



Vendor Database

For Secondary Steel and Pulp & Paper sector

Prepared by

PWC

for

Energy Efficiency in Industry and Data

GIZ India

Secondary Steel

S. No.	Technologies	Prominent vendors / Suppliers	Contact details	Email ID
1	Aluminum compressed air piping	Luthra PNEUMSYS	Mr. A Appare	rl@pneumsysenergy.com
2	Aluminum compressed air piping	Parker Legris	Mr. Joy Dewan	joy.dewan@parker.com
3	Aluminum compressed air piping	Samarthair Pneumatics Pvt. Ltd	Mr. Chetan Damle	sales@samarthair.in
4	Aluminum compressed air piping	SPMarthair Pneumatics Pvt. Ltd	Mr. Chetan DPMle	sales@sPMarthair.in
5	Automated casting system	Concast India Limited		cil.sales.ccm@primetals.com
6	Automated casting system	KÜNKEL WAGNER India Pvt. Ltd		INFO@KUENKEL-WAGNER.COM
7	Automated Sand plants	Ganesh Quality Machine	Mr. Milind Bindar	response@ganeshfoundryequipment.com
8	Automated Sand plants	JK Foundry engineers	Mr. Krupal Patel	kpatel@jkfoundryequipments.com
9	Automated Sand plants	KÜNKEL WAGNER India Pvt. Ltd		INFO@KUENKEL-WAGNER.COM
10	Automation control Systems	JTES	Mr. Parvinder Singh	jtes.india@gmail.com
11	BLDC fans	Atomberg	Mr. Rohit Vohra	rohitvohra@atomberg.com

S. No.	Technologies	Prominent vendors / Suppliers	Contact details	Email ID
12	BLDC fans	Sinox	Mr. Himanshu Ajudia	sinoxpower@gmail.com
13	Blowers	Alfa blowers	Ms. B Sarita	sales@alphablowsers.com
14	Blowers	Generally locally fabricated		-
15	Blowers	Srilaxmi Air control	Mr. Raju	raju@srilaxmiair.com
16	Cooling towers	Delta cooling towers	Mr. Ankur	delta@deltatowers.com
17	Cupola	Cupola designed from TERI - locally fabricated		
18	Cupola/ Divided Blast Cupola	Foundry Friends, Pune	Mrs. S. S. Karkhans	ananz@vsnl.com
19	Drop Hammer and Presses	NKM HPMmers		nkhhPMmer@yahoo.co.in
20	Drop Hammers and Presses	Rattan HPMmers		98761-20925
21	EE Burners	Wesman Burners		delhi@wesman.com
22	EE pump sets	Grundfos	Mr. Laxesh Sharma	laxesh@grundfos.com
23	EE pump sets	Kirloskar Pumps	Mr. L Joshi	Laxmikant.Joshi@kirloskar.com
24	EE pump sets	Shakti pumps	Mr. L Joshi	Laxmikant.Joshi@kirloskar.com

S. No.	Technologies	Prominent vendors / Suppliers	Contact details	Email ID
25	Energy Efficient Blowers	Alfa blowers	Ms. B Sarita	sales@alphablows.com
26	Energy Efficient Blowers	Generally locally fabricated		
27	Energy Efficient Blowers	Srilaxmi Air control	Mr. Raju	raju@srilaxmiair.com
28	Gas based re-heating furnace	Dilwal Vigyan Praudyogikee Pvt. Ltd.	Mr. Anshul Kaushik	dilwalkaushik@gmail.com
29	Gas based re-heating furnace	Locally fabricated		-
30	Heat Pump	Promethean Energy	Mr. Ashvin K.P.	ashwinkp@prometheanenergy.com
31	IE3 / IE4 motors	Crompton Greaves	Mr. Sukhraj Singh	sukhraj.singh@cgglobal.com
32	IE3 / IE4 motors	Siemens	Mr. Anshul Luthra	anshul.luthra@siemens.com
33	IGBT based Induction Billet heater	Inductotherm	Mr. RD Mehta	rdmetha@inductothermindia.com
34	IGBT based Induction Billet heater	Megatherm	Mr. Suchintya Paul	suchintya.paul@megatherm.com
35	IGBT based Induction Billet heater	Plasma Induction	Mr. Hardik Khant	hardikkhant99@gmail.com

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36	IGBT based Induction melting furnaces	Inductotherm	Mr. RD Mehta	rmehta@inductothermindia.com
37	IGBT based Induction melting furnaces	Megatherm	Mr. Suchintya Paul	suchintya.paul@megatherm.com
38	IGBT based Induction melting furnaces	Plasma Induction	Mr. Mayur Suhagiya	ms@plasmainduction.com
39	Induction heating coils	Inductotherm	Mr. RD Metha	rdmetha@inductothermindia.com
40	Induction heating coils	Megatherm	Mr. Suchintya Paul	suchintya.paul@megatherm.com
41	Induction heating coils	Plasma Induction	Mr. Mayur Suhagiya	ms@plasmainduction.com
42	IoT based EnMS	Enerlly	Mr. Nilesh Shedge	nil.shedge@gmail.com
43	IoT based EnMS	Schneider Electric	Mr. Rohit Chashta	Rohit.Chashta@schneider-electric.com
44	IoT based EnMS	Sensegrow	Mr. Krishanu Sudi	krishanu.sudi@sensgrow.com
45	Recuperator / Waste heat recovery	Locally fabricated		-

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46	Screw Air compressor with VFD and WHR	Atlas Copco	Ms. Divya Purohit	Divya.Purohit@in.atlascopco.com
47	Screw Air compressor with VFD and WHR	Elgi	Mr. Gopal Krishna	gopikrishna@elgi.com
48	Screw Air compressor with VFD and WHR	Kaeser compressors	Mr. Amit Rajpal	kpatel@jkfoundryequipments.com
49	Screw Air compressor with VFD and WHR	Kaeser compressors	Mr. PMit Rajpal	PMit.rajpal@kaeser.com
50	Thermo- ceramic / Insulation coating	A-ONE INSULATIONS	Mr. Parth	contactinsulation@gmail.com
51	Thermo-ceramic / Insulation coating	A-ONE INSULATIONS	Mr. Parth	contactinsulation@gmail.com
52	Thermo-ceramic / Insulation coating	ISCT	Mr. Nikhilesh	isct.nikhilesh@gmail.com
53	Thermo-ceramic/ Insulation coating	ISCT	Mr. Nikhilesh	isct.nikhilesh@gmail.com
54	VFD drives	ABB	Mr. Vinay Tiwari	vinay.tiwari@in.abb.com
55	VFD drives	Schneider Electric	Mr. Rohit Chashta	Rohit.Chashta@schneider-electric.com
56	VFD drives	Siemens	Mr. Anshul Luthra	anshul.luthra@siemens.com
57	Waste heat recovery	Spirax Sarco	Mr. Nitin Sharma	Nitin.Sharma@in.spiraxsarco.com

Pulp and paper sector

S. No	EE technologies	Indian Vendors	International Vendors
1	Thermo compressor for flash steam heat recovery	Chem Process Systems Shail Vac Engineers Astrolex Process Systems Jet Flow Technologies	
2	Cantilever stationary syphon for condensate evacuation	<u>Stationary Syphon along with Turbulator Bars:</u> Star Engineering Industries Kadant Inc.	
3	Oxyfuel burning in limekiln and black liquor boilers	<u>Oxy-Fuel Burners:</u> Honeywell Nippon Gas Rajen Engineering Stores- MAXON <u>Liquid Oxygen:</u> Linde Local Vendors	Air Products
4	Installation of shoe press in paper machines	Voith Paper Fabrics India Limited Parason Machinery (India) Pvt. Ltd.	Bellmer Andritz Valmet
5	Firing of black liquor at high concentration	<u>Falling Film Evaporator:</u> SVAAR Spray Engineers Limited Yajna Fuel Services	

S. No	EE technologies	Indian Vendors	International Vendors
6	Ultra low intensity refining	Parason Machinery (India) Pvt. Ltd. R.R.Engineers B.G.S. Alloy Products Desarda Group of Industries Pratishthan Alloy Pvt. Ltd.	<u>Refiner Plates:</u> GARUDA AFT Global Tansa Equipments Pvt. Ltd.
7	Optimise dispersion energy according to the requirement	<u>Disk Dispersion:</u> Parason Machinery (India) Pvt Ltd. <u>Kneading Dispersion:</u> NA	<u>Disk Dispersion:</u> ROOT Leizhan <u>Kneading Dispersion:</u> Voith
8	Installation of extended delignification system for cooking of wood	<u>Oxygen Delignification System:</u> Valmet Chennai Private Limited Hindustan Dorr-Oliver Limited	Valmet ANDRITZ
9	Biomethanation from waste water discharge of agro based pulp mill	<u>Biomethanation:</u> Viswa Equipments Private Limited M/S Asia Bio- energy Pvt Ltd (ABIL) Cicon Environment Technologies Bermaco/WM Power Ltd Hydroair Tectonics Limited	

S. No	EE technologies	Indian Vendors	International Vendors
10	Installation of centralized compressed air generation system	Atlas Copco CINDAN TECHNOLOGIES Elgi Compressors KAESER COMPRESSORS INDIA P LTD Parker Legris Service Equipment Company	
11	Installation of high pressure cogeneration systems	Cummins Siemens Energy Shrijee Group Caterpillar	
12	Installation of multiport dryers to reduce steam consumption in paper machines	<u>Multiport Dryers:</u> NA	
13	Biogas Firing in Rotary Lime Kiln (Replacement of Furnace Oil)	Valmet India <u>Biogas:</u> Local Vendors according to the paper mill location	Valmet ANDRITZ
14	Boiler Modification: Fluidized bubbling to Spouted bed	Glatt India Engineering Pvt Ltd ENCON	
15	Preconditioned Refiner Chemi – Alkaline Peroxide		CNBM (China) ANDRITZ

S. No	EE technologies	Indian Vendors	International Vendors
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	Mechanical Energy Pulping (BCTMP)		
16	Hydrogen Boiler for Heating Application (LT Steam Generation)	<u>Hydrogen Burners:</u> SAM CARBON SPECIALITIES <u>Green Hydrogen: (In Process)</u> RIL NTPC Larsen & Tubro BPCL Indian Oil Corp BGR Energy Systems <u>Hydrogen Gas:</u> Linde	<u>Hydrogen Boilers:</u> Worcester Bosch Giacomini <u>Hydrogen Burners:</u> SAACKE E&M Combustión Chugai Ro Co. Ltd. <u>Green Hydrogen:</u> Siemens Energy AG (Germany) Linde (Ireland) Toshiba Energy Systems & Solutions Corporation (Japan) Air Liquide (France)
17	Bio-Refinery: Utilization of Paddy Straw as a source of bio energy	<u>Bio-fuel Boiler:</u> Thyssenkrupp ISGEC Power Flame <u>Paddy Straw Feedstock:</u> Punjab Renewable Energy Systems Private Limited	

S. No	EE technologies	Indian Vendors	International Vendors
.		Lehra Fuel Other Local Vendors	
18	Bio-Refinery: Utilization of Paddy Straw as a source of cellulose pulp, paper and value-added products	<u>Bio fuel Pulp Plant: (Soda Pulping Process)</u> <u>NaOH:</u> Local Vendors <u>Ethanol:</u> Local Vendors <u>Oxylic Acid:</u> Local Vendors <u>Paddy Straw Feedstock:</u> Punjab Renewable Energy Systems Private Limited Lehra Fuel Other Local Vendors	
19	Bio-Refinery: Concentrating solar power (CSP) Technologies for Heating Purpose (Steam Generation)	Lauren CCL Engineers Private Limited ACME Group Rajasthan Sun Technique Energy Pvt. Ltd (Subsidiary of Reliance Power)	TSK
20	Promoting 2nd Generation Biofuels over 1st	<u>Biofuel Pulp Plant:</u> Nuberg EPC	

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	Generation Biofuels	<u>Raw Bio-Feed Stock:</u> Farmers and Traders Punjab Biomass Corporation	
21	Steam Generation Powered by Converting Waste-To-Energy	Enkem Engineers N. S. Thermal Energy Private Limited M/S Asia Bio- energy Pvt Ltd (ABIL) Cicon Environment Technologies	
22	Tall Oil Extraction Plant	<u>Batch system for soap acidulation:</u> AFRY India ALFA LAVAL India	AFRY ALFA LAVAL
23	Preparation of Pulp from Eucalyptus Plant	<u>Eucalyptus Wood:</u> JK Paper Managalam White Bilt Paper Mill	<u>Eucalyptus wood pulp plant (EPCM: Engineering, Procurement, Construction Management):</u> AFRY
24	Lime Kiln Modification: High-Performance Refractory	Champion Ceramics Pvt. Ltd RHI Magnesita India DUKHIRAM MAURYA ENGINEERING CO. RS Refractory Fire Brick Limited	RESCO

S. No	EE technologies	Indian Vendors	International Vendors
25	Digital Twins: Advanced Sensoring System for the Pulp & Paper industry	Honeywell India Yokogawa	ABB Yokogawa Valmet Emerson
26	Radial Blowers in The Vacuum System	<u>Radial Blower:(Local Vendors)</u> Rajen Engineering Stores Delco Fans Pvt. Ltd. R. K. Engg. Works Private Limited Smd Engineering Equipments & Systems	FIMA
27	Paper Machine Hood Heat Recovery Systems	Neelkanth Engineering Works Mecord Systems & Services Private Limited	ENERQUIN Runtech Systems Oy AIRTHERM Corporation Andritz
28	Displacement pressing	Voith Paper Fabrics India Limited	Andritz Ten Unity Sdn. Bhd. ,Malaysia
29	Fibrous Fillers for Paper Production	<u>Silica coated GCC Fillers:</u> NA	<u>Silica coated GCC Fillers:</u> NA
30	Steam Cycle Washing	<u>Steam cycle washer:</u> NA	<u>Steam cycle washer:</u> NA
31	Chemical pre-treatment with oxalic acid	<u>Oxalix Acid Pre-Treatment Plant:</u> NA	<u>Oxalix Acid Pre-Treatment Plant:</u> NA
32	Dry Sheet Forming	-	-

S. No	EE technologies	Indian Vendors	International Vendors
33	Membrane Concentration of Black Liquor	-	-
34	Cradle Debarker	-	MHM Automation Acrowood
35	Energy Efficient High Capacity Chippers	<u>Disc type wood chippers:</u> Real Tech Engineering Bharath Industrial Works Keyul Enterprise MechArch	-
36	Replacing Pneumatic Conveyors with Belt Conveyors	<u>Belt Conveyor:</u> Somi Conveyor Belting Ltd Fenner Conveyor Belting Pvt Ltd Continental Belting Pvt Ltd Sempertrans India Private Limited	-
37	Automatic Chip Handling and Thickness Screening	<u>Automation in Chip Handling:</u> Valmet India Yokogawa India	<u>Automation in Chip Handling:</u> Andritz ABB
38	Chip Conditioning	<u>Chip Conditioner:</u> TerraSource Global Valmet India	-

S. No	EE technologies	Indian Vendors	International Vendors
39	Microwaving Logs	<u>Wood Seasoning Microwave Conveyor Machine:</u> Kerone Engineering Solutions LTD Enerzi GN Technologies Zen Industries	-
40	Biotreatment of the wood		
41	Dry Debarking	<u>Tumbling debarking drums:</u> Valmet India	ANDRITZ Acrowood
42	Enzyme-Assisted Debarker	<u>Enzyme-Assisted Debarker:</u> <u>Enzymes:</u>	-
43	Bar-Type Chip Screens	Parason Machinery India Jagtap Engineering Works	US Screen Co.
44	Fine-Slotted Wedge Wire Baskets	Jagtap Engineering Works Ganesh Engineering	Valmet
45	Continuous cooking digester	Arjun Technologies (India) Ltd, Chennai Mangla Steel Udhog Pvt Ltd, Noida	Vaisala Valmet CNBM
46	Use of Pulping Aid	Aquapharm	Monson Companies Inc APChem Kimberlite

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47	Optimize dilution factor in brownstock washing		Vaisala ABB
48	Collection of most spillages		The Foxboro Company Schneider Electric
49	Partial Borate Autocausticizing	Borax Moraji Ltd A B Enterprises, Mumbai Bhimani Chemicals Pvt Ltd, Gujarat Hemadri Chemicals, Mumbai	
50	Infrared camera for kraft recovery boilers	TLT Engineering India Pvt Ltd	Mirion Technologies Babcock & Wilcox
51	Heat recovery from bleach plant effluents		Alfa Laval
52	Secondary heat use for chlorine dioxide (ClO ₂) preheating		Alfa Laval
53	Screw press	Annapurna Imports Parason Machinery India Pvt Ltd	
54	Continuous Repulper		
55	EE Repulping Rotor	Parason, Aurangabad, MH	Voith Paper Inc. Valmet
56			

S. No	EE technologies	Indian Vendors	International Vendors
57	XTREME Cleaner	Kadant India Pvt Ltd	
58	Drum Pulper	Parason Azimuth International, Delhi	ANDRITZ Voith Valmet
59	Fractionation of recycled fibre	Pap-Tech Engineers and Associates	Valmet Voith ANDRITZ
60	The Continuous Batch Fibre Recovery System to processing recovered paper in a complete system		Pellerin Milnor Corporation
61	Screenable Pressure Sensitive Adhesives		Pinnacle Label Company
62	Paper Machine Vacuum System Optimization		Valmet VAKUO The Switch
63	Energy Efficient Vacuum Systems for Dewatering		Runtech Systems MAN Energy Solutions
64	Gap Forming	M/S Hindustan Paper Machinery Industries, Ghaziabad Scan Machineries	Valmet Vector Solutions Leizhan

S. No	EE technologies	Indian Vendors	International Vendors
65	High temperature soft calender		Valmet
66	Pressure screen in stock preparation	Sutantra, Aurangabad Parason	VEGA Zhengzhou Dingchen Machinery Co Ltd, China
67	Advanced dryer control		KADANT JOHNSON LLC
68	Crown Controlling Roll		Japan Paper Association / ECCJ (JIEC)
69	Paper machine with enclosed hoods	Neelkanth Engineering Works DNB Dryvent India Pvt Ltd	Airtherm Corporation Enerquin Runtech Systems
70	Energy efficient vacuum pumps	Nash Pumps Busch Vacuum Solutions Atlas Copco India	
71	Optimizing Pocket Ventilation Temperature		Valmet
72	Vacuum Blower	MAN Energy Solutions India	Runtech Systems
73	Infrared moisture profiling		Ircon Solaronics Valmet
74	High Concentration Size Press		C & D Paper Co Ltd, China Japan Paper Association
75	High Concentration Pulper		Zhucheng Kyrgyzstan Hengtai Machinery Co., Ltd Japan Paper Association / ECCJ (JIEC)

S. No	EE technologies	Indian Vendors	International Vendors
76	Air Impingement Dryer	DNB Dryvent India Pvt Ltd	Valmet Spooner Industries Ltd
77	Optimising water removal at press section		Valmet ABB
78	Optimization of Water Removal in Forming		Valmet
79	CO2 absorption in Precipitated Calcium Carbonate (PCC) plant	Gulshan Polyols	
80	RTS Pulping (short Residence time, elevated Temperature , high Speed)	<u>Refiner Plates with small plate gaps:</u>	
81	Thermopulping	<u>ThermoMixers:</u> Eppendorf India	
82	Heat Recovery in Thermo-mechanical Pulping	-	
83	Pressurized Groundwood	Valmet India	Tampella
84	Installation of High Efficiency Centralised Refiners	M/s. Glv & Company	Alfa Laval Huaxia

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85	Improvements in Chemi-Thermomechanical Pulping (CTMP)	Valmet Automation India Private Limited	ANDRITZ
86	Advanced Thermo Mechanical Pulping (ATMP)	Honeywell	ANDRITZ