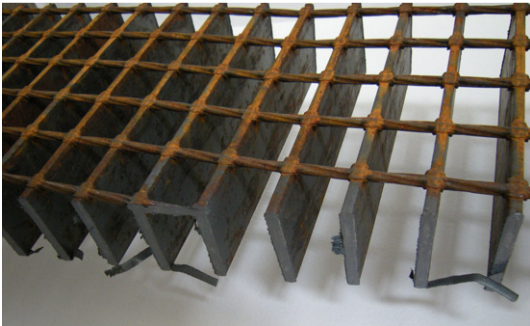




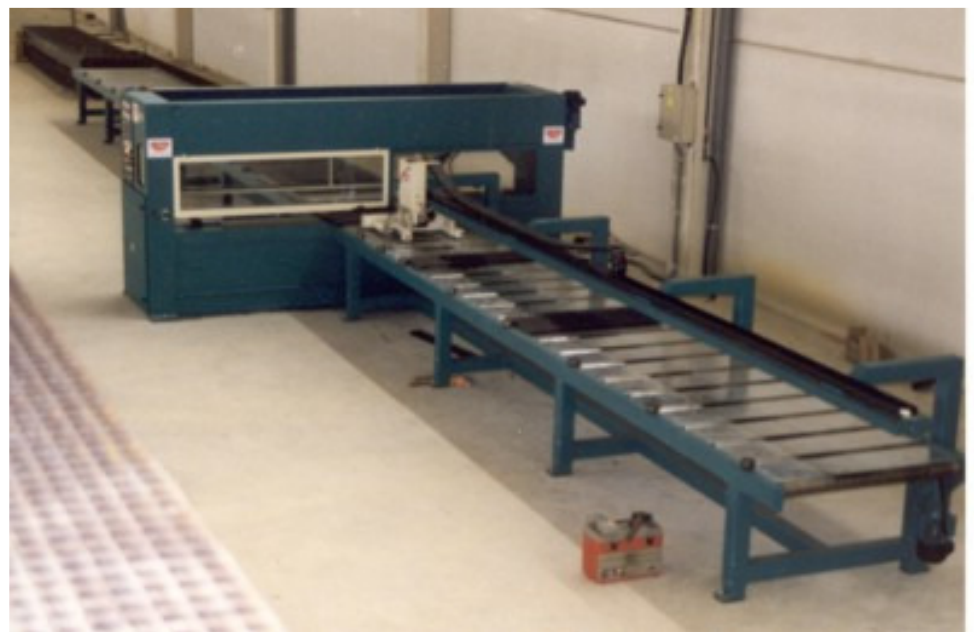
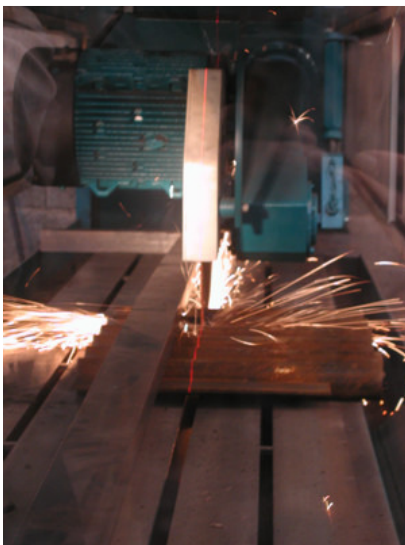
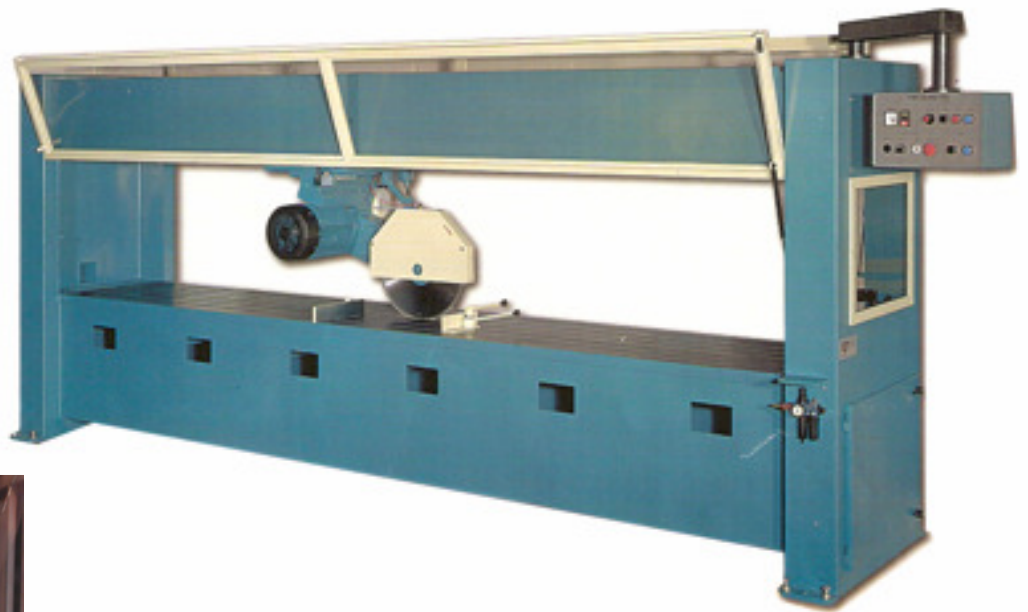
how to cut gratings





TYRO – RO – UNIVERSAL PANEL SAWS

To cut gratings, we recommend manual machines with minimum 11 kW (15 HP).
Smaller machines are only recommended for gratings less than 40 mm.
Machines with automatic feeder should have min. 18 kW (25 HP)
For continuous production, we recommend 22 kW (30 HP)





TOOLS and USAGE

ABRASIVE WHEELS

- Also called: aluminous abrasive
- for: exists in a lot of different mixtures and qualities for cutting-off nearly all materials. (disadvantage: producing a lot of dust and flames)



WM-CUTTING DISC (Tungsten-Molybdenum Steel)

- Also called: Warm Cutting-off disc
Friction disc
- for: optimal to cut-off gratings
Sandwich-Panels
Steel sheets up to 5 mm maxi



TCT – Sawing plate

- for: Aluminium, Plastics and (nearly) all non-ferrous metals
- Special form „**DRY-CUTTER**“
- for: Sandwich-, Trapezoids-Panels and similar Sheets of Steel or Aluminium





Package 1:

**RO-2-10
+
Clamping
Beam
or
Bridge
with cylinders**

RO-1,2-10 Abrasive disc Ø 400
RO-2-10 TCT blade for alu Ø 400
Motor 7,5 kW
Cutting length 1,25 / 2 m

Driven by hand wheel
T-Slots in the table for other clamping devises

Clamping Bridge with 3 / 5 cylinders

The universal solution,
Clamps any kind of plates up to 120 mm,
Only at one side of the cut possible

Clamping Beam

Special solution for plates and gratings up to 80 mm
Recommended: 2 peaces, to clamp on both sides of the cut.

Machine only recommended for cutting manually.

Gratings only with abrasive wheels.

In principle, you can cut any material; cutting speed depends to volume and material.



RO-2-10
with Clamping Bridge





Package 2:

**RO-2-15
+
Clamping
Beam
or
Bridge
with cylinders**

RO-1-15	Abrasive disc	Ø 500
RO-2-10	Friction disc	Ø 500
	Motor	11 kW
	Cutting length	1m or 2m
	Cutting speed	80 m/s

Driven by hand wheel
T-Slots in the table for other clamping devices

Clamping Bridge with 3 / 5 cylinders

The universal solution,
Clamps any kind of plates up to 120 mm,
Only at one side of the cut possible

Clamping Beam

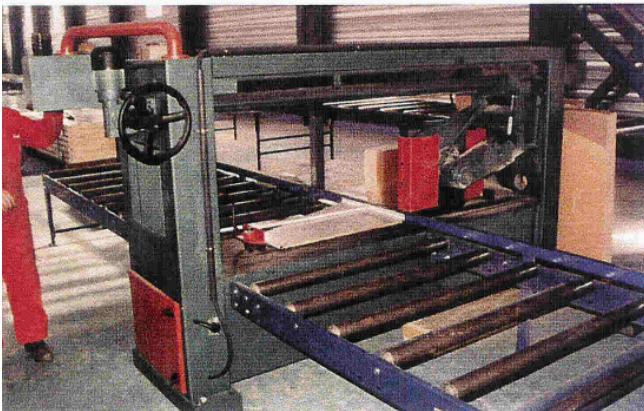
Special solution for plates and gratings up to 80 mm
Recommended: 2 peaces, to clamp on both sides of the cut.

For production

Machine only recommended for cutting manually.

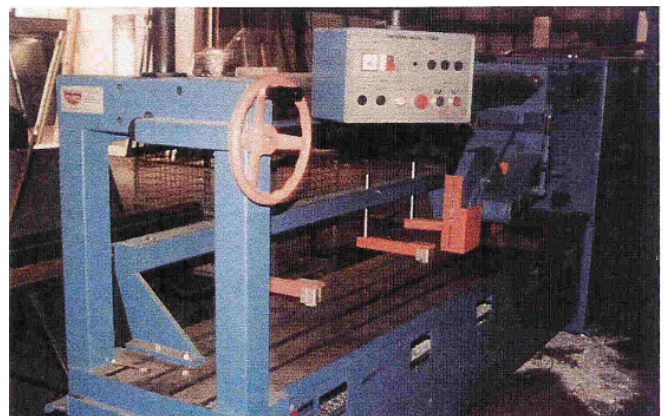
In principle, you can cut all materials; cutting speed depends to volume and material.

Friction disc only for gratings up to 4 mm, or for steel sheets less than 5 mm.



RO-1-15, manual

RO-2-15, manual
with Clamping Bridge





Package 3:

RO-2-25
 driven manually
 or automatically
 +
**Clamping
 Beam**
 or
Bridge
 with **cylinders**

RO-2-25

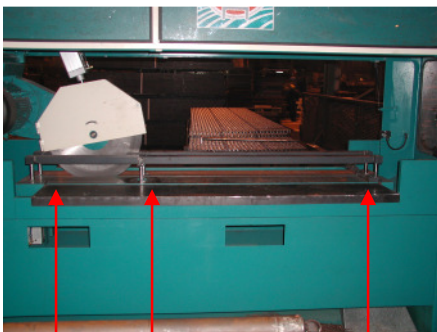
Abrasive disc Ø 500
 Friction disc Ø 500
 TCT blade for alu Ø 500
 Motor 18 kW
 Cutting length 2.000 mm
 Cutting speed 80 m/s
 Feeder speed 0...14 m/min

Driven by hand wheel or for automatic cuts
 T-Slots in the table for other clamping devices

Clamping Bridge and **Clamping Beam**, see description in package no.2
 Only at one side off the cut possible, not sufficient to cut off heavy gratings

For production

In principle, you can cut all materials; cutting speed depends to volume and material.
 Friction disc, only for gratings smaller than 40 mm, or for steel sheets less than 5 mm.



inner
1.300 mm

large
clamping zone
max. 2.100 mm

Special Clamping Beam
 with 3 cylinders for gratings
 cylinder to lift the head after the cut





Package 4:

RO-2-30
driven automatically
+
**Clamping
Beam**
+
Automatic
Back-Stop
+
Tables

RO-2-30

Abrasive disc Ø 600
Friction disc Ø 600
TCT blade for alu Ø 600
Motor 22 kW
Cutting length 2.000 mm
Cutting speed 80 m/s
Feeder speed 0...14 m/min

Electronic Back-Stop-System

Measuring length 4.000 mm
Stop lifts automatically after clamping, passage 100 mm
Electronic control, see TYRO - VISUMATIC
heavy table 4m x 1,3 m, 33 rollers Ø 70 mm
table 2,5m, width 1,3 m, 21 rollers, T120 mm
table 2,5m, width 1,3 m, 11 rollers, T240 mm

Driven by gear-moor or for automatic cuts
T-Slots in the table for other clamping devices

Clamping Beam with additional third cylinder, to reinforce clamping for cuts up to 1.300 mm
This cylinder can be taken out of service to make the full cutting length possible.

Cylinder to lift the head after the cut.
Allows to position or to load the next grating, while the head is moving backwards.

For production

In principle, you can cut any material; cutting speed depends to volume and material.
Friction disc, only for gratings up to 40 mm, or for steel sheets less than 5 mm.



RO-2-30-CBR
with Special Electronic Stop
optimal solution for gratings



- 7 -

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- All machines are available with:
- other cutting length
 - other motor power
 - different back-stop systems
 - Pusher system
 - Noise reduction
 - Measurements for special tasks

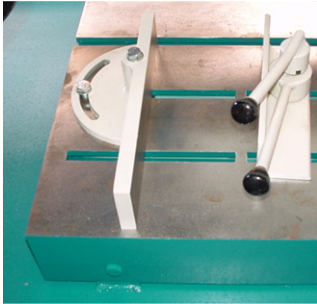
Sample for a custom-made unit to cut-off gratings

RO-3-60
Performs indigently with electronic pusher system
Voluminous noise reduction measurements
Spindle power 45 kW
For discs up to 600 mm
Cutting length 3 m





CLAMPING SYSTEMS



a) Horizontal clamp

Left side: back-stop, Position und angle adjustable

Right side: clamping device, manual with eccentric lever, optional pneumatic driven

Both parts are to adjust into the T-slots of the table

All along the cutting length and in any position

- only to mount at one side of the cut



b) Clamping bridge 2m, 5 cylinders

Very universal use

The points to press are adjustable by turning and in different heights.

Typical use:

Trapezoid sheets, big profiles with non continuous thickness as hydraulic platforms.



c) Clamping beam (proposal -1)

Is pressing by a small movement (also horizontally against a back-stop)

Clamping beam (proposal -2)

As shown at the right side, but only two cylinders (big range)

Optimal for Press-Gratings and Welded gratings until app. 40 mm

d) Clamping device with 3 cylinders high pressure in the inner range



Inner Clamping range 1.300 mm

big range (maxi cutting length)

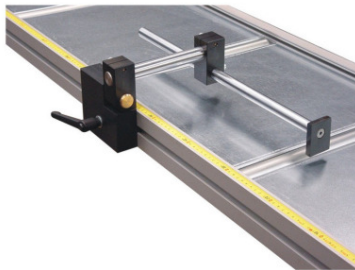
Only in powerful machines
> 22 kW, Ø disc 600 mm mini,
(big gratings for trucks)



customized clamp
in different designs



ROLLER TABLES



BACK-STOP-SYSTEMS



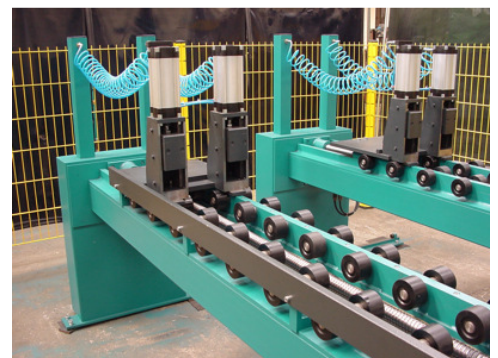
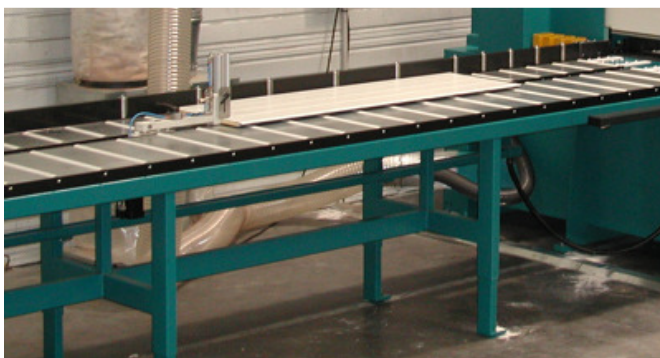
ELECTRONIC BACK-STOP

- for RO-UNIVERSAL
- to cut panels and gratings

left side:
in measuring position

right side.
Lift, to load or unload material

PUSHER SYSTEMS





More than 60 years of experience in cutting-off machines
By the inventor of oscillating cuts

More than 25 years of experience in precise positioning
of back-stop and feeder systems

CUTTING-OFF MACHINES

Wet or dry cuts
for production or for testing materials

LENGTH CUTTING MACHINES

for big dimensions, as panels, gratings and more

SAWING MACHINES

for Aluminium, Non Ferrous Metals, Plastics and similar

BACK-STOP SYSTEMS

reliable, versatile, for every purpose
also to upgrade existing Roller Tables

FEEDER SYSTEMS

basic for automation

ROLLER TABLES

in different sizes and

*Trennen
- wo Sägen versagen*

**We offer huge experiences
by a lot of custom-made solutions**