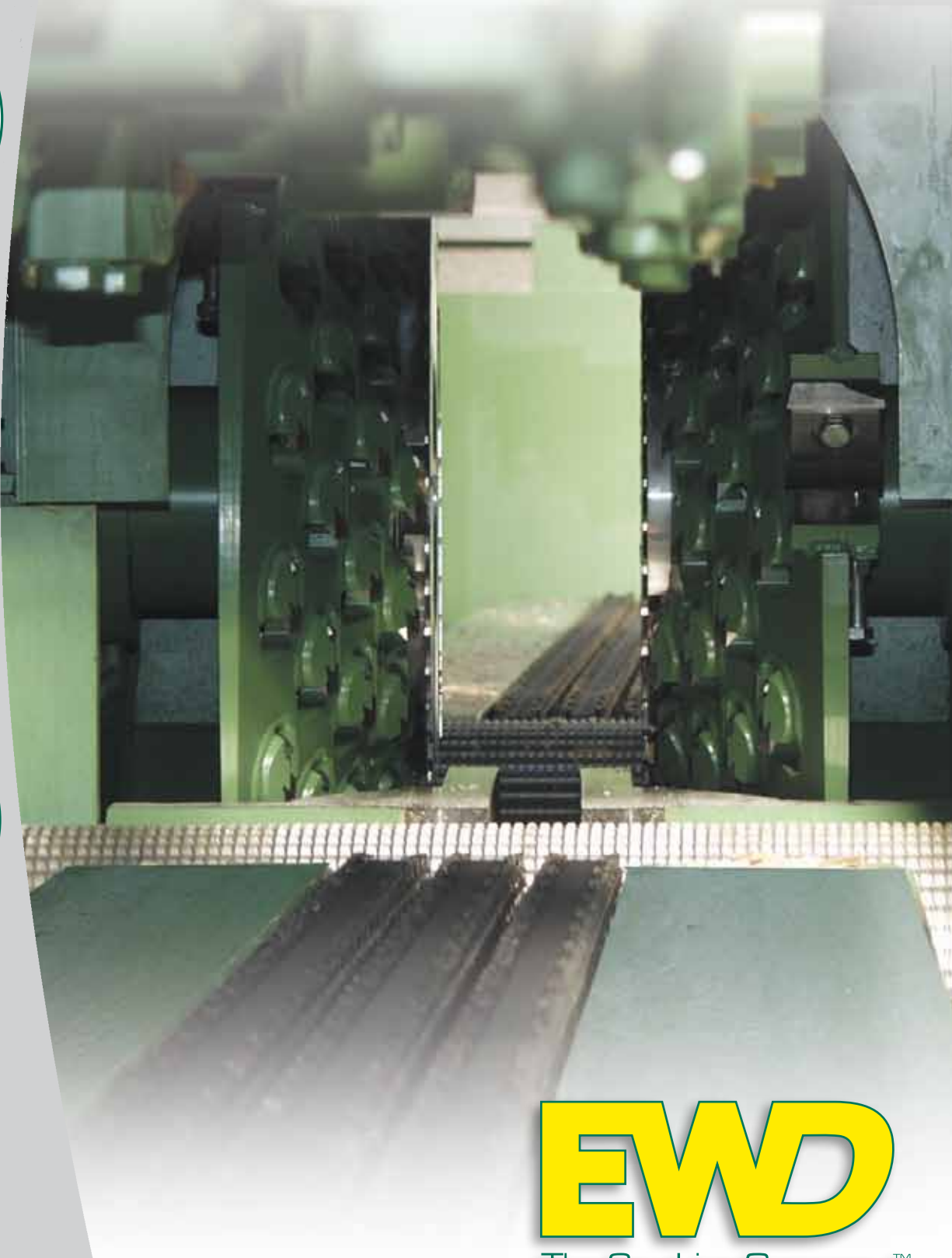
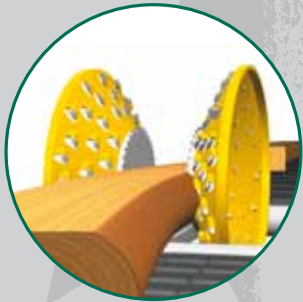
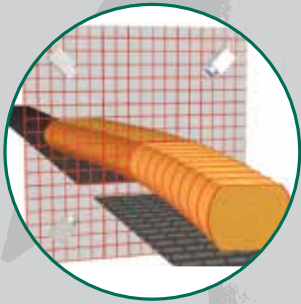


ArcoLine

Better Recovery with
Active Curve Chipping and
Active Curve Sawing



EWD

The SawLine Company™

Important for the economic production of lumber is the maximization of recovery with the highest possible productivity and the highest possible sawing accuracy.

Modern 3D scanning technology and complex optimization algorithms allow us to compute the highest possible recovery.

The **ArcoLine** resaw process was developed for perfectly controlled execution of the results of the scanning and optimization process.



**with ArcoLine
up to 20 %
more recovery**

The **ArcoLine** Process

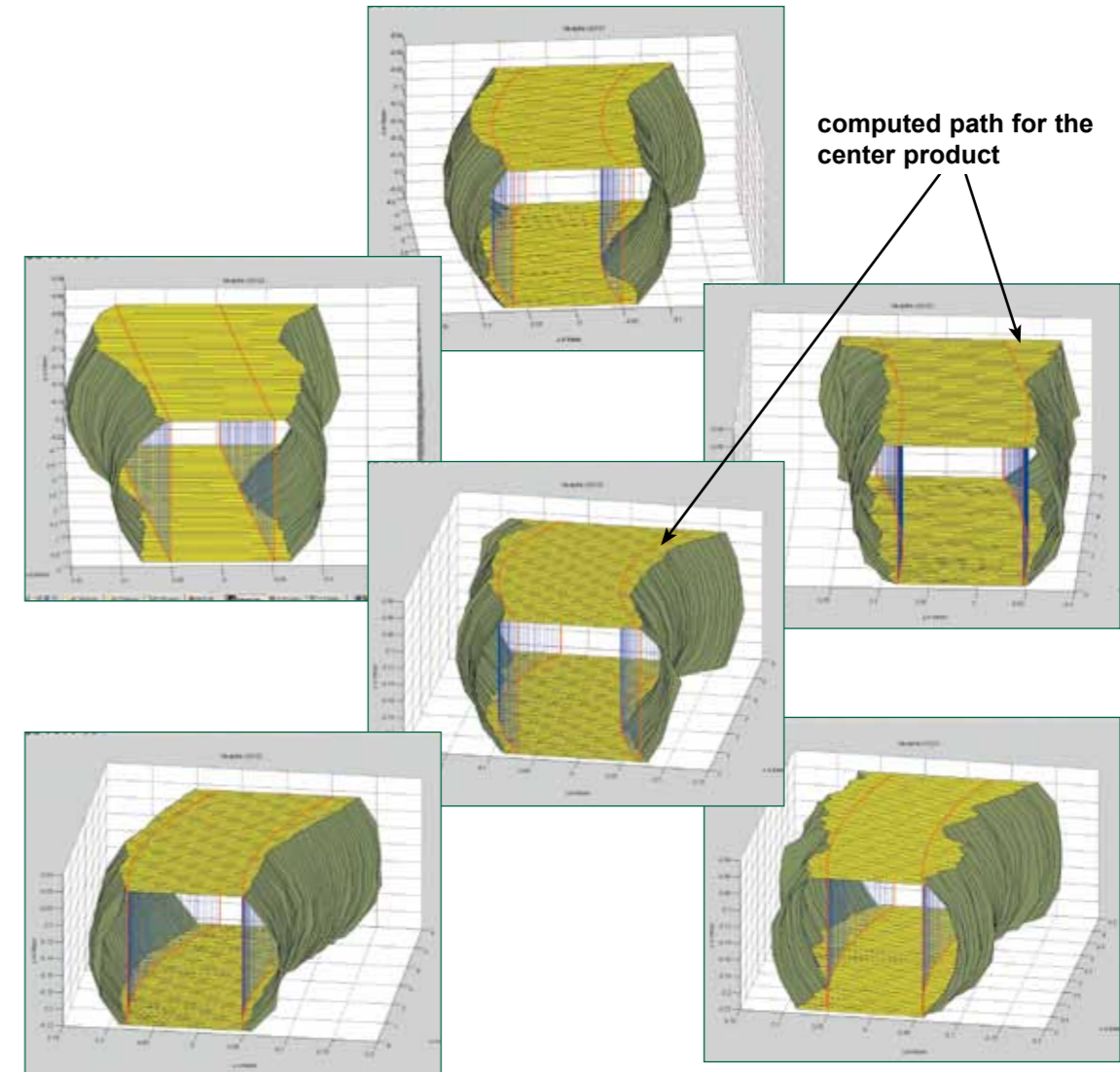
- Positioning:** Centering the cant with a linear system and holding it on a chain bed conveyor.
- Scanning:** Continuous linear scanning with a True Shape 3D scanner.
- Optimization:** Calculation of maximum open face, of the best curve radius and the optimum position for the center products within the cant.
- Chipping:** Spot on positioning of the canter heads to meet the exact small end position of the cant together with simultaneous pivoting of the heads to follow the computed sawing angle.

Precise tracking of the computed cutting path by motion control of the canter heads finishing spot on at the cant's large diameter end.
- Sawing:** Positioning of all infeed and outfeed rollers according to the computed curve radius.

Resawing of the 4-sided curved cant with a fix-mounted resaw.

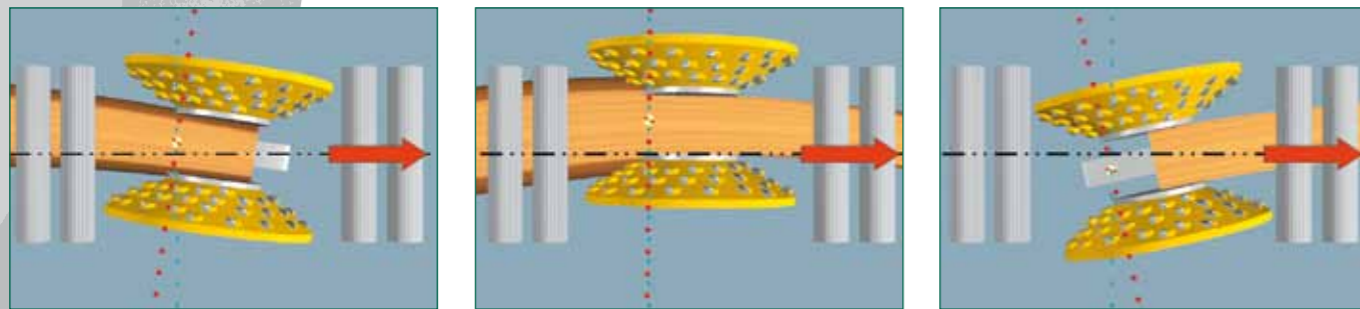
Sawing examples

Highest lumber recovery with optimum sawing accuracy



The completely defined and controlled chipping and sawing path over the cant's length allows ArcoLine to precisely meet a customer's specific optimization.

- Optimization of center product, optimization of side boards
- Value optimization for all products
- Grade optimization according to position of pith, knot positions etc.

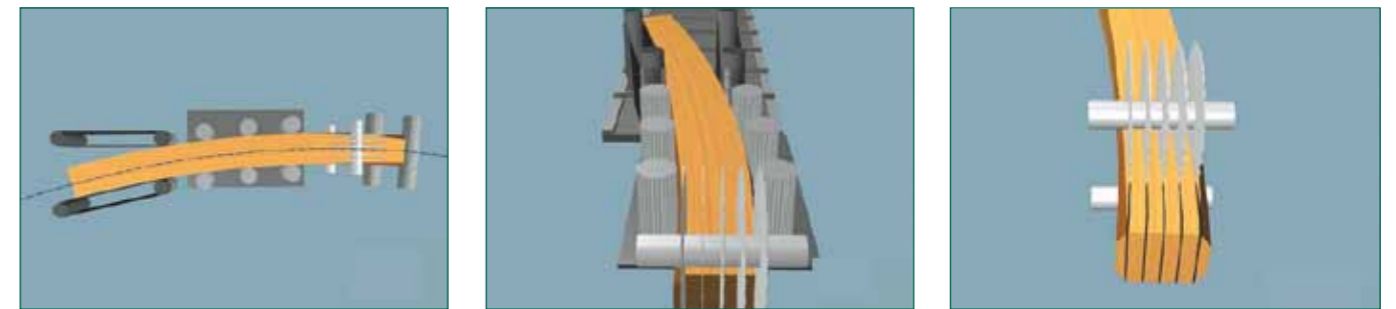


The Arco-Chipper canter is placed with large bearing areas on a support frame.
The arc or curve radius calculated by the optimization computer is followed by the chipper canter heads with a simultaneous linear movement of the heads and a pivot movement of the canter.
During the chipping process, the cant is held on the in- and outfeed chain bed.

ArcoLine Chipper canter model FZ 5 Arco

The knives of the ArcoLine chipper canter are mounted in several conical spirals on the head. Depending on the feed speed requirement three or up to six spirals are used.

| | | |
|-----------------------------|-------|----------|
| Minimum arc radius | m | 70 |
| Chipper canter head dia. | mm | 1400 |
| Chipping depth of head max. | mm | 180 |
| Max. chipping height | mm | 300 |
| Opening of chipper heads | mm | 80 - 800 |
| Feed speed max. | m/min | 250 |
| Weight | t | 17 |



During the sawing process the tools are not moving. The vertical infeed and outfeed rollers are positioned by servonetworks according to the constant arc radius of the respective cant. This process provides the same cutting conditions for the saws as in a straight sawing process.

Double arbor circular resaw model DWK Arco

The double arbor resaw is designed for the resawing of 4-sided cants.

The saw blades are fix mounted strobe type saws. Distance arbor to arbor and height of the matchline of the saws are adjustable.

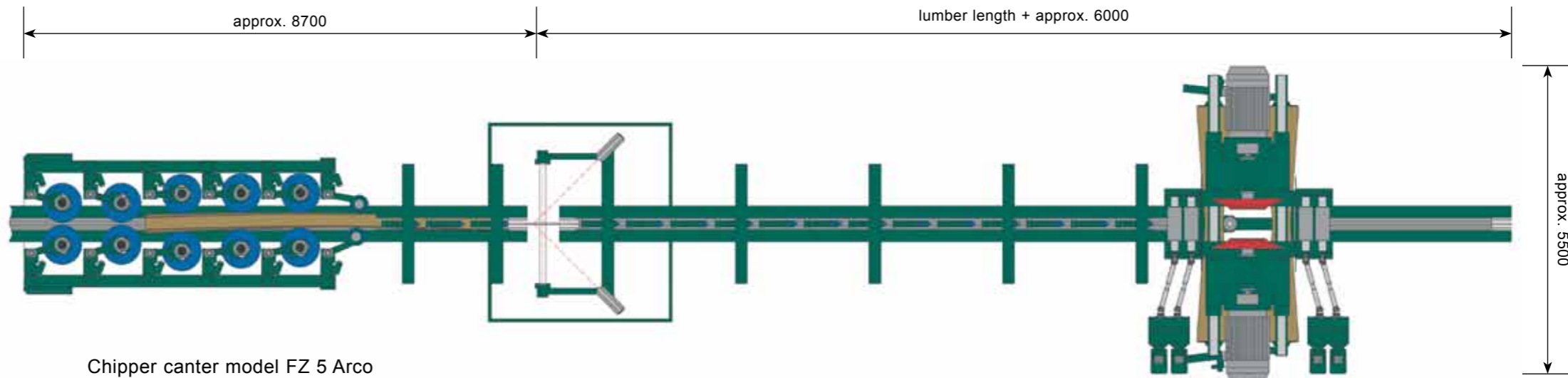
| | | |
|--|-------|--------|
| Sawing height max. | mm | 290 |
| Useable sleeve length max. | mm | 340 |
| Distance arbor to arbor (adjustable sawing height) | mm | 290Saw |
| blade diameter | mm | 565 |
| Cutting Speed | m/sec | >80 |
| Feed speed max. | m/min | 230 |
| Drive power per arbor max. | kW | 315 |

Band resaw model EB 1200 - 1800 Arco

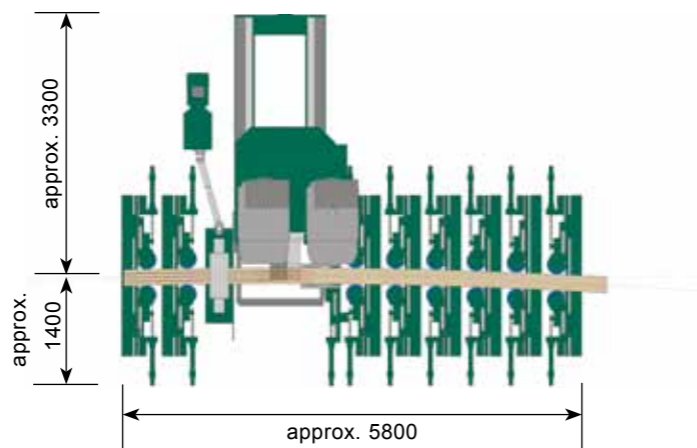
The band resaws can be used in single, twin, triple or quad configuration.

| | | |
|----------------------|-------|-------------|
| Wheel diameter | mm | 1200 - 1800 |
| Sawing height max. | mm | 300 |
| Feed speed max. | m/min | 150 |
| Drive power per band | kW | 55 - 132 |

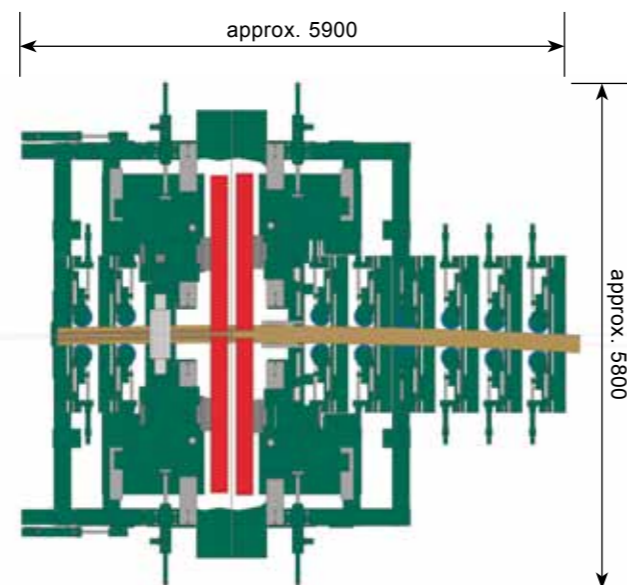




Chipper canter model FZ 5 Arco



Double arbor circular resaw model DWK Arco



Band resaw model EB1800 Arco

The **ArcoLine** resaw solutions-

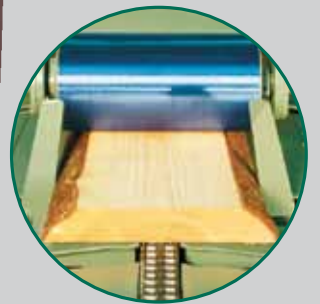
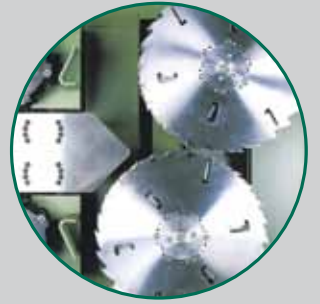
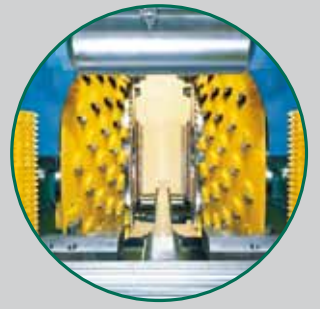
Arco-Chipping + Arco-Profiling + Arco-Circular resaws

Arco-Chipping + Arco-Circular resaw + **Edger optimizer**

Arco-Chipping + Arco-Band resaw + **Edger optimizer**

Arco-Chipping + existing curve sawing unit





Esterer WD GmbH

Estererstraße 12
84503 Altötting, Germany

phone: +49 (0)86 71 - 503 - 0
fax: +49 (0)86 71 - 503 - 386
e-mail: info@ewd.de
Internet: www.ewd.de

Esterer WD GmbH

Täleswiesenstraße 7
72770 Reutlingen, Germany

phone: +49 (0)71 21 - 56 65 - 0
fax: +49 (0)71 21 - 56 65 - 400
e-mail: info@ewd.de
Internet: www.ewd.de

EWD
The SawLine Company™