

Reference project
Cooling of tools and machinery
Injection molding



Figure 1: Complex® unit on site

Cleaning of cooling circuits in tools and machinery
with 29 injection molding machines and 2 free-coolers

Assignment

- cleaning of injection molding machines with the Complex® process (Figure 1)
- remove impurities from the system
- recover cooling performance and reliability

Technical Data

- cooling system for injection molding machines (Figure 2)
 - feed and discharge of the main circuit
 - feed and discharge of the individual machines
 - cooling circuits of tools and machinery
 - diameters up to DN 100, length approx. 300 m
 - 2 free-coolers
- 29 injection molding machines
 - manufacturers: Arburg, Krauss Maffei
 - various types and models



Figure 2: pipeline system at the injection molding machines



Figure 3: temporary bypass between feed and discharge of the main pipeline

Cleaning using the Complex® process

- mechanical cleaning by defined application of compressed air from the Complex® unit (Figure 1)
- successive cleaning of the system
 - feed and discharge of the main circuit including free-coolers with temporary bypass (Figure 3)
 - feed and discharge of individual machines
 - cooling circuits of individual injection molding machines
- access via standard adapters (Figure 4)
- discharge at centrally arranged adapters (Figure 5)
- 2 x 3 technicians in shift work, approx. 30 hours on site



Figure 4: feed of air and water

Result of Complex® cleaning

- deposits and impurities mobilized and discharged from the system
- cooling performance recovered
- efficient and reliable operation



Figure 5: discharge of air and rinse water via adapters