

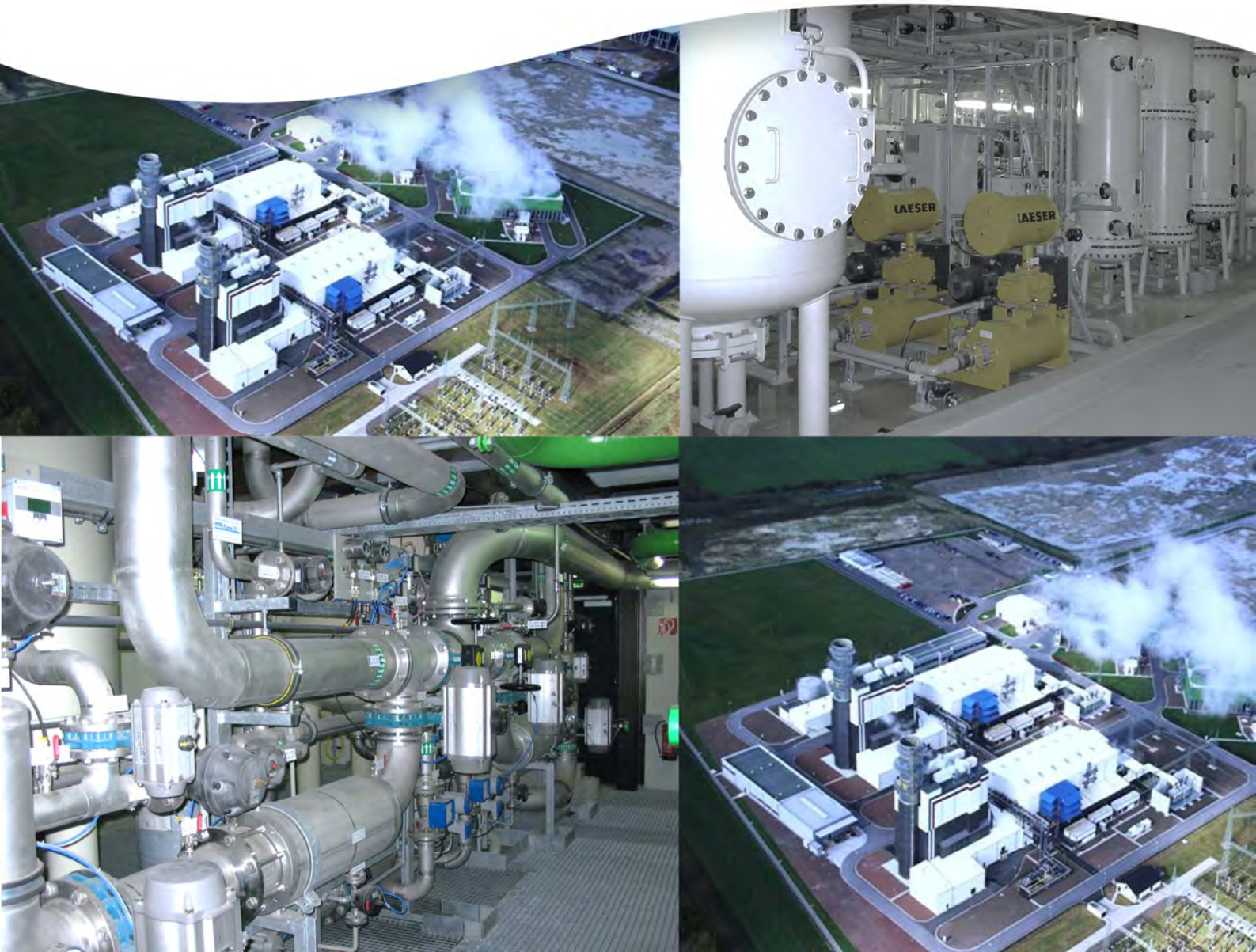
REFERENCE LIST

SEMICONDUCTOR
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POWER GENERATION
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Demineralisation & Condensate Polishing

Treatment in Power Stations and Industrial Power Plants



Client	Plant Type	Capacity
OOO EvroChim-BMU Belorechensk/Russia	Demineralisation plant Cation and anion exchangers, CO ₂ degassers, mixed bed exchangers, regeneration equipment	3 x 100 m ³ /h
Power plant Mainz-Wiesbaden Mainz/Germany	Demineralisation plant Deferrisation and demanganisation filters, cation and anion exchangers (UPCORE), CO ₂ degassers, mixed bed exchangers, regeneration equipment	2 x 42 m ³ /h
Alstom Tzafit/Israel	Demineralisation plant Gravel filters, Activated carbon filters, cation and anion exchangers (UPCORE), CO ₂ degassers, mixed bed exchangers, regeneration equipment, chemical storage tanks Waste water treatment Neutralisation	2 x 100 m ³ /h
Siemens Andong/Korea	Condensate treatment Cartridge filters, external regenerated mixed bed exchanger, regeneration equipment, chemical storage tanks	2 x 198 m ³ /h
Siemens Ansan/Korea	Condensate treatment Cartridge filters, external regenerated mixed bed exchanger, regeneration equipment, chemical storage tanks	2 x 345 m ³ /h
Alstom Power Rybnik/Poland	Condensate treatment Cartridge filters, cation and mixed bed exchangers, regeneration equipment, chemical storage tanks	2x 795 m ³ /h
Alstom Power Narva/Estonia	Pre-treatment Coagulation, flocculation, sedimentation, sandfilter, biofilter, backwashwater recycling and sludge dewatering unit Demineralisation plant Cation and anion exchangers (UPCORE), CO ₂ degassers, mixed bed exchangers regeneration equipment, chemical storage tanks Waste water treatment Neutralisation	1 x 55 m ³ /h 2 x 36 m ³ /h

Client	Plant Type	Capacity
ThyssenKrupp Uhde EG-EHC	Pre treatment	
	Coagulation, flocculation, sedimentation, sand filter	120 m ³ /h
	Cooling tower make-up water treatment	
	Reverse osmosis	120 m ³ /h
	Demineralisation plant	
	Reverse osmosis, mixed bed exchangers	14 m ³ /h
	Waste water treatment - ZLD	
	Reverse osmosis, crystalliser	28 m ³ /h
Siemens Hemweg/Netherlands	Boiler blow down recycling unit Balance tank, RO-EDI	2 x 8 m ³ /h
Ecolutia Gommiswald/Switzerland	3 x Pretreatment – Container Multimediafilter	150 m ³ /h
Siemens Toul/France	Demineralisation plant 2 stage RO system, membrane-degasification, EDI, dosing equipment	2 x 6 m ³ /h
KVA Bern/Switzerland	Demineralisation plant Softener, RO, dosing equipment, EDI	2 x 7.5 m ³ /h
Ecolutia Gommiswald/Switzerland	4 x Pretreatment – Container Multi-media filter	150 m ³ /h
	3 x Brackish water RO – Container	55 m ³ /h
Power Holding Co of Nigeria, Egbin Power Plant, Lagos/Nigeria	Major refurbishment of existing power station	300 m ³ /h
	Raw water pretreatment plant Chemical Dosing (Lime, Chlorine) Twin clarifiers Sand filtration Raw water & firefighting storage Carbon filtration & Potable water storage	
	Demineralisation Plant GAC filtration, cation, anion and mixed bed ion exchangers Regeneration stations Chemical Bulk storage & measuring systems	2 x 240 m ³ /h
Siemens AG Rotterdam/Netherlands	Demineralisation plant Gravel and activated carbon filtration, cation and anion exchangers, degasser, mixed bed exchangers, regeneration station, chemical storage, neutralisation	2 x 16 m ³ /h
Tractebel Brüssel/Belgium GDF Suez Wilhelmshafen	Demineralisation plant Cartridge filter, cation and anion exchangers, mixed bed exchangers, regeneration station, chemical storage	2 x 40 m ³ /h
	Flue gas desulphurisation Precipitation, flocculation, sedimentation (2 staged) sand filter, sludge dewatering, chemical storage	1 x 40 m ³ /h
	Boiler feed water with OIS Belgium as consortium partner	

Client	Plant Type	Capacity
Perlen Papier AG Perlen/Switzerland	Demineralisation cation exchanger scavenger anion exchanger mixed bed exchanger	2 x 40 m ³ /h 1 x 40 m ³ /h 2 x 40 m ³ /h 1 x 60 m ³ /h
Alstom Power Plants RWE nPower, Pembroke UK	Demineralisation Raw Water storage & back-washable filters Ultrafiltration with CIP system RO pre-filters Double Pass RO units with CIP system Permeate storage & pumping Mixed bed exchangers Bulk storage & dilution systems for 96% H ₂ SO ₄ & 32% NaOH Neutralisation system	2 x 86 m ³ /h 2 x 84 m ³ /h 2 x 60 m ³ /h
Mondi Syktyvkar/Russia	Condensate polishing plant Cartridge filter, mixed bed exchanger, regeneration station, Condensate storage tank	3 x 400 m ³ /h
E.On Maasflakte/Netherlands	Demineralisation Gravel and activated carbon filtration, RO, mixed bed, chemical storage Condensate polishing plant Cartridge filter, cation exchanger, mixed bed exchanger, neutralisation, dosing equipment	2 x 70 m ³ /h 2 x 650 m ³ /h
Siemens AG Lünen Germany	Cooling tower make-up water FLOCOPAC LC Demineralisation Gravel and activated carbon filtration, cation and anion exchanger, TOC - RO, mixed bed, chemical storage Condensate polishing plant Cartridge filter, cation exchanger, mixed bed exchanger, neutralisation	2 x 750 m ³ /h 2 x 25 m ³ /h 2 x 713 m ³ /h
KAB Takuma GmbH HKW Eisenhüttenstadt Germany	Cooling tower make-up water Gravel filter, dosing equipment Demineralisation Scavenger, cation and anion exchanger, TOC - RO, mixed bed exchanger, chemical storage Condensate polishing plant Activated carbon filter, cation exchanger, mixed bed exchanger, neutralisation, dosing equipment	300 m ³ /h 45 m ³ /h 180 m ³ /h
Alstom Power Systems GmbH RDk8 Karlsruhe Germany	Condensate polishing plant Cartridge filter, cation exchanger, mixed bed exchanger	2 x 752 m ³ /h
RWE Westfalen Germany	Cooling tower make-up water Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC LC sludge treatment with band-pass filter	2 x 1,360 m ³ /h
E.ON Datteln Germany	Demineralisation Gravel and activated carbon filtration, cation and anion exchanger, TOC - RO, mixed bed, chemical storage Condensate polishing plant Cartridge filter, cation exchanger, mixed bed exchanger, neutralisation	2 x 85 m ³ /h 2 x 650 m ³ /h
Siemens PG Pont sur Sambre France	Cooling tower Biofiltration, denitrification, carbon removal, final filtration, belt thickener for rinsing waste water Biofit-FDN, BIOFIT FC	70 m ³ /h

Client	Plant Type	Capacity
RWE AG Niederaußem Germany	Cooling tower make-up water Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC LC	4 x 4,000 m ³ /h
Vattenfall Cottbus Boxberg/Germany	WWTP Sand trap, flocculation, neutralisation, pre-settlement	700 m ³ /h
Siemens PG Pont sur Sambre CCEP France	Cooling tower make-up water Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC LC Production of boiler feed water (Demineralisation) Gravel filter, activated carbon filter, cation exchanger, degasser, anion exchanger, mixed bed exchanger	2 x 240 m ³ /h 2 x 8 m ³ /h
Via Hitachi Oberhausen for Steag Walsum/Germany	FGD effluent treatment	84 m ³ /h
Alstom Power Spain S.A. Malaga Spain	Production of boiler feed water from municipal water after sewage treatment. Precipitation, flocculation, ultrafiltration, activated carbon filters, reverse osmosis 1+2, mixed bed, neutralisation	2 x 27.5 m ³ /h
Alstom Power Generation AG Maritza/Bulgaria	Cooling tower make-up water (River water treatment) Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC L Boiler feed water (demineralisation) Gravel filter, activated carbon filter, cation exchanger, and degasser, anion exchanger, mixed bed exchanger.	2 x 1,100 m ³ /h 2 x 42 m ³ /h
Alstom Power Italia S. p. a. Gissi/Italy	Production of boiler feed water from municipal water after sewage treatment. Zero discharge plant Precipitation, flocculation, ultrafiltration, activated carbon, reverse osmosis, mixed bed, evaporator, neutralisation	2 x 25 m ³ /h
Eon Engineering GmbH Scholven/Germany	Treatment of wastewater resulting from flue gas desulphurisation Extension by mercury removal Refitting during normal operation	
Siemens Power Generation Hamm Uentrop/Germany	Cooling tower make-up water (River water treatment) Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC L Boiler feed water (demineralisation) Gravel filter, activated carbon filter, cation exchanger, degasser, anion exchanger, mixed bed exchanger. Condensate Polishing Cartridge Filter (backwash), external regenerated mixed bed exchanger	2 x 500 m ³ /h 2 x 16 m ³ /h 2 x 195 m ³ /h
RWE AG Essen/Germany KW Niederaußem	Automation of the demin plant Optimization of the process water plant in Block BoA 1. The demineralisation plant with a capacity of is being upgraded, extended by a regeneration station and automated.	2 x 220 m ³ /h
E.On Engineering GmbH Datteln/Germany	Treatment of wastewater resulting from flue gas desulphurisation Extension by mercury removal Refitting during normal operation	
Siemens PG Ras Laffan Qatar	Boiler feed water (demineralisation) Mixed bed after evaporation	2 x 90 m ³ /h

Client	Plant Type	Capacity
Petrom SA Pitesti/Romania	Treatment of process condensate Cation exchanger, degasser, mixed bed Demineralisation plant Gravel filter, cation and anion exchanger, mixed bed	2 x 15 m ³ /h 2 x 55 m ³ /h
Minera Escondida Ltda. Via Aguasin Lt.a Chile	River water treatment Flocculation, decarbonisation, sedimentation, Clarification reactor FLOCOPAC-I Reverse osmosis	1 x 350 m ³ /h 2 x 80 m ³ /h
Mark-E AG Herdeke/Germany	Refurbishment and optimisation of the demineralisation plant and the condensate polishing plant.	
Eon Engineering GmbH Schkopau/Germany	Treatment of wastewater resulting from flue gas desulphurisation Extension of capacity Refitting and extension largely including existing components during normal plant operation.	25 m ³ /h
Südzucker Bioethanol GmbH Zeitz/Germany	Boiler feed water Gravel filter, decarbonisation, reverse osmosis, degasser, mixed bed. Process water treatment Ultrafiltration, reverse osmosis. Anaerobic-aerobic waste water treatment ANAFIT-FB / BIOFIT-H / FILTRO-B	2 x 40 m ³ /h 2 x 50 m ³ /h 235 m ³ /h 11.1 t BOD/d
Formosa Petrochemie Corporation Taiwan	Condensate Polishing PW Mixed bed	2 x 300 m ³ /h
Nan Ya Plastic Corp. Taiwan	River water treatment Flocculation, Sedimentation System FLOCOPAC-L Sand filtration System FILTRO-G	1 x 5,000 m ³ /h 1 x 1,250 m ³ /h
Uhde GmbH, Dortmund For Saudi Arabia Fertiliser Company	Treatment of condensate cartridge filter: Cartridge filter, mixed bed exchanger Treatment of Deionate (desalination): Activated carbon filter, cation exchanger, trickling degasser, anion exchanger	3 x 400 m ³ /h 2 x 300 m ³ /h
Infraserv Gendorf Burgkirchen/Germany	Demineralisation: Cation exchanger, anion exchanger	2 x 180 m ³ /h
Siemens PG Madrid For Gas Natural in Arrubal/Spain	Cooling tower make-up water (River water and sludge treatment) Flocculation, Clarification reactor FLOCOPAC-L Treatment of Deionate: Sand filter, activated carbon filter, cation exchanger, irrigator, degasser, anion exchanger, mixed bed filter	2 x 815 m ³ /h 1 x 130 m ³ /h
NBCC Choibalsan/Mongolia	Boiler feed water treatment: Softener Reverse osmosis NOVALIS	50 m ³ /h
Uhde GmbH, Dortmund For Qatar Fertiliser Company	Treatment of Turbine condensate: Cartridge filter, mixed bed filter Treatment of Process condensate: Cartridge filter, cation exchanger, anion exchanger, mixed bed filter Treatment for Demin Water: Activated carbon filter, cation exchanger, anion exchanger	2 x 350 m ³ /h 2 x 170 m ³ /h 2 x 110 m ³ /h

Client	Plant Type	Capacity
Kuo Kuang Power Company Taiwan Through Siemens AG Power Generation Erlangen/Germany	Make-up water treatment: Demineralisation Condensate treatment: Cartridge filter Wastewater treatment: Neutralisation, flocculation, precipitation, sludge treatment	20 m ³ /h 235 m ³ /h 15 m ³ /h
Power Station RUS-Nowoworonesh through KAB- AG Berlin/Germany	Pre-treatment: Destabilisation, flocculation and precipitation, FLOCOPAC-L Demineralisation: Weakly and strongly acid cation exchanger, weakly basic anion exchanger, CO ₂ trickling degasser, strongly basic anion exchanger Mixed bed exchanger as polishing stage	200 m ³ /h 3 x 100 m ³ /h
Siemens Ltd. Huntstown/Republic of Ireland	Make-up water treatment: Gravel filter, activated carbon filter, trickling degasser, 2-stage reverse osmosis, CONTIPUR (CEDI), dosing plant	2 x 10 m ³ /h
Formosa Plastic Taiwan	Extension River water treatment Flocculation, Sedimentation System FLOCOPAC-L	2 x 3,000 m ³ /h
Stadtwerke Rosenheim Rosenheim/Germany	Boiler feed water treatment: Reverse osmosis, EDI	10 m ³ /h
Starck Goslar/Germany	Treatment of ultrapure working materials: Softener, Reverse osmosis, EDI	3.4 m ³ /h
Zuckerfabrik Jülich/Germany	Boiler feed water treatment: Demineralisation, CO ₂ removal, mixed bed exchanger Neutralisation and chemical storage	2 x 25 m ³ /h
HEW Hamburg/Germany	Demineralisation plant for make-up water: FLOCOPAC-L, multimedia filter, activated carbon filter, two-line demineralisation plant, cation and anion exchanger, mixed bed exchanger	2 x 120 m ³ /h
Hamberger Industriewerke Stephanskirchen Germany	Pure water for a high-pressure boiler (parquet production): Softener ECOSOFT, reverse osmosis NOVALIS, membrane degasification, ContiPur (CEDI), tank	4.5 m ³ /h
Degrémont Santillo/Mexico	EDI plant for an EDF power generation station in Mexico: ContiPur (CEDI) comprising 4 stacks	11.4 m ³ /h
Borsodchem Kazincbarcika/Hungary	Extension of an already existing boiler feed water treatment plant: Cation exchanger, trickling degasser, reverse osmosis, mixed bed exchanger	2 x 122.5 m ³ /h
HEW Hamburg/Germany	Boiler feed water treatment: FLOCOPAC-L Multimedia filter Activated carbon filter Demineralisation plant Condensate treatment: Mixed bed exchanger	140 m ³ /h 3 x 60 m ³ /h 2 x 100 m ³ /h 2 x 120 m ³ /h 60 m ³ /h
RWE Niederaußem Germany	Condensate treatment: Cartridge filter and mixed bed exchanger	2 x 925 m ³ /h

Client	Plant Type	Capacity
Linde München/Germany	Boiler feed water treatment Demineralisation	1.5 m ³ /h
Katharinenhospital Stuttgart/Germany	Boiler feed water treatment Reverse osmosis NOVALIS	2.4 m ³ /h
Formosa Petrochemical Corp. RC-Mai-Lao	Demineralisation Cation/anion exchanger	8 x 500 m ³ /h
Chemopetrol a.s. Litvinov/ Czech Republic	Cooling tower make-up water Demineralisation Plant Softening	2 x 375 m ³ /h 3 x 275 m ³ /h 2 x 150 m ³ /h
VEAG AG Berlin KW Lippendorf Berlin/Germany	Cooling tower make-up water treatment: Cooling tower make-up water Wastewater treatment plant	2 x 2,400 m ³ /h 2 x 200 m ³ /h
Erhard Schwäbisch Gmünd/Germany	Boiler feed water treatment: Softening, reverse osmosis NOVALIS	3.5 m ³ /h
Schering Berlin/Germany	Boiler feed water treatment: Automation of an already existing partial treatment	15 m ³ /h
Schrader Ennigerloh Magdeburg/Germany	Boiler feed water treatment: Decarbonisation and softening	2 x 20 m ³ /h
WAG Wien/Austria	Boiler feed water treatment: Demineralisation - compound fluidised bed ion exchanger	50 m ³ /h
Stadtwerke Cottbus HKW Cottbus through ABB Mannheim Mannheim/Germany	Cooling tower make-up water Demineralisation plant Condensate polishing plant Condensate polishing plant	2 x 125 m ³ /h 2 x 50 m ³ /h 2 x 83 m ³ /h 2 x 71 m ³ /h
Mass Aritma Gebze-Kocaeli/Turkey	Boiler feed water treatment: Pre-filtration, fluidised bed ion exchanger (cation, anion, mixed bed exchanger)	25 m ³ /h
VEAG AG Berlin KW Boxberg Berlin/Germany	Cooling tower make-up water treatment	2 x 3,400 m ³ /h
Papierfabrik Palm Aalen/Germany for fab in Eltmann	Boiler feed water treatment: Filter for removal of manganese, desalination	14 m ³ /h
Wuppverband Wuppertal/Germany	Treatment of wastewater resulting from flue gas scrubbing: Pre-filter, heat exchanger, collecting station, two-stage neutralisation, precipitation/flocculation (Hg), sludge treatment, multi-media filter, chemical station	5 m ³ /h
BorsodChem Co. Ltd. Kazincbarcika/Hungary	Boiler feed water treatment: Softener, trickling degasser, reverse osmosis, permeate tank, mixed bed exchanger, DI water tank	450 m ³ /h
Formosa Petrochemical Corp. Taiwan	Cooling tower make-up water treatment: Cooling tower make-up water Decarbonisation Demineralisation plant	4 x 4,000 m ³ /h 8 x 500 m ³ /h 8 x 500 m ³ /h
EKO Eisenhüttenstadt through ELIN Berlin/Germany	Demineralisation: Gravel filter, cation exchanger, trickling degasser and anion exchanger	2 x 90 m ³ /h

Client	Plant Type	Capacity
TRV Buschhaus	Condensate polishing: Cation exchanger and mixed bed exchanger	150 m ³ /h
Boehringer Ingelheim/Germany	Demineralisation: Antiscalant dosing and reverse osmosis plant	2 x 50 m ³ /h
Unkel Würzburg/Germany	Demineralisation: Decarbonisation Reverse osmosis plant	30 m ³ /h 12 m ³ /h
Neckarwerke AG Power Station Gaisburg Stuttgart/Germany	Demineralisation Condensate polishing Turbine condensate polishing Condensate polishing from a remote heating facility	2 x 50 m ³ /h 3 x 100 m ³ /h 300 m ³ /h 100 m ³ /h
Felix Schoeller Weissenborn/Germany	Demineralisation: Cation-, anion- and mixed bed exchangers Condensate polishing: Cation- and mixed bed exchangers	2 x 15 m ³ /h 1 x 40 m ³ /h
STEAG AG Essen/Germany Leuna 2.000	Cooling tower make-up water treatment: Cooling tower make-up water Flocculation and sedimentation Filtration Reverse osmosis	2,000 m ³ /h 780 m ³ /h
VITKOVICE A.S. Ostrava/Czech Republic	Demineralisation	2 x 90 m ³ /h
ROW Rheinische Olefinwerke GmbH Wesseling/Germany	Treatment of wastewater resulting from flue gas desulphurisation	5 m ³ /h
Formosa Plastic Taiwan	River water treatment FLOCOPAC-L	4 x 3,000 m ³ /h
Kernkraftwerk Obrigheim Obrigheim/Germany	Demineralisation Mixed bed exchanger Mixed bed exchanger Reconstruction of neutralisation	2 x 40 m ³ /h 60 m ³ /h
Neckarwerke AG Altbach Power Station Esslingen/Germany	Demineralisation: Flocopac, gravel filter and H decarbonisation, Reverse osmosis plant and fluidised bed ion exchanger Condensate polishing: Pre-coat filter, cation exchanger and mixed bed exchanger	30 m ³ /h Ext. to 60 m ³ /h 730 m ³ /h
Neckarwerke Altbach Power Station Esslingen/Germany	Cooling tower make-up water treatment: Cooling tower make-up water Ash water treatment plant Flue gas desulphurisation wastewater treatment plant	2 x 600 m ³ /h 130 m ³ /h 15 m ³ /h
BEWAG Berlin Kraftwerk Oberhavel Berlin/Germany	Treatment of wastewater resulting from flue gas desulphurisation	6.5 m ³ /h
Hoechst Trevira GmbH Bobingen/Germany	Demineralisation: Reverse osmosis plant Condensate polishing: Cation-, anion- and mixed bed exchangers	3 x 17.5 m ³ /h 3 x 35 m ³ /h
Bayernwerk AG Munich Frauenaurach/Germany	Treatment of wastewater resulting from flue gas desulphurisation Demineralisation	16.5 m ³ /h 150 m ³ /h
Burda Offenburg/Germany	Demineralisation Continuous neutralisation	18 m ³ /h 13 m ³ /h

Client	Plant Type	Capacity
Michelin Reifenwerke KGaA Bad Kreuznach Germany	Demineralisation: Compound cation exchanger, CO ₂ trickling degasser, compound anion exchanger	25 m ³ /h
Müllverbrennungsanlage der GSB Ebenhausen (Sewage incineration plant) through GHH Borsig	Demineralisation: Compound cation exchanger SERVO-Cleanflow, CO ₂ trickling degasser, compound anion exchanger, thermal degasification	8/21 m ³ /h
Bayernwerk AG Munich Schwandorf Power Station Germany	Wastewater treatment	80 m ³ /h
Gas Turbine Power Station T-Map Ta Phut through GEC Alstom Belfort/France	Pre-treatment: Destabilisation, flocculation and precipitation for treating reservoir water Demineralisation: Gravel filter, activated carbon filter strongly acid cation exchanger, CO ₂ trickling degasser, strongly basic anion exchanger Mixed bed exchanger as polishing stage	3 x 300 m ³ /h 2 x 140 m ³ /h
SP-Reifenwerke GmbH Dunlop Hanau/Germany	Treatment of re-circulation cooling water: Removal of iron and manganese, H decarbonisation with trickling degasser	2 x 100 m ³ /h
GKM Mannheim/Germany	Condensate polishing	2 x 750 m ³ /h
Bayernwerk AG Ingolstadt/Germany	Treatment of wastewater resulting from flue gas scrubbing: Treatment plant for fuel power station, block III (Same design as the treatment plant commissioned in 1990 for block IV)	10 m ³ /h
Belchatov Poland through ESTS Netherlands	Treatment of wastewater resulting from flue gas desulphurisation	20 m ³ /h
Heizkraftwerk SSK Guben through RWE Essen Germany	Industrial water treatment	110 m ³ /h
Stadtwerke Leipzig AG Leipzig/Germany	Demineralisation: Multi-media filter, compound cation exchanger, trickling degasser, compound anion exchanger Condensate polishing: Cartridge filter, fluidised bed cation exchanger and mixed bed exchanger	17 m ³ /h 190 m ³ /h
BASF Ludwigshafen Schwarzeide Germany	Treatment of wastewater resulting from flue gas desulphurisation	8 m ³ /h
GKM Mannheim/Germany	Make-up water treatment: - Cont. ECI as carboxyl phase - 2-stage reverse osmosis plant - Vacuum degasification	2 x 75 m ³ /h

Client	Plant Type	Capacity
Papierfabrik Scheufelen GmbH Lenningen Germany	Demineralisation: Cation exchanger, CO ₂ trickling degasser, anion exchanger Condensate polishing: Activated carbon filter, cation exchanger, mixed bed exchanger	2 x 25 m ³ /h 100 m ³ /h
MVA Nürnberg Nürnberg Germany	Treatment of wastewater resulting from a sewage incineration plant: Precipitation, flocculation and sedimentation, contact sludge reactor, Flocopac, post-filtration and sludge dewatering via filter press	5 - 40 m ³ /h
Stadtwerke Leipzig AG Leipzig/Germany	Demineralisation: Weakly acid cation exchanger, trickling degasser and reverse osmosis plant Condensate polishing: Cation-, anion- and mixed bed exchangers	194 m ³ /h 166 m ³ /h
Neckarwerke AG KW Altbach Esslingen/Germany	Treatment of wastewater resulting from flue gas desulphurisation (2nd stage)	18 m ³ /h
PreussenElektra KW Staudinger	Decarbonisation FLOCOPAC-L	1,100 m ³ /h
HKW Erfurt Ost through ENAG, Erfurt, Germany	Demineralisation Condensate polishing	100 m ³ /h 100 m ³ /h
Röhm GmbH Darmstadt/Germany	Demineralisation: Well water treatment with removal of iron and manganese, cation exchanger, CO ₂ trickling degasser Condensate polishing: Anion- and mixed bed exchangers	120 m ³ /h 80 m ³ /h
Gebrüder Lang GmbH Ettringen/Germany	Demineralisation: Multimedia filter, cation exchanger, CO ₂ trickling degasser, anion exchanger, mixed bed exchanger	25 m ³ /h
GKM Mannheim/Germany	Treatment of wastewater resulting from flue gas desulphurisation: Extension of an already existing system	2,000 m ³ /h
PreussenElektra KW Rostock	Cooling tower make-up water treatment:	2,000 m ³ /h
Agfa-Gevart AG Leverkusen Germany	Demineralisation of photographic emulsion water: Pre-heating, decarbonisation, reverse osmosis plant, mixed bed exchanger	40 m ³ /h
Hoffmann La Roche Grenzach Grenzach/Germany	Make-up water treatment: Demineralisation (+ Multistep) (Fluidised bed ion exchanger)	2 x 150 m ³ /h
PreussenElektra KW Emden	Central process wastewater treatment	10 m ³ /h
GKM Mannheim/Germany Fab II	Central process wastewater treatment	80 m ³ /h

Client	Plant Type	Capacity
Stadtwerke München Power Station Nord Munich/Germany	Demineralisation: Compound cation exchanger SERVO-Cleanflow, CO ₂ trickling degasser, strongly basic anion exchanger, vacuum degasser	3 x 100 m ³ /h
Stadtwerke München Power Station Nord Munich/Germany	Heating water treatment: Pre-filter, strongly acid cation exchanger SERVO-Cleanflow, strongly basic anion exchanger, vacuum degasser	100 m ³ /h
Stadtwerke München Power Station Nord Munich/Germany	Condensate polishing: Pre-filter, cation exchanger SERVO-Cleanflow, externally regenerated mixed bed exchanger, separate back-rinsing/separation/regeneration column for cation exchanger, regeneration station, neutralisation	3 x 600 m ³ /h
Stadtwerke Bremen KW Hafen Germany	Treatment of wastewater resulting from flue gas desulphurisation Flue gas desulphurisation wastewater treatment plant with NH ₃ stripping Process wastewater treatment	10 m ³ /h 100 m ³ /h
Bayernwerk AG Ingolstadt Germany	Treatment of wastewater resulting from flue gas scrubbing in a fuel power station, block IV: Two-stage precipitation, flocculation, neutralisation and sedimentation plant + NH ₃ stripping, ammonia steam stripping, sludge dehydration	10 m ³ /h
Holtzmann E & Cie. GmbH Fab Maxau Karlsruhe/Germany	Demineralisation: Multi-media filter, cation exchanger, CO ₂ trickling degasser, compound anion exchanger, mixed bed exchanger	2 x 34 m ³ /h
Stadtwerke Bremen HKW Hastedt Germany	Treatment of wastewater resulting from flue gas desulphurisation Flue gas desulphurisation wastewater treatment plant with NH ₃ stripping Process wastewater treatment	10 m ³ /h 70 m ³ /h
Isar-Amper-Werke München Leininger Werk Block 5 Germany	Treatment of wastewater resulting from flue gas desulphurisation: Flue gas desulphurisation wastewater treatment plant with NH ₃ stripping Luvo-wash water	21.6 m ³ /h 1.8 m ³ /h
Hoechst AG (Infraserv) Frankfurt/M. Germany	Demineralisation: weakly acid cation exchanger, reverse osmosis plant, multistep system, SERVO PC monitoring system	300 m ³ /h
BASF AG Ludwigshafen Ludwigshafen Germany	Treatment of wastewater resulting from flue gas desulphurisation Two-line process Sludge dewatering	2 x 15 m ³ /h
GKM Mannheim/Germany Fab I	Central process wastewater treatment	80 m ³ /h
Deutsche Gasrußwerke GmbH & Co.KG. Dortmund/Germany	Demineralisation: Multi-media filter, cation exchanger, CO ₂ trickling degasser, anion- and cation exchangers Condensate polishing: Mixed bed exchanger	20 m ³ /h 100 m ³ /h

Client	Plant Type	Capacity
STEAG AG Essen Herne/Germany	Treatment of wastewater resulting from flue gas desulphurisation: Two-stage flue gas desulphurisation wastewater treatment plant, sludge dewatering	90 m ³ /h
Schoeller + Hoesch GmbH Gernsbach/Germany	Demineralisation: SERVO-Cleanflow	3 x 250 m ³ /h
STEAG AG Essen Walsum/Germany	Treatment of wastewater resulting from flue gas desulphurisation Two-stage flue gas desulphurisation wastewater treatment plant, sludge dewatering	90 m ³ /h
STEAG AG Essen Lünen/Germany	Treatment of wastewater resulting from flue gas desulphurisation Two-stage flue gas desulphurisation wastewater treatment plant, sludge dewatering	90 m ³ /h
Dillinger Hüttenwerke AG Dillingen/Germany	Demineralisation I: Fluidised bed cation and anion exchangers and mixed bed exchanger	55 m ³ /h
Dillinger Hüttenwerke AG Dillingen/Germany	Demineralisation II: Fluidised bed cation and anion exchangers and mixed bed exchanger	55 m ³ /h
Elektromark Hagen Werdohl-Elverlingsen/Germany	Treatment of wastewater resulting from flue gas desulphurisation	34 m ³ /h
PreussenElektra Hannover KW Staudinger (e on) Germany	Treatment of wastewater resulting from flue gas desulphurisation	50 m ³ /h
Technische Werke Stuttgart AG Stuttgart (EnBW) Germany	Water treatment: Total water treatment: River waste water-treatment	75 m ³ /h 100 m ³ /h
KRC Würzburg Mannheim/Germany	Treatment of wastewater resulting from flue gas desulphurisation Flue gas desulphurisation wastewater treatment plant with NH ₃ stripping	20 m ³ /h
BEWAG AG Power Station Reuter West Berlin/Germany	Demineralisation: Fluidised bed cation and anion exchangers and mixed bed exchangers Heating water treatment: Softening Condensate polishing: Mixed bed cation exchanger	2 x 45 m ³ /h 3 x 110 m ³ /h 2 x 350 m ³ /h
BEWAG Berlin HKW Reuter Alt Germany	Treatment of wastewater resulting from flue gas desulphurisation	10 m ³ /h
BEWAG Berlin HKW Reuter/Germany	Treatment of water resulting from wet ash removal	2 x 135 m ³ /h
STEAG AG Essen KW Herne Germany	Treatment of wastewater resulting from flue gas desulphurisation	60 m ³ /h
Saarbergwerke AG Saarbrücken Fenne/Germany	Treatment of wastewater resulting from flue gas desulphurisation incl. biological reduction of formic acid	42 m ³ /h

Client	Plant Type	Capacity
Hoffmann La Roche Grenzach Grenzach/Germany	Make-up water treatment: Demineralisation (+ Liftbed) (Fluidised bed ion exchanger)	2 x 100 m ³ /h
Gemeinschaftskernkraftwerk Neckar GmbH (GKN) Neckarwestheim/Germany Block 2	Cooling tower make-up water treatment: Cooling tower make-up water (FLOCOPAC-L, sludge dewatering)	3 x 1,560 m ³ /h
Großkraftwerk Franken AG Erlangen/Germany	River water treatment	130 m ³ /h
Saarbergwerke AG Saarbrücken Bexbach/Germany	Treatment of wastewater resulting from flue gas desulphurisation incl. biological reduction of formic acid	53 m ³ /h
Oberösterreichische Kraftwerk AG Linz Riedersbach/Austria	Treatment of wastewater resulting from flue gas desulphurisation	15 m ³ /h
BEWAG Berlin HKW Reuter-West Germany	Cooling tower make-up water treatment: RPS and Sludge dewatering	2 x 1,100 m ³ /h
BEWAG Berlin HKW Rudow	Treatment of water resulting from wet ash removal	2 x 58 m ³ /h
Umm Al, Al Taweelah Abu Dhabi/ UAE through Borsig GMBH	Demineralisation: Mixed bed exchanger	3 x 80 m ³ /h
Umm Al, Al Taweelah Abu Dhabi/UAE through Borsig GmbH	Demineralisation: Mixed bed exchanger	160 m ³ /h
Neckarwerke AG Esslingen KW Altbach Block 5	Flue gas desulphurisation wastewater treatment plant Ash water treatment Condensate polishing plant Demineralisation plant Cooling tower make-up water (RPS with sludge-dewatering)	15 m ³ /h 100 m ³ /h 2 x 600 m ³ /h 2 x 35 m ³ /h 2 x 600 m ³ /h
Badenwerk AG Karlsruhe/Germany RDK Block 7	Treatment of wastewater resulting from flue gas desulphurisation: Flue gas desulphurisation wastewater treatment plant Process water treatment	14 m ³ /h 50 m ³ /h
EVS AG Stuttgart KW Heilbronn Germany	Flue gas desulphurisation wastewater treatment plant (85) Condensate polishing plant Demineralisation Plant (84/85) Ash water treatment Cooling tower make-up water (RPS with sludge-dewatering)	60 m ³ /h 2 x 750 m ³ /h 2 x 100 m ³ /h 60 – 120 m ³ /h 2 x 1,000 m ³ /h
HEW Hamburg KW Tiefstack Germany	Ash transport water-treatment: Flocculation with FLOCOPAC-CL	60 m ³ /h
GKM Mannheim Block 7 Neckarau Germany	Demineralisation Condensate polishing (Fluidised bed ion exchanger)	2 x 100 m ³ /h 2 x 750 m ³ /h

Client	Plant Type	Capacity
Gemeinschaftskernkraftwerk Neckar GmbH Neckarwestheim Germany	Demineralisation: Continuously operating SERVO-Kontimat consisting of cation- and anion exchangers, parallel regeneration in separate columns	70 m ³ /h
MVA Geisselbullach/V through GfA GmbH	Treatment of wastewater resulting from a sewage incineration plant: Flocculation, precipitation, lamellar clarifier, sludge filtration Particularities: Wastewater containing NOX and organic sulphuric compounds	15 m ³ /h
Northern Power Station through ETSA Port Augusta/Australia	Condensate polishing: Externally regenerated mixed bed exchangers	2 x 750 m ³ /h
Kali-Chemie AG Heilbronn/ Germany	Demineralisation	85 m ³ /h
NEWAG + VKG Wien Dürnrohr/Austria	Ash transport water-treatment: Flocculator, RP thickener, filtration	100 m ³ /h
VEW Dortmund KW Westfalen B Germany	Filter backwash wastewater treatment: Flocculation with FLOCOPAC-CL	18 m ³ /h
Badenwerk AG Karlsruhe Rheinhafen Dampfkraftwerk	Condensate polishing	2 x 540 m ³ /h
HEW Hamburg/Germany - KW Karoline 1984 - KW Tiefstack 1983 - KW Harburg 1983 - KW Hafen 1983	Filter backwash wastewater treatment Filter backwash wastewater treatment plant Flocculation with FLOCOPAC-CL	27.5 m ³ /h 15 m ³ /h 40 m ³ /h 25 m ³ /h
Hoechst AG Frankfurt/M. Germany	Demineralisation	380 m ³ /h
Berliner Entwässerungswerke Berlin/ Germany	Demineralisation	2 x 70 m ³ /h
RWE Essen Dettingen/ Germany	Condensate polishing	270 m ³ /h
Saarbergwerke Saarbrücken KW Bexbach/ Germany	Cooling tower make-up water treatment: FLOCOMAT-T and sludge-dewatering	1 x 2,000 m ³ /h
BKB Helmstedt KW Buschhaus/ Germany	Cooling tower make-up water treatment: Quick reactor FLOCOPULS-S	3 x 333 m ³ /h 2 x 500 m ³ /h
KWU Offenbach Kraftwerk Daura/Iraq	Preliminary treatment Demineralisation (reverse osmosis)	2 x 25 m ³ /h
Saarbergwerke Saarbrücken Völklingen/ Germany	Cooling tower make-up water treatment: Cooling tower make-up water (FLOCOPULS-S) Condensate polishing plant Demineralisation plant	800 m ³ /h 2 x 230 m ³ /h 2 x 25 m ³ /h

Client	Plant Type	Capacity
GKM Mannheim Neckarau/ Germany Block 7	Make-up water treatment: Make-up water treatment RPS Reverse-osmosis ECI process O ₂ elimination Demineralisation plant Condensate polishing plant	290 m ³ /h 210 m ³ /h 220 m ³ /h 220 m ³ /h 200 m ³ /h 1,200 m ³ /h
SEVC-Melbourne Melbourne/Australia	Condensate polishing: Externally regenerated mixed bed exchangers	3 x 522.5 m ³ /h
Endessa Puentes/Spain	Treatment of slake water: Flocculation, sedimentation, lamellar clarifier	2 x 400 m ³ /h
Degussa Rheinfelden Rheinfelden/ Germany	Demineralisation (Liftbed)	2 x 60 m ³ /h
STEAG-RWE Essen Voerde/Germany	Cooling tower make-up water treatment: (RPS)	3 x 1,350 m ³ /h
RWE Essen KW Dettingen Dettingen/Main/Germany	Condensate polishing (Fluidised bed ion exchanger)	2 x 70 m ³ /h
Coutinho, Caro & Co Indonesia	Demineralisation (Fluidised bed ion exchanger)	2 x 220 m ³ /h
Bayernwerk AG München KW Schwandorf Germany	Filter backwash wastewater treatment: FLOCOPAC-CL and sludge dewatering	130 m ³ /h
EW Mark Hagen KW Elverlingsen Elverlingsen/Germany	Demineralisation (Fluidised bed ion exchanger)	2 x 25 m ³ /h
BfA Bundesversicherungsanstalt Berlin/Germany	Demineralisation (Fluidised bed ion exchanger)	2 x 25 m ³ /h
Krauss Maffei München München/Germany	Demineralisation (Fluidised bed ion exchanger)	2 x 15 m ³ /h
Saabergwerke Weiher/Germany	Condensate polishing (Cat + MB)	400 m ³ /h
KWU- Contract Cadefe/Venezuela	Condensate polishing (Cat + MB)	2 x 400 m ³ /h
Esso Chemie Köln/Germany	Condensate polishing (Cat + MB)	2 x 155 m ³ /h
Sadtwerke Mainz Mainz/Germany	Condensate polishing (MB)	400 m ³ /h
RWE- Essen KW Neurath/Germany	Condensate polishing (MB)	1,800 m ³ /h
Gemeinschaftskraftwerk Weser GmbH KW Veltheim/Germany	AMA- Cartridge filter unit	2 x 350 m ³ /h
RWE- Essen KW Neurath/Germany	AMA- Cartridge filter unit	3 x 750 m ³ /h
Schering AG KW Charlottenburg/Germany	Condensate polishing (MB)	15 m ³ /h
GKW KW Veltheim/Germany	Condensate polishing (MB)	315 m ³ /h

Client	Plant Type	Capacity
RWE- Essen KW Weisweiler/Germany	Condensate polishing (MB)	3 x 1,200 m ³ /h 3 x 1,400 m ³ /h
VEW Dortmund Lingen/Germany	Condensate polishing (2 Cat + 1 MB)	2 x 250 m ³ /h 1 x 500 m ³ /h
RWE- Essen KW Weisweiler/Germany	AMA- Cartridge filter unit	6 x 600 m ³ /h
GKM Mannheim/Germany	AMA- Cartridge filter unit	300 m ³ /h
Firma Praeg KW Borken/Germany	AMA- Pre coat filter unit	200 m ³ /h
Firma Praeg KW Staudinger/Germany	AMA- Pre coat filter unit	2 x 400 m ³ /h
Firma Dynamit Nobel Werk L÷ltsdorf/Germany	AMA- Pre coat filter unit	50 m ³ /h
Firma KWU, Erlangen KKW Vorssele/Netherlands	AMA- Pre coat filter unit (radioactive water)	40 m ³ /h
RWE- Essen KW Niederaussem/Germany	AMA- Cartridge filter unit	2 x 720 m ³ /h
GKM Mannheim Mannheim, Block 5 Germany	Condensate polishing (MB)	400 m ³ /h
NKW KW Emden/Germany	Condensate polishing (Cat + MB)	2 x 500 m ³ /h
RWE- Essen KW Niederaussem/Germany	Condensate polishing (MB)	1,200 m ³ /h
VEW KKW Lingen Germany	Condensate polishing (MB)	500 m ³ /h
RWE- Essen KW Weisweiler/Germany	Condensate polishing (MB)	3 x 1,200 m ³ /h
NWK Wilhelmshaven/Germany	Condensate polishing (MB)	2 x 800 m ³ /h
Stewaeg for Fernheizkraftwerk Graz	AMA- Cartridge filter unit	70 m ³ /h
RWE- Essen KW Neurath/Germany	Condensate polishing (MB, externally regenerated)	4 x 3,000 m ³ /h
Stadtwerke Frankfurt/ M. Germany	Condensate polishing	220 m ³ /h
Hamburgische Elektrizitätswerke KW Tiefstack/Germany	Condensate polishing	15 m ³ /h
Hamburgische Elektrizitätswerke KW Carolinenstrasse/Germany	Condensate polishing	80 m ³ /h
Norddeutsche Papierwerke GmbH D÷sseldorf- Reisholz/Germany	Condensate polishing	100 m ³ /h

Client	Plant Type	Capacity
Rheinische AG f. Braunkohlenbergbau KW Fortuna, Köln Germany	Condensate polishing	720 m ³ /h
RWE- Essen KW Niederaussem I/Germany	Condensate polishing	360 m ³ /h
RWE- Essen KW Niederaussem II/Germany	Condensate polishing	360 m ³ /h
Preußische Elektrizitäts- AG KW Borken, Hannover/Germany	Condensate polishing	10 m ³ /h
Preußische Elektrizitäts- AG KW Heyden, Hannover/Germany	Condensate polishing	260 m ³ /h
Preußische Elektrizitäts- AG KW Wölfersheim, Hannover Germany	Condensate polishing	140 m ³ /h
Chemische Werke Hüls Marl Germany	Condensate polishing	150 m ³ /h
Bergische Elektrizitätsversorgung KW Elberfeld/Germany	Condensate polishing	216 m ³ /h
Bewag KW Moabit/Germany	Condensate polishing	100 m ³ /h
Bewag KW Charlottenburg/Germany	Condensate polishing	120 m ³ /h
Bewag KW Steglitz/Germany	Condensate polishing	40 m ³ /h
Bewag KW Spandau/Germany	Condensate polishing	75 m ³ /h
Bewag KW Rudow/Germany	Condensate polishing	160 m ³ /h
Rheinpreußen KW Moers/Germany	Condensate polishing	210 m ³ /h
Sydosts Jaellands Elektrizitets Haslev, Denmark	Condensate polishing	270 m ³ /h
Gemeinschaftswerk Hattingen Germany	Condensate polishing	420 m ³ /h
Neckarwerke Esslingen KW Altbach/Germany	Condensate polishing	100 m ³ /h
Neckarwerke Esslingen KW Walheim/Germany	Condensate polishing	70 m ³ /h
Gemeinschaftskraftwerk Weser Veltheim/Germany	Condensate polishing	230 m ³ /h
Altenessener Berkwerke AG KW Emscher/Germany	Condensate polishing	270 m ³ /h

Client	Plant Type	Capacity
Carl Freudenberg KG Weinheim/Germany	Condensate polishing	100 m ³ /h
Saarbergwerke AG KW Weiher/Germany	Condensate polishing	460 m ³ /h
Rheinstahl Bergbau AG KW Marl/Germany	Condensate polishing	300 m ³ /h
Vereinigte Glanzstoff- Fabriken AG Werk Obernburg Germany	Condensate polishing	180 m ³ /h
Gruppenkraftwerk Herne Essen/Germany	Condensate polishing	680 m ³ /h
KW Siersdorf, Kohlscheid Germany	Condensate polishing	340 m ³ /h
VEW Dortmund/Germany	Condensate polishing	600 m ³ /h
Deutsche Linoleum- Werke AG Maximiliansau/Germany	Condensate polishing	40 m ³ /h
Papier und Zellstoff- Fabrik Teisnach/Germany	Condensate polishing	40 m ³ /h
Bayernwerk AG DKW Aschaffenburg/Germany	Condensate polishing	350 m ³ /h
Bayernwerk AG DKW Aschaffenburg/Germany	Condensate polishing	110 m ³ /h
Vereinigte Aluminium Werke AG Nabwerk, Schwandorf/Germany	Condensate polishing	80 m ³ /h
Stadtwerke München München/Germany	Condensate polishing	350 m ³ /h
HKS Helsinki KW Hanasaari/Finland	Condensate polishing	60 m ³ /h
Bergwerkgesellschaft Hibernia AG KW Datteln/Germany	Condensate polishing	150 m ³ /h
Stadtwerke Braunschweig KW Uferstrasse/Germany	Condensate polishing	200 m ³ /h
Großkraftwerk Mannheim AG KW Neckarau/Germany	Condensate polishing	840 m ³ /h
Kobenhavns Belysningsvasen Kopenhagen/Netherlands	Condensate polishing	800 m ³ /h
Nordwestdeutsche Kraftwerke AG KW Emden/Germany	Condensate polishing	300 m ³ /h
KW Badalona, Spain	Condensate polishing	320 m ³ /h
I/S Nordjyllands Elektricitetsforsyning KW Norresundby/Denmark	Condensate polishing	300 m ³ /h
Stadtwerke Neumünster/Germany	Condensate polishing	100 m ³ /h
Neckarwerke Esslingen DKW Walheim/Germany	Condensate polishing	150 m ³ /h

Client	Plant Type	Capacity
Stadtwerke Düsseldorf KW Lausward, Block D Germany	Condensate polishing	320 m ³ /h
Brauenschweigische Kohlen- Bergwerke KW Offleben/Germany	Condensate polishing	240 m ³ /h
RWE- Essen KW Niederaussem I/ 3 Germany	Condensate polishing	700 m ³ /h
Bewag KW Reuter/Germany	Condensate polishing	240 m ³ /h
Bewag KW Reuter/Germany	Condensate polishing	270 m ³ /h
VEW KW Westfalen/Germany	Condensate polishing	600 m ³ /h
RWE- Essen KW Niederaussem/Germany	Condensate polishing	700 m ³ /h

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