

**Design calculation data**

Type of suspension	Alu + Limestone Waste Water	
Suspension volume	10	m <sup>3</sup> /h
DS in suspension	1 - 4	%
DS in filter cake	~ 50	%
Suspension temperature	ambient	°C
pH Value of suspension	~ 10,5	
Working time	12	h
Quantity filter press	1	
Batches each filter press	8 cycle in 12 hours	

Based on the suspension data you have provided, we recommend the use of the filter press/es and accessory equipment described below.

Data / values specified above are assumed design calculation data for which we cannot accept any guarantees. On the other hand, these data would have to be confirmed by pilot tests beforehand.

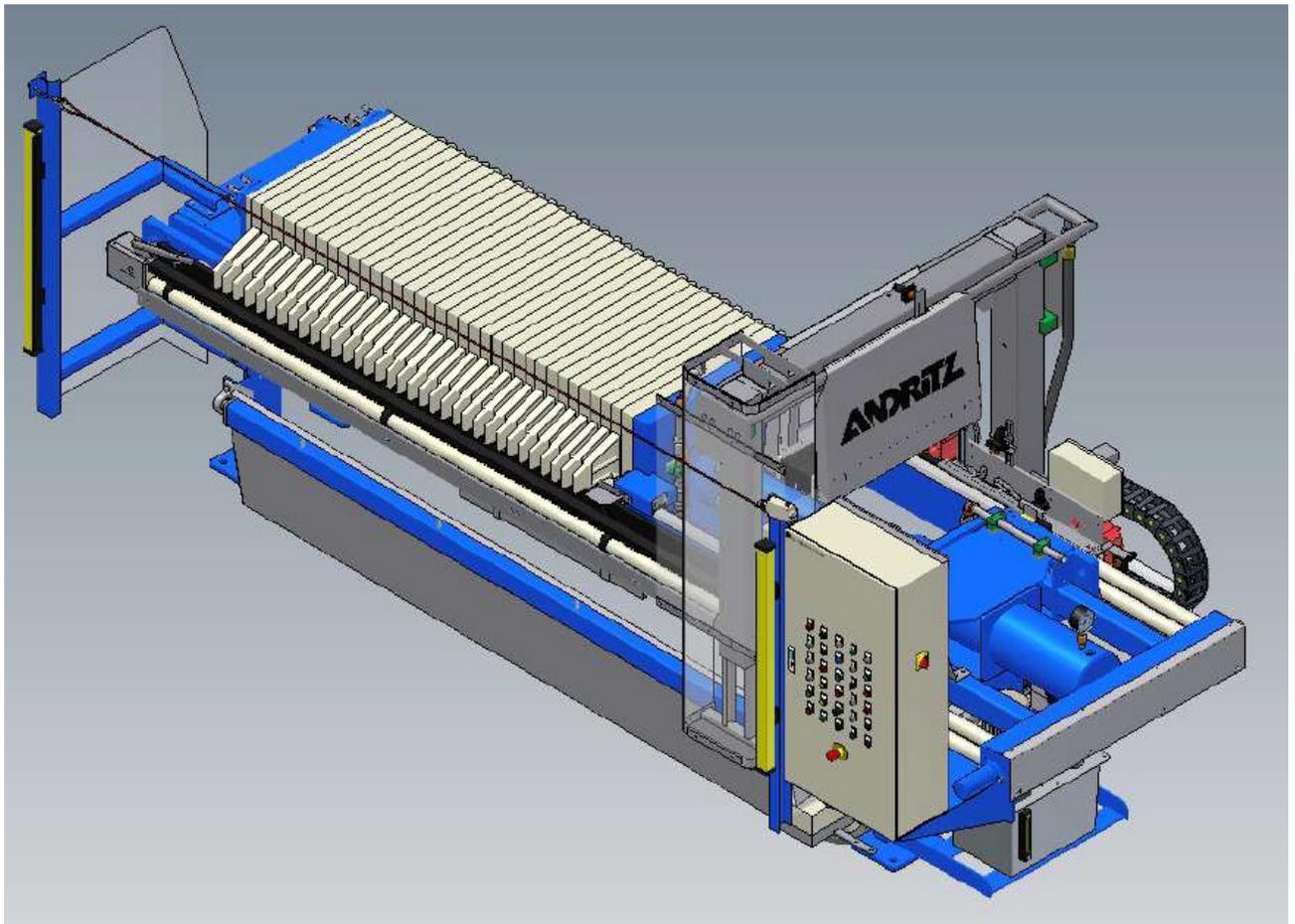


Image for illustration purposes only

Pos. 1	Andritz STANDARD Chamber Filter Press Type:	SE800CRWD15	
<u>General data</u>			
Filter plate size	800x800		mm
Design pressure:	16		bar Ü
Working length:	2345		mm
	G050		
No. of chambers:	45		Pcs
	Extendable to:	50	Pcs
Chamber depth:	25		mm
Total press volume:	~ 500		l
	Extendable to:	550	l
Total filtering area:	~ 44		m <sup>2</sup>
	Extendable to:	49	m <sup>2</sup>
Membrane inflation medium:	-		
<u>Filter plates</u>			
Material:	Membranes / Carrier plates:	-/-	
Material:	Chamber plates:	PPH	
	Filtration pressure	15	bar
	Membrane inflation pressure:	-	bar
	Max. feeding pressure (absolute):	Deviations according to p/T(t)-Diagram	
	Cake washing /Cake drying:	-	
<u>Connections</u>			
	Slurry inlet I:	Central DN 80 PN 16bar	
	Slurry inlet II:	DN -	
	Filtrate discharge:	DN 40	
	Core blow inlet:	Via air connection plate or integrated air connection in the end filter plate. With manual ball valve, non-return valve and hose bridge to the cylinder stand DN R 1'	
	Cake wash water inlet:	-	
	Cake wash water outlet:	-	
	Cake air blow inlet:	-	
	Cake air blow outlet:	-	
<u>Filter cloths</u>			
	Material:	Polypropylene	
	No. of cloths:	45	Pcs

<u>Backing cloths</u>	Cloth fixing:	Quick fastener	
	Material:		
	No. of cloths:		Pcs
<u>Closure of filter pack</u>		Hydraulic unit, 2,2kW	
<u>Plate shifting device</u>		hydraulically	
<u>Surface protection</u>	Painting:	Sandblasting acc. SA 2 1/2 DIN EN 12944 T.4 1 x base coat / 1 x intermediate coat 1 x top coat SikaCor EG 5 RAL 5017 (traffic blue) Total thickness: 160µm	
<u>Corrosion protection</u>	Head and pressure piece/follower:	Anticorrosive head-/ pressure piece PP SE800	
	Side bars:	Painted steel	
	Hydraulic cylinder:	-	
	Drip tray hydraulic cylinder:	-	
	Plate shifting device:	Wetted parts in stainless steel, AISI 304L (1.4301)	
<u>Safety device:</u>	Operating side:	Safety light curtain with lanyard switch control for interrupting and restarting the plate shifter	
	Non-operating side:	Safety precautions provided by the customer	
	Membrane unit:	-	
<u>Electrical equipment</u>		Filter press wired ready for connection	
	Operating voltage:	400 V 3-phase / 50 Hz	
	Control voltage:	24 V DC	
	Protection class:	IP 54	
<u>Overall dimensions (ca.)</u>	( L / W / H ):	5361x2120x2290	mm
<u>Weight (ca.)</u>	Transport weight:	5400	kg
<u>Scope of supply</u>		Complete filter press as specified above, starting from the sludge inlet flange and ending with the filtrate discharge flange/s.	

**Functional description:**Design

Side bar construction made of high grade steel with:

- Two rectangular side bars in rectangular design, laterally beside the filter pack, of high-grade steel with stainless steel coating on the sliding surfaces resistant to corrosion and wear and tear.
- All connection points machined for parallelism and uniform thrust distribution.

Automatic plate pack closure

Automatic working hydraulic system with double acting hydraulic pushing-cylinders and maintaining pressure device.

Filter plate arrangement

Filter plates arranged on the rectangular side bars with lateral handles. Shifting areas on side bars protected with supports made of stainless steel.

Plate shifting device

To move the filter plates, automatically working, arranged at the side bars, consisting of: 2 parallel shifting carriages, drive chain, tensioning device and hydraulic motor with control valves, progressive speed adjustment and reversion of rotation controlled by pressure switch.



<b>Pos.</b>	<b>3</b>	<b>Filter Cloth Washing Device</b>
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for automatic cleaning of the filter cloths

**Design:**

Spraying Device built into the filter press, movable on 2 rails at the side bars, consisting of: Carriage with two collecting pipes, spray nozzles inward facing to an individual plate, excessive splash protection by means of brushes mounted on each spray bar. Horizontal and vertical movement of the spray beams is provided by individual electric motors.

Exact positioning of spraying device by means of electronic sensors. High-pressure hose for water supply. The hose and power cables are guided in a flexible track mounted at the side bar on the non-operating side.

Specification

Motor power of horizontal drive	0,12	kW
Motor power of vertical drive	0,37	kW
Type of protection	IP55	
Cabling and control	Fully wired, controlled via filter press PLC	



<b>Pos. 3</b>	<b>Feeding - High Pressure Diaphragm Pump</b>
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Triplex high-pressure plunger pump for the water supply of the filter cloth cleaning device

- Surface protection 1 coat of primer (40 µm)  
1 finish coat (RAL 5015, blue), 40 µm
- Squirrel cage motor
- Drive side for v-belt drive consist of motor and pump sheave, v-belts and v-belt guard as per safety standards made of fibre-glass reinforced plastic
- Base frame made from mild steel
- 1 set fastening elements: vibration absorbers, stone bolts, hexagon nuts, washers
- Pressure gauge 0-160 bar, liquid filled
- Certified full stroke safety valve, made of nodular cast iron(Mat.-No: 0.7043) adjust at 110 bar
- Discharge side high pressure hose, 1 m long, with flange, flange DN 40 PN160 made of steel
- Suction-side compensator (expansion joint), DN 80 PN16 flanges made of steel
- Suction filter, DN 80 PN 16 DIN 2633, with replaceable stainless steel screen
- Recirculation system UST made of spherical cast iron (Mat.-o: 0.7040), consisting of: 3/2-way-valve DN 32 PN 100, with electro-pneumatically controlled valve. Control voltage 24VDC
- Manually operated flow by-pass valve G 1/2", made of steel
- Pulsation dampener made of steel (Mat.-No:1.0539/1.0979), membrane made of neoprene, total volume 2.0 l, with discharge T-piece cpl., for electropneumatically controlled valve version

Technical data

Medium	Fresh water	
Flow rate	150	dm <sup>3</sup> /min
Medium temperature	max.30	°C
Volumetric efficiency	97	%
Feed pressure	100	bar
Plunger diameter	56mm	
Number of strokes	250-550	/min
Suction side connection	DN 80 PN16	
Discharge side connection	DN 40 PN160	

Material

Cylinder	0.7050/GGG 50
Cylinder cover	0.7050/GGG 50
Valve cover	0.7050/GGG 50
Plunger sealing	NBR groove ring
Plunger	1.4057 /Cr <sup>2</sup> O <sup>3</sup> coated
Valve	Brass / 1.4057
Gear box	grey cast iron
Internal gear components	modular cast iron or steel

Electric drive

Electric performance	45	kW
Motor speed	1500	UpM

**Pos. 4      Electric Control Unit according Andritz Standard for Standard Filter press**

For operating the chamber filter press

Consisting of a control cabinet and the control elements for the equipment and their functions listed below:

- Hydraulic cylinder: Open / Close press
- Filter plate shifting
- Safety device - Light curtains on service side
- Safety device - Overpressure
- Hydraulic operated drip trays

**Equipment**

- PLC S7-300 based on ET200S CPU / IM151 8 F CPU
- Safety engineering (Emergency stop, light curtain, ...) with fail safe CPU
- Contactors, motor protection switches, push buttons, make: Siemens
- Slave relay, make: Finder
- Control cabinet, make: Rittal
- Terminals, make: Phönix Federzug
- Single conductor numbering
- Power supply unit, make: Siemens Sitop
- Control: Siemens Simatic IM151 8 F
- Touch Panel 4"

**Configuration of the Control**

- All sensors and actuators are cabled to the switch box which contains the control part and the electrical power supply
- Safety features and equipment realized with ET200S
- Main switch; Regulated power supply 400VAC / 24VDC
- Control Simatic IM151 8 F
- Digital- and analog cards ET200S
- Hydraulic valves are controlled by 2A outputs of the PLC
- All fail-safe modules are certified up to Kat. 4 (EN954-1) and up to SIL 3 (IEC 61508).
- Protection class: IP 55
- Paint: RAL 7035
- Guidelines: VDE 0100/0113 EN60204/01 EN918; VDE660 Teil 500
- Ambient temperature: Maximal 40 °C
- Humidity: Maximal 95% , no condensation allowed
- Net: TN-C Net
- Potential-free contacts to customer: Collective fault, filter press closed, Filtration has started
- As far as possible the operation of the filter press will be done with the Touch Panel 4"

**Documentation**

- Circuit diagram
- Part list
- Terminal plan
- Functional description
- Actor/sensor list
- Structure plan
- Cable plan
- Cable layout plan
- Operating manual

<b>Price list</b>				
Pos.	Subject	Qty.	Single Price [ € ]	Total Price [ € ]
001	Filter Press	1	53.000,00	53.000,00
002	Drip Tray <b>(OPTION)</b>	1	3.870,00	3.870,00
003	Filter Cloth Washing Device <b>(OPTION)</b>	1	19.150,00	19.150,00
004	Filter Cloth Washing Pump <b>(OPTION)</b>	1	21.300,00	21.300,00
005	Electric Control Unit according Andritz Standard	1	13.710,00	13.710,00
		<b>Total:</b>		

**Scope of supply and services/ CONTRACT Scope**

<p>The content and scope of the goods supplied ("Scope of Supply") and the services performed ("Services") (together "Contract Scope") shall be conclusively governed by <i>Pos. 1-5</i>.</p> <p>All not herein contained materials and services which are required for commissioning or for operation shall be provided by you in due time and without charge for us. In case these materials or services are provided by us, they will be charged separately.</p> <p>In particular the following items are to be supplied by you, unless they are explicitly included in Contract Scope.</p>	Foundations, scaffolds, staircases and platforms.
	Thermal and sound insulation
	All supply and discharge pipes, utility piping, fittings, armatures, auxiliary constructions etc.
	Transport facilities, lifting appliances, rails
	Supply, laying and connection of electric cables between the various components (terminal boxes, motors, control unit etc.)
	Tools necessary for installation and maintenance
	Spare parts
	Oil and grease for the Contract Scope, the hydraulic unit and the lubrication unit
	Control system and local control panel
	Motor switch gears / frequency converter
	Engineering services for control systems provided by customer
	Risk assessment for declaration of conformity according to 2006/42/EC Annex IIA
	HAZOP study
	User requirements specification
	Dimensioning and selection, engineering for peripheral equipment
	Verification and approval of customer documents in respect of functionality and safety of the process beyond our Contract Scope
	Implementation of our standard PID into customer PID
	Civil works
	Erection
	Cold commissioning
Product commissioning	
Training	
<p>The time and the nature of supplies to be provided by you must be agreed in due time. Delays of supplies to be provided by you may cause delay of our delivery of the scope of Supply and Services and may cause additional costs to be borne by you. The erection and commissioning of the Scope of Supply will be carried out by you with your own personnel. The possible monitoring of erection and commissioning to be provided by our staff as well as the training of your operators are regulated in separate conditions for delegation abroad. Documentation shall mean all data in writing, graphical or in other form, which are needed for the installation, commissioning and operation as well as maintenance of the Scope of Supply. The number of revisions of documents compliant with to the Contract according to your further requests is limited to one revision. The documentation including all operation and maintenance instructions will be supplied in English language.</p>	

**1. Terms and Conditions**

Please understand that we will not acknowledge any general terms and conditions of purchase from you. The same applies if we fulfil delivery of the Scope of Supply or Services although we are aware of the existence of such terms and conditions.

**2. Prices**

The prices in this quotation are firm and fixed for the goods to supply (the "Scope of Supply") and the services to perform (the "Services") (together "Contract Scope"), unless expressly stated otherwise. They shall be subject to appropriate adjustment if the Scope of Supply/Services changes. Net-Price means quotation price minus Services, packing, transport, finance costs and insurance premiums as far as they are quoted separately, and without VAT.

**3. Pricing/ Risk of Loss**

The prices are quoted for *ex works* Andritz workshop Slovakia delivery as per INCOTERMS 2010, unpacked and not insured, and the risk of loss or damage shall be transferred in accordance. Partial delivery is permitted.

The statutory Value Added Tax (VAT) will be added and stated separately on the invoice; it is payable on receipt of the respective invoice.

**4. Delivery period**

The delivery time is approx. 3 - 4 months after coming into force of a contract and shall be considered to be fulfilled if at its expiry delivery has been completed according to EXW (INCOTERMS 2010). The estimation of the delivery time is based upon today's work load and non-binding until the date of delivery gets confirmed in a contract award.

**5. Price binding**

This offer is binding until 3 months from its issue date. We reserve in particular the right of changes of the contract price and delivery deadline in case of expiry of this deadline.

**6. Payment Terms and Conditions**

Payments shall be made after issuing of invoice according to following milestones:

30 % of the contract price payable within 10 days after conclusion of the Contract.

30 % of the contract price payable within 10 days after half of the delivery time, but at latest 6 months after conclusion of the Contract.

40 % of the contract price payable within 10 days after notification of readiness for shipment.

Payments shall be made without any deductions such as discounts, bank charges, taxes, duties, fees, charges and other expenses and shall be considered received on the date when they are unconditionally credited to one of our bank accounts.

If you are in delay with the payment of any amount due, we are entitled to claim interest, according to the 3-months EURIBOR- interest rate plus 5 % per annum.

Payment for Services, if any, will be made after completion of the Services.

**7. Set-off and Retention of Payments**

You may not set-off payment unless the underlying counterclaims have been recognized by us or have been adjudicated by judicial decision. The same applies for retention of payments which is moreover only admitted with regard to claims resulting from this Contract.

**8. Suspension**

Should you fail to effect a payment and/or to submit a Letter of Credit by the date(s) indicated in the Contract, we shall have the right to suspend immediately our performances under this Contract until the actual payment respectively submission of the Letter of Credit. The contractual time schedules and the prices shall be subject to separate agreement between you and us, as far as necessary.

**9. Transport Packaging (bei Verpackung für den Seetransport)**

The transport packaging is done in conformity with our packaging standards which we are glad to submit to you upon request. We will

- provide suitable packaging for the Scope of Supply, if necessary
  - mark the equipment according to your instructions
  - provide the necessary shipping documents (invoice, packing lists);
  - inform you by fax or email about readiness for dispatch respectively about the date of departure of the Scope of Supply mentioning weight, number of packages, value of the delivery.
- For overseas shipment the machine(s) will be containerised. The accompanying optionals and spare parts will be packed into seaworthy wood cases.

**10. Start of Delivery Period**

Delivery periods are starting after the latest of the following conditions is fulfilled:

- written order as per quotation or signature of Contract as agreed,
- complete technical and commercial clarification,
- receipt of required data, declarations, supplies to be provided by you,
- compliance with all of your obligations of information about legal, official or other regulations at the place of delivery,
- receipt of all required official and other national and foreign authorizations (e.g. export, transit and import licenses and payment permits), they are to be requested by you unless the Contract is imposing their procurement on us,
- performance of any other kind of participation of your part for the execution of the Contract,
- Receipt of all payable payments and payment securities (e.g. bank guarantee or letter of credit) to be effected by you according to the payment terms.

If a special calendar day has been fixed for the delivery of the Scope of Supply or carrying out of the Services, and the previous conditions are not fulfilled within the agreed deadline (or, if there is no such deadline, within a reasonable deadline set by us in writing) for reasons outside of our responsibility, we may postpone the day of delivery of the Scope of Supply or the day of carrying out of the Services respectively.

After the effectless expiry of a reasonable respite in written form we may rescind the Contract.

**11. Default of Delayed Delivery or Services**

In case of a damage caused by delayed delivery of the Scope of Supply and/or delayed Services at our fault, you are entitled to claim, after a grace period of 11 working days, liquidated damages for every completed calendar week of default

- of 0.5% of the Net-Contract Price of the affected part of the Scope of Supply or Services, limited to an aggregate maximum total of 5% of the Net-Contract Price for all cases of default of deliveries of the Scope of Supply and Services, limited to a maximum amount of 25.000 EUR for all cases of default with documentation, and limited to an aggregate maximum total of 5% of the Net-Contract Price for all cases of default. Liquidated damages due to delay of parts which are not impeding successful start-up shall not be claimed.

A statutory right to terminate the Contract may only be exercised if a reasonable period of grace, set by you in writing upon effectless expiry of a deadline after which you are entitled to claim the full scope of liquidated damages, has expired without success. With the payment of liquidated damages the right of Contract termination shall be relinquished and likewise the entitlement to liquidated damages shall be relinquished with the termination of the Contract. The above-mentioned liquidated damage compensation and the right of termination are representing according to the opinion of the contracting parties an equitable compensation for the existing risks of late deliveries and Services. Other claims for delayed deliveries or delayed Services, including but not limited to damages, shall be excluded (also in case of termination of the Contract), unless the delay is based on intentional or grossly negligent acts or omissions.

**12. Delay**

In case the Contract execution is delayed, due to reasons not attributable to us, we shall have the right to claim for additional costs and we are entitled to postpone accordingly the deadlines to be observed by us. If the reasons are in your responsibility, we may - after effectless expiry of a reasonable time for elimination of the causes of the delay, notified in written form - terminate the Contract or, if the Contract can not be performed within the agreed deadlines, modify the contract price.

**13. Legal Provisions, Governing Design and Manufacture and Services**

In respect of the manufacture of our Scope of Supply and the performance of our Services, we will comply with the relevant legal provisions applying to the whole of the Federal Republic of Germany, and in particular governing safety requirements. It is your responsibility to ensure compliance with other provisions.

We shall get informed by you about the legal, official and other regulations or by-laws at the place of delivery.

All changes in legal, official and other regulations or by laws having the force of law, which come into force after conclusion of the Contract, which have to be observed by us in the execution of the Contract are for your account. We shall get informed by you about the changes in due time and we will inform you about any resulting technical changes and impact. Additional costs resulting here from are for your account. The time schedule shall be amended, if necessary.

**14. Approval of Documents**

In order to ensure Contract execution within the time schedule all documents, drawings and other documents that have to be approved by you, have to be returned with approval or comments within 2 weeks. Delays in submission of documents and objections not attributable to us and affecting delay shall entitle us accordingly to postponement of our performance and adjustment of the contract price. We have to notify the intended modifications to you.

**15. Commissioning/Acceptance/Tests/Costs**

You shall not refuse the successful commissioning due to minor defects, which do not prevent the operation of the Scope of Supply. There is no need for a formal acceptance of the Scope of Supply and Services, unless agreed otherwise. Also acceptance may not be refused for the above-mentioned reasons, nevertheless your rights of warranty remain unaffected. The commissioning and the acceptance shall be confirmed in a protocol, signed by both parties.

If any acceptance test, other test or inspection is agreed to be made, our costs (including raw material, consumables and utilities) of these tests and any repetition are to be born by you - excluding our travelling costs.

If, for reasons not attributable to us, any agreed acceptance test, other test or inspection (for example commissioning start up or make-up test) of our Scope of Supply is not performed within 8 months after delivery (i.e. fulfilment of sellers obligations according to the agreed INCOTERMS) – respectively after notification of readiness for shipment in case the dispatch does not take place for reasons not attributable to us -, the acceptance, tests or inspection shall be deemed to be carried out successfully. The same shall apply mutatis mutandis in respect to Services to be performed by us.

If the Scope of Supply is used for production or any other purposes, all kind of scheduled acceptance, completion and taking over is deemed to be carried out successfully.

In both above mentioned cases we are entitled to issue a protocol which is binding for both parties.

If any acceptance test, other test or inspection is agreed to be made, our costs (including raw material, consumables and utilities) of these tests and any repetition are to be born by you – excluding our costs in case a Factory Acceptance Test is agreed.

**16. Operation Instructions**

Details of how to operate and maintain our Scope of Supply are contained in our operating instructions. These instructions are to be followed exactly in respect of the commissioning, operation and maintenance of our Scope of Supply and, in particular, as regards any safety devices.

**17. Warranty**

(1) We shall be liable, to the extent described below, for defects in design, quality of material and workmanship, being in our responsibility, existing at the time of handover and influencing the functioning of the Scope of Supply. If we have assumed Services the following provisions shall apply accordingly. In case software specific provisions are agreed these shall take precedence.

You shall immediately inform us about defects arising. Our instructions to avoid further damages must be adhered to. We shall receive the necessary time and opportunity to determine the reason for the defect and to rectify it. We shall have the duty and right to either at our discretion repair the defective parts or to deliver a new equipment. During rectification of defects the plant will be made available to us free of charge. For works at your site the necessary assistance and lifting devices shall be provided by you for free.

The repair and/or delivery of new equipment are the exclusive remedy for breach of warranty. However, in urgent cases with risk for operation security (we must be informed immediately in these cases) as well in cases we are in delay with the rectification of a defect, you shall be entitled, after consulting us, to rectify the defect properly and expertly yourself or to instruct a third party therewith and to demand compensation for the necessary expenses incurred from us. We receive a report on the nature and scope of the defects and the work carried out. The defective parts are at our request to be made available to us on site free of charge.

(2) We submit our offer for materials of construction, linings and sealing material without disposing of any knowledge with respect to their resistance against the special stress or wear by your process/product. We cannot accept any warranty claims in this respect unless expressly agreed upon in writing.

The warranty shall exclude all defects due to reasons not in our sphere of influence (e.g. operation with other products than the specified ones, use of inappropriate consumables and lubricants, improper erection/operation/maintenance (in particular, the requirements in the user manuals and other handling advices are to be adhered to) normal wear and tear, chemical impact, corrosion or caused by a third party or by Force Majeure. If the Scope of Supply has been manufactured according to design information, drawings or other specifications you provided, our warranty is limited to the correct execution of specifications.

The rights shall be conditional upon you complying with the statutory duties of inspecting the delivery and notifying us of defects; if such duties are relevant, they shall apply accordingly in respect of the inspection of the presence of all separate elements in case of delivery of several goods.

(3) The warranty period is limited to 12 months after putting into operation of the Scope of Supply up to a maximum of 18 months from the delivery of the Scope of Supply (i.e. fulfilment of sellers obligations according to the agreed INCOTERMS) respectively after notification of readiness for shipment in case the dispatch does not take place for reasons not attributable to us – in case the equipment consists of several functional units.

For spare parts this period is 18 months from the time of installation, but not longer than 24 months from the delivery of the Scope of Supply respectively notification of readiness for shipment in aforementioned cases.

The warranty period for parts repaired or replaced due to defects attributable to us extends by 12 months from the replacement/repairation. However the period for all such parts expires in any case 12 months after the expiration of the original warranty period.

(4) Performance Warranty: The Performance Warranties, type/extent and duration of the warranty test, procedure(s) of measurement and consequences of non-fulfillment will be discussed and agreed later. However it is expressly understood and agreed that the term "performance warranty" and other similar terms are not to be considered as giving a guarantee (especially they do not constitute guarantees in the meaning of sections 443, 444 and 639 German Civil Code, so called "Beschaffens-" and/or "Haltbarkeitsgarantien").

Besides that the warranty shall exclude the fitness for purpose and any other process characteristics (they are not agreed qualities). The indications regarding performance, including technical and design data and lifetime of equipment, are for your information only and are not warranted or guaranteed.

(5) The foregoing provisions apply mutatis mutandis if we negligently fail to provide any or provide faulty advice, regardless if the Contract was already concluded or not as well as in case of erroneous instructions and/or technical documentation given by us.

(6) These provisions are secluding. Other claims for defects of quality, advices and instructions are excluded, except in case of intention or gross negligence. As far as claims resulting from other legal causes

are impossible to exclude, they are modified accordingly by the present clauses.

**18. Guarantees**

Any terms used in the present Contract including annexes with regard to the Contract Scope (in particular in the descriptions of the Scope of Supply and Services, in definitions of characteristics and technical data), as well as all terms used in this context do not constitute guarantees of characteristics with the effect of aggravated liability; such guarantees are not granted by us. Instead, they mean (if they are part of the mutual agreement and if we are liable in this regard) descriptions and indications of the agreed quality and the agreed characteristics, for which our liability is limited to the warranty granted in the present Contract.

**19. Storage**

Should warehouse storage become necessary for reasons not attributable to us or be desired by you, such storage shall be at your costs. Furthermore passing of risk takes place at the time the Scope of Supply is ready for dispatch for storage. We are authorized to insure the Scope of Supply at your cost, until you provide evidence for existing storage insurance. Should the Scope of Supply not already be fully paid at the time of readiness for dispatch for storage, the outstanding payment amount shall be due immediately. Should the storage last for more than 6 months, you shall be obliged to take over the stored goods.

**20. Force Majeure**

"Force Majeure" shall mean all events beyond the reasonable influence or control of the Party claiming Force Majeure, which affect the performance of the Contract and which the respective Party could not reasonably have provided against, including but not limited to, acts of God, strikes, labor disputes, acts of war, terrorism, outbreaks of infectious disease, severe weather conditions, flood as well as delayed delivery of the Scope of Supply or Services of the subcontractors due to such events. Either party affected is entitled to suspend the performance of its respective obligations under the Contract if the fulfillment is impeded or unreasonably onerous due to Force Majeure, other than the obligation to make payments due hereunder, and has promptly notified the other party of such delay. Upon request of the other Party the affected Party will add a confirmation of the situation of Force Majeure by a Chamber of Commerce or any other competent institution. All obligations that are affected by Force Majeure will be suspended for the period of Force Majeure and for such additional time as is required to resume the performance of the obligations, and all schedules will be adjusted accordingly. If the period of suspension of operations will extend to more than six (6) consecutive months or periods of suspension in total more than eight (8) months in any twelve (12) month period, then either party may terminate the Contract by written notice to the other party. No delay, non performance or termination by either party hereto caused by the occurrence of Force Majeure shall give rise to any claim, especially claim for damages, however all claims resulting from the period before the occurrence of the Force Majeure subsist without prejudice, and we may claim compensation for our costs and expenses incurred until this moment by the execution of the Contract, against providing of the work results.

**21. General Limitation of Liability**

(1) The following limitations and exclusions of liability shall have the priority over any other provisions in this Contract and shall remain applicable also in case of any termination of this Contract. They shall also apply in favor of the liability of other companies of the Andritz Group, our executives, employees, representatives, agents, suppliers and subcontractors. The limitation of liability set forth above also forms the basis of our pricing and calculation. Our liability for damages requires an act or omission of negligence from our side.

(2) In no event (including obligations of indemnification) we shall be liable to you or third parties for loss of use, loss of profit, loss of revenue, loss of production, loss by reason of plant shutdown, loss of future contracts, the inability to operate any facility or increased expense of plant operations, claims of customers, any indirect and/or consequential damage - irrespective of the legal basis - and in each case whether foreseeable or not, special or incidental.

(3) Our total aggregate liability - irrespective of the legal basis (including but not limited to, claims based on warranty, indemnity, tort, strict liability, non-contractual liability) - shall not exceed 10% of the total contract price.

(4) Our environmental remediation responsibility for other than for hazardous material we bring onto site of

delivery is excluded and we shall have no liability for equipment or parts thereof, materials, structures or soil provided by you.

(5) In aggregate the liquidated damages (and penalties, if any) set out in this Contract for delay and for failure to achieve the performance warranties, if any, shall not exceed 8% of the total Net-Contract Price.

(6) All liquidated damages (and penalties, if any) stipulated in this Contract, shall constitute the sole and exclusive remedy for these causes.

(7) All claims from your side stipulated in this Contract, shall constitute the sole and exclusive remedy for these causes.

(8) All our liabilities arising out of or in connection with this Contract shall expire at the latest 6 months after the expiry of the mechanical warranty period.

(9) Claims for intentional or grossly negligent breach of obligations as well as negligent breach of obligations which result in damage to life, body or health shall remain unaffected by the limitations and exclusions of liability. Similarly, to that product liability cases are to be handled according to the mandatory applicable law (taking into account our Scope of Supply/ Services and the extent of our negligence or legal fault).

## **22. Retention of Title**

We retain title to the Scope of Supply as far as legally permissible, until we have received payment of all sums owed by you under the Contract. In case the Scope of Supply is assembled with other objects to a overall plant, we are acquiring accordingly partial ownership. In case in the country of delivery the retention of title has to be registered you (and the end-user, if any) shall support us to the extend necessary. In case of breach of contract we are authorized after previous reminder to take back the Scope of Supply and to liquidate it. The proceeds of liquidation will be credited to the contract price, after deduction of equitable liquidation costs. Unless explicitly declared otherwise, the fact that we are taking back the Scope of Supply or parts of it does not constitute a resignation of the Contract.

## **23. Property Right and Other Third-party Rights**

It is warranted by us, that our Contract Scope and its parts do not infringe any third-party patents, applicable in the country where the Scope of Supply shall be installed/the Services shall be rendered according to this Contract and in existence as of the date of conclusion of this Contract. If you are cautioned due to claimed infringement of such rights or claims are filed against you, you shall immediately inform us in writing about these facts. Subject to the precondition that we get entitled and enabled by you to unlimited ability to defend and settle the claim – i.e. you must not take any actions or omissions that affect the above mentioned claims or the infringement or the type and scope of damage and shall not acknowledge such claims, neither out of court or before the court nor make any other agreements toward the settlement of such disputes – we shall have the obligation and right to take the following measures according to our own choice and our own expenses:

- obtain the rights to use the respective part of the Contract Scope for you, or
- replace the infringing parts with non-infringing parts or modify them so that they do not infringe, or
- remove the infringing parts and refund the Net-Contract Price paid for them; if and so far as the Contract Scope has no value for you without these parts, we will retake the respective whole Contract Scope.

Our further liability for the infringement of patents or other industrial property rights is excluded, except in case of intention or gross negligence. We shall not assume any warranty for the Contract Scope to be devoid of third-party rights in respect to the Scope of Supply being issued according to your specifications, to your alterations to the Scope of Supply, to your combinations with other goods, to the process applied or the product manufactured by you as well as not for any use deviating from the Contract/the documentation. Furthermore we are not liable for claims resulting from your distribution of the Scope of Supply to, or its use for the benefit of, any third party as well as not for claims resulting from your running the Scope of Supply, without our prior consent, after being notified to discontinue such use due to a third-parties claim. In these mentioned cases you will indemnify us and hold us harmless

**24. Termination by Purchaser**

You are entitled to terminate the Contract, by written declaration, to the extent we are in culpable serious breach of a material contract obligation. In this case we shall refund any payments received for the parts of the Contract Scope affected by termination, and at our own expenses remove these parts. Any other claims of you shall be excluded, unless there is intentional or grossly negligent breach of obligations. The termination may only be exercised if we have failed to rectify the breach of contract within a reasonable period set by you in writing and announcing the termination in case the period of grace expires without success. As far as termination is excluded in this Contract the aforesaid is not applicable. Additional rights for termination do not exist unless explicitly agreed in the Contract for cases of delay or in a process warranty.

**25. Right of Withdrawal for Supplier**

We are entitled to finally refuse the continuation of the Contract performance in case you are not fulfilling your contractual obligations in reasonable time despite that they are due and you got summoned by us to do so or in case that it is already foreseeable before maturity that you can not or not in time fulfill your obligations due to a worsening of your financial situation or in case your payments will not benefit us at our location. Without prejudice to our claims for damage compensation, compensation of expenses and costs, the deliveries and Services which have already been realized must be paid in accordance with the clauses of the Contract. This does also apply with regard to the Contract Scope which you did not take in charge yet and with regard to measures of preparation which we have effected. Alternatively we can also claim restitution. All claims from your side are excluded.

**26. Intellectual Property / Confidentiality**

Our offer /the Contract as well as information, data, documents and parts transmitted/disclosed by us on the occasion of their execution contain confidential information, both of a technical and commercial nature. You commit yourself to keeping them secret and to protecting them as business secrets, including but not limited to, not to disclose such information to third parties, not to duplicate it and not to use it by yourself for other purposes than the contractual use of the Scope of Supply and Services (especially not for own commercial purposes or other contractors) without our prior written consent. The obligation of confidentiality does not apply to information, documentation etc. for which it can be proved in written form that (i) it was already public before its transmission/disclosure, (ii) it has been made available by an authorized third party at any moment, (iii) it was already in your possession before the transmission/disclosure, (iv) it becomes public after its transmission/disclosure without your participation, (v) it must be disclosed due to legal obligation. Notwithstanding the foregoing exceptions, you agree not to disclose our information etc. to any third party in order to copy our Contract Scope or parts of it nor to copy it yourself. All information provided by us (in particular drawings, documents) remains our intellectual property and may be reclaimed by us at any time.

**27. Software**

In case the Scope of Supply includes software, we grant to you a non-exclusive and non-transmissible right of its use, in machine-readable, object code form, on one system for the operation of the Contract Scope, unlimited in time and in territory and including its documentation. You agree that neither you nor any third party shall modify, reproduce, translate, reverse engineer, transfer from object code to the source code or decompile the software beyond the legally mandatory extent. You are entitled to make a single copy for backup purposes in accordance with our related operating documentation and provided that our confidential and proprietary legend is included. You are not allowed to remove manufacturer's indications - in particular copyright information - or to modify them without our prior express agreement. Unless otherwise provided in this Contract, the fees for the software license are included in the Net-Contract Price. All other rights on and the property to the software and documentation, including all copies, are reserved by us/ by the software supplier. The issue of sub-licenses is not allowed. Upon breach of the foregoing license and in case of delay of payment we are entitled to terminate the license. In case of termination of the Contract also the license terminates. All copies of the software and the documentation shall be returned to us promptly after termination.

We warrant that on the date of shipment of the software (1) the software media contains a true and correct

copy of the software and are free from material defects; (2) we have the right to grant the license hereunder; and (3) the software will function substantially in accordance with our related operating documentation. We disclaim any warranty that the operation of the software will be uninterrupted or error free. In case of defects we shall have the duty and right to either at our discretion repair or deliver a new software. If we cannot correct the nonconformity or deems correction to be commercially impracticable or prohibitively expensive, we and you are entitled to termination of this license; an equitable, pro rata share of the license fee paid (of the Net-Contract price if no fee is classified) is to be refunded. This warranty does not apply to software delivered by us but produced by others. The warranty for software produced by others shall be the warranty as stated by the software producer.

The warranty period is limited to 6 months after putting into operation of the software up to a maximum of 18 months from the delivery (i.e. fulfilment of sellers obligations according to the agreed INCOTERMS) respectively after notification of readiness for shipment in case the transportation is not at our part or the dispatch does not take place for reasons not attributable to us – in case the delivery consists of several software items the foregoing shall apply to every single software.

These quality warranty provisions are excluding. Other claims for defects of quality are excluded, except in case of intention or gross negligence. As far as warranty claims resulting from other legal causes are impossible to exclude, they are modified accordingly by the present warranty clauses.

#### **28. Export/Import Licenses**

The export of the Scope of Supply may be subject to approval by our national authorities. This authorization has to be obtained by us. This Contract is concluded under the suspensive condition of the attribution of the export permit.

You have to notify to us, correctly and without need of special request, all information required for the attribution of the export permit, in particular the International import certificate which has been issued by the competent administration in the country of the operator.

You have to obtain the import permit which could be required under certain circumstances.

#### **29. Writing**

No cancellation of, amendments to or modifications of this Contract will be effective unless made in writing. The same will also apply to the waiver of this requirement for written form. A period preceding legal sanctions must be fixed in writing.

#### **30. Severability**

If one of the provisions of this Quotation and its Appendices, if applicable, should be or become ineffective, this shall not impede the effectiveness of the rest of the provisions. Rather, the parties shall work together to add a legally permissible or effective provision, which is suited to achieve the intended commercial result of the ineffective provision, in place of the ineffective provision. The same applies to closing loopholes in the Contract.

#### **31. Applicable Law**

This Contract shall be governed and construed in accordance with the material law of Switzerland. The United Nations Convention on Contracts for the International Sale of Goods (CISG) shall not be applicable in this context.

**32. Arbitration/ Legal Venue**

The parties agreed that all disputes arising out of or in connection with this Contract, including any questions regarding its existence and validity, which can not be settled by an amicable effort of the Parties shall be exclusively and finally settled under the Rules of Arbitration of the International Chamber of Commerce in Paris (ICC) by one or three arbitrators appointed in accordance with said rules. The place of arbitration shall be Zurich/Switzerland. The arbitral tribunal shall also decide on the matter of costs of the arbitration and on the allocation of expenditure among the respective Parties to the arbitration proceedings. The language of the arbitration shall be English. The arbitral award can be declared enforceable by ordinary court. Notwithstanding the foregoing provisions, in case a party wishes to seek interlocutory relief, the ordinary courts are in charge; place of jurisdiction shall be Zurich; however we are entitled to alternatively file suit at your place.

With best regards,

ANDRITZ SEPARATION GMBH

i.V. Kai Podratzky