IT'S ALL ABOUT TIME
WE ARE A ...
MISUMI WORLDWIDE

MISUMI is a global manufacturer of configurable as well as standard mechanical components and distributor of indirect production materials.

THE MISUMI QCT CONCEPT

QUALITY
High product quality due to strict quality guidelines

COSTS
Competitive prices

TIME
Unbeatable lead times
MISUMI WORLDWIDE
A global company with more than 50 years of know-how

62 SALES OFFICES
23 PRODUCTION SITES
62 SALES OFFICES
11,000 EMPLOYEES
2,4 Billion Euro GLOBAL REVENUE
261,000 CUSTOMERS
MISUMI HISTORY
More than 50 years of quality and development

1963 FOUNDATION IN JAPAN

1965 PORTFOLIO ENLARGEMENT by launching Press Die products

1972 Expansion in Asia and establishment of further regional sales offices

1985 PORTFOLIO ENLARGEMENT 1st Plastic Mould catalogue

1988 FOUNDATION OF MISUMI USA

1991 PORTFOLIO ENLARGEMENT 1st Factory Automation catalogue

1991 ACQUISITION OF Dayton Progress Corporation

2001 Merge with Suruga Seiki CO., LTD (manufacturing company)

2003 FOUNDATION OF MISUMI EUROPA

2001 Good Factory Award by the Japan Management Association

2003 Foundation of MISUMI EUROPA

2012 ACQUISITION OF Dayton Progress Corporation

2015 EC 5.0 Platform with >17 Mio. Components

2015 Good Factory Award by the Japan Management Association

2017 Logistics Relocation and start of Warehouse expansion

2018 Office Re-Location to Frankfurt
REDUCING CUSTOMERS’ PROCESS COSTS

We make our customers’ lives easier; with faster and more cost effective deliveries
Manufacturer

Distributor

E-Commerce platform provider
MISUMI is a global manufacturer of standard and configurable mechanical components for Factory Automation, Press Die and Plastic Mold Industries.

**Standard components**
- More than 60,000 stock items available for same-day shipment
- 10,000 m² space for the optimized availability

**Configurable components**
- Pre-selection of products by choosing specifications/dimensions
- Configure 100,000 parts online in up to 0.01-mm increments
- Free CAD download in several native formats
Beside manufacturing its own components, MISUMI is also a distributor – As a result of this product range extension, MISUMI now covers all industry demands

More than 1,500 European and Asian brands

Many also available on same-day shipment
Our One-stop-shop concept allows you to save time and money – How do you benefit from the MISUMI Online Shop?

- Purchase everything from 1 supplier to minimize your process costs
- Control your purchases with MISUMI e-procurement solutions: access products directly from your system and automate most processes
- Download 2D and 3D CAD models in various native formats for free
- Get quotes and create orders instantly in our online shop
- Let us inspire you! Find your desired application in our comprehensive collection inCAD Library
PRODUCT CONFIGURATION PROCESS

- Simple navigation through picture-based category lists
- Search by keyword, part number or brand
- Specifications comparison within a product line, e.g. linear shaft
PRODUCT CONFIGURATION PROCESS

- Online Configuration for more than 100,000 parts
- Pre-selection of products by choosing specifications/dimensions
- Configurable components in up to 0.01 mm increments
- Free CAD download in 40 different native formats
inCAD Library as inspiration pool for designers

More than 200 application examples including CAD data and bills of material
PURCHINEERING & MISUMISATION
PURCHINEERING & MISUMISATION

Purchineering 2.0

Avoiding the creation of new data files means saving costs

Survey result:
65% of the interviewed companies have duplicate copies in their databases.

Source: Survey parts management & product development processes in the industry, CADENAS 2015.
TCS

“Total Cost Saving”
TOTAL COST SAVING
(VALUE CHAIN MACRO FLOW)

COMPONENTS DESIGN
- Drawing (search and draw)
- Technical documentation
- Part number generation

PURCHASING AND PRODUCTION PLANNING
- Make or Buy
- RFQ request
- Production Order
- RFQ evaluation
- Planning
- PO issue
- Follow up

COMPONENTS PRODUCTION
- Delivery time
- Prod. Lead time
- Quality check
- Treatments
- Quality check
- Scraps / Delays

LOGISTIC
- Stock Management
- Assembly Management (planning)

MACHINE ASSEMBLY

1. Value Adding Operations
2. Time sensitive Operations
3. Unplanned Operation
TOTAL COST SAVING
(MISUMI operations flow)
### Average Time Spent for Single Operation for Each Item

<table>
<thead>
<tr>
<th>Components Design</th>
<th>Purchasing and Production Planning</th>
<th>Components Production</th>
<th>Logistic</th>
<th>Machine Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Make or Buy evaluation</td>
<td>Lead time</td>
<td>Stock management</td>
<td>agreed time</td>
</tr>
<tr>
<td>From 10 to 75 min.</td>
<td>5 min.</td>
<td>Prod. LT Treatments</td>
<td>All operations 15 min.</td>
<td></td>
</tr>
<tr>
<td>Drawing</td>
<td>QTs request</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From 10 to 30 min.</td>
<td>3 min.</td>
<td>Prod. Order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical documentation</td>
<td>Supplier call (clarif.)</td>
<td></td>
<td>Prod. LT Treatments</td>
<td></td>
</tr>
<tr>
<td>From 30 to 60 min.</td>
<td>5 min.</td>
<td>Int. management</td>
<td>All operations 55 min.</td>
<td></td>
</tr>
<tr>
<td>Part number creation</td>
<td>Qts evaluation</td>
<td>Prod. sched., Remind archive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From 10 to 40 min.</td>
<td>6 min.</td>
<td>5 min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO issue</td>
<td></td>
<td>Remind Phone calls</td>
<td>Delivery delay</td>
<td>All operations 25 min. (re-planning time)</td>
</tr>
<tr>
<td>3 min.</td>
<td></td>
<td>3 min.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** All operations 55 min.

**Note:** Delivery delay All operations 25 min. (re-planning time)
DESIGN PHASE
## Saving into Design activities

### DESIGN PHASE ACTIVITIES FOR NON-CORE PARTS (TRADITIONAL)

<table>
<thead>
<tr>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing research</td>
</tr>
<tr>
<td>Drawing / Modification</td>
</tr>
<tr>
<td>Technical Specifications</td>
</tr>
<tr>
<td>Product code creation</td>
</tr>
<tr>
<td>Archive</td>
</tr>
</tbody>
</table>

- Drawing research not always effective and efficient and very time consuming
- Risk to create duplicate part number
- Increase of the # of drawings for simple basic parts (not standardized)

### DESIGN PHASE ACTIVITIES FOR NON-CORE PARTS (MISUMI WAY)

### CONFIGURATION

- Fast and optimized process (e-platform)
- Already standardize components
- Commercial code creation (unique and worldwide available)

### SAVE TIME IN ORDER TO DEDICATE IT FOR MORE VALUE ACTIVITIES

#### Simple parts drawings

#### Complex parts (CORE)
Saving into Design activities
Comparison R&D activities

During an internal investigation, aimed for a university thesis, we have interviewed some customers (potential and already acquired) to compare time for draw some specific items (below). Total time includes: research on ERP, drawings, cartouche and code creation. Then, we have compared with MISUMI average configuration time from expert and beginner user.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COMPLEXITY</th>
<th>CUSTOMER DETECTED AVERAGE TIME (min)</th>
<th>MISUMI TIME (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SEARCHING</td>
<td>ADJUSTING</td>
</tr>
<tr>
<td>LINEAR SHAFT</td>
<td>easy</td>
<td>PDM software or research engine</td>
<td>from 10 up to 25 min</td>
</tr>
<tr>
<td>ROTARY SHAFT</td>
<td>complex</td>
<td>manual research</td>
<td>from 30 up to 75 min</td>
</tr>
<tr>
<td>WELDING STANDOFF</td>
<td></td>
<td>from 10 up to 25 min</td>
<td>from 30 up to 90</td>
</tr>
<tr>
<td>ANGLE PLATES</td>
<td>mid</td>
<td>from 10 up to 25 min</td>
<td>from 30 up to 90</td>
</tr>
<tr>
<td>BEARING WITH HOUSING</td>
<td></td>
<td>from 10 up to 25 min</td>
<td>from 30 up to 90</td>
</tr>
<tr>
<td>PULLEY</td>
<td></td>
<td>from 10 up to 25 min</td>
<td>from 30 up to 90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>from 10 up to 25 min</td>
<td>from 30 up to 90</td>
</tr>
</tbody>
</table>
Purchasing & Planning
Saving at Purchase & Planning activities

PURCHASING & PLANNING ACTIVITIES (TRADITIONAL)

- Send drawings to suppliers
- Suppliers call for clarification
- Receive suppliers QT
- Analysis of quotes
- ISSUE PO
- Follow up

- Time consuming and fragmented process
- Multiple suppliers involved for the evaluation and also for the production phases
- All aborted QTs request are wasted time

PURCHASING & PLANNING ACTIVITIES (MISUMI WAY)

MISUMI E-SHOP

- Direct web QT (24/7)
- Direct PO issuing
- Online manageable delivery
- One-stop supplier
- Short delivery time

- 99%+ on time delivery
- Possibility to add internal data info
- Order history available
- Possibility to create project folders

Commercial MISUMI item

Free field to fill (internal code?)

Purch. unit price

Delivery
Quality check and Scrap
Compare Non Core activities (scrap)

QUALITY CHECK (AND SCRAP) (TRADITIONAL)

- Accept operations
- NOT compliance management
- Defect analysis
- PJ/DRW changement
- Report
- New PO
- Lead time
- Check item
- Acceptance operations
- Manage material reception
- Item available

- Time consuming process due to operation fragmented
- Delays in following operations (production/assembly)
- Very expensive process

QUALITY CHECK (AND SCRAP) (MISUMI WAY)

ACCEPT OPERATION

Time to spend in other activities

0.002% of scrap possibility over million of delivered items
SAVING CALCULATION

AVERAGE MINUTES OF MAN WORKING TIME AND DAYS OF DELAY RELATED TO A NON CONFIRMITY

<table>
<thead>
<tr>
<th>Activity</th>
<th>Minutes</th>
<th>Day(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept operations</td>
<td>5</td>
<td>0,5</td>
</tr>
<tr>
<td>NOT compliance management</td>
<td>5</td>
<td>0,5</td>
</tr>
<tr>
<td>Defect analysis</td>
<td>10</td>
<td>0,5</td>
</tr>
<tr>
<td>PJ/DRW modification</td>
<td>10</td>
<td>0,5</td>
</tr>
<tr>
<td>Report</td>
<td>10</td>
<td>0,5</td>
</tr>
<tr>
<td>New PO</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Check item</td>
<td>5</td>
<td>0,5</td>
</tr>
<tr>
<td>Acceptance operations</td>
<td>4</td>
<td>0,5</td>
</tr>
<tr>
<td>Manage material reception</td>
<td>4</td>
<td>0,5</td>
</tr>
<tr>
<td>Item available</td>
<td></td>
<td>0,5</td>
</tr>
</tbody>
</table>

**Cost (working time)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check item</td>
<td>5</td>
</tr>
<tr>
<td>Not compliance management</td>
<td>5</td>
</tr>
<tr>
<td>Defect analysis</td>
<td>10</td>
</tr>
<tr>
<td>Project/drawing changeement</td>
<td>10</td>
</tr>
<tr>
<td>Reports</td>
<td>10</td>
</tr>
<tr>
<td>New purchase order</td>
<td>2</td>
</tr>
<tr>
<td>Check item (second)</td>
<td>5</td>
</tr>
<tr>
<td>Acceptance operation</td>
<td>4</td>
</tr>
<tr>
<td>Manage material reception</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL COST SAVIG</td>
<td>55</td>
</tr>
</tbody>
</table>

**Time (pure delay)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Day(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting time from phase 1 and 2</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 2 and 3</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 3 and 4</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 4 and 5</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 5 and 6</td>
<td>0,5</td>
</tr>
<tr>
<td>New LEAD TIME (URGENT)</td>
<td>6</td>
</tr>
<tr>
<td>Waiting time from phase 7 and 8</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 8 and 9</td>
<td>0,5</td>
</tr>
<tr>
<td>Waiting time from phase 9 and 10</td>
<td>0,5</td>
</tr>
<tr>
<td>TOTAL TIME SAVED</td>
<td>10</td>
</tr>
</tbody>
</table>

Average time spent by factory for each item scrap
Average waiting time for receiving new compliant product
Machine Assembly
SAVING CALCULATION

HOW DELAY AFFECTS PRODUCTION TIME (AND QUALITY) AND RELATED COST

<table>
<thead>
<tr>
<th>Week</th>
<th>Plan</th>
<th>Reality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts Delivery</td>
<td>Parts Delivery</td>
</tr>
<tr>
<td></td>
<td>Assembly Lead Time Originally Scheduled</td>
<td>Delay</td>
</tr>
<tr>
<td></td>
<td>Validation Test</td>
<td>Assembly L.T. to Make Up for Lost Time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fast Test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delay Buffer</td>
</tr>
</tbody>
</table>

- **Time**: Working time of the assembly workers
- **Quality**: Risk of errors due to speed up operations
- **Cost**: Penalty to be paid in case of late delivery

**Average time spent by factory production planners for each item delivered with delay**

**Time (plus general machine assembly process time)**

**ON TIME DELIVERY (traditional way)**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time (min)</th>
<th>Nr of Items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Calls</td>
<td>5</td>
<td>N</td>
<td>times N</td>
</tr>
<tr>
<td>Complains</td>
<td>5</td>
<td>N</td>
<td>times N</td>
</tr>
<tr>
<td>Re-Scheduling</td>
<td>10</td>
<td>N</td>
<td>times N</td>
</tr>
<tr>
<td>Other (reporting, meeting...)</td>
<td>5</td>
<td>N</td>
<td>times N</td>
</tr>
</tbody>
</table>
PRODUCTS BY APPLICATION AREA

- Get essential products per application
- Components for body-in-white, powertrain and packaging industry at a glance
- OEM supplier lists available
- Our network of design houses provide innovative solutions, increase your flexibility and improve your output
PRODUCTS BY APPLICATION AREA

Find a wide range of products and applications for your industry. MISUMI is your one-stop-shop for automotive and packaging industry.
IT’S ALL ABOUT TIME
From design to purchase – MISUMI is your partner

Wide product range:
More than 20 million products

Configurable components:
In up to 0.01-mm increments

Free download of CAD models:
2D and 3D CAD files in various native formats

No mark-up for small-volume purchases:
Delivery from 1 piece

Short lead times: More than 100,000 configurable parts are ready for dispatch within four days.

Continue increase of stock items - Available for same-day shipment