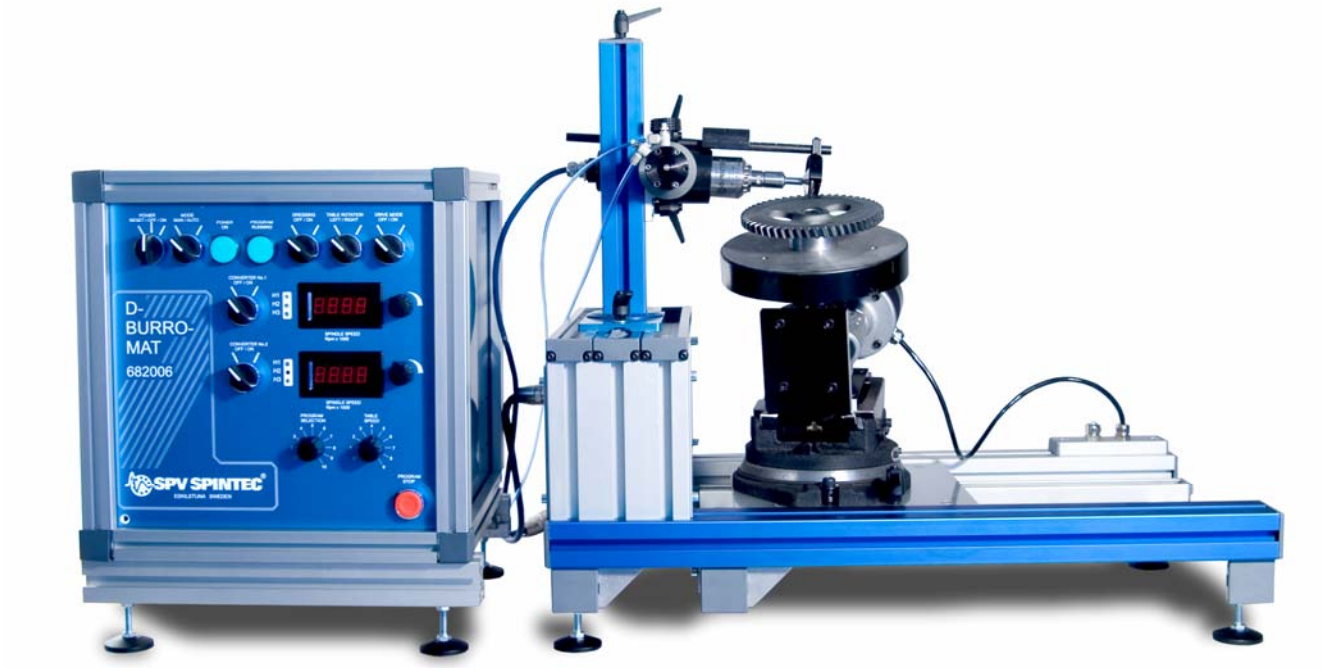
D-Burromat 682006



Note:Db-Enclosure (68-15000) is not shown in the picture

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SPV Spintec AB
BOX 303
SE-631 04 Eskilstuna
Sweden

Important information

For your safety,

please read the safety instruction in the 68-11400 Operators manual before you connect the Deburromat 682006 to the main power.

1. Table of contents

2. Description

This document describes the maximum equipped D-Burromat 682006.

2.1 General

The D-Burromat 682006 (hereafter referred to as the D-Burr) is a automatic deburring machine for deburring of gear wheels and contours on round and oval work pieces typically pipes and flanges.

The D-Burr has a very fast set-up and is very flexible.

The grinding pressure is adjusted by means of a counterweight, Pneumatic lowering and lifting of the spindle when the cycle is complete.

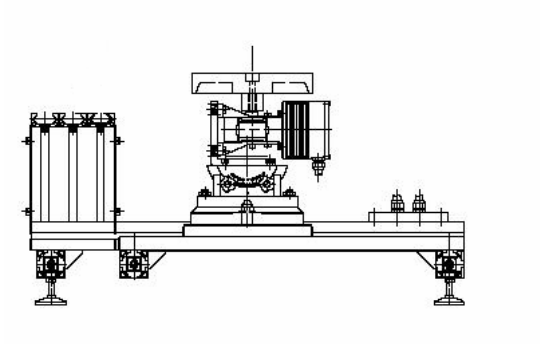
The cycle is controled by a programmable unit. The machine has a built in converter for driving the grinding motor.

The machine is easy to reset for different details and can be driven remotely from another robot or machine.

Customized machines can be delivered on request

3. Unpacking

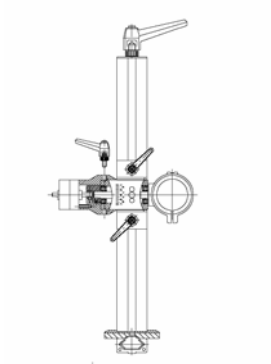
The D-Burr comes in three packages, the worktable in a half euro pallet, The controlunit comes in one box and the safety cover comes in one box.



Figur 1 DB-Table in Eur-pallet

Caution!

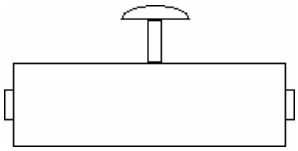
The Db-tables weight is 35kg. For safety reasons there must be two persons, and they must work together and communicate to avoid misunderstanding.
Check that the turn table is secured before lifting.
Lift the machine by the support beam.



Figur 2 Column for the DB-Table

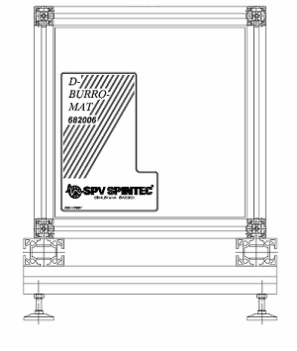
Figur 3 Transport safety for worktable

The transport safety can be used to fasten the Db-Table to the table that the machine will be working on.



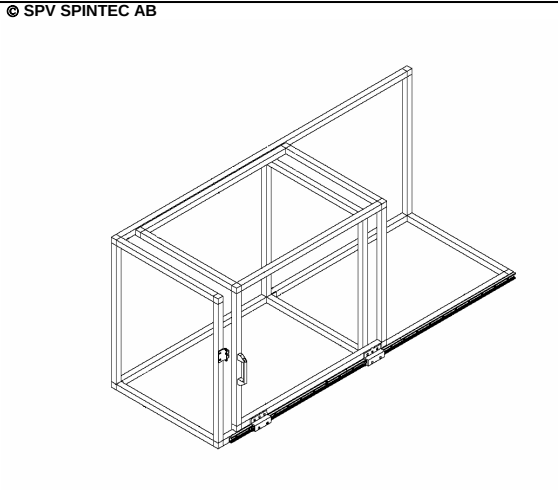
Figur 4 Db-Odevice

The Db-Odevice (Start and emergency stop box, operation device) comes with a standard 3m cable.



Figur 5 Db CUnit

The Db-CUnit (central unit)



Figur 6 Db-Enclosure

Caution!
The Db-Enclosure weight is 30kg. For safety reasons there must be two persons, and they must work together and communicate to avoid misunderstanding.
Check that the door is secured before lifting.
Lift the enclosure by the support beam in the bottom.

Figur 7 Transport safety for Db-Enclosure

The transport safety must be used to fasten the DbEnclosure to the table that the machine will be working on.

Be careful with the cable that comes with the enclosure, it is for control that the enclosure is closed. If the cable is broken the D-Burr can't be started. The cables are put together and taken over the cable entry see (Figur 18 Db-Enclosure cable entry)

Figur 8 Serial number at Db-CUnit

Figur 9 Serial number at the Db-Table

Check that the serial numbers is the same as that in the order.

Figur 10 Production Year

The production year of the De-Burromatic 682006
Do not try to remove this sign.

Figur 11 Db-Enclosure

The Db-Enclosure with the short hand instruction and the warning signs, read them.
Do not try to remove the signs.

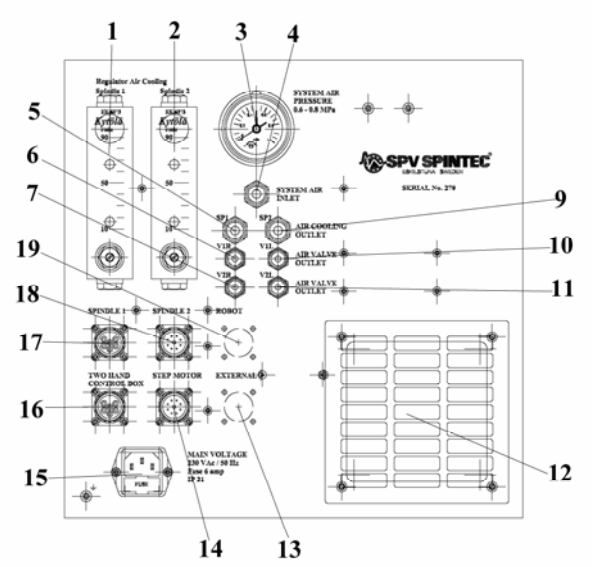
4. Installation

Warning

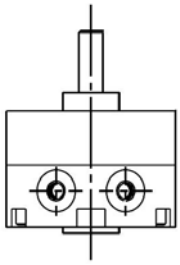
1. Before installing the machine, read and understand the safety notice thoroughly in this manual
2. While installing, there should be no oil or water on the floor to prevent the workers from slipping
3. Use only earthed main plug, Only authorized personal can do earth working. Failure to comply may result in personal severe injury, death or accident.
4. Do not connect the main power before all other cables are connected, and the machine is secured and ready for operation.

For the rear and the front panel see 68-11200 Technical specification for closer details about the numbers

4.1 Backside of Db-CUnit

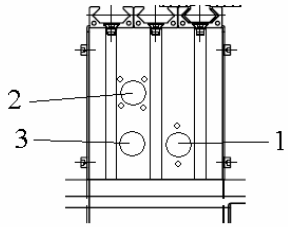


Figur 12 Rear panel



Figur 13 The Rotary actuator at the adjustable spindle holder.

Thera are two fast snap in connections at the rotary actuator, they are connected to the rear panel No6 and No 10 for spindle 1 and No 7 and No11 for spindle 2.



Figur 14 Connections on the Db-Table

1. Connection to the switch who is located at the Db-Enclosure
2. Connection to the Db-CUnit rear panel, Step motor
3. Option, air pressure to the Turn table

4.2 Db-Enclosure

Figur 15Db-Enclosure connector

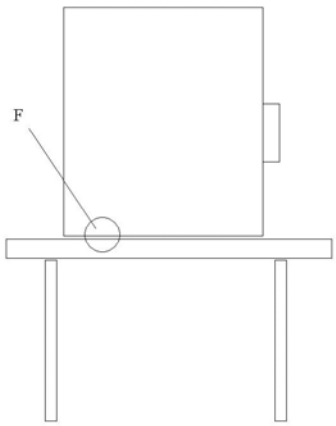
Investigate that the cable is not damaged before connecting.

No		Function
1	Connect air pressure to air inlet (No 4) on the rear panel Secure the pipe (as near as possible to the air inlet) to the table or to another secure place.	Check that the pressure is max 0.8 MPa
2	Connect air cooling outlet SP1 (No 5) to the input on the spindle 1	Adjust the air flow to 50l/min
3	Connect air cooling outlet SP2 (No 9) to the input on the spindle 2	Adjust the air flow to 50l/min
4	Connect the air valve outlet V1R (No 6) and V1L (No 10) to the rotary actuator on the adjustable spindle holder for spindle 1	If the spindle 1 moves down when the pressure is on, then shift the tubes
5	Connect the air valve outlet V2R (No 7 and V2L (No 11 to the rotary actuator on the adjustable spindle holder for spindle 2	If the spindle 2 moves down when the pressure is on, then shift the tubes
6		
7	Connect the spindle 1 to the connector spindle1 (No 17 rear panel	Be careful not to damage some pins in the connector Don't switch cabels
8	Connect the spindle 2 to the connector spindle2 (No 18) at the rear panel	Be careful not to damage some pins in the connector Don't switch cabels
9	Connect the Db-Odevice to the connector two-hand control box (No 16) at the rear panel	Be careful not to damage some pins in the connector
10	Connect the step motor cable at the connector stepmotor No2 in (Figur 14 Connections on the Db-Table)and to the connector (No 14) at the Db-Table	Be careful not to damage some pins in the connector
11	Connect the DbEnclosure switch () to the connection No1 on the Db Table (Figur 14 Connections on the Db-Table)	

Tabell 1 Connection plan

Figur 16 Db-table fastening

As an option it is possible to secure the Db-Table as in the (Figur 16 Db-table fastening) then use the (Transport safety for worktable)



Figur 17 Securing of Db-Enclosure

The (Figur 7 Transport safety for Db-Enclosure) must be secured at the table (as shown in Figur 17 Securing of Db-Enclosure at point F) when all cables are connected.

Figur 18 Db-Enclosure cable entry

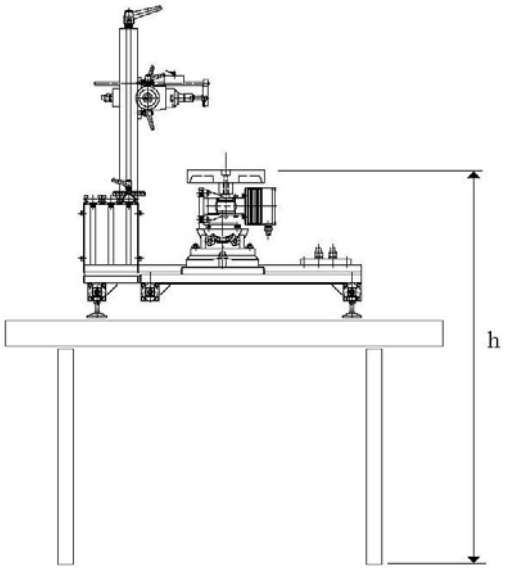
Ensure that the cables and pipes are not bent over the cable entry

When everything is connected, inspect the machine to see if there is some errors, some cables connected to the wrong connector.
Connect the air pressure.
Is there some leakage somewhere?
Connect the main power

5. Enviroment

To ensure that the environment for the worker is good we recommend that the following proposal is done.

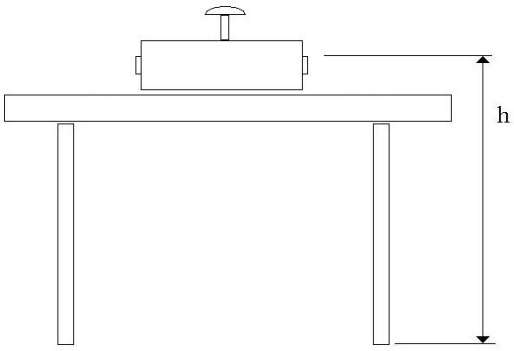
5.1 The hight of the table



Figur 19 Working hight

To ensure that the worker has a good environment, ensure that the hight h is the right for the specific worker that is working with this machine. Place the Db-Table on a table so the working hight is good.

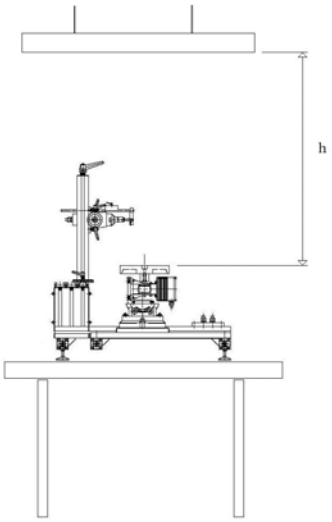
5.2 The hight of the start and emergency stop



Figur 20 Start and emergency stop hight

For good environment place the start and emergency stop at the right hight for the worker that is working with this machine

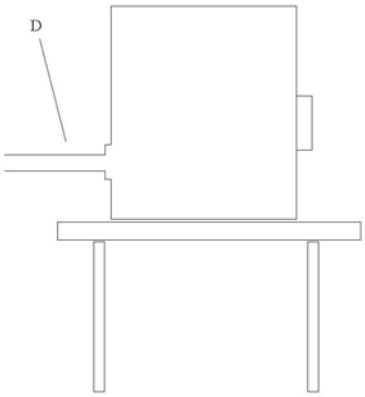
5.3 Lightning



Figur 21 Light on the worktable

For good environment, ensure that the light is right and that it will not give any shadows.

5.4 Dust extracting



Figur 22 Exhausting place

For good environment, connect the dust exhausting device to the rear (D) of the Db-Enclosure.

Contact the exhausting company to investigate how and where to connect the exhausting.

The rear plate is of Aluminium and is fasten with bolts at the rear. Be careful when removing the plate so that no cables will be damaged.

6. Appendix

6.1 Figures

6.2 Tables

7. References

No	Description	Date
1	MD 98/37/EC	1998-07-23
2	AFS 1993:10 (omtryckt AFS 1994:48)	2000-12-15
3	89/655/EEC	1989-11-30
4	AFS 2006:4	
5	AFS 2005:16	
6	AFS 1998:1	
7	AFS 2001:3	
8	LVD 2006/95/EC	
9	EMC 2004/108/EC	
10		
11		
12		

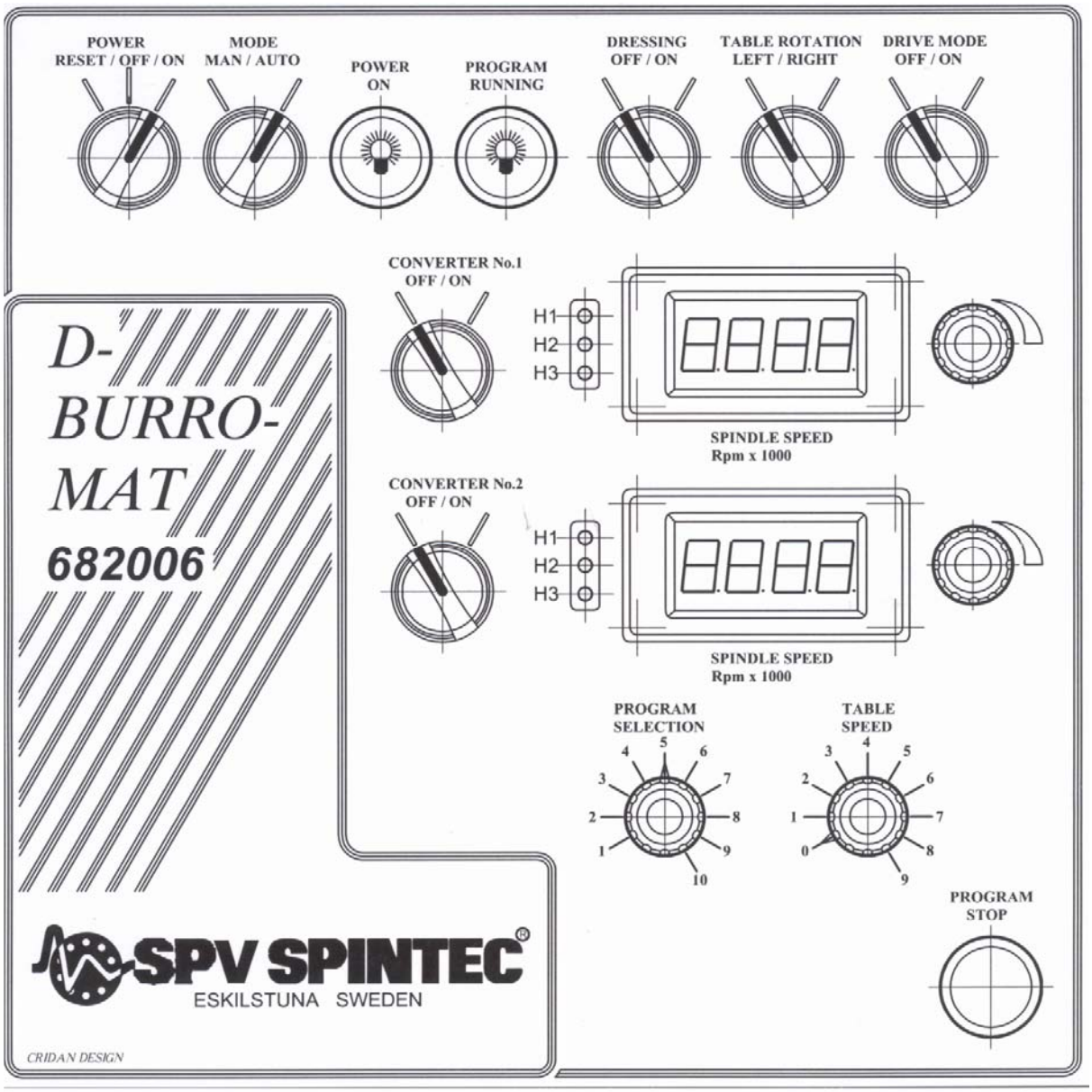
Tabell 2 References

8. Revision

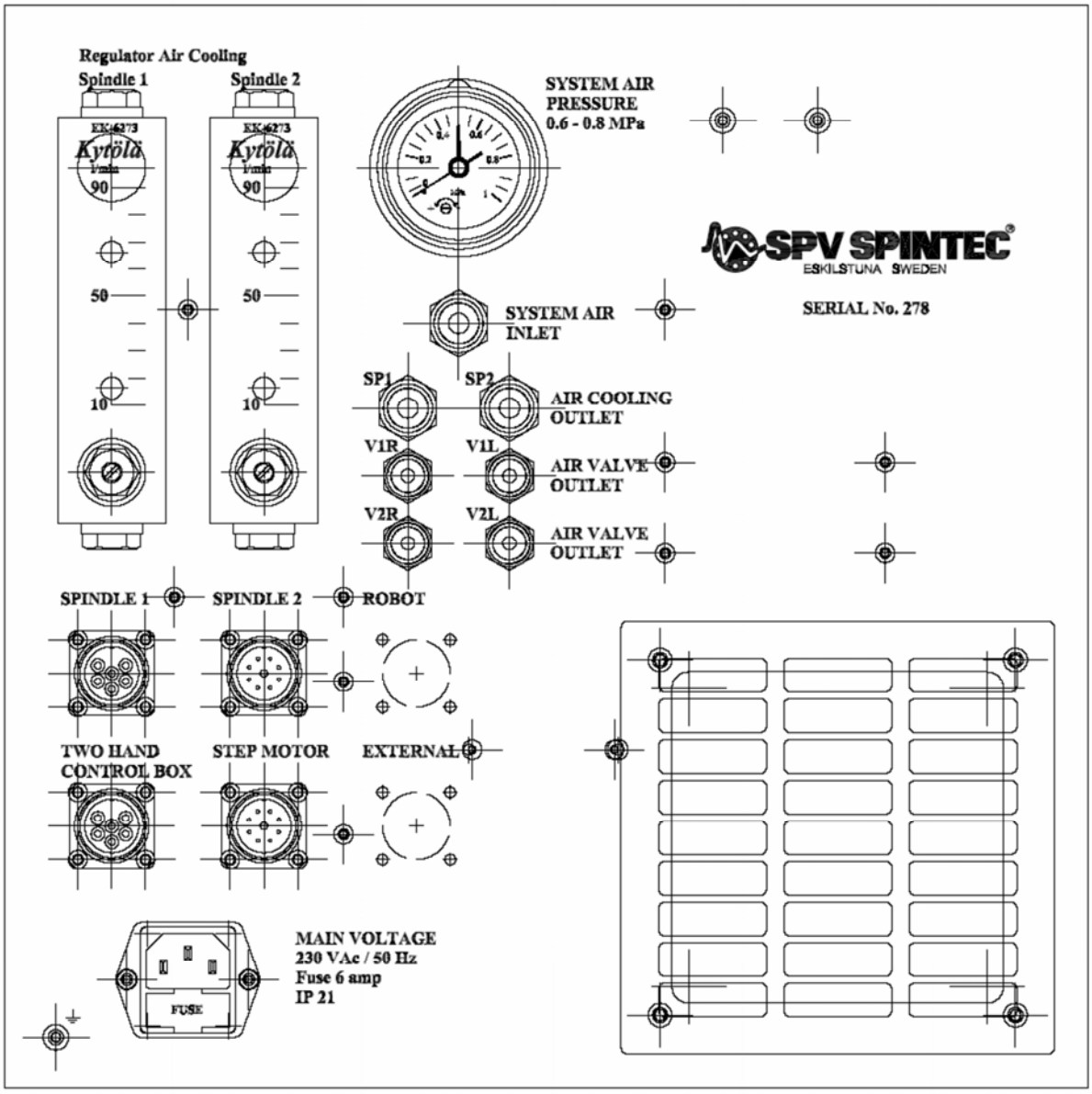
Rev.	Description	Date Init.
0.5	Changes due to SEMCO updates	070820
0.4	Changes due to SEMCO updates	070501
0.3	Changes due to SEMCO updates	070120
0.2	Articelnumber and references	061206
0.1	New document	060101

Tabell 3 Revision

Senast sparat av Christer Kolb
29 August 2007 8.44



Figur 23 Front panel



Figur 24 Rear panel