

Universal Drum flaker



Universal Drum flaker – machine versions

Type of machine	Diameter of cutterhead mm	Number of knives	Cutting length mm	Width of feeding trough mm	Max. infeed height mm	Driving power of motor appr. kW	Capacity with serrated knives appr. t_{ovendrv}/h^*
MU 74/2.60.18	750	36	740	1.500	600	250	8,2
MU 112/2.80.24	1.000	48	1.120	1.500	800	400	13,8
MU 112/3.75.24	1.000	48	1.120	2.000	800	400	14,2
MU 112/4.120.26	1.400	52	1.120	2.000	1.200	2x450	18,0
MU 166/1.75.20	1.000	60	1.660	2.000	800	2x450	17,0
MU 166/4.120.26	1.400	78	1.660	2.000	1.200	2x545	27,0

1) Comb knives with 0,45 mm thickness of particles

Universal Drum flaker – Raw material and final product



Round timber



Peeler cores



Slabs



Edgings in bundles



OSB-Strands



Flakes

U-Maschine – One step vs. Two step particle board production

HOMBAK-Procedure

- Universal Drum flaker

Alternative Procedure

- Drum Chipper
- Knife-ring flaker



Flakes

U-Maschine – One step vs. Two step particle board production

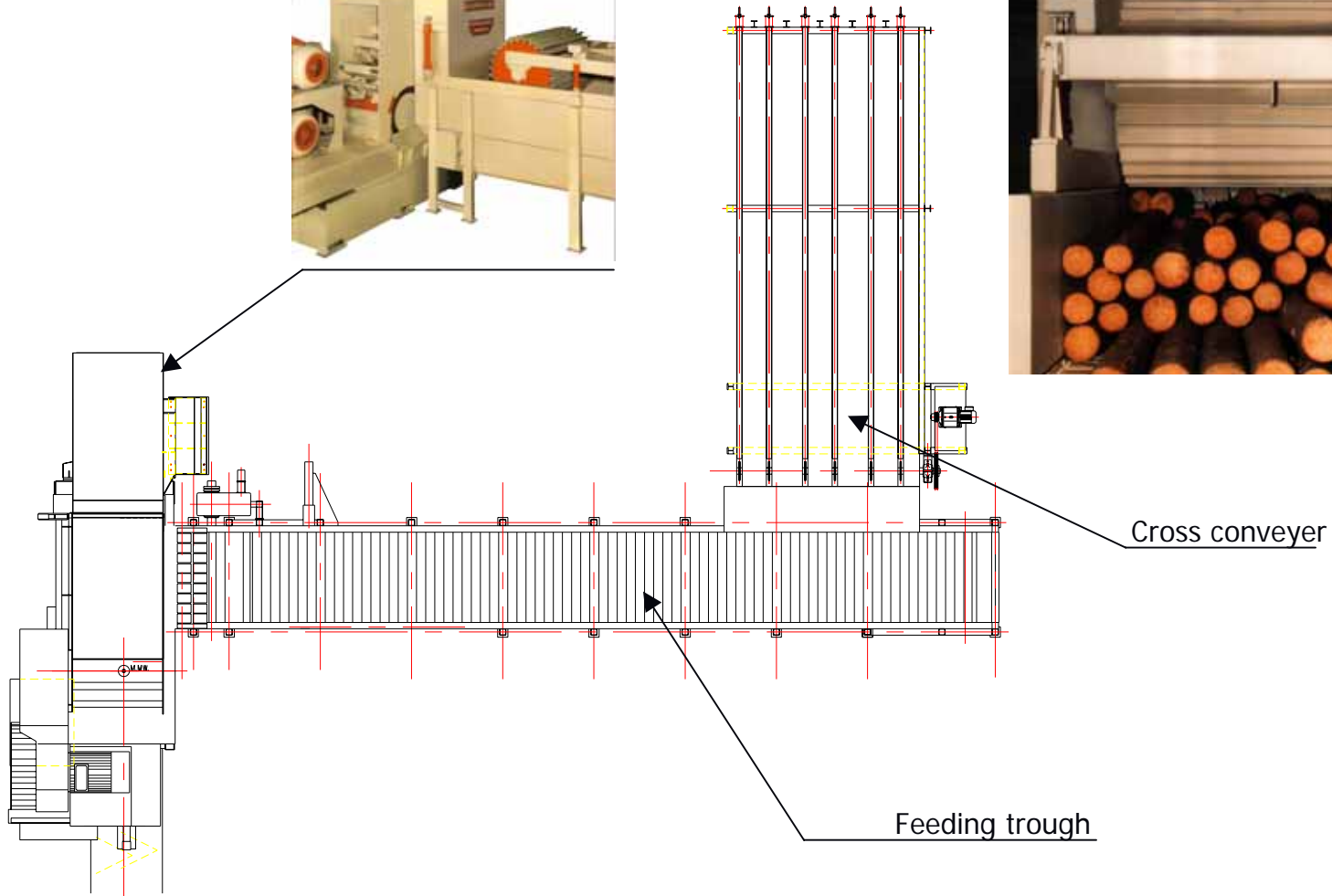
HOMBAK-Procedure

- Only one machine required
- Less fine
- Parallel cutting and to the grain therefore better tensile strength

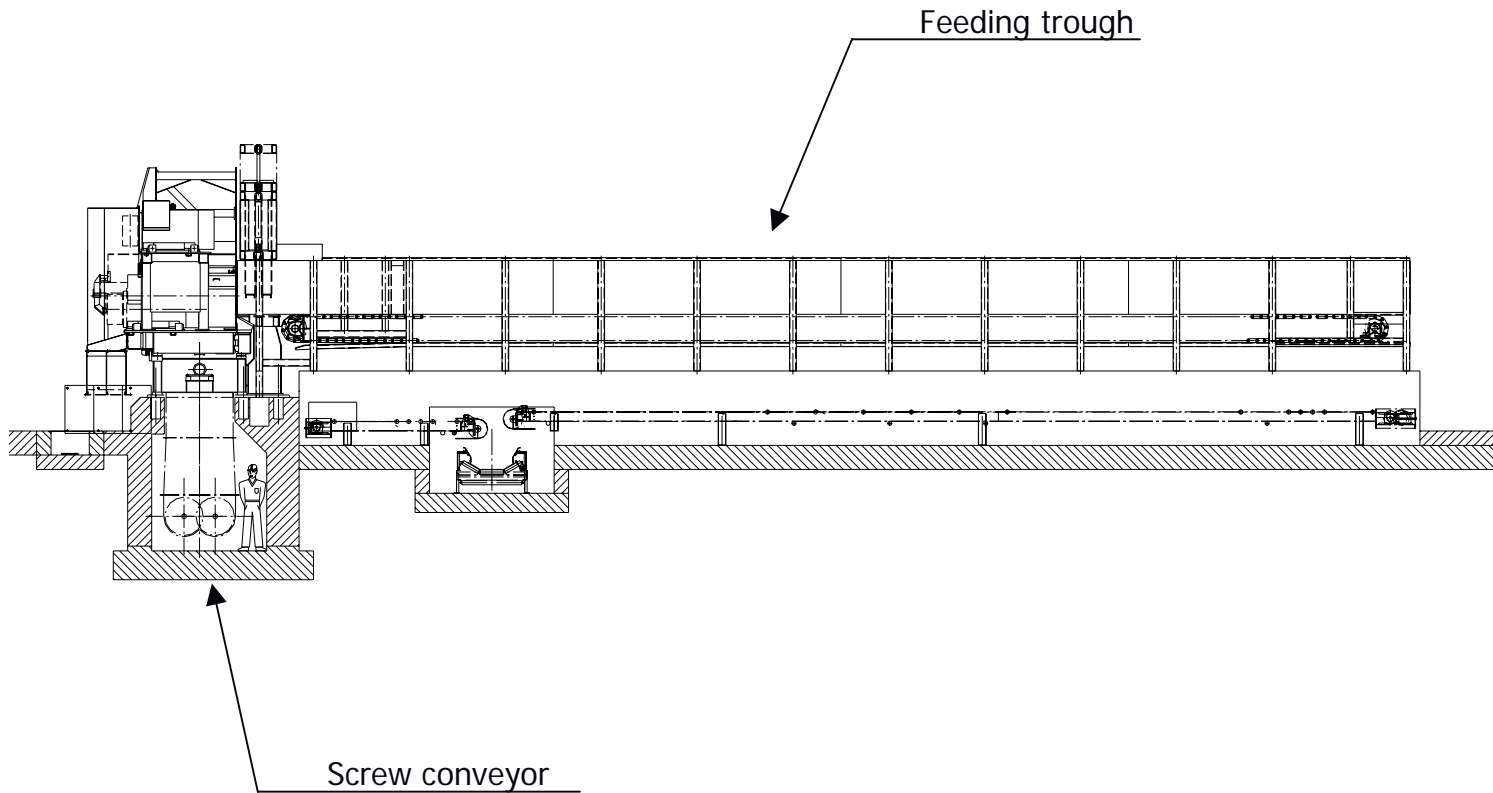
Alternative Procedure

- Investing in at least two machines
- Operating costs for at least two machines
- At least double operating personal required
- Wear out costs for at least two machines

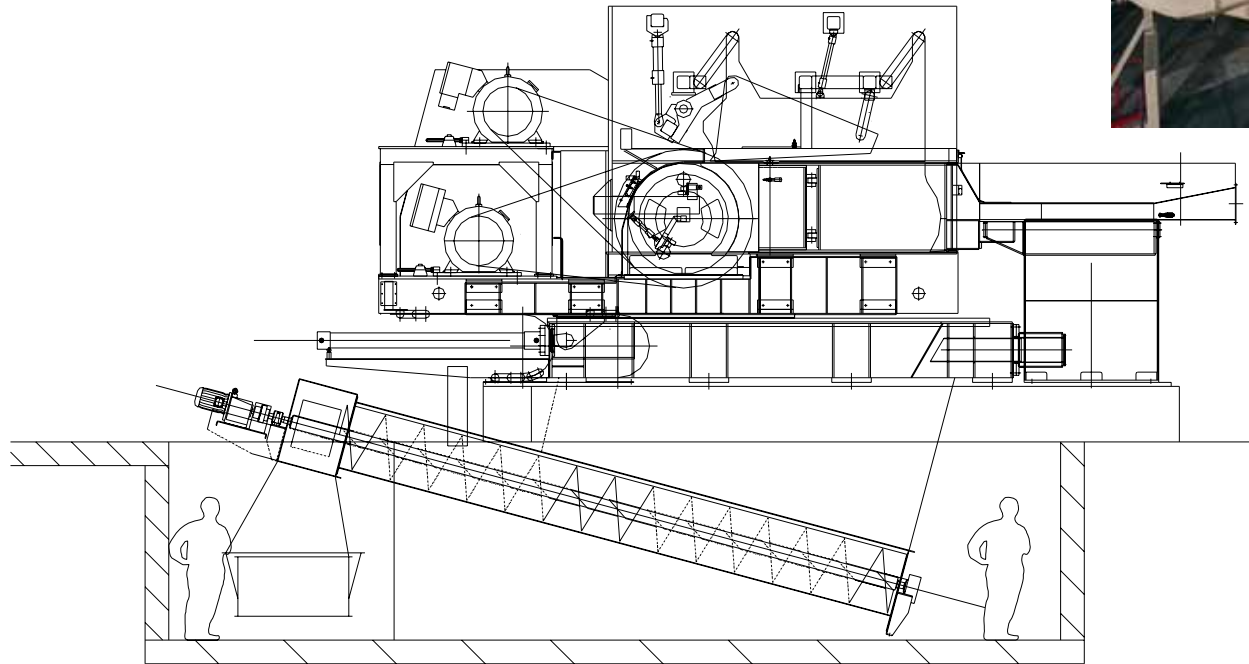
Universal Drum flaker – possible setting plan (top view)



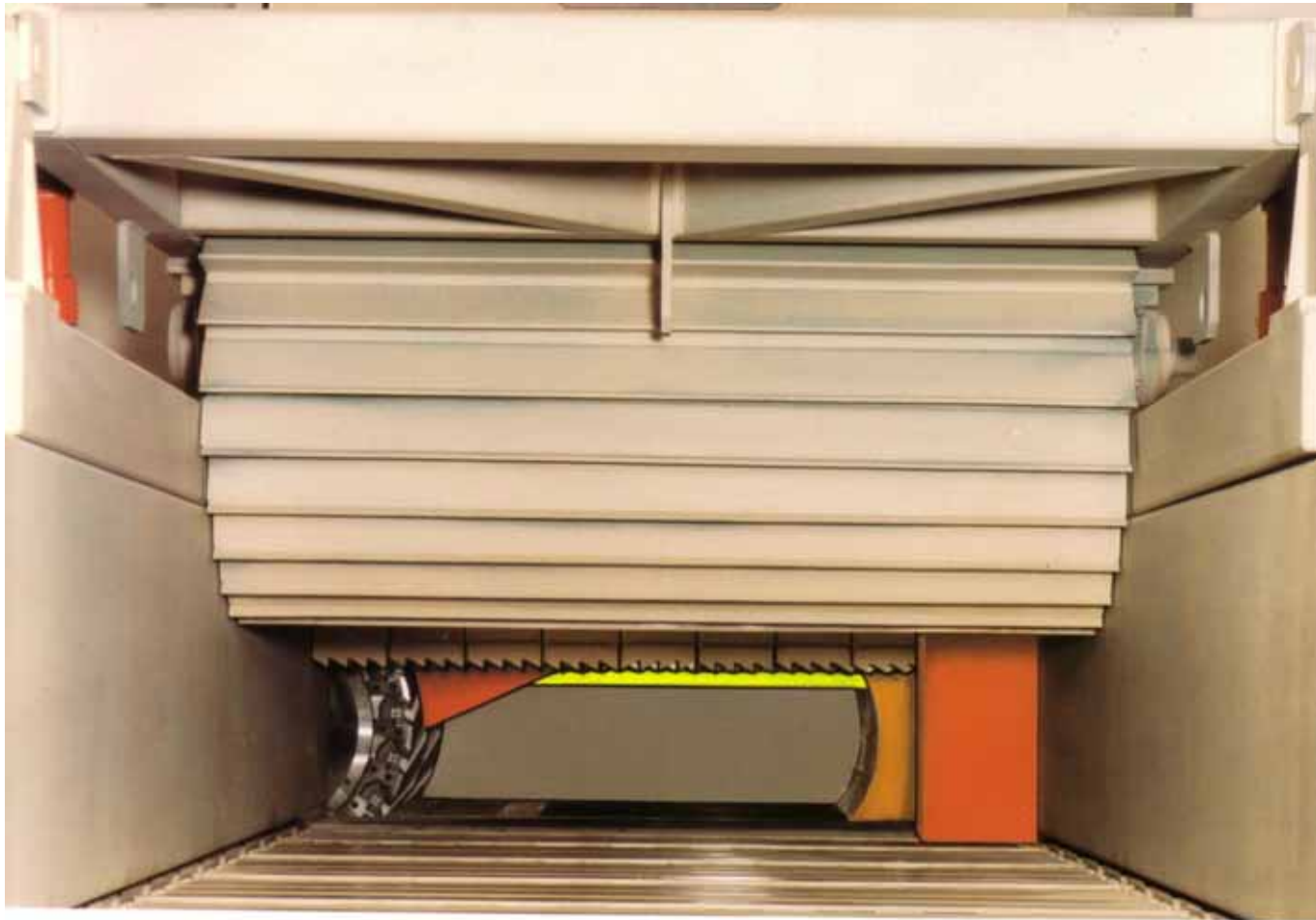
Universal Drum flaker – Possible setting plan (side view)



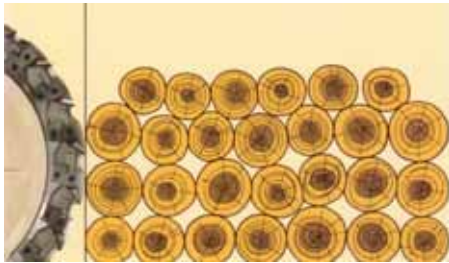
Universal Drum flaker – Front view



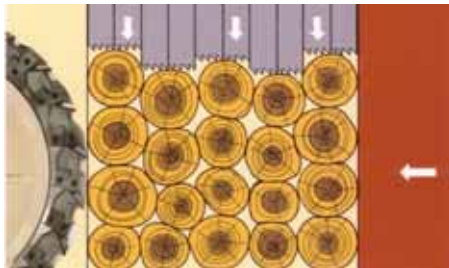
Universal Drum flaker – Flaking chamber



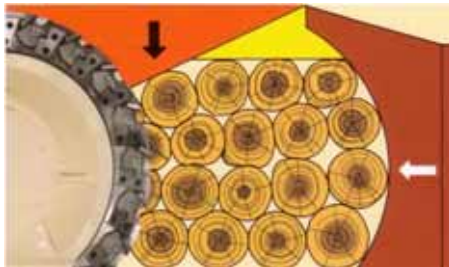
Universal Drum flaker– Flaking process



1. Infeed of the raw material in the chamber



2. Vertical and horizontal adjustment of the material via automatically wood locking



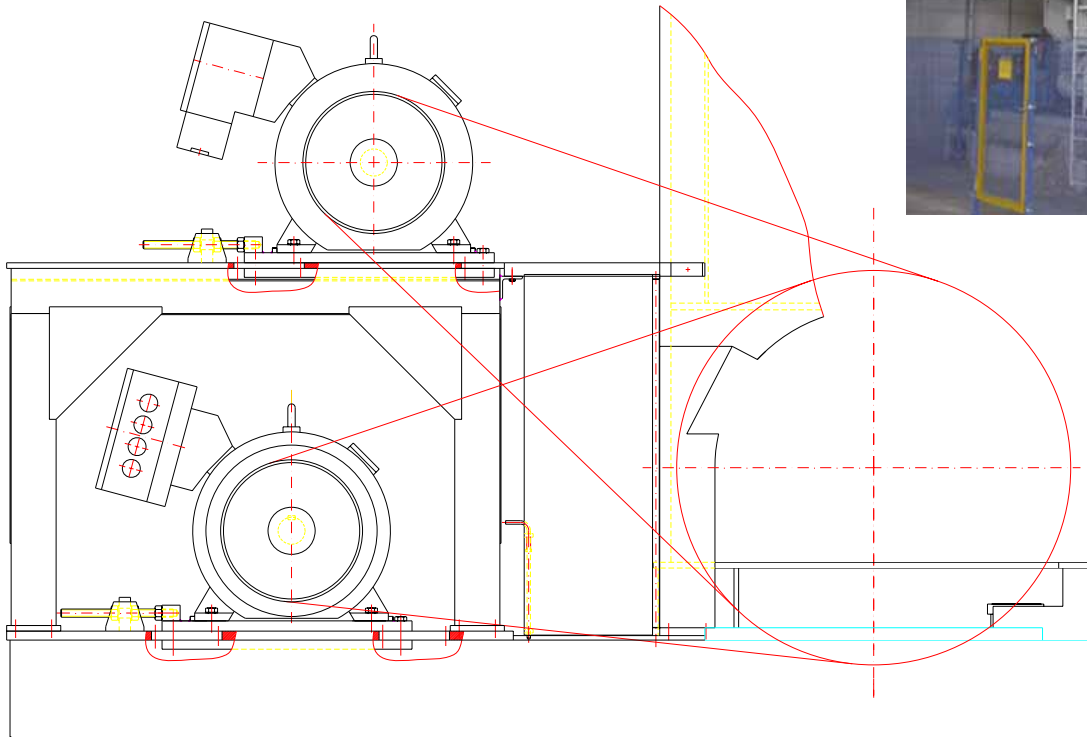
3. Cutting parallel and to the grain



4. After flaking cutterhead and clamping system go back to initial position; discontinuous working process

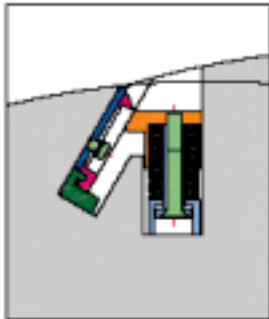
Universal Drum flaker– Drive

(Dep. on type of machine; here: U 164.4)

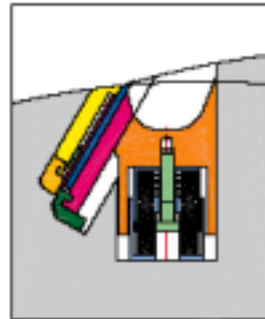


Universal Drum flaker– Knife systems

Comb Knife



Knife screwed on
knife holder
without
wear part



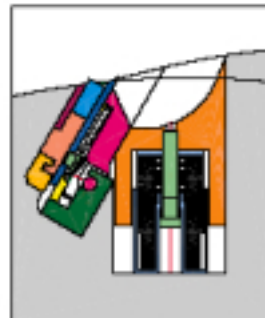
Knife screwed
on adjustment
plate
with wear part



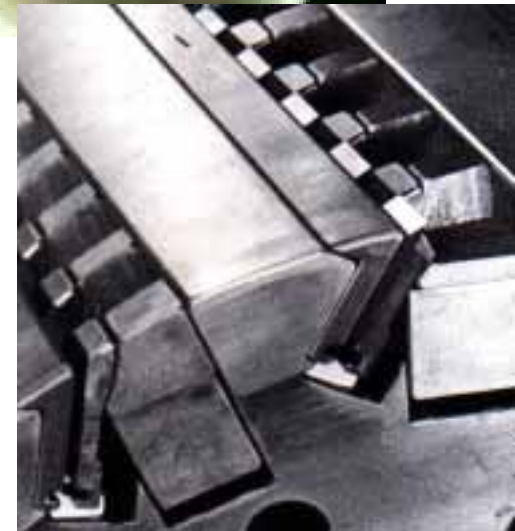
Full Knife



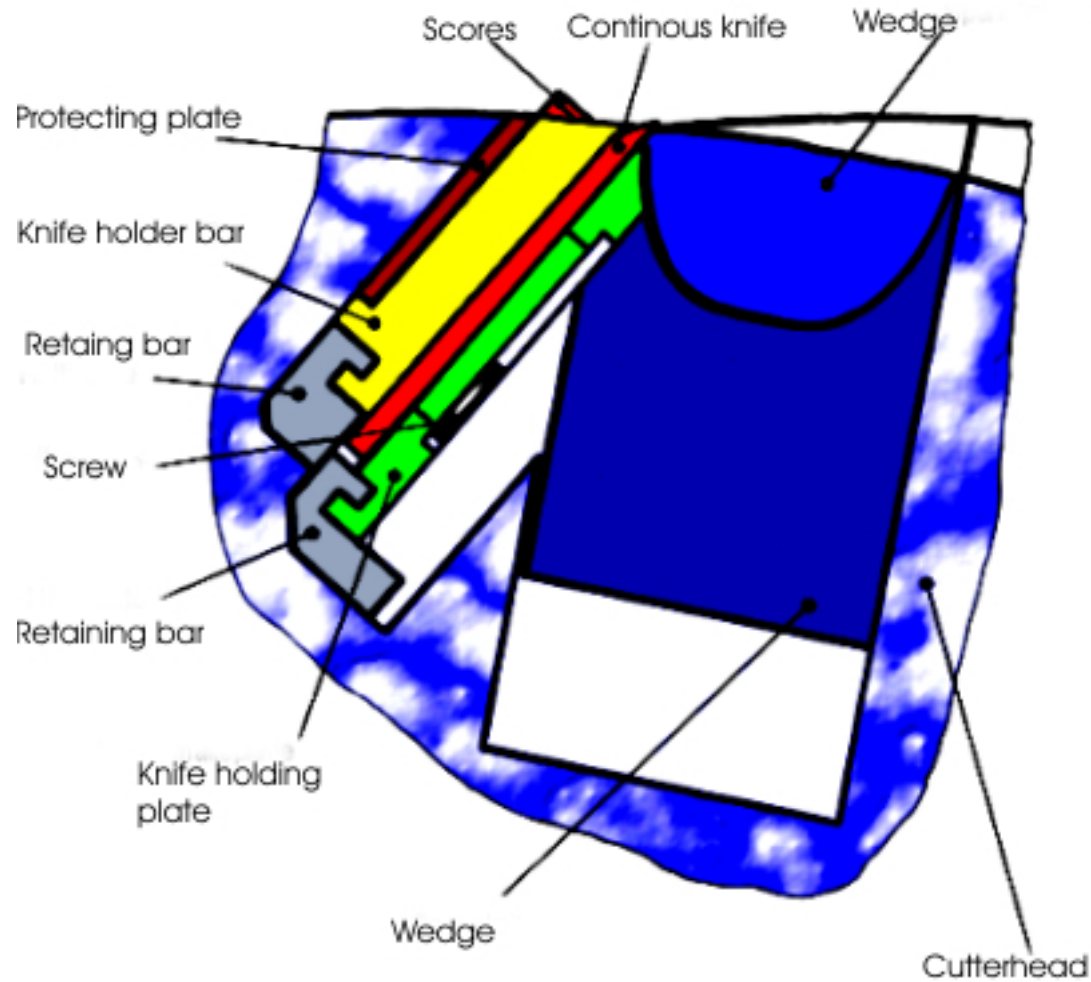
IWM-Full knife with adjustable
counter plate
without wear plate



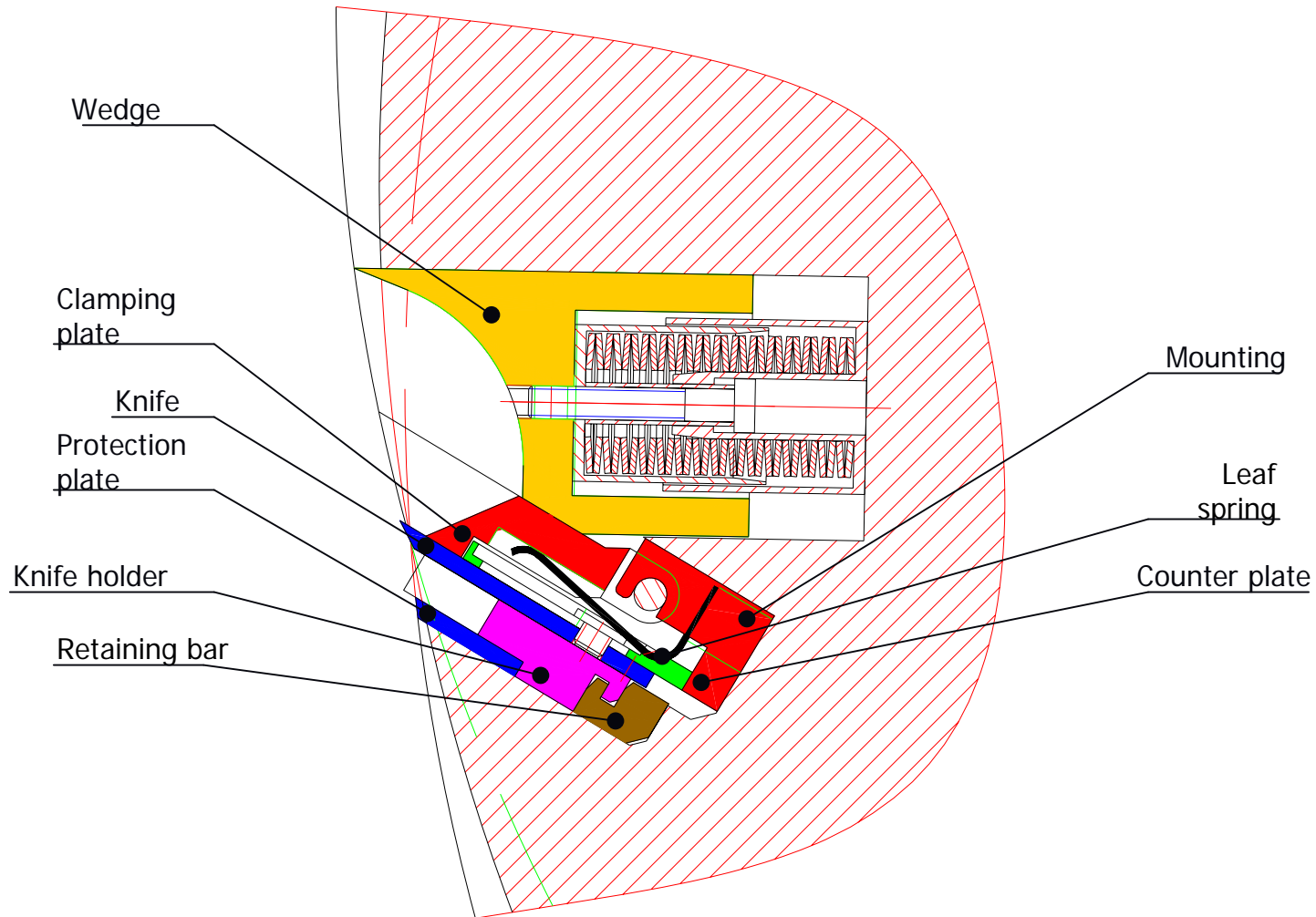
Continuous knife with adjustable
counter plate
and holder bar



Universal Drum flaker– Scoring knife



Universal Drum flaker– Continuous knife



Universal Drum flaker– Type of knives

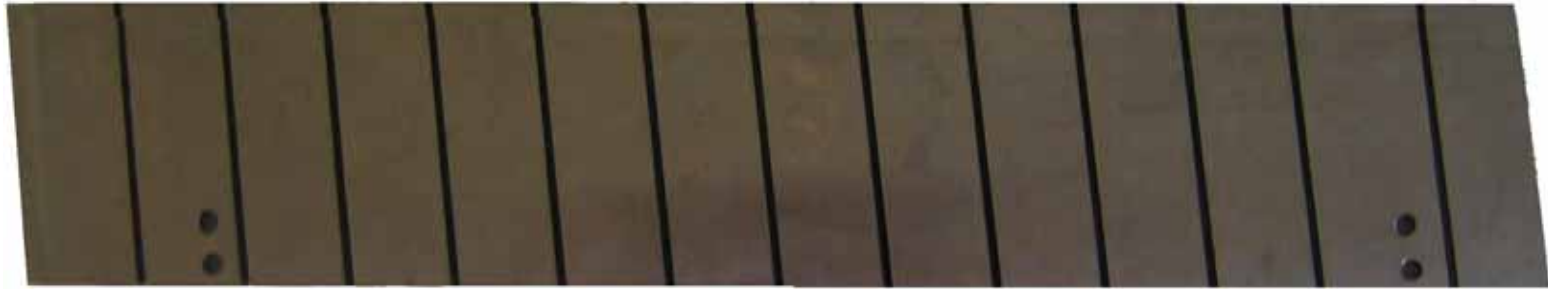


IWM-Full knife with scoring knives



Serrated knife for very thin thickness

Universal Drum flaker– Type of knives



Grooved knife



Continuance knife

Universal Drum flaker– Changing of knives



Wedges are pressed down hydraulically

Half-automatic knife adjustments



Universal Drum flaker– Wear out protection

Special welding procedure of the cutterhead:

Rockwell hardness 56-58RC



Special powder procedure of the cutterhead parts:

Increases the Rockwell hardness on 68-70RC
and therefore a longer lifetime

Universal Drum flaker – Your advantages

- Spread worldwide and proved since decades for full satisfaction of our clients
- More than 5.000 flakers built
- High perimeter preciseness of the cutterhead. Variance less than 0,02 mm
- Different kinds of knife-systems available
- Static and dynamic balancing of the cutterhead
- Frequency variation enables multiple starting of the machine as well as an activation and turn-off within 40 sec.
- Knives can be changed easily because of simple access to the cutterhead
- Changing knives without any additional devices

Universal Drum flaker – Your advantages

- Production of very thin, flat flakes with tight thickness tolerance
- Extreme high lifetime because of special developed powdering procedure
- Flake preparation in one step only
- Drive of the cutterhead by electro motor with low- and middle voltage
- Hydraulic movement of the machine sledge and the feeding trough
- Moveable baffle wall in order to avoid cuts off cross grained wood
- Processing of oversized logs up to a diameter of 1,2 m

Universal Drum flaker – Your advantages

- Round timbers in random lengths, slabs and edgings in bundles are processed equally
- Two machines can be operated by just one person
- Automatic loading possible
- Low investment
- Small foot-print

Contact

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