The high volume professional
The transfer system Multistar LX is a processing system for manufacturing small precision parts in large quantities. Versions with 24 work stations are available. What makes the Multistar LX so special? It's the fast, nimble and precise performance and its simple and functional construction, which make the Multistar LX your reliable partner. Ideally, but not a necessity, is an output of at least a million parts per year. Another advantage is the price performance ratio, which makes the Multistar an investment with added value.

As fast as it gets!
The mechanical control beats anything. Perfectly coordinated accelerations and feeds provide speed. The mechanism works as follows: A master cam controls with the help of a rocker arm the feeding and processing track of the working spindles. A frequency regulated motor drives the working spindles in pairs over a toothed belt. Driven together, both of the spindle pairs remain speed independent. Incomparable processing speed means economical mass production.

At home in many places
The Multistar LX is used for electrical and electronic contacts, plug-in connections for light wave conductors, nozzles, valves and ballpoint pen tops or for workpieces used in the medical technology. When it comes to high volume production, Multistar is the best partner.

Advantages at a glance
• High processing speed
• Absolute reliability
• High operating convenience
• Minimal maintenance required
• Convincing price-performance ratio
Multistar LX-24: It’s a professional, isn’t it?
The Multistar LX-24 with 24 work stations and up to 44 working spindles is the guarantor for a smooth mass production. With the Multistar LX-24 machining is possible from below and above or from the side, for example when separating, drilling, turning or thread cutting. Other additional features are the 24 intermediate stations, which allow measuring, controlling and cleaning procedures during the same run.

That way you can quadruplicate your productivity
It is unique! A run produces up to 600 simple workpieces per minute. Separating the fields of work doubles, triples or quadruplicates the amount of production at the same high processing speed. With the same parallel-concept, the complete production of different workpieces is possible within one run.

Factors of success at one glance
- Fastest rotary transfer machine worldwide
- High precision and repeatability
- Simultaneous machining at two sides at each station
- Multiple cycles for extremely high amounts
- Parallel production of two parts (e.g. plug and socket)
- Load and unload time parallel to the machining process
- Quick and simple tool changes

Multistar LX-24 – What do you gain when separating the field of work? The simultaneous production of plugs and sockets in one run.
Mikron Multistar LX-24

Typical applications
CASE HISTORY Bicycle Nipples
On Mikron Multistar LX-24

The challenge
- Produce bicycle nipples ø 4mm, length 12mm, thread length 8mm
- Annual production volume approx. 100 mio nipples
- Material: Brass

The traditional solution
Production area: 25 m²
Required machines: 4*
Necessary statistic control: 4
Necessary tools: 24
Employees: 1 every 4 machines
- Raw material: starting from pressed blanks
* Traditional transfer machines

Mikron: The innovative solution
Production area: 16 m²
Required machines: 1 Mikron Multistar LX-24
Necessary statistic control: 1 for constant quality
Necessary tools: 20
Employees: 0.25/machine
- Raw material: starting from pressed blanks

Your advantage
- Production area: -36%
- Machines: -75%
- Employees: -75%
- Setup time: -17%
- Productivity: -75%
## Technical data Multistar LX-24

<table>
<thead>
<tr>
<th>Machine</th>
<th>LX-24/1000</th>
<th>LX-24/1500/ LX-24/1500R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stations</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Max. number of upper units (^1)</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Max. number of lower units (^1)</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Max. number of lateral units (^1)</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Number of clamping fixtures</td>
<td>24 / 48</td>
<td>24 / 48</td>
</tr>
<tr>
<td>Table indexing accuracy TIR</td>
<td>mm</td>
<td>0.005</td>
</tr>
<tr>
<td>Max. cycles</td>
<td>pcs/min.</td>
<td>120</td>
</tr>
<tr>
<td>Double cycle</td>
<td>2 x 120</td>
<td>240</td>
</tr>
<tr>
<td>Multiple cycle</td>
<td>4 x 120</td>
<td>500</td>
</tr>
</tbody>
</table>

### Clamping devices

| Min. clamping diameter                                                | mm         | 0.4                     |
| Max. clamping diameter                                                | mm         | 10                      |

### Machining units

| Max. machining length                                                 | mm         | 35                      |
| Central cam for working feed (machining units)                        | yes        | yes                     |
| Linear cam for working feed (machining units)                         | no         | no                      |
| CN-control system for working feed                                    | no         | no                      |
| Chuck indexing for workpiece machining around 360°                    | no         | no                      |
| Rotation of workpiece (chuck drive), speed adjustable up to 6000 rpm  | rpm        | no                      |

### Machining spindles

| Spindle speed                                                         | rpm        | 22'000                  |
| Spindle diameter                                                      | mm         | 40                      |
| Max. spindle rating                                                   | kW         | 0.2                     |

### Installation

| Main drive power                                                       | kW / Hz    | 2.2 / 50                |
| Input voltage \(^2\)                                                  | V          | 400                     |
|                                                                 | 3 phases   | 50/ 60                  |
|                                                                 | Hz         | 400                     |
|                                                                 | 3 phases   | 50/ 60                  |
| Power consumption ca. \(^3\)                                          | kW         | 6 - 12                  |
| Pressure of compressed air                                            | bar        | 5                       |
| Consumption \(^3\)                                                    | (m³/h)     | 10 - 20                 |
| Coolant system                                                        | l          | 850                     |
| Approx. weight of machine \(^3\)                                      | kg         | 1900                    |
| Max dimensions L x D x H in m                                         | m          | 2.85 x 1.53 x 2.75      |
| when machining from wire                                             | m          | 4.0 x 2.2 x 3.0         |

\(^1\) On each station, two of three possible machining axis can be equipped with a machining station.

\(^2\) Other voltages require a transformer (optional).

\(^3\) Is affected by the number of units.

The technical data listed are not binding and may be changed at any time without notice.
Mikron Machining

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