

CHX 840 and CHX 1300

///////CIRCULAR SAW///

Versatile sharpening machine for TCT circular saw blades up to 840 or 1300 mm in diameter



FOR WHEN YOU REQUIRE THAT LITTLE BIT MORE.

FIVE CNC AXES. EXCELLENT KINEMATICS. TOOTH FACE AND TOOTH TOP MACHINING IN ONE SET-UP. AN OPERATING CONCEPT THAT'S LITERALLY CUTTING EDGE. EVEN IN ITS BASIC FORM, THE CHX WITH DOUBLE GRINDING WHEEL IS SURE TO WIN YOU OVER COMPLETELY. IT CAN BE FLEXIBLY ADAPTED TO YOUR REQUIREMENTS THANKS TO AN EXTENSIVE RANGE OF OPTIONS, SUCH AS AUTOMATION FOR UNMANNED OPERATION.

THE RESULT IS TYPICAL HIGH-QUALITY MACHINING FROM VOLLMER THAT OFFERS EXTREMELY SHORT SET-UP TIMES AND MAXIMUM PRODUCTIVITY.

**CHX 840 and CHX 1300
SETTING THE BENCHMARK FOR CIRCULAR
SAW MACHINING TODAY.**



FORMAT SHOWN FOR EACH SIZE: THE CHX



//// 1 COMPACT DESIGN

Space-saving design and optimal accessibility for operators

//// 2 INNOVATIVE CONTROL PANEL

With 10-inch LCD colour display and multifunction handwheel for fast and safe operation

//// 3 LARGE VIEWING WINDOW

Internal, two-part operation door for a perfect overview of the grinding process

//// 4 FULL ENCLOSURE AS STANDARD

For effective safety at work, noise and emission protection, as well as a characteristic appearance

//// 5 SOLID DESIGN

Robust machine construction for vibration-free operation and high-quality sharpening result



/// THE MACHINE CONCEPT

Logically tailored to meet the expectations and needs of its operators, the CHX allows for efficient and high-quality machining of circular saw blades. Which configuration suits you?

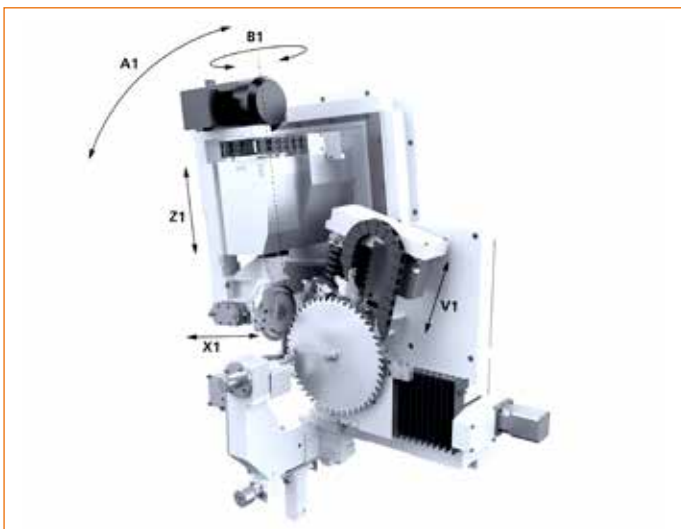
/// Machining of tooth faces and tooth tops in just one set-up, thanks to original VOLLMER double grinding wheel technology and automatic A1 axis

/// Five CNC-controlled axes for the complete machining of all commonly used tooth geometries in just one set-up – even for saws with axial face angle and group toothing

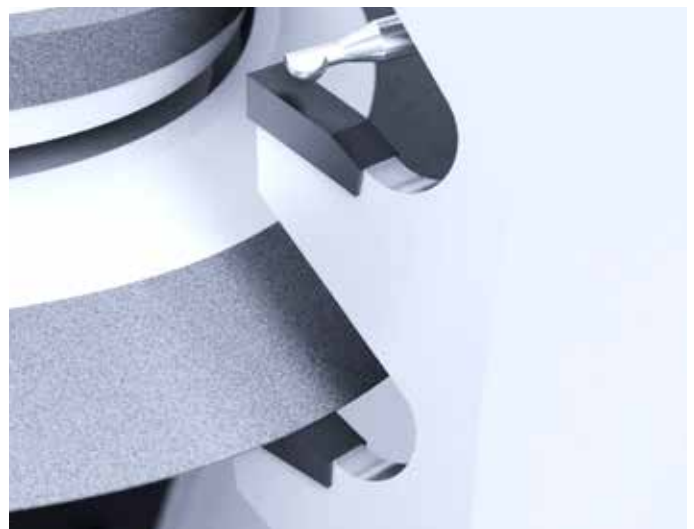
/// Optimum movement coordination for short grinding times and reduced non-productive times

/// Consistently hydraulic-free – extremely low-maintenance

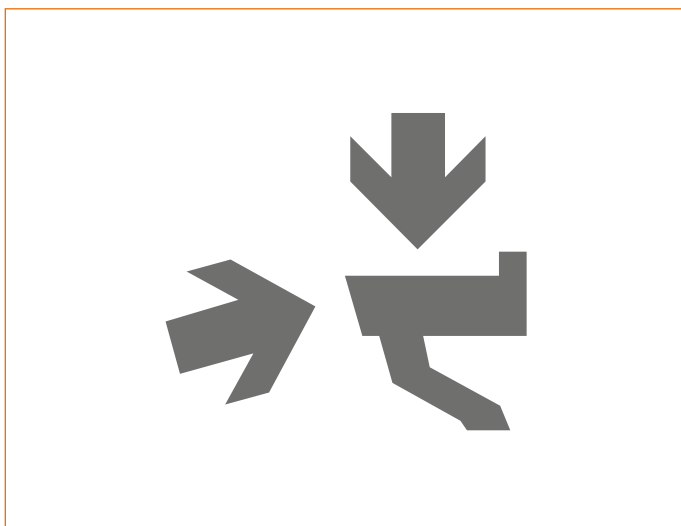
/// Automatic central lubrication included in the basic equipment for reduced maintenance effort



/// MAXIMUM FLEXIBILITY
thanks to five CNC-controlled axes (A1, B1, Z1, X1, V1)



/// TOOTH FACE MACHINING



/// TOOTH FACE AND TOOTH TOP MACHINING
in just one set-up

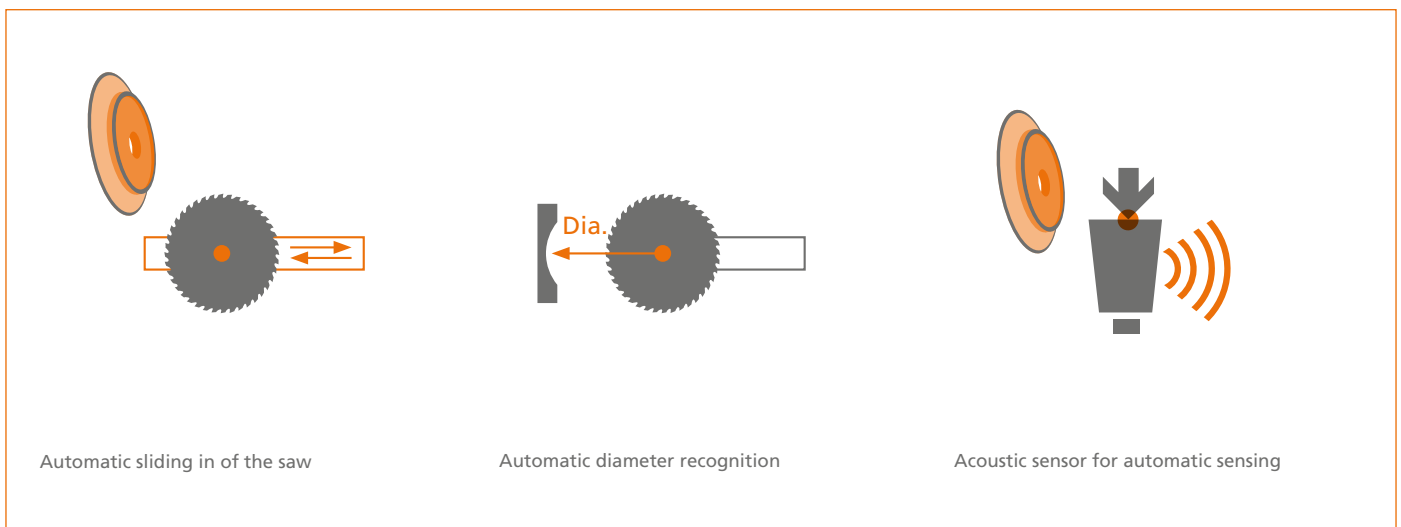


/// TOOTH TOP MACHINING

Automatic set-up procedure

The use of one set-up for the machining of tooth faces and tooth tops already ensures a clear reduction in set-up time. Thanks to the individually selectable degree of automation of the CHX, set-up times can be reduced even further. And, above all, this results in an enormous boost to convenience, as well as increased flexibility and profitability.

/// Automatic set-up procedure, consisting of saw insertion, diameter recognition and an acoustic sensor for sensing



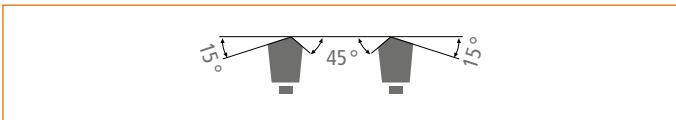
/// AUTOMATIC SET-UP PROCESS



/// THE APPLICATION

The high level of productivity, functionality and astounding variability make CHX machines a worthwhile investment for sharpening shops in particular, as well as sawmills. No matter whether it concerns wood, aluminium or metal processing – if it requires circular saw blades, CHX has the right solution at the ready!

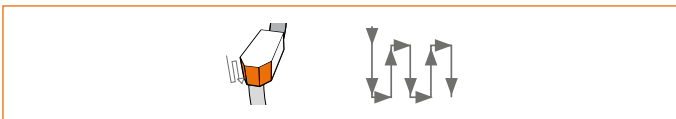
/// Oscillation grinding as standard – for high material removal rates in just one cycle, e.g. when machining teeth for repair



/// BEVEL GRINDING ANGLE
can be individually chosen



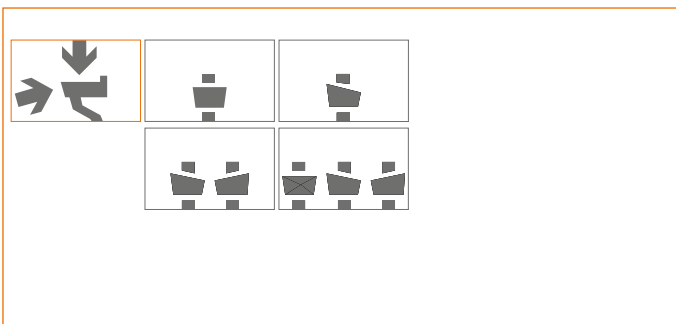
/// GRINDING SPEED
can be steplessly adjusted according to different surface qualities



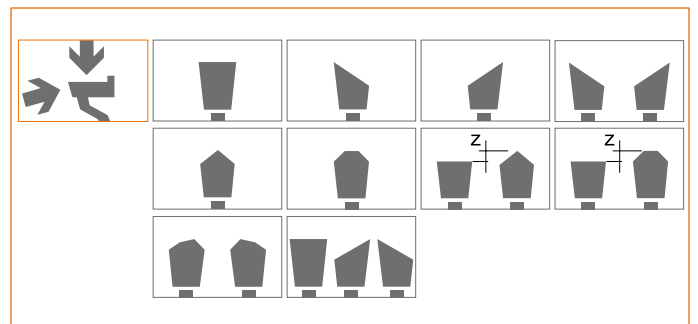
/// OSCILLATION GRINDING PROCESS
achieves outstanding surface finish quality even with high removal rates



/// GROUP TOOTHING
can be machined



/// TOOTH FACE // TOOTH SHAPE EXAMPLES



/// TOOTH TOP // TOOTH SHAPE EXAMPLES

Saws for the saw mill industry, solid wood processing and furniture manufacture

The name VOLLMER guarantees process reliability and stability. Thanks to the diagonally integrated feed pawl with pneumatic lift, even chipper segments present no problem – even if these are screwed with or without a reinforcing ring onto the mounting devices manufactured specially for the purpose, often also with filler pieces in order to fill up the gaps in the body.

/// Wide-opening blade clamping mechanism for saws with collar or reinforcing ring

/// Optional second feed pawl for machining tooth pitches up to 180 mm

/// Optional hollow face grinding device for machining hollow face saws



/// TOOTH TOP MACHINING
on chipper segment from the saw mill industry



/// HOLLOW FACE MACHINING
for excellent results in furniture manufacture, optional



/// THE APPLICATION

Saws for metal machining

Particular requirements apply in metal industry, which is also true for sharpening. The CHX 840 and CHX 1300 are ideally designed for efficiently grinding even complex tooth geometries and group toothings.

/// More powerful grinding motor with variable grinding speed, for a high level of grinding efficiency and the possibility of optimising process and machining parameters

/// Software for negative tooth face geometries and chip breaker machining is optional

/// Adjustable grinding sleeve for chip breaker machining for more flexibility



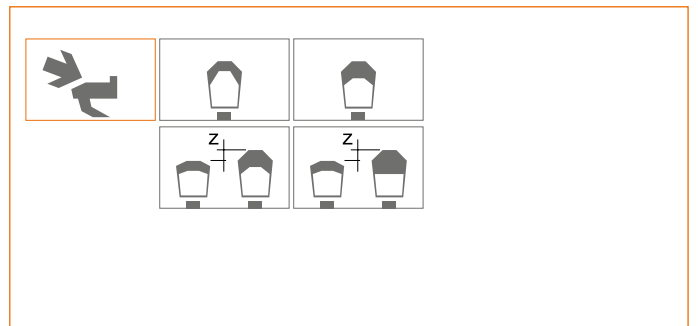
/// CHIP BREAKER MACHINING ON SAWS with 50 mm grinding wheel



/// CHIP BREAKER MACHINING with 125 mm grinding wheel



/// NEGATIVE HOOK ANGLE MACHINING



/// NEGATIVE HOOK ANGLE // TOOTH SHAPE EXAMPLES



/// OPTIONAL CHIP GUIDING NOTCH
Machining of saws with chip guiding notch

/// SPECIAL APPLICATIONS

/// First-time automatic deposition of the base body as an independent program for efficient pre-machining of the circular saw blade for the subsequent sharpening process

/// Optional additional function for grinding the tip groove – for optimal preparation of the saw blank in the production process



/// RELIEF GRINDING



/// TIP GROOVE
optional



/// MULTIPLE SURFACE PROGRAM// TOOTH SHAPE EXAMPLES
optional

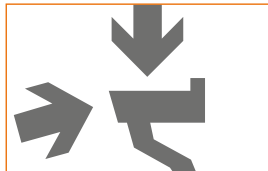
No matter which degree of automation you choose for the CHX, you will already be able to save considerable set-up time and begin machining even quicker thanks to the fact that machining of tooth faces and tooth tops takes place in one set-up.

You can also optimise your set-up time even further using the automatic set-up procedure. And then there's the automated HS, which even allows for unmanned operation that can take place overnight, for example. You can see all the individual automation options that the CHX offers in the overview below.

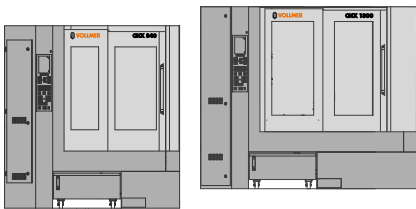
OVERVIEW OF ALL AUTOMATION OPTIONS



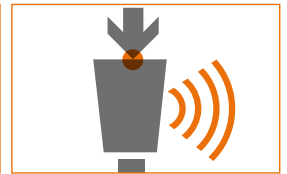
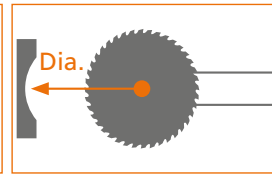
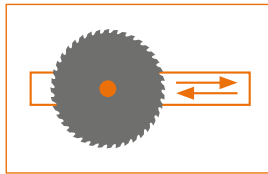
CHX 840



Manual set-up



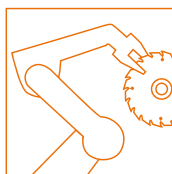
CHX 840/CHX 1300



Automatic set-up



CHX 840 with HS



Automatic loading

/// OPTIONAL: AUTOMATION

To all who want to use their CHX with even greater efficiency and productivity, we recommend combining the machine with HS loading, which is available on request. The automatic loading of the machine enables up to seven hours of independent time, allowing for unmanned operation that can take place overnight, for example. The programming and preparation of the saw batch can take place while the machine is working.

- /// Automatic machine loading with circular saw blades up to a stack height of 180 mm (for up to 25 saws)
- /// Stacking of saws with intermediate layers to protect the cutting edges
- /// For saw blade bore diameters of up to 80 mm
- /// For circular saws with a diameter of 140–530 mm in two possible working ranges (140–370 mm or 300–530 mm)
- /// Data entry station for stack programming

CHX 840 WITH HS WORKPIECE LOADING DEVICE



/// QUICK LOADING
thanks to two CNC-controlled axes (R2, Y2)



/// THE OPERATING CONCEPT

The modern operation concept with the new multifunction handwheel makes work significantly easier and faster. The axes are selected and controlled by only one module, which is very helpful for avoiding the possibility of incorrect operation. The handwheel is also used as a potentiometer in order to be able to carry out speed adjustments in automatic mode.

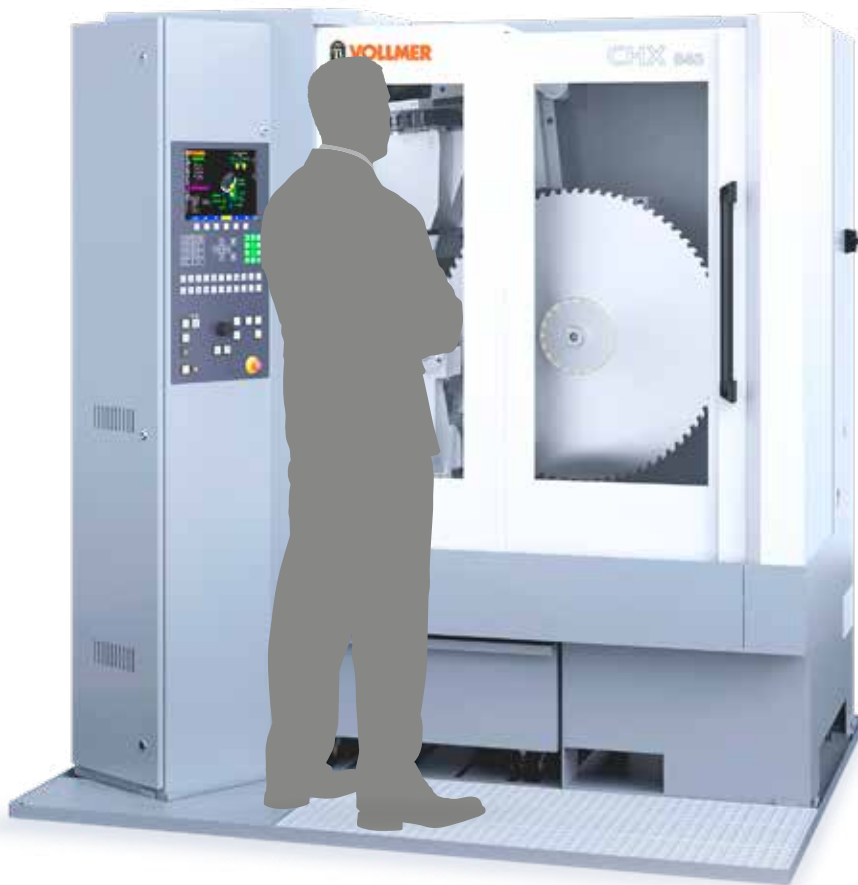
/// Optimised machining times and surface finish quality through variable input of the grinding speeds for various different surfaces

/// No tooth pitch input required thanks to the feed pawl sensor system

/// Automatic adjustment of the tooth surface and top through the controlled A1 axis avoids adjustment errors

/// Network connection for data protection and acquisition of machine data and production data

VOLLMER OPERATION PHILOSOPHY – ensures maximum convenience of use



////// 1 CONCISE VOLLMER SYMBOLS
facilitate intuitive programming

////// 2 USB CONNECTION
for seamless data transfer

////// 3 WINDOWS-BASED INTERFACE
with 10-inch LCD colour display and graphical user guidance, prepared for remote service

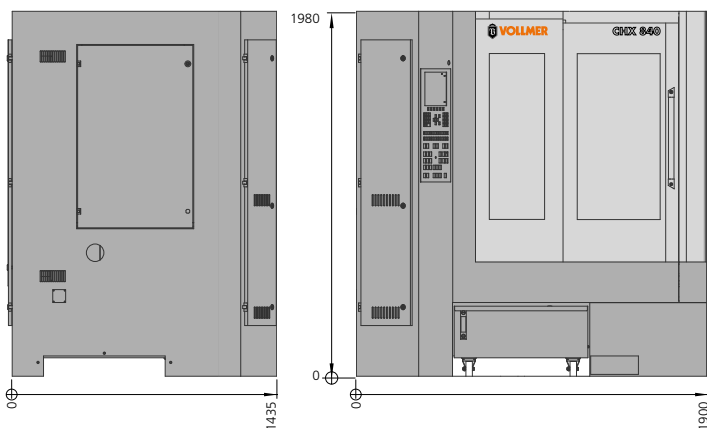
////// 4 EASY SET-UP
thanks to innovative multifunctional handwheel

/// SPECIFICATIONS

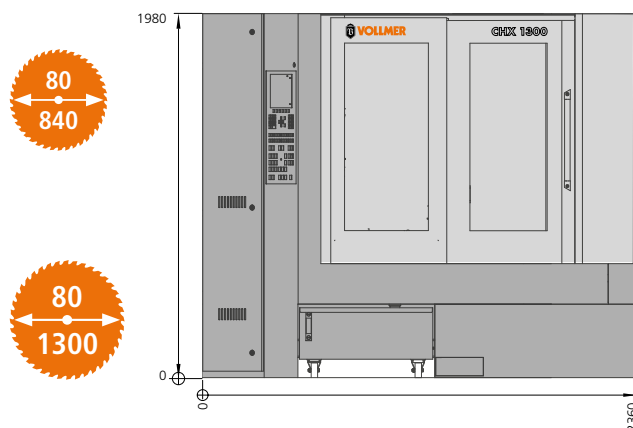
Circular saws	CHX 840	CHX 1300	
Outside diameter	80–840	80–1300	mm
Bore diameter	from 10	from 10	mm
Blade thickness	≤ 8	≤ 8	mm
Tooth pitch	≤ 100 (≤ 180*)	≤ 100 (≤ 180*)	mm
Cutting width	to 12	to 12	mm
Workpiece weight	max. 30	max. 80	kg
Hook angle	-30* to +40	-30* to +40	°
Hollow face hook angle	-10 to +30*	-10 to +30*	°
Clearance angle	+6 to 45	+6 to 45	°
Bevel grinding			
on the tooth top	≤ 45	≤ 45	°
on the positive tooth face	≤ 15 (20)* ¹	≤ 15 (20)* ¹	°
on the negative tooth face	≤ 15*	≤ 15*	°

Grinding paths	CHX 840	CHX 1300	
Hook angle	≤ 20	≤ 20	mm
Tooth top	≤ 24	≤ 24	mm
Hollow face*	≤ 15	≤ 15	mm
Relief grinding	≤ 50	≤ 50	mm
Grinding spindle output	1.1	1.1	kW
Grinding wheels			
Outside diameter	125/175	125/175	mm
Bore diameter	32	32	mm
Peripheral speed	variable	variable	
Coolant tank capacity	Approx. 150	Approx. 150	l
Connected load (without auxiliary equipment)	Approx. 2.2	Approx. 2.2	kVA
Weight	Approx. 1765	Approx. 1955	kg

*Optional *¹for hook angle of ≥ -5°



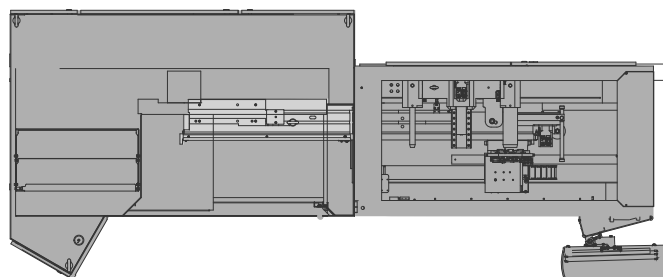
/// CHX 840 MACHINE DIMENSIONS



/// CHX 1300 MACHINE DIMENSIONS



/// MACHINE DIMENSIONS FOR CHX 840 WITH HS



We reserve the right to make design changes in the interest of technical progress. Patent pending.

/// SERVICE THAT IS MADE TO MEASURE

With a comprehensive range of helpful and efficient services, VOLLMER is there to provide you with support. From competent advice and the best financing for you, through to an advantageous service contract that allows you to decide now which service costs you will have to pay in the future.

In short: We do everything so that you can concentrate on what's important: Your success.

/// Extensive advice and project planning

/// Financing and insurance

/// Training and start-up

/// Maintenance and service

/// Original spare parts

/// Upgrade and software

/// Purchase and sale of used machines



CHX 840 AND CHX 1300 – YOUR ADVANTAGES AT A GLANCE:

/// MORE PRODUCTIVITY

Machine tooth faces and tooth tops in just one set-up and minimise set-up times.

/// INCREASED FLEXIBILITY

For the workshop-oriented machining of circular saws of all kinds.

/// MORE INDIVIDUALITY

Can be flexibly configured to meet your requirements thanks to a comprehensive range of options.