

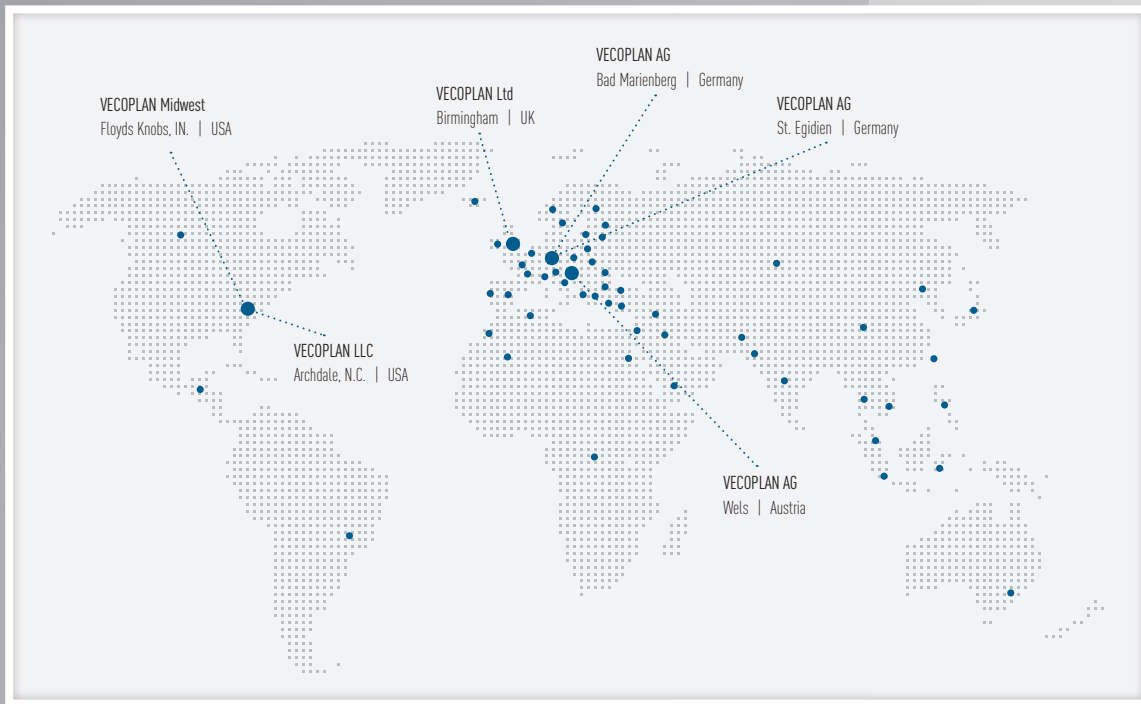
TECHNOLOGY FOR A SUSTAINABLE TOMORROW



WOOD

THE RESOURCE WITH A FUTURE

**Vecoplan**<sup>®</sup>



## VECOPLAN INTERNATIONAL

Waste prevention is one of today's most pressing tasks and challenges. Careful use of finite resources, reasonable recycling, environment-driven thinking and sustainable acting become more important every day. Our company has been tackling these challenges successfully for more than 40 years – today, we are a leading partner of the international wood and recycling industries with numerous branches and selling agencies all over the world.

VECOPLAN AG develops, produces and sells technologically superior plants and machines for shredding, conveying and processing primary and secondary raw materials gained in recycling processes. Continuous research and development as well as in-house-production give our customers a competitive edge in technology. Our results are convincing: numerous patents are proof of our knowledge. In order to meet our set objectives of technological leadership and high quality, we have focused our business activities on our key competences. Our service division is a supplement to this structure. We accompany our customers all the way: from integrated engineering over production, delivery, assembly and commissioning to the maintenance of the complete plant. Thus, VECOPLAN AG delivers everything from the single machine to the complete plant, according to our customers' demand, meeting highest standards of quality and sustainability.

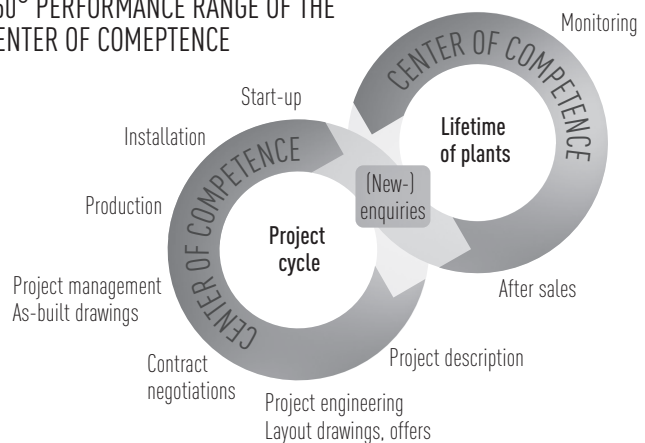


## MASTERMINDS – POWER FOCUSED

The Wood Market is a global acting one – not only because of the globalizations of markets it is in a permanent alteration. We at VECOPLAN are specialists for the development and production of high quality machines and plants for shredding, conveying and recycling of wood.

We have focused our know-how and experience – our Center of Competence monitors the developments in the Wood Market. For the benefit of our customers we are able to quickly accommodate to market alterations, take opportunities, develop future trends for our products and offer customized solutions. Our range of services covers the whole system technology including engineering and acceptance test. From the beginning on our Center of Competence guarantees for professional project engineering and realization of your system and plant – pending on highest quality standards, prompt and on schedule, hands-on, customer focused – all under one roof.

### 360° PERFORMANCE RANGE OF THE CENTER OF COMEPTENCE





## FOR EACH MATERIAL THE RIGHT SOLUTION



Short-cuts



Demolition Timber



Log Wood

### Solutions for the recycling of:

- Sawmill waste e.g. chips, saw dust, log end pieces, slabs and bark.
- Tree trunks and round logs
- Chip board, pallets and demolition timber

Recycling or energetic use of wood - VECOPLAN offers from one source multiple technologically solutions for the recycling process. We manufacture and sell systems and components for shredding, conveying, screening, separating and storage of wood. The development and manufacturing of plants for the wood- and biomass industry is a challenging task. The core of such recycling installation is the shredding technology.





Wood

The shredded wood waste is further processed and applied for:



Chips



Paper



Chip board



Pellets



Energetic use

## WOOD IS VERSATILE – SAME APPLIES FOR OUR TECHNOLOGY

Different input materials claim for different demands on technology. VECOPLAN offers from one source for recycling as well as for energetic use of wood multiple, innovative solutions.

Focused demand is always the right type of shredding technology. VECOPLAN has developed for the different applications a wide range of shredding systems. By customized configuring the machines are always best prepared for the individual application. Our drum chippers produce

homogenous quality chips out of slabs, round logs and tree trunks. Customers rely on our biomass chippers especially for the pellet production. Our pre-shredders are highly valued for demolition timber. For each recycling application we have the right solution.

## Shredding



Single-shaft-shredder (VAZ)

## SHREDDING IS OUR CORE COMPETENCE

Our customers benefit from our long-lasting experience at shredding technology. Since company foundation 1969 we are the experts for this issue. With six different types of shredding technology, which elementary differ in their cutting system and build-up, we have for each type of wood the right sized machine in our performance range.

## Conveying



Belt conveyor (Vecobelt)

## CONVEYING TECHNOLOGY – TAILOR-MADE

With conveyor, chain, screw, belt or vibration conveyor - we lead the way. Our product range includes reliable and customized products for bulk materials and piece cargo, which fulfill the task to transport the wood and all other raw- or waste materials to their final destination.

## Screening



Oscillation screen (VSS)

## GETTING THE MOST OUT OF EVERYTHING

What hard handcraft could not do - by "oscillating", "disc" and "star" we get most out of everything. Star- and disc screens are available for over sizes and bigger fractions as well as 3-story oscillating screens, which have surfaces of up to 9 m<sup>2</sup> which separate your material in at least four different fractions.

## Separating



Overbelt magnetic separator (VÜB)

## FOCUSING ON THE ESSENTIAL

Our separating technology frees your wood from all tramp material which has bad influence on your further process. High end magnet-, sensor- and air systems like our air separators, metal detectors and overbelt magnetic separators are vital for your further process.





Storing

Dosing



Loading- and unloading conveyor (BEF)



Double screw conveyor

## STORAGE IS NOT AN ART – IT IS A SCIENCE

With our machines, it is possible to fill and discharge rectangular silos with a capacity of up to 1,300 m<sup>3</sup>. We also supply uniquely efficient technology for continuous 24-hour discharging that can be used for heating installations, loading and unloading vehicles from silos, and also for discharge from bunkers. Loading- and Unloading conveyors, push-/pull rod discharger or drag chain dischargers for you it is: Storage fill or discharge with high end technology.

## SUPPLYING THE EXACT MEASURE REQUIRES THE RIGHT TECHNOLOGY

We provide cutting edge technology for regulated feeding of wood, wood chips, sawdust, bark and plastics. Precise dosing is ensured via vibration technology and screw dischargers or push rod dischargers. We will be pleased to develop a customized system which is perfectly tailored to your requirements and is therefore particularly cost-effective and energy-efficient.



## SHREDDING IS OUR CORE COMPETENCE

Our customers take benefit from our long-lasting experience for shredding technology. Since company foundation in 1969 we are the experts for this issue and belong to the international market leaders.

Our roots are in the wood market: The first deliveries of VECOPLAN machines were for sawmill- and furniture industry, the first supplied system in 1973 was also for the wood recycling. 1971 we developed the drum chipper with the centrifugal wedge clamping system, worldwide applied this chipper writes its own story of success and guarantees for a high quality chip. The different sizes of chippers make it easy to apply them in sawmills, chipping plants, paper

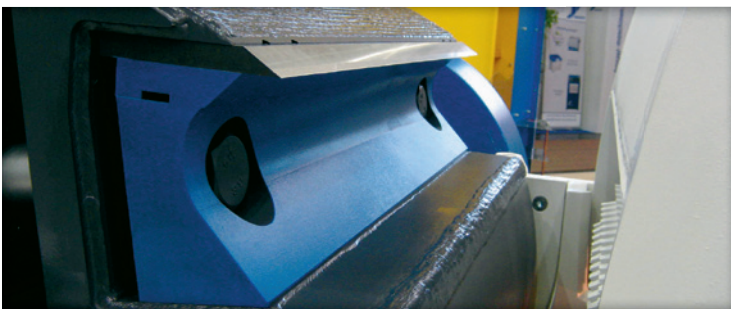
industry, biomass plants or woodworking industry. The shredder is always in the first place at each recycling plant. If customer request the value added chain VECOPLAN as a system supplier has the skill to guarantee for professional treatment. In case of sawmill waste, tree trunks, slabs and bark our shredders convince by high performance, low energy consumption, low wear costs, little maintenance and maximum, permanent availability.

## WE ARE DRIVEN BY INNOVATION

Every day our engineers and technicians from the R+D fulfill the task to deliver best possible solutions for the demands of our customers. Numerous patents proof our technical leadership on the worldwide market.

After launching the VAZ into the market in 1983 this technology has been consequently advanced and VECOPLAN received patent in 1989 on the Universal-Cutting-System (u-rotor). This was followed by: Protection against tramp material, pneumatic counter knife traverse ("Flipper"), hydraulic bridge breaker, patented film- and fibre rotor (2002) and the

patented HiTorc®-drive (2005). An innovation which stirs attention: The HiTorc®-drive has been nominated for the Innovation Award of the German Economy. Innovations made by VECOPLAN rule the market. Our engineers and technicians work on concepts and reliable solutions also for high demanding topics.



### Centrifugal wedge Clamping system

Still efficient and established VECOPLAN fixing system

- quick cutter exchange
- secured fixing
- solid construction



### Profiled steel rotor

Profiled rotor for very homogenous and superb transportable chip quality

- Rotor tools can be applied from all 4 sides
- Simple cutter exchange
- Non-sensitive at tramp material

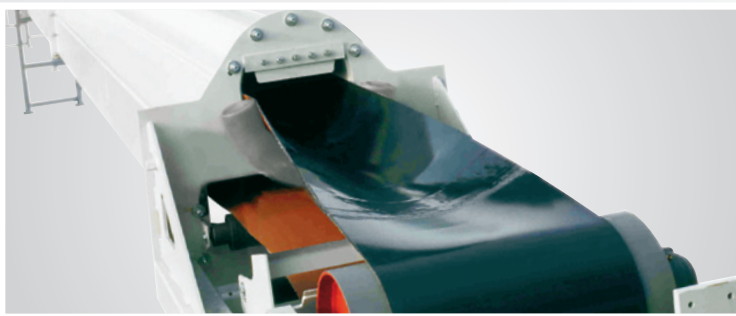




## HiTorc®

The revolution in shredding technology

- Direct drive motor / permanent controlled sync motor
- Higher performance – smaller consumption
- Energy saving up to 50 % on pre shredding
- Current peaks cut in half (in comparison to async motor)
- Space saving / low noise / almost maintenance free



## Vecobelt

Pipeconveyor – applied for horizontal or easy inclined transport of bulky material

- transport distances up to 400 m in one part
- low noise and dust poor transport by beltguidance in closed pipe



## TopLoader

“Wheel loader shovel on rails”

- Fully automatic box discharge
- Discharge via inclined ramp to following conveying technology
- conveying capacity up to 100 m<sup>3</sup>/h

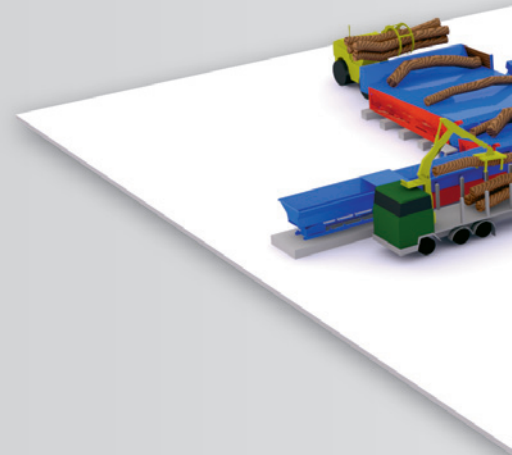


## Moveable rod system floor

“the driveable grid”

- Safe solution to skip bulky material
- Full access for walk-in or drive-in
- Performance up to 1000 m<sup>3</sup>/h

# COMPLETE INSTALLATION OF COMPLEX PLANTS



## Duties of the electrical engineering

- Consulting / Specification Analysis
- Customer-dependent evaluation of specifications
- Creation of ICA lists as well as circuit diagrams (including documentation of control panels)
- Design of facility-specific software
- Testing and simulation of control panel systems in advance to dispatch
- Support on installation up to complete installation
- Commissioning and later optimising according to customer requests

## Duties of switchgear manufacturing

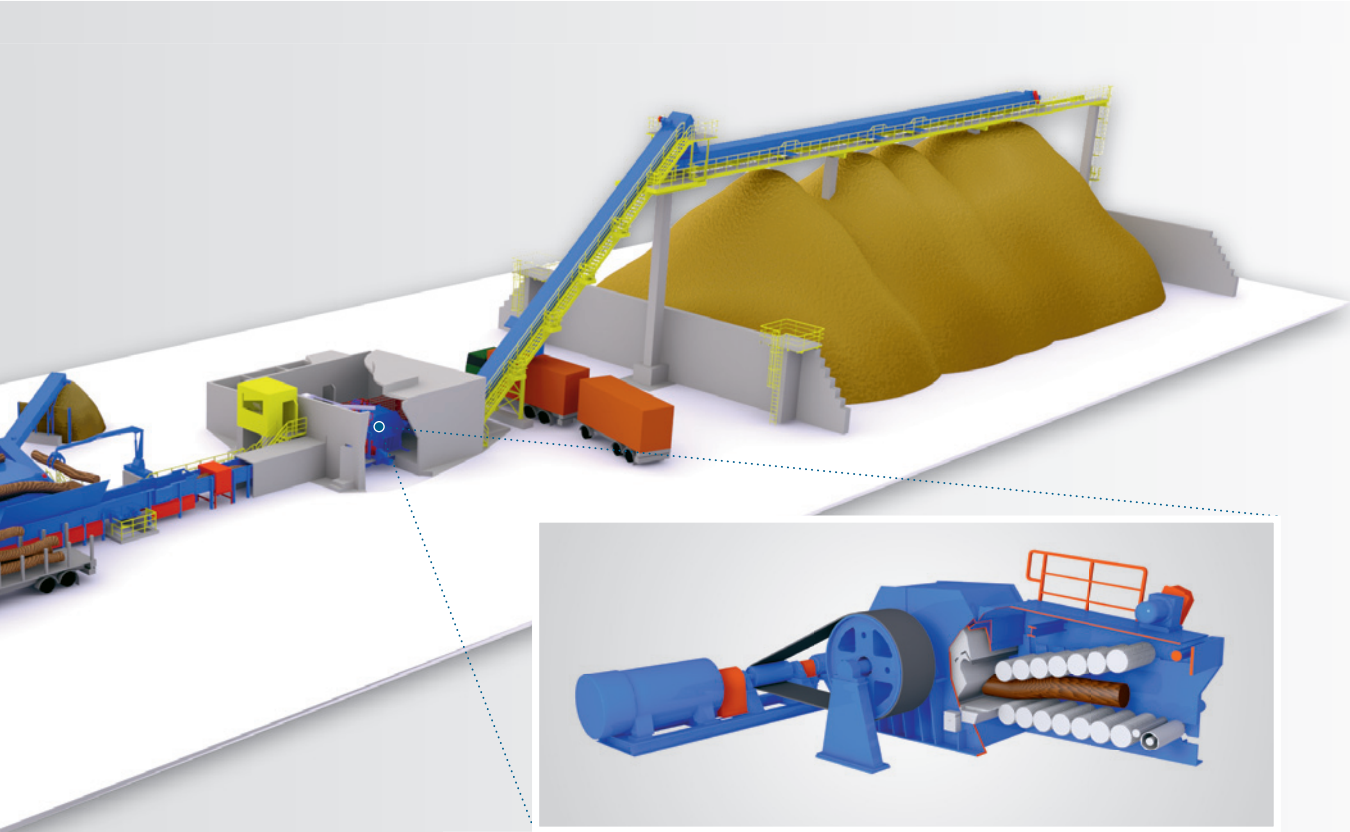
- Wiring of the control panel systems
- Individually designed control panel systems for stand-alone machines as well as for complex facilities

## Duties of electrical development

- Working out concepts for automation
- Layout and optimisation of drive concepts
- Programming of different control systems
- Visualisation of stand-alone machines
- Working out safety concepts according to national and international standards
- Model- and prototype manufacturing incl. support up to maturity phase
- Optimisation of repetition parts
- Realisation of individual customer demands on VECOPLAN products
- Realisation of special requirements on hard- and software

## VMI – The VECOPLAN Human-Machine-Interface-Solution

- 7" Widescreen with Intel Atom processor
- Smart desktop
- Indication of actual operation conditions
- Troubleshooting via remote access



## LONG-LASTING – HIGH-PERFORMANCE – SOLUTION-DRIVEN

Wood is alive. Each single piece is unique and waits for its intended use.  
 We at VECOPLAN do have the know-how to bring each kind of wood to a worthwhile recycling.

We offer solutions and have for each application the right system. To treat the raw- and waste material of wood it is necessary to employ up-to-date environmental technology and take advice of engineers and technicians.

VECOPLAN is an international supplier of complete systems and plants for the worldwide wood industry. Our performance range includes beside the engineering and acceptance test the whole system technology. Bunker-, conveying- and storage technology are

configured to the tailor made requests of our customers under the aspects of highest quality demands. Our project management guarantees our customers a reliable team to realize the complex targets. Our customers benefit from our system competence in wood recycling, chipping plants, biomass power plants, sawmill industry, demolition timber recycling and pellet production. The long life cycle of a VECOPLAN plant is defined by perfect construction and solid manufacturing. Which leads to exceptional high lifetime of our plants and systems.



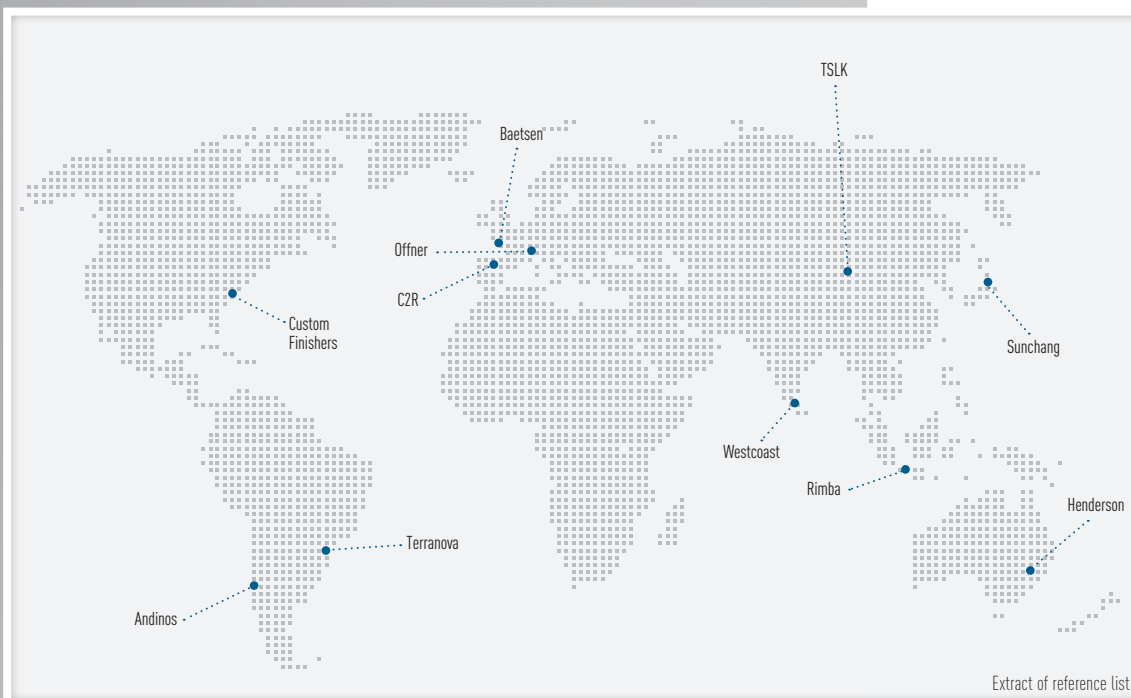
# VECOPLAN POWER: AN EFFECTIVE SYSTEM

We shape your fuel and secure high availability for your small heating or big power plant. Our specialists create the basis for an effective plant by designing the right system concept.

## Sawmill Bois du Dauphiné in France

Within one year they once again built-up the sawmill in Le Cheylaz (France) and it has been equipped with a complete wood waste plant delivered by VECOPLAN.

The new conveying technology was delivered and connected without gateways to the existing conveying technology of the pellet plant. The performance of the sawmill is at 600.000,00 solid cubic meter per year at a 2-shift operation.





## SUCCESSFUL PROJECTS:

Worldwide we have – together with our customers and partners – successfully realised projects in the wood industry and wood recycling business. Below please find some best practise examples:

- Baetsen – demolition timber  
performance: approx. 200,000 to/a
- C2R – wood waste and bark  
performance: approx. 118,000 to/a
- Henderson – demolition timber  
performance: approx. 30,000 to/a
- Offner – sawmill  
performance: approx. 500,000 scm\*/a  
performance at chips: max. 1,100,000 m<sup>3</sup>/a  
performance at saw dust: max. 600,000 m<sup>3</sup>/a
- Rimba – chipboard  
performance: approx. 30,000 to/a
- Sunchang – sawmill  
performance: approx. 600,000 scm\*/a  
performance at chips: max. 400,000 m<sup>3</sup>/a  
performance at saw dust: max. 300,000 m<sup>3</sup>/a
- TSLK – sawmill  
performance: approx. 1,000,000 scm\*/a
- Westcoast – chipping plant  
performance: approx. 100,000 to/a
- Andinos – sawmill  
performance: approx. 300,000 scm\*/a
- Terranova – sawmill  
performance: approx. 200,000 scm\*/a
- Custom Finishers – harbboard industry  
performance: approx. 50,000 to/a

\* solid cubic meter



# YOUR ORDER IS OUR RESPONSIBILITY



Original parts



Service



Contact







## INTERNATIONAL NETWORK GUARANTEES IDEAL SERVICE

For the benefit of our customers and your continuous growing requirements we establish synergy and connect efficiently the know-how and experience of our employees. This guarantees all our international customers prompt and reliable technical support. All this is done under the commitment as a system supplier who bears responsibility – even after delivery.

Our performance range includes consulting, engineering, installation and start up but also intensive trainings, as well as a structured maintenance and service center. Furthermore we offer for individual repairs, quick and unfailing service for wear- and spare parts. We assure you to be there wherever or whenever needed.

We at VECOPLAN engineer, manufacture and install your plant from one source – you can reach our service 24/7.

Our TeleService guarantees worldwide access: trouble-shooting is done immediately. The remote service can adjust parameters, transfer data and delete errors. By that VECOPLAN technology guarantees professional support and maximum plant availability. Our service and maintenance packages secure your investment. We offer pre-defined service packages, which of course can be individually supplemented.

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