CONTENTS

SAWING TECHNOLOGY

VERTICAL CIRCULAR SAW KSA 08
for billets, tubes and profiles made from steel

INCLINED BED CIRCULAR SAW KSS 09
for billets and tubes made from steel

CIRCULAR SAW KSA L 10
for tubes in layers

CIRCULAR SAW KSA CU 11
for sawing copper slab ingots and copper billets

TUBE CUT-OFF MACHINE RTM 12
for longitudinal welded or seamless pipes

MULTICUT TUBE CUT-OFF MACHINE 13
for cutting pipes in ERW extrusion lines and seamless extrusion lines

MILLING TECHNOLOGY

STRIP EDGE MILLING MACHINE BFMK 16
for spiral tube lines

STRIP EDGE MILLING MACHINE BFMK 17
for longitudinal tube lines

PLATE EDGE MILLING MACHINE PFM 18
for shipyards

PLATE EDGE MILLING MACHINE PFM 19
for tanks and wind tower columns

PLATE EDGE MILLING MACHINE PFM 20
for large pipes, simultaneous preparation of welded edges on both longitudinal sides

PIPE BEVELLING MACHINE RFM 21
for large pipes, API welding bevel at both pipe ends

SPECIAL MILLING EQUIPMENT 22
for the tube industry

SPECIAL MILLING EQUIPMENT 23
for shipyards

RAIL TECHNOLOGY

RAIL MILLING AND GRINDING 26
The technology

MOBILE SOLUTIONS 28
The Linsinger fleet

STATIONARY SOLUTIONS 29
Stationary rail head milling line SKF for reprofiling rail heads

STATIONARY SOLUTIONS 30
Rail sawing & drilling system LSB

THE COMPLETE SOLUTION – RAIL WELDING AND REPAIR WORKS 31
for new and used rails

TOOL TECHNOLOGY & SERVICE

TOOLS 34
Designed to optimize LINSINGER machines

SPARE PARTS SERVICE, CUSTOMER SERVICE AND MAINTENANCE 35

LINSINGER

LINSINGER has a tradition of more than 70 years as a global leader for milling and sawing technology. We stand for enduring quality and outstanding productivity. Years of experience, competent employees and latest technologies permit us, together with our customers, to achieve excellent results.

It is our aim to maintain our technological edge and in the market. We listen to customers and offer perfect products and services in order to support the successful operations of more than 400 satisfied clients.

Our basic principles are integrated into company philosophy. Everyone at LINSINGER is prepared to commit themselves fully for the company and its projects. Strong and economic independent growth initiated by the company itself ensures that responsible decisions shape our personality. Here our close proximity to our customers through international experts provides optimum support. Our high standards regarding insourcing also facilitate a huge production depth and secure critical technologies for LINSINGER.

OUR BASIC PRINCIPLES

COMMITMENT, INDEPENDENCE, GROWTH INITIATED BY THE COMPANY ITSELF, PERSONAL CONSULTATION, INSOURCING
98% EXPORT QUOTA

98% of the in-house manufactured machines are exported worldwide.

TECHNOLOGY

LINSINGER stands for over 70 years of mechanical engineering. Passion, hard work, personal commitment and dedication have played the primary role in the success of LINSINGER and the satisfaction of our customers. LINSINGER is always at the forefront of developments in order to prepare, along with their customers, the best solution for a task. Therefore, LINSINGER is constantly conducting research and development in order to redefine new limits. Our satisfied customers often confirm this.

With highest design and an eye for details, we support our customers with state-of-the-art design tools for today’s projects. In order to develop customer-tailored concepts aligned to the wishes and requirements of our customers, an active partnership is very important to us. Our branch know-how facilitates the achievement of continuous development on our products and processes.

With innovation and precision, we develop and manufacture highly complex components and assemblies – everything from a single source.

ENGINEERING

Our experienced design team supports and customers you with complex tasks. Thanks to our years of experience and the large production depth, we are able to complete complex projects within the shortest possible time, and through the collaboration with our clients, an optimum exchange of information is guaranteed at all times.
BUSINESS UNITS

SAWING TECHNOLOGY
Sawing lines for the cutting of billets, tubes and profiles made from steel or non-ferrous metals, single or grouped in a layer.

MILLING TECHNOLOGY
Milling equipment for the preparation of welded edge profiles on sheet metal plates as well as steel strips and non-ferrous metals. Highest productivity with maximum precision.

RAIL TECHNOLOGY
Mobile and stationary milling and grinding equipment for reprofiling rail heads. Rail sawing & drilling equipment for processing rails.

TOOL TECHNOLOGY & SERVICE
Exclusive manufacture and optimisation of tools for LINSINGER machines. Global service of the highest quality. Original tooling for increased productivity.
### Sawing Technology

<table>
<thead>
<tr>
<th></th>
<th>Tube mills</th>
<th>Forge mills</th>
<th>Rail processing</th>
<th>Railway wheel production</th>
<th>Rail production</th>
<th>Rail maintenance</th>
<th>Wind tower and tank prefabrication</th>
<th>Automotive industry</th>
<th>Ship industry</th>
<th>Non-ferrous smelters</th>
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</thead>
<tbody>
<tr>
<td>Spiral tube mills</td>
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<td>Longitudinal seam tube mills ERW</td>
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<td>CIRCULAR SAW KSA L</td>
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<td>for tube layers</td>
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<td>CIRCULAR SAW KSA CU</td>
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<td>for copper slabs and copper billets</td>
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<tr>
<td>MULTICUT TUBE CUT-OFF MACHINE</td>
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<td>for cutting pipes in ERW and seamless extrusion lines</td>
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<td>TUBE CUT-OFF MACHINE RTM</td>
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<td>for longitudinal welded or seamless pipes</td>
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<td>RAIL SAWING AND DRILLING LSB</td>
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<td>for sawing and drilling of rails</td>
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</tbody>
</table>
LINSINGER offers added value for increased quality and productivity in your production process. LINSINGER sawing lines for cutting solid material, tubes and profiles made from steel or non-ferrous metals in single and layer cut are manufactured exactly to customer requirements for worldwide deployment.
VERTICAL CIRCULAR SAW KSA
FOR STEEL BILLETs, TUBES AND PROFILES

APPLICATIONS
Forge mills, steelworks, tube mills, automotive suppliers industry, cutting workshops

FEATURES
- Designed for 3-shift operation
- Smooth cut surfaces without cracks or burrs
- No hardening or structural changes to the cutting surfaces through the cold cutting process
- Dry cutting – no emissions
- Designed especially for exclusive LINCUT® and brazed saw blades
- Available for small material diameters, also in a double cut version.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MAX. MAT. Ø</th>
<th>MAX. MAT. Ø</th>
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</thead>
<tbody>
<tr>
<td>KSA 500</td>
<td>160 mm</td>
<td>150 mm</td>
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<tr>
<td>KSA 710</td>
<td>200 mm</td>
<td>180 mm</td>
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<tr>
<td>KSA 800</td>
<td>270 mm</td>
<td>250 mm</td>
</tr>
<tr>
<td>KSA 1010</td>
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<tr>
<td>KSA 1250</td>
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<tr>
<td>KSA 1400</td>
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<tr>
<td>KSA 1600</td>
<td>600 mm</td>
<td>550 mm</td>
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<tr>
<td>KSA 1900</td>
<td>700 mm</td>
<td>650 mm</td>
</tr>
<tr>
<td>KSA 2400</td>
<td>850 mm</td>
<td>800 mm</td>
</tr>
<tr>
<td>KSA 3000</td>
<td>1,060 mm</td>
<td>970 mm</td>
</tr>
</tbody>
</table>

CUTTING TIME < 60 SECONDS

KSA 1010, solid material Ck45, Ø 330 mm
INCLINED BED CIRCULAR SAW KSS
FOR STEEL BILLETs AND TUBES

APPLICATIONS
Forge mills, railway wheel production, railway axle production, tube mills, steelworks, automotive supplier industry, cutting workshops

FEATURES
- This machine combines the advantages of both horizontal and vertical saws
- Secure clamping even of bent billets through unique three-point clamping system
- Designed especially for exclusive LINcUT® and brazed saw blades
- Designed for three-shift operation
- Optimum downward chip flow

COST SAVINGS PER CUT USING LINcUT® >50%

KSS 1250, solid material Ck45, Ø 380 mm

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MAX. MAT. Ø</th>
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</thead>
<tbody>
<tr>
<td>KSS 630</td>
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<tr>
<td>KSS 800</td>
<td>270 mm</td>
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<tr>
<td>KSS 1010</td>
<td>350 mm</td>
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<tr>
<td>KSS 1250</td>
<td>450 mm</td>
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<tr>
<td>KSS 1400</td>
<td>500 mm</td>
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<tr>
<td>KSS 1600</td>
<td>600 mm</td>
</tr>
<tr>
<td>KSS 1900</td>
<td>700 mm</td>
</tr>
<tr>
<td>KSS 2400</td>
<td>850 mm</td>
</tr>
<tr>
<td>KSS 3000</td>
<td>1,060 mm</td>
</tr>
</tbody>
</table>
CIRCULAR SAW KSA L
FOR TUBES IN LAYERS

APPLICATIONS
Precision or seamless pipe mills

FEATURES
- Low-burr cut ready for sale
- Very short cutting times per tube
- Stress- and crack-free cutting surface
- Low tooling costs
- Suitable for ground and peeled billets
- Designed especially for exclusive LINCUT® and brazed saw blades

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MAX. LAYER WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSA 800 L</td>
<td>400 mm</td>
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<tr>
<td>KSA 1010 L</td>
<td>650 mm</td>
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<tr>
<td>KSA 1250 L</td>
<td>850 mm</td>
</tr>
<tr>
<td>KSA 1400 L</td>
<td>850 mm</td>
</tr>
<tr>
<td>KSA 1600 L</td>
<td>1,050 mm</td>
</tr>
<tr>
<td>KSA 1900 L</td>
<td>1,280 mm</td>
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</tbody>
</table>

CUTTING TIME
10 SECONDS PER TUBE

KSA 1600 L, 5 pcs., Ø 210 x 8.9 mm, St 52
CIRCULAR SAW KSA CU
FOR SAWING COPPER SLAB INGOTS AND COPPER BILLETS

FEATURES
- Especially suitable for large slab ingot cross sections
- No jamming of saw blade due to centric cut-in
- Shortest cutting distances due to vertical construction
- Designed for 3-shift operation
- Uncontaminated, recyclable chips

APPLICATIONS
Non-ferrous smelters

FOR SAWING SLAB INGOTS MADE FROM NON-FERROUS METAL

TYPE | MAX. WORKPIECE
--- | ---
KSA 1250 Cu | Ø 420 mm 850 x 200 mm
KSA 1600 Cu | Ø 550 mm 1,250 x 250 mm
PSA 1600 Cu | 1,300 x 300 mm

FOR SAWING BILLETS MADE FROM NON-FERROUS METALS

APPLICATIONS
Non-ferrous smelters

FEATURES
- Designed for 3-shift operation
- Smooth cut surfaces without cracks
- Dry cut – no emissions during sawing process
- Sorted, recyclable chips

TYPE | MAX. WORKPIECE Ø
--- | ---
KSA 710 Cu | 230 mm
KSA 1010 Cu | 350 mm
KSS 1250 Cu | 450 mm

CUTTING TIME: 1.6 MIN.
1,250 x 260 mm DHP-Cu
TUBE CUT-OFF MACHINE RTM
FOR LONGITUDINAL WELDED OR SEAMLESS TUBES

APPLICATIONS
Seamless tube mills, socket pipe production

FEATURES
- Exact angularity through precision cut-off
- Clean cut surfaces
- Low-burr cut
- No chips in tube
- Narrow cutting width
- Quick and easy tool change through carbide cutting tips

~45% OF THE TOOLING COSTS IN COMPARISON TO A CIRCULAR SAW

Working time: 24 s, Ø 406 x 10.3 mm
MULTICUT TUBE CUT-OFF MACHINE
FOR TUBES IN ERW LINES AND SEAMLESS LINES

FLYING MULTICUT

APPLICATIONS
Longitudinal seam tube mills ERW

FEATURES
- Short cutting times for maximum line speeds
- Low-burr cut ready for sale
- Lowest possible tooling costs due to inexpensive saw blades
- High availability due to failure strategy
  (cutting with 2 units possible)
- Dry or wet cutting possible
- Suitable for circular, square and rectangular profiles

STATIONARY MULTICUT

APPLICATIONS
Seamless tube mills, socket pipe production, tube cutting

FEATURES
- Tube dimension changes possible without retooling
- Suitable for circular, square and rectangular profiles
- Automatic tool change for uninterrupted production
- Low-burr cut ready for sale
- High availability due to failure strategy
  (cutting with 2 units possible)
- Automatic robot cut removal
- Tool change 30 seconds per saw blade
## MILLING TECHNOLOGY

### Milling Machines

<table>
<thead>
<tr>
<th>Tube mills</th>
<th>Forge mills</th>
<th>Rail processing</th>
<th>Wind tower and tank prefabrication</th>
<th>Automotive industry</th>
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<tbody>
<tr>
<td>Spiral tube mills</td>
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<tr>
<td>Longitudinal seam tube mills SAW, RE</td>
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<td>Cold drawn tubes</td>
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<td>Seamless tube mills</td>
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<tr>
<td>Forging mills</td>
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<td>Railway wheel production</td>
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<td>Rail production</td>
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<td>Wind tower and tank prefabrication</td>
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<td>Non-ferrous smelters</td>
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</tbody>
</table>

### Special Milling Machines

**Strip edge milling machine BFMK**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing

**Plate milling machine FFM**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Cold drawn tubes
- Rail production

**Pipe end bevelling machine RFM**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Cold drawn tubes
- Rail maintenance

**Special milling machines SCCM**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters

**Plate cross cutting machine PCCM**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters

**Ball tank segments milling machine**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters

**Submarine hatch milling machine**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters

**Longitudinal seam milling machine**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters

**Round seam milling machine**
- Spiral tube mills
- Longitudinal seam tube mills ERW
- Seamless tube mills
- Rail processing
- Rail production
- Rail maintenance
- Wind tower and tank prefabrication
- Automotive industry
- Ship industry
- Non-ferrous smelters
One of the most important business units at LINSINGER is Milling Technology – this has been the core competence of the company for decades. The tried and tested vertical copying peripheral milling technology by LINSINGER is used in plate milling machines for a wide range of applications, such as tank and windtower prefabrication, strip edge milling for the tube industry, and stationary or mobile rail milling.
STRIP EDGE MILLING MACHINE BFMK
FOR SPIRAL TUBE LINES

APPLICATIONS
For perfect weld seam preparation in spiral tube lines with and without tack welding

FEATURES
- Milling unit with vertical copying and profile milling tools for accurate plate edge profiles
- Material savings through less oversize
- High line speeds possible during tack welding due to double milling units
- Small chips which are easy to handle

WORK AREA

<table>
<thead>
<tr>
<th>Strip thickness</th>
<th>up to 28 mm</th>
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</thead>
<tbody>
<tr>
<td>Line speed</td>
<td>up to 12 m/min</td>
</tr>
<tr>
<td>Materials</td>
<td>X52, N80, P110 and higher strengths</td>
</tr>
</tbody>
</table>
STRIP EDGE MILLING MACHINE BFMK
FOR LONGITUDINAL TUBE LINES ERW

APPLICATIONS
Longitudinal extrusion lines ERW

FEATURES
- Maximum-accuracy weld seam preparation
- Vertical and transverse-copying milling units with profile processing
- High cutting performance with low tooling costs
- N and V profiles or profile milling tools possible
- No additional deburring required

WORK AREA
| Strip width       | up to 2,200 mm |
| Strip thickness   | up to 25 mm   |
| Line speed        | up to 80 m/min|
| Materials         | X52, N80, P110 and higher strengths |

PAYBACK < 1 YEAR
Line speed up to 80 m/min.
PLATE EDGE MILLING MACHINE PFM
FOR SHIPYARDS

For the preparation of welded edge profiles on all sides

APPLICATIONS
Ship industry, shipyards

FEATURES
- Maximum accuracy weld seam preparation
- Vertical copying milling units with weld profile milling tools
- Transverse transport between the two clamping tables enables edge preparation crane manipulation

INCREASED QUALITY
through high-precision plate tolerances

LINSINGER TOOL TECHNOLOGY

Type PFMDT LQ
Type PFMDT I
Type PFMDT II
PLATE EDGE MILLING MACHINE PFM
FOR TANKS AND WIND TOWER COLUMNS

Developed for rectangular, trapezoidal and conical plates

APPLICATIONS
Tank prefabrication, wind tower columns

FEATURES
- Short processing time due to high productivity milling technology
- High accessibility
- Wide-ranging configuration diversity for every customer application
PLATE EDGE MILLING MACHINE PFM LL
FOR LARGE PIPES, SIMULTANEOUS PREPARATION OF WELDED EDGES ON BOTH LONGITUDINAL SIDES

APPLICATIONS
Large tube mills

FEATURES
- High productivity through simultaneous milling on both longitudinal sides
- Weld seam preparation with maximum accuracy
- Vertical copying milling units with profile milling tools

EXAMPLES OF POSSIBLE EDGE FORMS FOR PLATE EDGE MILLING MACHINES PFM LL

INCREASED OUTPUT
through precise weld seam preparation
PIPE BEVELLING MACHINE RFM
FOR LARGE PIPES, API WELDING BEVEL ON BOTH PIPE ENDS

APPLICATIONS
Large tube mills, spiral tube lines

FEATURES
- Exact pipe length
- Only one user required for bevelling both ends simultaneously
- Inner copying tools
- Low-burr bevelling
- Simple, low cost bevel geometry change-over

WORK AREA
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Tube</td>
<td>Ø 16” – 120” (406 – 3048)</td>
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<tr>
<td>Wall thickness</td>
<td>6.4 – 50.8 mm</td>
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<tr>
<td>Tube length</td>
<td>6 – 24 m</td>
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<tr>
<td>Material</td>
<td>API quality SL B, X80 Grade, ...</td>
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</table>
SPECIAL MILLING EQUIPMENT FOR THE TUBE INDUSTRY

STRIP CROSS CUTTING LINE
FOR CUTTING OF LEADING AND TRAILING SIDE
OF COIL ENDS AND CROSS WELD SEAM
PREPARATION FOR CONNECTION OF THE COILS.

FEATURES
- No shearing nose
- Accurate, clean, low-burr cut
- No structural changes
- N, Y, X profiles possible
- Use of the exclusive LINCUT® disc milling tool
- High economic viability due to the replaceable carbide cutting tips

PLATE CROSS CUTTING LINE PCCM
FOR CUTTING LEADING
AND TRAILING PLATE ENDS

FEATURES
- No shearing nose
- Accurate, clean, low-burr cut
- No structural changes
- N, Y, X profiles possible
- Maximum service life due to coated carbide tips
- Less production downtime due to long tool life
SPECIAL MILLING EQUIPMENT FOR SHIPYARDS

BALL TANK SEGMENTS MILLING MACHINE
FOR MILLING BALL SEGMENTS OF LNG TANKS

FEATURES
- Precision milling through one-time clamping on the rotating machining table
- Consistent weld edge profile across the entire plate edge through 3D copying milling unit
- Milling unit with profile milling tools can be used
- Accurate milling of pre-bent ball tank segments

SUBMARINE HATCH MILLING LINES
FOR MOBILE 5-AXIS PROCESSING OF SUBMARINE HATCH MILLING LINES

FEATURES
- Mobile and flexible: milling on shop floors or directly on submarine bodies.
- A range of tool heads permit machining options (turning, milling, boring, flame cutting, measuring)
- Quick-change mechanism for the replacement of tool heads

CONSISTENT PROFILE

through 3D copying milling unit

5-AXIS PROCESSING

Drilling, milling, boring, flame cutting, measuring
## RAIL TECHNOLOGY

<table>
<thead>
<tr>
<th>Spiral tube mills</th>
<th>Longitudinal seam tube mills</th>
<th>Large tube mills</th>
<th>Cold drawn tubes</th>
<th>Seam less tube mills</th>
<th>Forge mills</th>
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### RAIL MILLING TRAINS

- Large tube mills

### RAIL-ROAD-TRUCKS

- Large tube mills

### STATIONARY RAIL HEAD MILLING LINE SKF

- Large tube mills

### RAIL WELDING AND REPAIR MILLS

- Cold drawn tubes
All rail surfaces are subjected to unceasing wear. To increase rail safety and service life, and to lower operating costs, rails have to be regularly maintained. In order to reduce operational disruption, LINSINGER has developed mobile rail milling machines that process rail heads on-site, without dismantling them. All LINSINGER rail milling machines can be applied to mainline railways, suburban trains, underground trains, trams and private railways as well as for line rails, switches, road crossings and tunnels.
MOBILE SOLUTIONS

LINSINGER RAIL MILLING AND GRINDING TECHNOLOGY

LINSINGER rail milling technology is universally suitable for use on mainline railways, suburban trains, underground trains, trams and private railways as well as for line rails, switches, road crossings and tunnels.

MACHINING PROCESS

Peripheral milling of the rail head combined with surface finishing.

RAIL MILLING TECHNOLOGY

for a perfect rail surface

M631 High-speed rail processing on mainline railways

Milling unit with downstream peripheral grinding unit for maximum surface
LINSINGER RAIL MILLING AND GRINDING TECHNOLOGY

APPLICATIONS
Single pass reprofiling of the rail head
- Plain turnout processing of both tracks and turnouts (switches)
- New rail profiling
- Preventative maintenance and repairs
- Noise reduction in sensitive areas
- Gauge correction
- High-speed refurbishment
- Removal of rail head defects in the transverse and longitudinal profiles
- Improvement of running smoothness and wear minimization
- Rail profile change-over

FEATURES
- Complete processing in a single pass
- Individual material removal from 0.1 to 5 mm
- Environmentally-friendly procedure, no pollution through chips or grinding dust
- No flying sparks – no risk of fire
- Can be used in sensitive areas
- Dry machining, no water required
- No removal of track switching equipment required
- Can be used all year round
- High precision
- Material friendly process
- Chips can be reused as raw materials

PRODUCTIVE HIGH-PERFORMANCE The rail-road truck is a multi-talent amongst rail milling machines. This ingenious hybrid design permits easy transfer of the machine from and onto the track. Ideal for small construction lots, as well as for underground, subway and tram railway networks.
# MOBILE SOLUTIONS
THE LINSINGER FLEET

<table>
<thead>
<tr>
<th>LENGTH (m)</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
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</table>

- **MG31**: The fastest rail milling train in the world
- **SF06-FFS PLUS**: Developed for maximum performance
- **SF03-FFS**: Universal usage, equipped for all challenges
- **SF02T-FS**: Featuring low axle loads
- **SF02-TRUCK**: Maximum flexibility and mobility
- **MG11**: Designed especially for small track gauges

BEFORE

AFTER

Perfect rail head reprofiling with LINSINGER rail milling technology.
STATIONARY SOLUTIONS

STATIONARY RAIL HEAD MILLING MACHINE SKF FOR STATIONARY RAIL HEAD REPROFILING

For centralised rail heads processing
Stationary rail head milling line.

APPLICATIONS
- Welding and repair works in 3-shift operation
- Rail manufacturing

ECONOMICALLY VIABLE PROCESSING
redoubling of rail life through running gauge changeover

Transverse profile before and after processing
RAIL SAWING & DRILLING MACHINE LSB
FOR SAWING AND SIMULTANEOUS DRILLING OF RAILS

APPLICATIONS
Rolling mills, rail welding and switch manufacturing mills

FEATURES
- Sawing and drilling in a single pass
- Inclined saw design
- Fully automated
- Turnkey solutions
- Drilling hole cold pre-stressing for longer life
- Deburring unit
- Testing sample manipulator
- Longitudinal measuring system with temperature compensation

OPTIONS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>QTY DRILLS</th>
<th>RAIL HxB MAX</th>
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</thead>
<tbody>
<tr>
<td>KSA 500 S</td>
<td>0</td>
<td>190 x 160 mm</td>
</tr>
<tr>
<td>LSB 800</td>
<td>0</td>
<td>200 x 220 mm</td>
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<tr>
<td>LSB 800/S1</td>
<td>1</td>
<td>200 x 220 mm</td>
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<tr>
<td>LSB800/S2S</td>
<td>1*</td>
<td>200 x 220 mm</td>
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<tr>
<td>LSB 800/S3</td>
<td>3</td>
<td>200 x 220 mm</td>
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<tr>
<td>LSB 800/S6</td>
<td>6</td>
<td>200 x 220 mm</td>
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* Special design for switch manufacturing mills

CYCLE TIME
30 SECONDS
One saw cut and six drilled holes
RAIL WELDING AND REPAIR MILLS
THE COMPLETE SOLUTION FOR NEW AND USED RAILS

The LINSINGER complete solution for new and used rails is the rail welding and repair mill. Here LINSINGER presents itself as the partner for turnkey solutions, from basic concept, up to completion of work.

POSSIBLE WORKFLOW FOR USED RAILS
- Preliminary cleaning of rails, preliminary sorting by the customer
- Semi-automatic alignment of the rails
- Reprofiling using milling and grinding tools
- Error detection using ultrasonic inspection and manual marking by the operator
- Removal of previously-marked defects through sawing
- Welding of rail joints, including brushing preparation
- Fully-automatic removal of excess weld bead
- Cutting to length and drilling

EXAMPLE OF WORKFLOW FOR NEW RAILS
- Welding of rail joints, including brushing preparation
- Fully-automatic removal of excess weld bead
- Cutting to length and drilling

COMPLETE TURNKEY PACKAGE
Conservation of material resources and environment
## TOOL TECHNOLOGY

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**TOOLING** exclusive for LINSINGER machines
Customer relationships extend beyond commissioning into full production, and lasts throughout the entire lifetime of the equipment. The high quality standards we place on our sawing and milling machines, as well as on our mobile and stationary solutions in rail milling machines, are reflected in our after sales services. Exclusive tools optimised for LINSINGER machines, productivity consultation and short reaction times are deciding factors.
SAWING TECHNOLOGY

BRAZED CARBIDE SAW BLADES
The carbide saw blades manufactured in-house have been optimised for LINSINGER machines.

LINCUT®
The specially-developed LINCUT® system ensures maximum cutting performance and is ideal for challenging materials.

MILLING TECHNOLOGY

MILLING HEADS
Individually developed according to the highest standards, performance criteria and profile shapes

BEVELLING TOOLS
The robust and strong plate layer facilitates higher cutting performance

RAIL TECHNOLOGY

MILLING HEADS
In-house design and manufacture of special milling heads in one clamping position are guarantees for consistent LINSINGER quality and precision.
SPARE PARTS

Our experienced service team ensures fast and reliable provision of original spare parts, exclusively for LINSINGER machines.

service@linsinger.com

CUSTOMER SERVICE

The LINSINGER service team provides worldwide remote troubleshooting and on-site inspection and service.

REFERENCES

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