

TELEFAX

WAGNER

to: **Mr. Niels Ole Larsen**
WA Spraytech Scandinavia A/S · DK – 2605 Brøndby

Fax:

Copy to: Mr. Krucker (already distributed)

from: **Mr. Hans Giesinger**
J. WAGNER GmbH · Otto-Lilienthal-Str. 18 · 88677 Markdorf
Fax: 07544 / 505 173

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2000-05-26

Offer No. WA 518/00/Pumac 20017/FBC
Your project PUMAC

Dear Mr. Larsen,

thank you for your inquiry per e-mail dd. 23.05.00.

Enclosed you will find our offer for a a powder coating plant with FBC booth system and application equipment for above mentioned customer.

We hope our proposal is of interest to you.

In case there are any questions left please do not hesitate to contact us.

Best regards,

J. WAGNER GmbH
Division Systems

Alfred Reichel

i.A. Hans Giesinger

Encl.

OFFER No. WA 518/00

In accordance with our General Conditions of delivery and payment we offer as follows:

Item 01 1 Compact Plastic Booth (Type 02) FBC-16000 with Mono Cyclone Recovery System

consisting of:

- 2 Front elements, neutral, L = 1500 mm
- 2 Front elements with 2 slots, L = 1500 mm
- 1 Front element, neutral, L = 2000 mm
- 1 Front element with 1 door and lamp opening, L = 2000 mm
- 4 Roof elements, L = 1500 mm
- 2 Roof elements, L = 2000 mm
- 2 Pairs of sliding doors, manually driven
- 1 Inlet side element bottom with suction head to recover powder from the belt
- 1 Booth lamp, vertical
- 1 Mono cyclone with after filter, exhaust air channel, calming chamber, sieving chamber, noise dampener
- 1 Control cabinet el. + pneum. for ventilator

Technical data:

Air capacity cyclone	16000 m ³ /h
Amount after filter	1
Air consumption	approx. 5 Nm ³ /h
Air pressure	6 - 8 bar
Remaining water in the air	max. 1,3 g/Nm ³
Remaining oil in the air	max. 0,01 mg/Nm ³
Filter surface	1 x 150 m ²
Electric connection	30 kW
Colour	recovery system RAL 9010 booth grey / white
Booth material	PVC

Item 01.1 1 Peristaltic Powder Conveyor compl.

for the dust-free feeding of recovered powder with the help of a pinch valve to the powder container (e.g. powder centre).

All powders such as epoxy, polyester or tribo suited powders can be utilised.

Technical data:

Capacity	max. 35 l
Inlet air pressure	max. 6 bar
Compressed air consumption	approx. 3.5 Nm ³ /h
Control cabinet	24 V, 50 Hz, 25 W, IP 55
Powder output	75 - 80 kg/h, depending on powder
Feeding distance	max. 12 m
Feeding height	max. 1.5 m

Item 01.2 1 Powder Extraction Belt for Booth Length 5000 mm

The powder which is sprayed past the work piece is either removed directly from the booth by the multi cyclone or carried to the powder recovery equipment by the powder extraction belt. The powder collected and sieved in the sieve trolley is then return to the circuit.

Technical data:

Length	Booth length + 800 mm
Width	1660 mm
Material	Plastic (Urethane), reinforced with polyester
Voltage	230/400 V
Frequency	50 Hz
electr. performance	0,3 / 0,6 kW
Rpm	3,9 / 8 U/min
Protection	IP 54
Belt speed	v ₁ = 1 m/min
(adjustable)	v ₂ = 2 m/min
Air consumption (6 bar)	ca. 1200 l/min
Suction capacity (6 bar)	ca. 20 m ³ /h (Transvector set)

Item 01.3 1 Comfort Powder Centre

consisting of:

- 1 Recovery system with 4000 m³/h suction capacity
- 1 Electrical unit with suction and fluidizing system
- 1 Fresh powder dosing system
- 2 Vibration tables to take the powder box or the powder container
- 1 Fresh powder pump with powder hose and blow-off unit
- 1 Electrical and pneumatic control unit
- 1 Integrated blow-off system for peristaltic pump
- 11 Suction systems complete with powder injector PJ 2020 PRS
- 1 Powder hopper, round, fluidized

The powder separated from the cyclone and returned from the peristaltic pump is fed into a powder container or in the original box. From this container the guns are being supplied through suction systems.

Into the powder centre there is a fresh powder dosing system integrated.

The entire system is housed in a case with suction unit and filter separation which ensures a virtually dust-free operation of the powder centre.

Technical data:

Dimensions	W = 1740 mm (incl. control box) H = 2250 mm D = 1500 mm
Volume of powder (in plastic container)	approx. 40 l
Amount of injectors	9
Powder control	minimum level control
Mains supply	230/400 V
Frequency	50 Hz
Motor capacity	2.3 kW
Ventilator	2,2 kW
Vibration motor capacity	95 W
Protection class	IP 54 / IP 55
Air pressure	6 to 8 bar
Suction capacity	4000 m ³ /h
Filter surface	30 m ²
Amount of filter	3

Technical data PJ 2020 PRS:

Diameter of powder conn.	11 mm
Diameter of air connection	NW 6
Pressed air quantity at 3,5 bar	max. 6 Nm ³ /h
Air pressure	max. 6 bar
Powder capacity	approx. 50 - 300 g/min

Item 01.4 1 Powder Hose Cleaning Device

consisting of:

- 2 Fittings with quick coupling for hose
- 2 Electric drives
- 2 5-pack stopper (vertically)

This unit is to clean the powder hoses between the peristaltic conveyor and the powder centre. To enhance the normal cleaning foam stoppers are blown through with compressed air.

Item 02 1 Application Equipment Corona**Item 02.1 Switch and Control Cabinet**

consisting of:

- 1 Main switch cabinet HS 200
- 10 Gun control units C2 with high voltage generator HVM 2072 S and pneumatic module AFC+PM101
- 1 Programming module touch screen
- 1 Gap and depth,high control
- 2 Sliding axis modules VT 211
- 1 Connection cable set, 15 m
- 1 Connection cable set, 25 m
- 2 Powder level controls minimum/maximum
- 2 Gun connection boxes PA 4
- 2 Gun connection boxes PA 2

Technical data:

Protection class	IP 54
Dimensions	800 x 500 x 2000 mm per line
Varnish	RAL 9010 (pure white)

Item 02.2**Movement Units**

consisting of:

- 2 Short stroke reciprocators KHG 350 with approx. 100 - 350 mm working stroke
- 10 Gun brackets for 1 gun bar square 40
- 2 Hose guiding units vertical

Technical Data:

Max. load		8 guns
Electrical supply		220/380 V
Protection class		IP 54
Working stroke		approx. mm
Colour	tower	RAL 1023 (yellow)
	pedestal	RAL 7037 (grey)

- 2 Electromechanical sliding axis ZW 900 without potentiometer, to move your reciprocators and guns out from the booth slot for automatic outside cleaning of guns

Technical Data:

Speed	3 m/min
Max. load	700 kg
Power motor	90 W
Electrical supply	220/380 V, 50 Hz
Temperature	0° - 40° C
Protection class	IP 54
Working stroke	up to 900 mm
Weight	102 kg
Total length	1718 mm

- 2 Flexible energy chains for sliding axis ZW 900

Item 02.3 Application System Automatic

consisting of:

- 10 Automatic powder guns PEA-C2 XL (1,1) for easy outside cleaning
- 10 Electric cables, 5 m, shielded
- 10 Sets of flat and round jet nozzles
- 10 Sets of powder and air hoses

The high tension part which is built in the spray system is connected to the control module by a thin flexible low tension cable. The powder cloud is adjusted from the switch and control unit by modular technique.

The spray systems are built on reciprocators or on swivelling supports on stands. The pneumatic control module regulates the powder transport and powder dosing in the switch and control board.

Technical Data PEA-C2 XL:

Length	1100 mm
Weight	1500 g
Input voltage	max. 22 Vpp
Input current	max. 0,9 A
Frequency	19...30 kHz
Output voltage	max. 100 kV DC
Output current	max. 200 µA DC
Polarity	negative or (positive)
Protection	IP 54
Input air pressure	max. 3 bar
Powder flow rate	max. 450 g/min
Air consumption including feed, dosage and atomizing air	ca. 7...8 m³/h

The powder injector has to supply powder coating material to a powder spray system.

This system combines 3 inputs for fluidised powder, dosage air and feed air with one output for powder-air-mixture.

The main function of the injector is a Venturi suction system consisting of nozzles

Item 02.4 Manual Powder Spray Set

consisting of:

- 1 Manual powder gun PEM-C2 with integrated power packs
- 1 Control unit EPG 2007 with wall bracket
- 1 Set of flat and round jet nozzles
- 1 Set of powder and air hoses

Technical Data PEM-C2:

Length	400 mm
Weight	498 g
Input voltage	max. 22 Vpp
Input current	max. 0,9 A
Output voltage	max. 100 kV DC
Output current	max. 200 µA DC
Polarity	negative
Protection	IP 54
Input air pressure	max. 5,5 bar
Powder flow rate	max. 450 g/min at 4 bar
Air consumption	approx. 10 m ³ /h

Item 02.5 Assembly Material

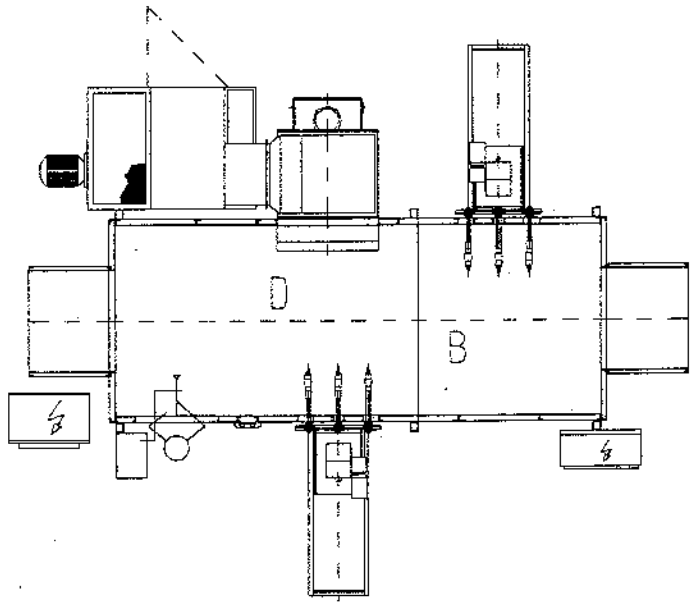
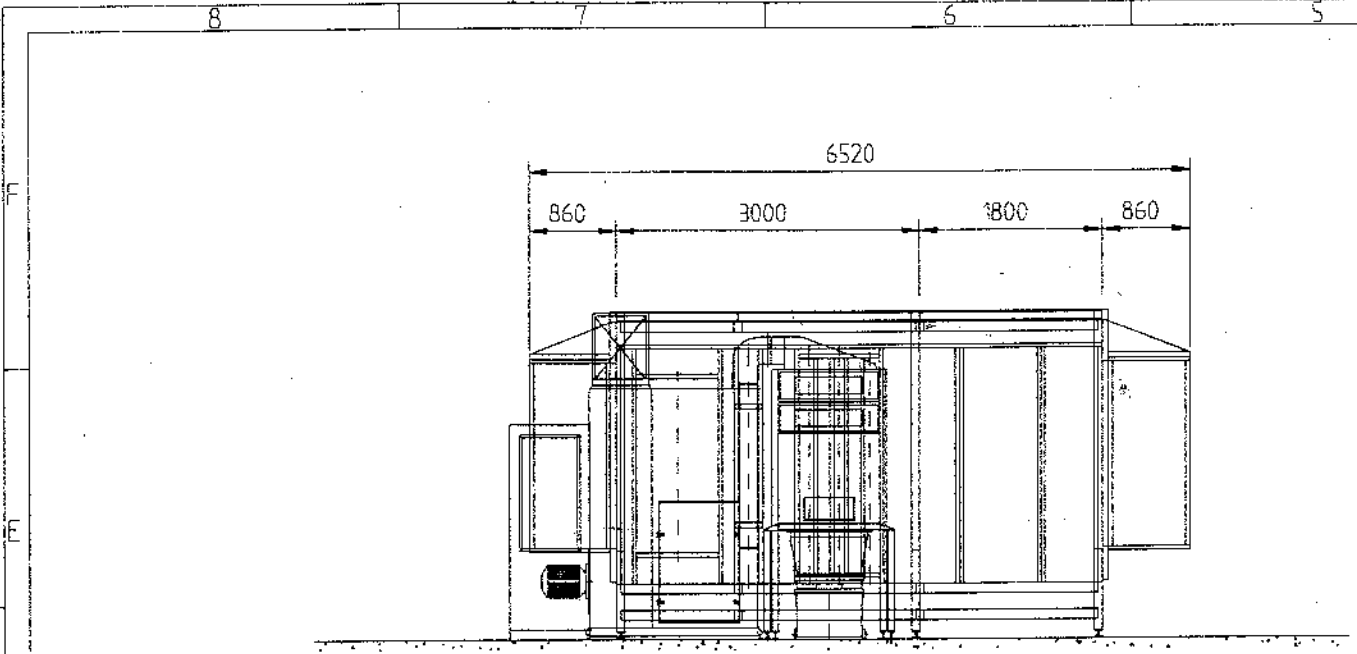
- 1 Set of connecting material, electric cables, cable ducts, distribution boxes

Item 03 Supervisory Assembly and Commissioning for Line 1

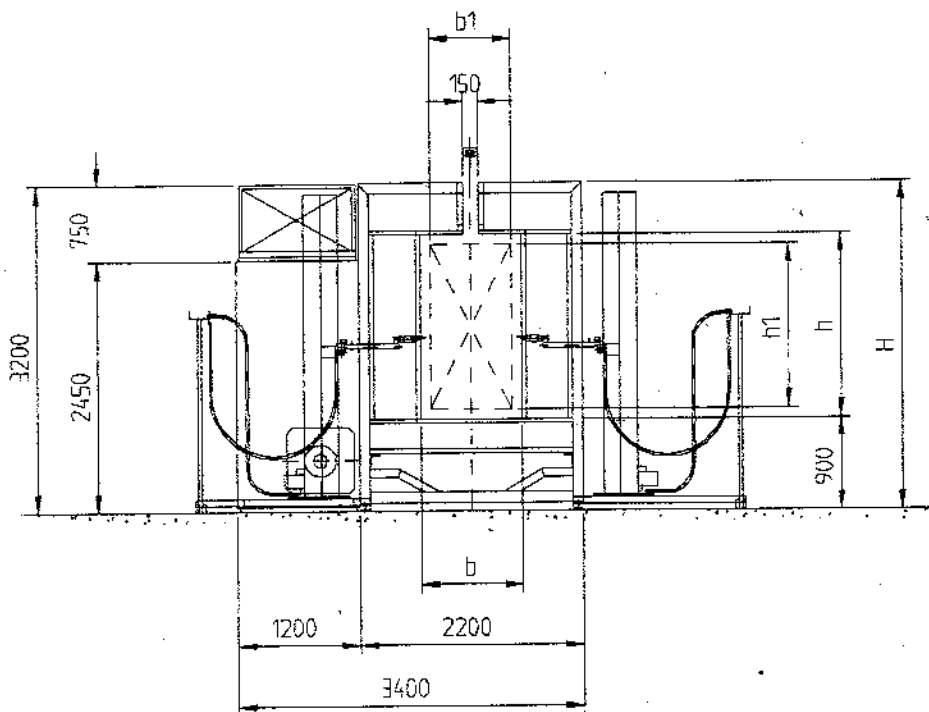
- 1 Guiding engineer incl. 2 way air ticket, accommodation and training on site

Item 04 Delivery CIF

- including packing



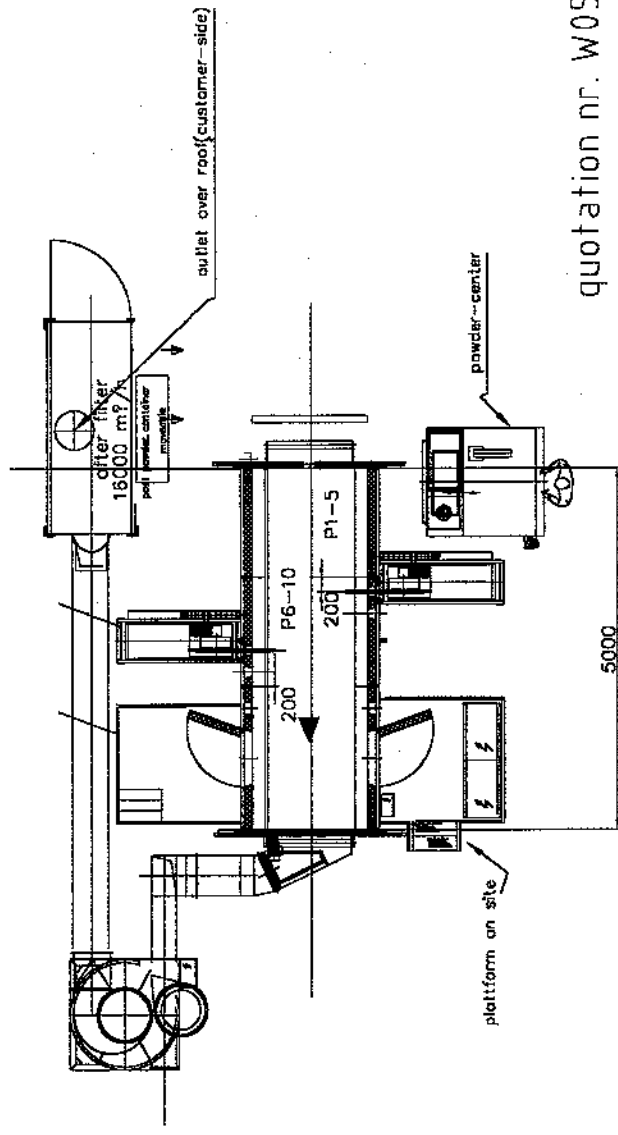
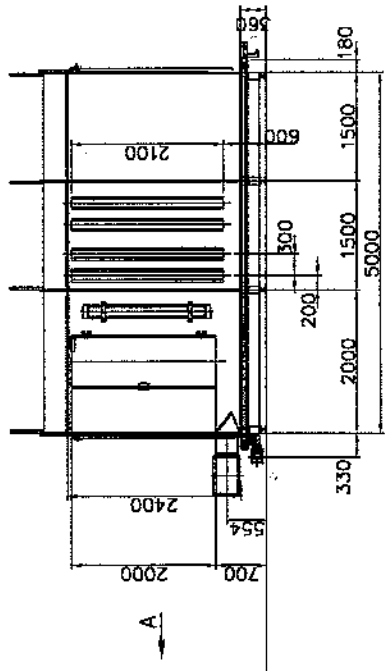
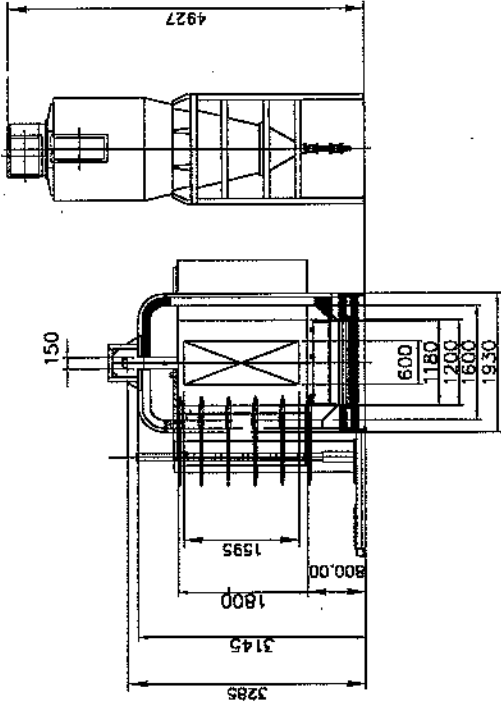
Standardk
Kabinehøjde (h)
2810
3210
3610
Slusebredde



Specifikationer	
<p><u>Kabine</u></p> <p>Beskrivelse: Integral multicyklonkabine</p> <p>Type: IEM-DB</p> <p>Kabinemål:</p> <p>Kabinenhøjde (H):</p> <p>Slusehøjde (h):</p> <p>Slusebredde (b):</p> <p>Stationer/flytbar:</p> <p>Styreskab:</p> <p>Tekniske data:</p> <p>Tilslutning: kW</p> <p>Luftforbrug: Nm³/h</p>	<p><u>Påføringsudstyr</u></p> <p>Traversmaskine(r):</p> <p>Z-akse</p> <p>Aufschlagstoler:</p> <p>Håndanlæg</p> <p>Styreskab:</p> <p>Tekniske data:</p> <p>Tilslutning: kW</p> <p>Luftforbrug: Nm³/h</p>
<p><u>Emnedimension</u></p> <p>Emnebredde (b1):</p> <p>Emnehøjde (h1):</p>	

Slusehøjde (h)	
3400	
1800	
2200	
400	
600	
800	
1000	
1200	

Pulvertakeringsanlæg		Firma:	Mål:						
Tegning nr.:		Projekt ingeniør:	Format:						
Tilbud nr.:		Bruno Hedegaard							
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quotation nr. W0518-00a

SCALE 1/50		DATE 25.5.00	
Fa.Pumac/DK FBC16000-02-5000		DWG Nr. k518-00a	
DWG	DATE	NAME	
CTR		Giesinger	
WÄRMETECHNIK		NAME	
MODIF	DATE		