# **SAWING TECHNOLOGY**

The Maschinenfabrik Liezen und Gießerei GmbH is working with the development and design of sawing and milling machines for the steel and non-ferrous industry for more than 10 years.

Constant development and advancement enable MFL to offer our worldwide customers only machines that employ the latest state of the art design. The machines are mainly used for quality and capacity enhancement.

#### **OVERVIEW OF TYPES**

- Single cut sawing machines for billets, bars, rails and profiles
- Layer sawing machines for tubes and profiles
- Sawing machines for aluminium and steel plates
- Sawing machines for steel slabs
- Sawing machines for material inspection (samples)
- Sawing machines for axles





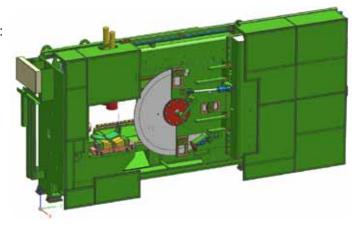




#### SINGLE CUT SAWING MACHINE

MFL provides economic and cost saving solutions for:

- Steel manufacturers
- Seamless tube manufacturers
- Forging plants
- Manufacturers of profiles (I, U, H, etc.)



Туре	Material Ø mm	Material □ mm	Saw blade Ø mm	Driving power kW	Flange Ø mm
HK 450 E	30 - 120	110 x 110	360 - 450	22	120
HK 550 E	30 - 160	145 x 145	370 - 550	30	160
HK 850 E	60 - 240	210 x 210	600 - 850	55	240
HK 1150 E	60 - 370	340 x 340	850 - 1150	90	320
HK 1350 E	100 - 440	400 x 400	1050 - 1360	110	400
HK 1650 E	180 - 520	470 x 470	1300 - 1650	132	500
HK 2000 E	220 - 700	650 x 650	1620 - 2000	160	500 (600)
HK 2200 E	220 - 800	720 x 720	1800 - 2200	160	500 (600)

### **Cutting time for billets**

Ø 80 mm approx. 8 sec.
Ø 120 mm approx. 14 sec.
Ø 240 mm approx. 38 sec.
Ø 370 mm approx. 134 sec.
Ø 520 mm approx. 268 sec.

Calculation is based on material 42CrMo4





Sawing plant HKA 2000 E160 for round billets



Sawing plant HKA 550 E45 for squared bars

## Application of single cut sawing machine



Tubes



Squared material



Round billets



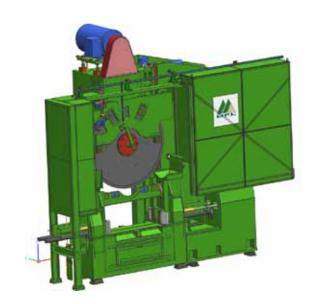
Profiles

### PERFECTION IN ALL AREAS

### **SAWING MACHINE FOR LAYER CUT**

MFL provides economic and cost saving solutions for:

- Seamless tube manufacturers
- Beam and profile manufacturers
- Manufacturers of angles and bulkheads



Туре	Layer width max. mm	Saw blade Ø mm	Driving power kW	Flange Ø mm
HK 850 L	450	600 - 850	<b>55</b> / 75	240
HK 1150 L	650	850 - 1150	75 / <b>90</b>	320
HK 1350 L	850	1050 - 1360	110	400
HK 1650 L	1050	1300 - 1650	132	500
HK 2000 L	1250	1620 - 2000	160	500
HK 2200 L	1500	1800 - 2200	160	700

### **Cutting time for tubes**

Ø 88.9 x 9.4 mm

(9 tubes/layer) approx. 2.3 sec. / tube

Ø 114.3 x 12.7 mm

(7 tubes/layer) approx. 3.2 sec. / tube

Ø 177.8 x 13.7 mm

(4 tubes/layer) approx. 6 sec. / tube

Data based on sawing machine HK 1350 L110 / material St52





Sawing plant HKA 1350 L110 for tubes



Sawing plant HKA 1350 L110 for profiles

## Application of layer cut sawing machine



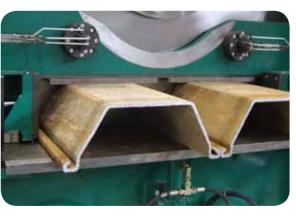
Tubes



Profiles



Angles



Bulkheads