



Documentation, guidelines and standards for new machines

The following provisions are part of the General Terms and Conditions of Purchase of Tyrolit Schleifmittelwerke Swarovski AG & Co K.G. and Tyrolit Construction Products GmbH. They apply to machine orders and deliveries and specify the requirements for documentation to be supplied and for guidelines and standards to be used, unless other written agreements have been made. These following provisions remain in any case the minimum requirement.

1. General

Both stand-alone machines and interlinked installations and the associated documentation must be designed in accordance with Directive 2006/42/EC (Machinery Directive MRL in the currently valid version). In addition, further directives must be applied if they are subject to the respective product.

The documentation must also be adapted according to the respective directive (for example: ATEX Directive, EMC Directive, Pressure Equipment Directive, Low Voltage Directive, etc. in the respective valid version).

2. Documentation content

The documentation for new machines must contain the following data (according to MRL 2006/42/EC):

- General description (of the machine)
- Overview drawing(s)
- Circuit diagrams (pneumatic / hydraulic circuit diagram, electrical circuit diagram, P-I flow diagram)
- Risk assessment (according to EN ISO 12100) of the machine with indication of all hazardous points and the corresponding measures (in the official language of the country where the machine is used)
- Safety-related control calculations (according to EN ISO 13849-1+2 in the official language of the user country)
- Listing of residual hazards
- List of applied standards and guidelines
- Maintenance instructions, hydraulic plans, pneumatic plans
- Transport regulations, slinging points, weight of the plant and plant components
- Connected load, energy consumption, specifications for energy supply, required media (compressed air, suction, cooling media....)
- Structural specifications for the installation site (statics)
- Specifications for room conditions
- Declaration of conformity (if not partly completed machinery)
- For incomplete machines:
 - Declaration of incorporation (stating the applied and complied essential requirements according to Annex VII B of MRL 2006/42/EC)
 - Assembly instructions (according to attachment VI of MRL 2006/42/EC)
- Operating instructions, at least with information about
 - Manufacturer
 - Designation (according to machine marking)
 - Intended use
 - Warnings regarding misuse based on experience
 - Protective measures and equipment
 - Training and familiarization of the operating personnel
 - Use, maintenance, repair, inspection (especially with drawings, circuit diagrams, descriptions and explanations)
 - Transportation and storage
 - Assembly, installation and connection (especially with drawings and circuit diagrams)
 - Commissioning and operation
 - Set-up, maintenance and servicing
 - Troubleshooting
 - Specification of the safety or health-related spare parts to be used
 - Characteristics of the mountable tools or workpieces
 - Possible workplaces
 - Airborne sound and any vibrations

3. Document languages

The scope of delivery includes all documentation at least in the official language of the user country. (e.g. manufacturer in Italy, but user in Austria → all documentation must be supplied in German).

The operating instructions must also be supplied in German and, if necessary, additionally in the languages specified in the order.



4. Document type

All documentation must be supplied in any case 1x electronically in PDF format. Additionally, all 3D data in stp format and all 2D data in dwg format, furthermore if possible on paper.

5. Guidelines and norms

For all orders placed by Tyrolit Schleifmittelwerke Swarovski AG & Co K.G. and Tyrolit Construction Products GmbH, the following guidelines and standards must be applied without fail - where applicable:

For example, directive 2006/42/EC, directive 2006/95/EC, directive 2004/108/EC and all other directives that are subject to the respective product.

Required standards, if applicable: EN ISO 13854, EN 614-1, EN ISO 14120, EN ISO 4413, EN ISO 4414, EN ISO 14118, EN 14119, EN ISO 10218-1, EN ISO 10218-2, EN 746-1, EN746-2, EN ISO 16092 part 1 to 4, EN ISO 11161, EN ISO 12100, EN ISO 13849-1, EN ISO 13849-2, EN ISO 13850, EN ISO 13855, EN ISO 13857, EN 60204-1, EN 60825-1, EN ISO 13855, EN ISO 13851, EN ISO 14122-Teil1 bis 4, EN 1127-1.

If additional directives and/or (in particular harmonized) standards are applied, these must be listed separately. The directives and standards must always be applied in the currently valid version.



Documentation, guidelines and standards for used machines

The following provisions are part of the General Terms and Conditions of Purchase of Tyrolit Schleifmittelwerke Swarovski AG & Co K.G. and Tyrolit Construction Products GmbH. They apply to machine orders and deliveries and specify the requirements for documentation to be supplied and for guidelines and standards to be used, unless other written agreements have been made. These following provisions remain in any case the minimum requirement.

1. General

Used machines built in 1995 or later are subject to the Machinery Directive 98/37/EC valid at that time, or if the used machine is built after 29.12.2009, the legal basis is the Machinery Directive 2006/42/EC.

In addition, further directives must be applied if they are subject to the respective product. Likewise, the documentation must also be adapted according to the respective directive (for example: ATEX Directive, EMC Directive, Pressure Equipment Directive, Low Voltage Directive etc. in the respective valid version).

2. Documentation content

The documentation for used machines must include the following data:

- General Description (of the machine)
- Overview drawings
- Circuit diagrams (pneumatic / hydraulic circuit diagram, electrical circuit diagram, P+I flow diagram)
- Specification of the performance level according to EN ISO 13849 or the control category according to EN954-1
- Listing of residual hazards
- List of applied standards and guidelines
- Maintenance instructions, hydraulic plans, pneumatic plans
- Transport regulations, slinging points, weight of the plant and plant components
- Connected load, energy consumption, specifications for energy supply, required media (compressed air, suction, cooling media....)
- Structural specifications for the installation site (statics)
- Specifications for room conditions
- Declaration of Conformity
- Operating instructions, at least with information about
 - o Manufacturer
 - o Designation (according to machine marking)
 - o Intended use
 - o Warnings regarding misuse based on experience
 - o Protective measures and equipment
 - o Training and familiarization of the operating personnel
 - o Use, maintenance, repair, inspection
(especially with drawings, circuit diagrams, descriptions and explanations)
 - o Transportation and storage
 - o Assembly, installation and connection (especially with drawings and circuit diagrams)
 - o Commissioning and operation
 - o Set-up, maintenance and servicing
 - o Troubleshooting
 - o Specification of the safety or health-related spare parts to be used
 - o Characteristics of the mountable tools or workpieces
 - o Possible workplaces
 - o Airborne sound and any vibrations

3. Document languages

The scope of delivery includes all documentation at least in the official language of the user country. (e.g. manufacturer in Italy, but user in Austria → all documentation must be supplied in German).

The operating instructions must also be supplied in German and, if necessary, additionally in the languages specified in the order.

4. Document type

All documentation must be supplied in any case 1x electronically in PDF format. Additionally all 3D data in stp format and all 2D data in dwg format, furthermore if possible on paper.