

Tooling Equipment Request and Use at AutoParts Manufacturing GmbH

AutoParts Manufacturing GmbH produces car chassis and body components for several global automakers. Occasionally, production engineers on the assembly line (called **line engineers**) require **specialized tooling equipment** not permanently available at the plant. This equipment might include robotic grippers, precision welding heads, or hydraulic lifts. Most of these tools are **rented from external suppliers**.

Step-by-Step Process:

1. Initiating a Tooling Request

A line engineer identifies the need for specialized tooling and fills out a **Tooling Request Form**, specifying:

- Equipment type
- Required specifications
- Duration of use
- Start date

This form is emailed to a **logistics coordinator** based in the plant's central tool depot.

2. Sourcing Equipment

The logistics coordinator:

- Consults the supplier database and catalogs to find matching tools.
- Selects the **most cost-effective** and technically adequate option.
- Contacts the supplier via email or phone to **check availability**.

3. Handling Unavailability

If the selected tool is not available:

- An alternative is chosen.
- Availability is verified again.

This loop may continue until a suitable tool is secured.

4. Managerial Approval

Once availability is confirmed, the request is forwarded to a **production manager** for approval. The manager may:

- Approve the request
- Reject it (e.g., due to budget constraints or technical mismatches)
- Request modifications (e.g., using a simpler tool or shorter rental)

5. Finalizing Order

Upon approval:

- A **Purchase Order (PO)** is generated using the ERP system.
- The PO is emailed to the supplier.

6. Cancellation Option

Before delivery, the line engineer may cancel the request if the production plan changes. The coordinator then informs the supplier and updates records.

7. Delivery and Acceptance

- The supplier delivers the tooling to the plant.
- The line engineer performs an **inspection**.
- If accepted, the tool is used in production.
- If **not compliant**, the tool is rejected and the process ends.

8. Usage and Extension

As the rental period nears its end:

- The line engineer may ask for an **extension**, contacting the supplier directly.
- The supplier may accept or deny the extension.

9. Return and Invoicing

After the rental:

- The tool is collected by the supplier.
- An **invoice** is sent to the logistics coordinator.
- The coordinator confirms:
 - Tool was used during the specified period
 - Price matches the PO
- Invoice is forwarded to the **finance department** for payment.