



## Optimization of the cooling lubricant supply - through Grindaix nozzles

Company:

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Address:

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Contact Person:

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Phone number:

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Fax no:

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Email:

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I would like a quotation and a nozzle proposal for my process

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## Questionnaire: for the respective process to be optimized

### General

#### 1) Details of the machine

a) Machine manufacturer and type: \_\_\_\_\_

b) Year of manufacture of the machine: \_\_\_\_\_

c) Compressed air connection (6bar) available? Yes  No

#### 2) Which grinding process is used in the process under consideration? used?

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## Grinding wheel and component

### 3) Details of the grinding wheel

- a) Grinding wheel manufacturer and type: \_\_\_\_\_
- b) please tick: conventional  high hardness
- c) Grinding wheel specification: \_\_\_\_\_
- d) Grinding wheel speed [ $ns = \frac{1}{min}$ ]: \_\_\_\_\_
- e) please tick, grinding wheel binding:  
 ceramic electroplated  rubber bonded   
other binding: \_\_\_\_\_
- f) Grinding wheel peripheral speed (min-max) [m/s]:  
\_\_\_\_\_
- g) Diameter (min-max) [mm]: \_\_\_\_\_
- h) Disc width [mm]: \_\_\_\_\_
- i) Cylindrical or profiled: \_\_\_\_\_

### 4) What does the geometry to be ground look like on the component?

- a) Please send us a drawing (CAD STEP file) showing the grinding positions or the component geometry to be ground (collision space, meshing conditions).
- b) Please send us a photo of the processing situation.
- c) Which areas on the component are particularly susceptible to abrasive fires? :

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**5) Are there any special restrictions with regard to the nozzle installation or the installation space (keyword collision, robot loading, etc.)?**

a) If yes, please describe the available installation space:

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b) Are these features clearly visible in the CAD STEP file?

**6) Are there any special requirements with regard to the mounting of the nozzle (interface to the machine)?**

a) If yes, describe them:

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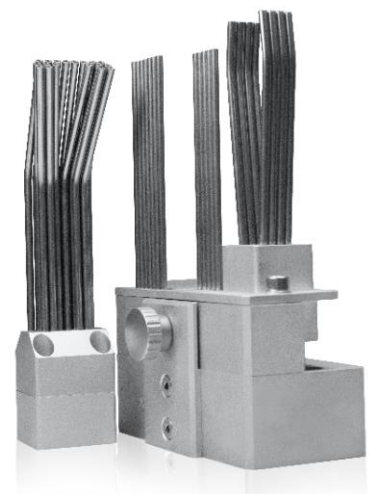
**7) Are there any special requirements for the connection (connection thread) for the cooling lubricant supply line?  
for the cooling lubricant supply line (e.g. metric, inch thread)?**

a) If yes, describe them:

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## Cooling lubricant

### 8) Which cooling lubricant do you use?

- a) Oil: \_\_\_\_\_  
Viscosity [mm<sup>2</sup>/s]: \_\_\_\_\_  
Density: \_\_\_\_\_
- b) Emulsion: \_\_\_\_\_  
Concentration: \_\_\_\_\_ %

\*Please send us a coolant data sheet.

### 9) What quantity of cooling lubricant do you currently use to supply the grinding nozzle?

- a) Volume flow [l/min]: \_\_\_\_\_  
b) Pump pressure nozzle [bar]: \_\_\_\_\_

### 10) How powerful is your feed pump?

- a) max. volume flow [l/min]: \_\_\_\_\_  
b) max. pump pressure (pump outlet) [bar]: \_\_\_\_\_  
c) Pump manufacturer and type: \_\_\_\_\_

### 11) How efficient is your filtration system?

- a) Filter fineness [ $\mu\text{m}$ ]: \_\_\_\_\_
- b) Do larger chip lumps or chip wool occur which get back into the feed to the nozzle?  
the feed to the nozzle?  
 Yes       No
- c) Residual contamination content of coolant [mg/litre]: \_\_\_\_\_