ILKE Fan
	Burner	250.000 Kcal/h -- Diesel burner	250.000 Kcal/h -- Diesel burner
	Exchanger	1200 mm	1200 mm
	Max.Drying Temperature	60°C / 80°C	60°C / 80°C
Exhaust Unit	Fan Motors	2 x 7,5 HP (2 x 5,5 KW)	2 x 7,5 HP (2 x 5,5 KW)
	Air Flow	36.000 m3/h -- ILKE Fan	36.000 m3/h -- ILKE Fan
Floor Filter		EU3	EU3
Ceiling Filter		EU5	EU5
Grates		1 Line Grates (Concrete Excavation project will be made.)	1 Line Grates (Concrete Excavation project will be made.)
Max.Weight		Without Metal Basement (With Tunnel)	Without Metal Basement (With Tunnel)
Metal Basement		NO	NO
Plenum		600mm	600mm
Max.Electric Power		30 KW	30 KW
Panel	Power	380 volt	380 volt
	Command	24 volt	24 volt
Chimneys		Belong to the customer!!!	Belong to the customer!!!

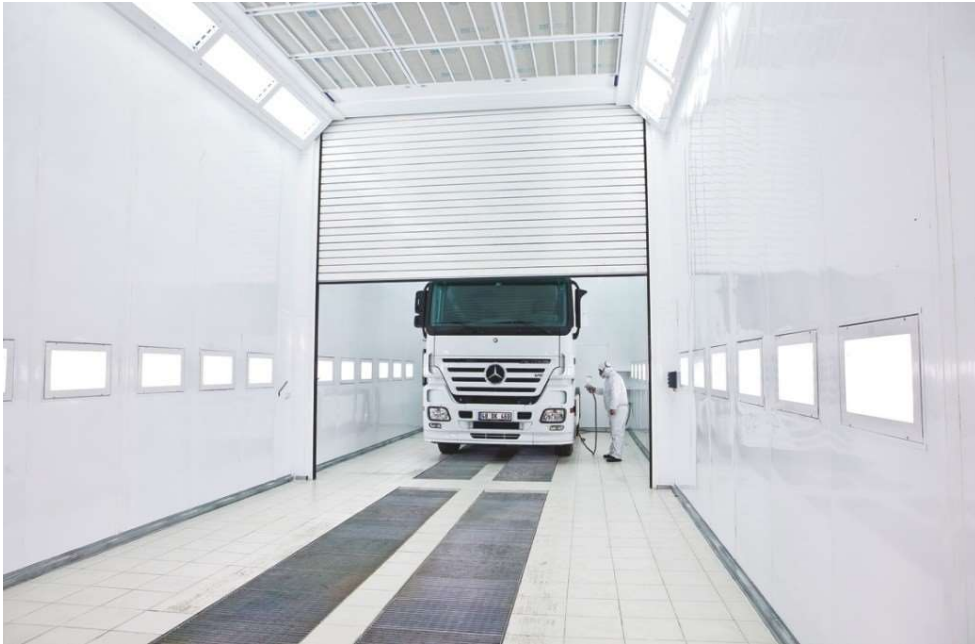


FIRAT FBK 9000
COMMERCIAL VEHICLE
SPRAYBOOTH



FIRAT FBK 10000
COMMERCIAL VEHICLE
SPRAYBOOTH

PRODUCTS- Bus Spray Booths

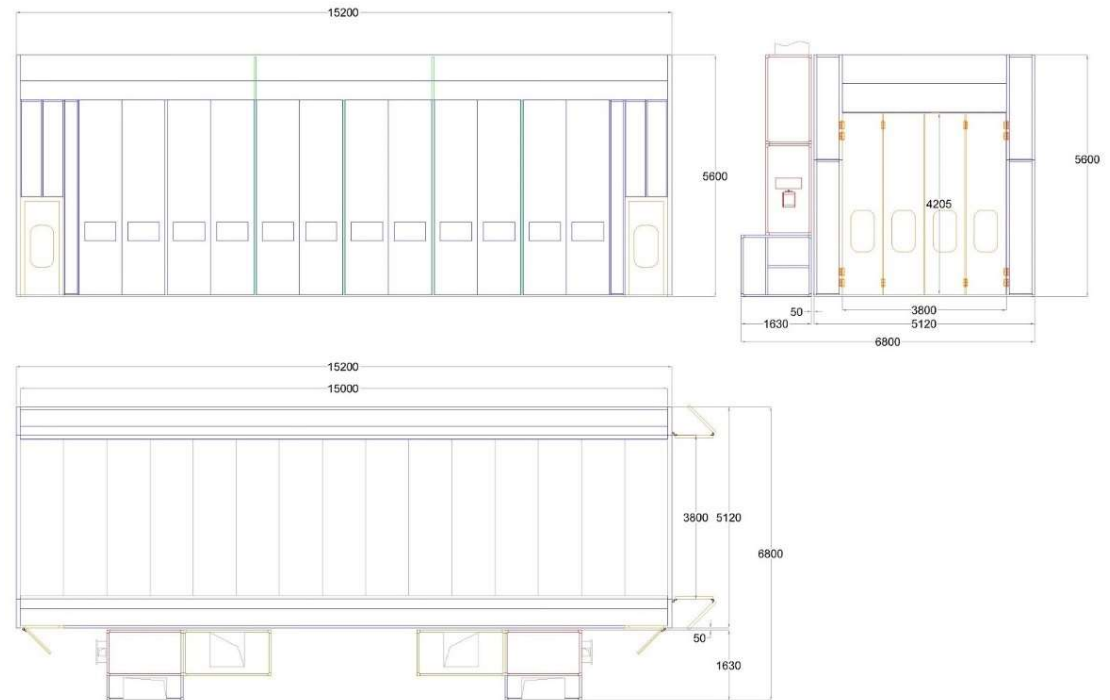


Bus Spray Booth

EFE EUROPE has enhanced the design of the large size spray booths for Buses.

PRODUCTS- Bus Spray Booths

BUS SPRAY BOOTH		FBK 15000 BUS
		TECHNICAL DETAILS
Internal Dimensions		15.000(L) x 5000(W) x 4970(H) mm
External Dimensions		15.200(L) x 5120(W) x 5600(H) mm (Units are excluded)
Entrance Door		3800 (W) x 4200 (H) mm
Quantity of Entrance door leaf		4 PCS
Service Door		800 (W) x 2127 (H) mm x 2 Pieces
Lighting	Top Lighting	88 X 36 W
	Lower Lighting	72 X 18 W
Fresh Air and Heating Unit	Fan Motors	2 x 10 HP (7,5 KW)
	Air Flow	48.000 m ³ /h -- ILKE Fan
	Burner	2 x 250.000 Kcal/h -- Diesel burner
	Exchanger	1200 mm
	Max.Drying Temperature	60°C / 80°C
Exhaust Unit	Fan Motors	2 x 10 HP (7,5 KW)
	Air Flow	48.000 m ³ /h -- ILKE Fan
Floor Filter		EU3
Ceiling Filter		EU5
Grates		1 Line Grates (Concrete Excavation project will be made.)
Max.Weight		Without Metal Basement (With Tunnel)
Metal Basement		NO
Plenum		600mm
Max.Electric Power		45 KW
Panel Electric	Power	380 volt
	Command	24 volt
Chimneys		Belong to the customer!!!



FIRAT FBK 15000 - 48000 m³/h
BUS & TRUCK SPRAYBOOTH

PRODUCTS - Custom Spray Booths



Special Spray Booth with Painting Robots



Furniture Painting and Drying Booth



Cartoon Filtered Positive Pressured Painting Booth

**The images and drawings of Custom Booths are for illustration purposes only, and do not necessarily represent the exact products. Manufacturer has a right to change the product specifications at any time without any prior notice. Please ask for a quotation for exact and up-to-date specifications.*

PRODUCTS - Custom Spray Booths



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PRODUCTS - Custom Spray Booths



Painting and Drying Booth with Crane



Special Painting and Drying Booth, Special Preparation Station and Sandblasting Booth for Trailer

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PRODUCTS-Custom Spray Booths



Furniture Painting and Drying Booth



Box Oven Screen



Box Oven

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