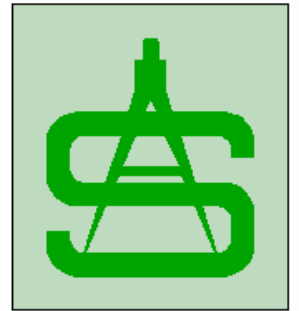
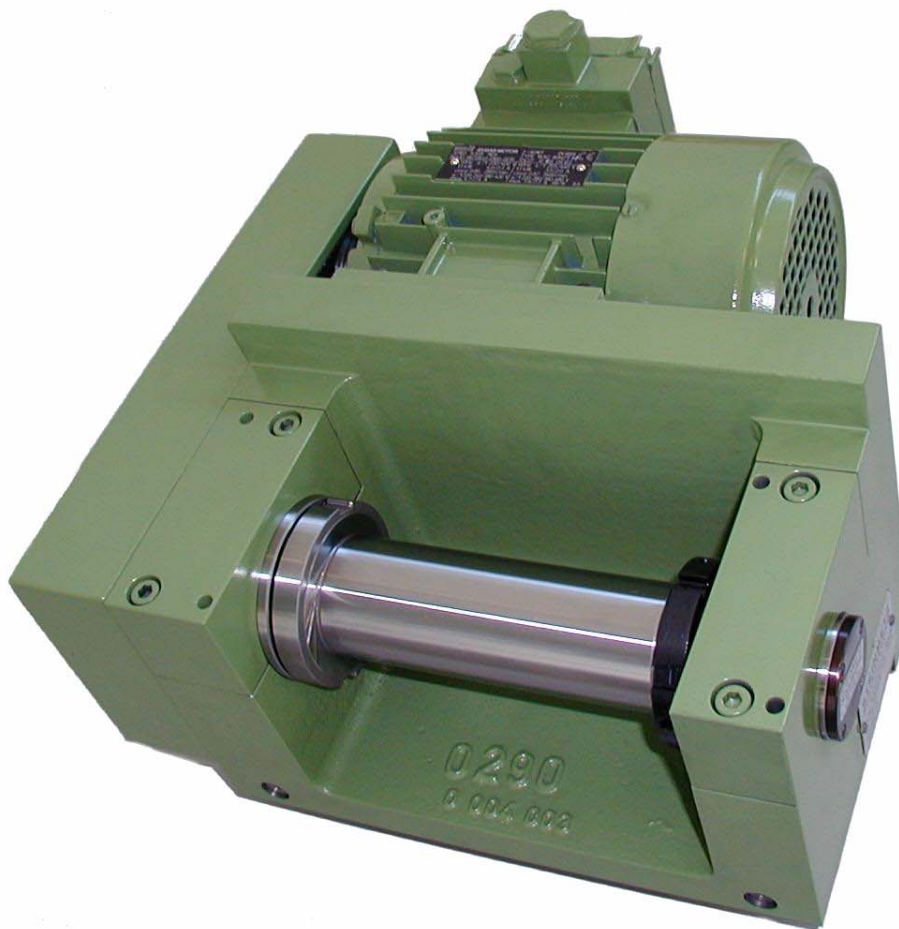


STEINMETZ Schleiftechnik

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Directions for use and operating instructions for dressing unit



1. Basic instructions

1.1. Use for the purpose built

The dressing unit is suitable for dressing grinding wheels. It is to be installed and used solely for dressing appropriate grinding wheels with suitable dressing tools. Only original accessories are to be used to ensure use for the purpose it was built. The maximum tool size as well as the maximum circumferential speed of the machining tool must not be exceeded and must be maintained under all circumstances.

Application of the dressing unit for the purpose it was built is only given when the stipulated speed is not exceeded. The unit must not be operated without the appropriate protective hood for the tool.

Own conversions and modifications to the dressing unit and their original accessories are forbidden for safety reasons.

1.2. Operator commitments

The dressing unit have been tested again before leaving the works. The dressing unit is in perfect technical working order after successfully completing the test run. The service life of your dressing unit depends upon proper installation. Installation is only to be carried out by qualified skilled personnel because this is a matter of a highly sensitive precision tool.

As a consequence the operator must ensure most urgently that all persons employed for installation and operation of the dressing unit most carefully read and follow these operating instructions.

1.3. Liability and warranty

Messrs. Steinmetz Schleiftechnik accepts no liability either for personal injury or material damage in the case of improper use and should the following instructions not be observed.

1.4. Service and consultancy

We will be only too pleased to advise you and provide you with any information you may require. You can approach us at any time should you have any questions or problems.

1.5. Repairs

Special tools are needed to repair the dressing unit. Consequently, we recommend that any repairs or servicing be only carried out by our trained employees.

Please would you note that by dismantling the tool yourself any claims under warranty become null and void.

1.6. Supplier



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1.7. Copyright

The copyright for these operating instructions remains the property of Messrs. STEINMETZ - Schleiftechnik, Karlstein, Germany.

The operating instructions must be neither duplicated nor used without permission for the purpose of competition. We reserve the rights to make alterations.

1.8. Information

These operating instructions comply with state-of-art engineering standards valid when the dressing unit is delivered. You will find the unit data once again on the rating plate affixed to every dressing unit.

2. Safety instructions

2.1. Dressing units hazards

All dressing units are tested before they leave the works. The test run has been successfully completed so that the dressing unit is in perfect technical working order. Nevertheless, the operator is exposed to certain risks as a result of faulty operation or misuse:

risk of life and injury
as well as machine and other material damage

2.2. Handling for the purpose it was built

- 2.2.1 Dressing units are suitable for dressing grinding wheels.
- 2.2.2 Only original accessories are to be used.
- 2.2.3 The maximum tool size must not be exceeded.
- 2.2.4 The maximum circumferential speed of the machining tool must be maintained under all circumstances (see manufacturer's data).
- 2.2.5 Dressing units may only be operated at the stipulated speed.
- 2.2.6 Units must never be operated without the appropriate protective hood for the tool.
- 2.2.7 Own conversions and modifications to the dressing units and original accessories are prohibited for safety reasons.
- 2.2.8 Accident prevention measures and the safety directives are to be observed under all circumstances.
- 2.2.9 Should changes occur in operation as compared with normal operation, the plant must be switched off immediately in cases of doubt and the maintenance personnel informed.
- 2.2.10 The tool must run perfectly true otherwise vibrations can occur on the tool which may possibly lead to tool breakage.

2.3. Sources of danger

- 2.3.1 The dressing unit rotates in operation and should the operator come into contact with the unit while it is turning this can cause serious injuries through abrasion and crushing.
- 2.3.2 The dressing unit is to be brought to a standstill before carrying out any servicing or cleaning work and the drive motor is to be prevented from being switched on again.
- 2.3.3 Splitters when dressing grinding wheels can cause serious eye injuries.
- 2.3.3 Should changes occur contrary to normal operation (unusual noises, vibrations, etc.) the plant is to be switched off immediately and the maintenance personnel informed.
- 2.3.4 The tool must run perfectly true because a tool not running perfectly true can cause the generation of vibrations which may possibly lead to tool breakage and thus be also a hazard to operating personnel.

2.4. Personal protective equipment

- 2.4.1 Protective goggles are to be worn when dressing grinding wheels.
- 2.4.2 Suitable tools must be used for dressing.

2.5 Unpacking, transportation and storage

- 2.5.1 When unpacking attention is to be paid first to damage which may have occurred during transport. The type and extent of the damage is to be reported immediately to the manufacturer should this be necessary.
- 2.5.2 The manufacturer shall then decide whether the dressing unit is to be put into operation or returned to the works for inspection.
- 2.5.3 The dressing unit must not be "attached" to either end of the shaft for transport purposes.
- 2.5.4 To be used for this purpose are the transportation holes provided or other appropriate lifting straps.
- 2.5.5 The dressing unit is to be slightly oiled and wrapped in oil paper and put into a "plastic sock" to protect it against mechanical damage during storage.
- 2.5.6 Dressing units must not be exposed to high differences in temperature to prevent the development of condensate and thus avoid the risk of rusting.

3. Putting into commission

3.1. Protection against shock

The protruding ends of the shaft in particular must not be subject to impact when handling the dressing unit. Damage can be caused through impact on the shaft ends which will detrimentally influence the service life of the unit.

3.2 Correct clamping

Each dressing unit is to be clamped in a positive locking unit mount. The length of the unit adaptor must cover at least two thirds of the stipulated sleeve length. Moreover, the adaptor bore hole must not have a maximum contour error in excess of 5 µm. Moreover, care must be taken to ensure that no clamping screw applies pressure to the unit housing.

3.3 Lubrication

The dressing unit has been assembled at the works and greased for life and, as a consequence, requires no maintenance. The service life of the bearing depends on the working conditions and is within a very broad range. We recommend that the dressing unit be sent to our works for repair in the case of problems occurring in production and in the case of an adapter concentricity error of > 4-6 µm.

3.4. Dressing unit turning direction and arrangement

All dressing units can run clockwise and anticlockwise and be used for machining in both turning directions.

3.5. Dressing unit drive

Before putting into commission it must be ensured that the grinding wheel is securely fastened.

3.6. Heating up of dressing unit

The dressing unit has been subject to a test run in accordance with the regulations (running-in phase).

Slightly higher temperatures when putting the dressing unit into operation for the first time will not damage the dressing unit. Nevertheless, a temperature of 50° C should not be exceeded.

3.7. Repairs

Special tools are needed to repair dressing units.

Accordingly we recommend that only trained employees of Messrs. Steinmetz Schleiftechnik be allowed to make any repairs or service the tool.

3.8. Accessories

Only original accessories from Messrs. Steinmetz Schleiftechnik are to be used to ensure perfect precision and function.

The mount must be cleaned thoroughly before fitting the diamond roller.

4. Special instructions for putting motor dressing units into operation

4.1. Connection of motor dressing units

Instructions for connecting up the three-phase motors used by us can be found in the enclosed connection drawing.