

Catalogue of Requirements for the Provision of Materials

FB 03/01

For optimal processing it is necessary to specify the delivered condition of the workpieces. The following requirements must be met:

1. Material

- Exact material and hardness specifications
- Homogeneous material structure
- No cavities, pores, grinding marks, foreign matter, mill scale, cracks, damage
- Rz < 2 µm
- Avoid cavities and blind holes
- No material distortion
- Avoid different material combinations
- No joints or overlaps
- No contamination by corrosion products
- No residues from mechanical pre-treatment
- Welding seams should be continuous
- Demagnetised

2. Pre-grinding

- Prevent localised overheating
- Apply sufficient cooling lubricant
- No cooling agents containing silicone, molybdenum, graphite or sulphur
- Avoid embedded particles by firing without infeed
- No residual turning marks

3. Pre-polishing

- No polishing agents containing silicone, molybdenum, graphite or sulphur
- Improper polishing leads to grease and polishing agent working into the surface

4. Preservation

- Avoid the following ingredients:
 - Metal soaps
 - Alkali soaps
 - Sulphurated oils
 - Chlorinated substances
 - Natural oils (rapeseed ester)
 - Ester oils
 - Waxes and fats with a melting point > 50°C
 - Zinc
 - Silicones
- Recommended ingredients:
 - Mineral oils, not pre-emulsified
 - Paraffin oils
 - Fatty alcohols
- Sufficient mechanical protection (transport damage)
- Intact packaging (reuse for return)
- Avoid corrugated cardboard packaging