

# Working with milling machine

## 1. Purpose

The purpose of this safety instruction is that, after reading the instructions, the employee is aware of the risks associated with the defined work and that he can perform it safely

## 2. General

Milling is a cutting process that uses a milling cutter to remove material from the surface of a workpiece. The milling cutter is a rotary cutting tool, often with multiple cutting points. As opposed to drilling, where the tool is advanced along its rotation axis, the cutter in milling is usually moved perpendicular to its axis so that cutting occurs on the circumference of the cutter. As the milling cutter enters the workpiece, the cutting edges (flutes or teeth) of the tool repeatedly cut into and exit from the material, shaving off chips (swarf) from the workpiece with each pass. The cutting action is shear deformation; material is pushed off the workpiece in tiny clumps that hang together to a greater or lesser extent (depending on the material) to form chips. This makes metal cutting somewhat different (in its mechanics) from slicing softer materials with a blade.

## 3. Risks

- Splinter in the eye
- Skin irritation as result of cutting oil
- Long sleeves and loose clothing can be grabbed by rotating parts
- Piece can become loose in claw and shoot away

## 4. Measures

- Keep the protective cover in the correct position during work
- Wear of prescribed personal protective equipment
- Wear clothes with sleeves that also cover the forearms
- Clamp the pieces as tight as possible with the tools available provided

## 5. Picture



## 6. Pictograms



## 7. Required PPE's



- Always clamp workpieces tight
- Only use machines which are approved in accordance with NEN3140
- Wear and use prescribed PPE
- Check that the switch is OFF before plugging the plug into the socket
- Wear long hair in a tail or under a hat
- Wear protective clothes
- Be familiar with the MSDS of the coolant



- Do **not** use the machine when it is not stable
- Do **not** wear loose clothing
- No **not** start working if you are not trained in working with this machine
- Do **not** use machine in a wet- or moist area
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