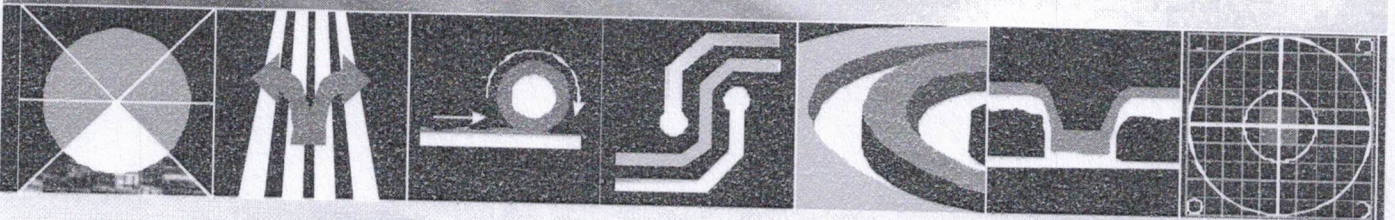
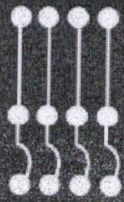


• **manual**

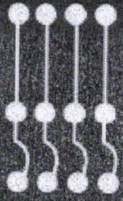




1. Introduction

1.2 Technical Data Sheet

General	Machine Type:	DMS-E Line (Touch Screen + PLC Version)
	Delivery Date:	March 2006
Dimensions	Machine Length	[mm]: 7000
	Machine Width	[mm]: 1450/1175/960
	Machine Height	[mm]: 1090
	Max. Working Width	[mm]: 650
	Working Height	[mm]: 900
	Working Direction:	left-right
Electric Supply	Operation Voltage	[V/Hz]: 400/50Hz
	Special Voltage	[V]: —
	Control Voltage	[V]: 24 DC
	Tot. Connected Power	[kW]: 49
	Tot. Connected Ampere	[A]: 105
Emission	Sound Level (measured in accordance with DIN 45635 at a free-standing machine)	[dB(A): 72
Drive	Conveyor Speed	[m/min]: 0,2 - 6,0



1. Introduction

1.3 General Description

The direct plate through-hole plating line is a fully automatic system used to chemically metalize the bore holes of single or double-sided PCBs. The PCBs pass through the machine horizontally during the through-hole plating process.

The modular construction of a chemical through-hole plating line depends on the process.

The control cabinet is located directly next to the line. The transport speed can be infinitely regulated by a potentiometer between 0.2 and 6.0 m/min. and is monitored by a digital display included. The line accepts boards between 0.2 and 5 mm thick.

The through-hole plating line of the *combi-line* type can be completely integrated into any line manufactured by Gebr. SCHMID if the working width is the same. It can be loaded and unloaded by all handling systems produced by Gebr. SCHMID (*Vacumat + Vaculine*). Module lengths between 375 and 2725 mm allow for exact fittings according to customer's preference and capacity demands. Additional extensions, changes, and modifications to the line can be implemented at any time.

The only materials used are PVC, PP, stainless steel type V2A and titanium.

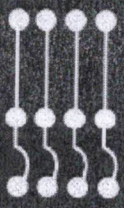
Wet processes such as conditioning, activator and micro-etching are done in the process module with a standing wave.

The usual elements such as pumps, heating, cooling, etc. are standard features in all process and rinse modules and are designed to temperature and chemical resistance according to material.

An area calculator is used to monitor the copper bath and to control dosage pumps of supplementary solutions. This instrument allows the corresponding replenishment of spent chemicals of the make-up and dosage stations.

The rinses are equipped as cascades with flood nozzle pipes below and spray pipes above for better rinsing of drill holes and board surfaces.

Dryers are equipped with slanted suction nozzles above and below the bore holes as well as vacuum pumps and air knives. In addition, large dryers have one or more high-powered blowers. The hot air output is thermostatically regulated and therefore can be used for high feeding speeds.



INTRODUCTION - INTRODUCTION

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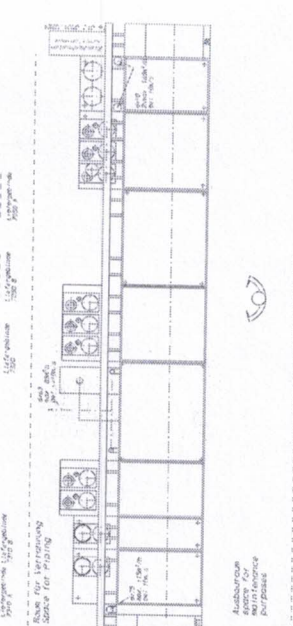
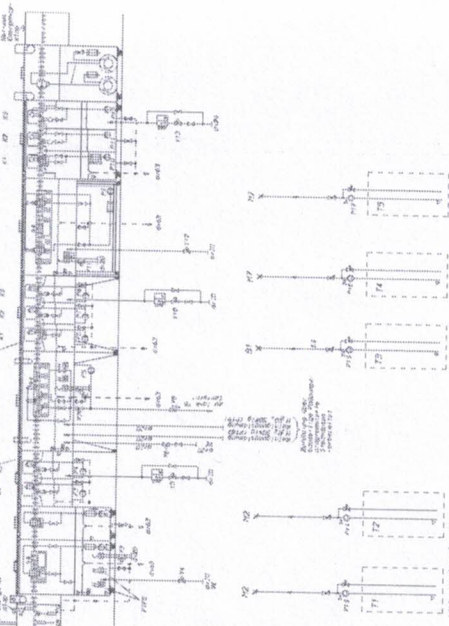
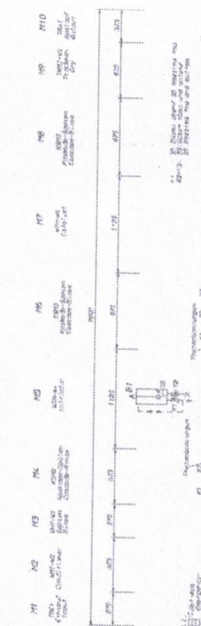
1. Introduction

All modules can be delivered in either direction of operation. The following working widths are available:

- 400 mm
- 650 mm
- 1320 mm

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 Directlater DMS-E

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ASSEMBLY AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.