

#	Country	Customer name	Solution	System	Area of application	Year of set up
1	Germany	Hydro Aluminium Rolled Products GmbH, Hamburg	Positive Material Identification (PMI) of moving Aluminium Blooms	Fiberlibs inline	Inline PMI	2012
2	Germany	HKM Hüttenwerke Krupp Mannesmann GmbH, Duisburg,	Identification of bulk material on the conveyor belt to avoid mix-ups in blast furnace feed	MineralLIBS	Bulk mineral material	2012
3	Germany	WISCO TAILORED BLANKS GmbH	Detection of defects in coating stripped off laser ablated edges by analyzing the element contents in the surface of ablation trace	Fiberlibs inline	Laboratory application	2013
4	Germany	ZGU Centre for glass investigations and environmental analysis, Ilmenau	Laboratory equipment for analysis of impurities inside glass samples in production	Science LIBS	Glass	2014
5	Japan	Tohoku University, Institute for Materials Research	Analysis of elements content in electronic scrap for detection of high content rare earth elements	MopaLIBS	Recycling	2014
6	Germany	RHIM&Horn&Co. Minerals Recovery GmbH Siegen	Manually operated analysis equipment to determine the material classes of spent refractories for subsequent sorting in recycling	MopaLIBS	Spent refractory	2014
7	Germany	RHIM&Horn&Co. Minerals Recovery GmbH Siegen	Fully automatic analysis of elements content in spent refractory bricks from furnace linings for sorting purposes	MopaLIBS	Spent refractory	2014
8	Germany	KIT Karlsruhe Institute of Technology, Karlsruhe	Laboratory equipment for scientific analysis of electrical charge carriers (for batteries, accumulators) and for analyzation of different materials in application-oriented research	Science LIBS	Battery	2015
9	Japan	Harita Metal Sorting	Analysis of aluminum scrap for high purity sorting in 1xxx – 7xxx classes	MopaLIBS	Recycling	2015
10	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2015

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11	Germany	Technical University of Applied Sciences Wildau	Laboratory equipment for application-oriented research on unknown sample materials and for the purposes of university education - analysis of element contents and visualization of surface elements distribution	Science LIBS	Laboratory application	2016
12	Germany	IAB Weimar Institute of Applied Construction Research, Weimar	ConcreteLIBS for application-oriented research on new building materials, analysis of element contents and visualization of surface elements distribution	ConcreteLIBS	Concrete	2016
13	Germany	Confidential customer	Positive Material Identification (PMI) of steel coils in the feeder of processing plants	Fiberlibs inline	Inline PMI	2016
14	Germany	Fondium Singen GmbH	Inline analysis of molten metal / cast iron (hot) in a fireproof channel after the separation of slag layer from top	MeltLIBS	Inline melt	2016
15	Germany	BAM Federal Institute for Materials Research and Testing, Berlin	Mobile equipment for analysis of concrete surfaces (visualization of the distribution of the elements) and detection of pollutants, causing damage to the buildings	ConcreteLIBS	Concrete	2017
16	Canada	Minesense	Laboratory equipment for analysis of random mineral samples from the mining area	Science LIBS	Mining	2017
17	Germany	HCU HafenCity University Hamburg, Hamburg	ConcreteLIBS for application-oriented research on building and other materials as well as for the purposes of university education, analysis of element contents and visualization of surface elements distribution	ConcreteLIBS	Concrete	2017
18	Germany	SICON Germany	Analysis of elements content metal alloy scrap (e.g., steel, aluminum, titanium, copper and more)	MopaLIBS	Recycling	2017
19	Japan	JFE Steel Corp. Fukuyama	Analysis of elements content in refractory bricks to sort into individual customer specified classes and analysis of elements content in slag fragments to determine the basicity	MopaLIBS	Spent refractory	2017

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20	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2017
21	Austria	Treibacher Industrie AG, Althofen	SlagLIBS for fast, sample preparation free analysis of slag	SlagLIBS	Process slag	2018
22	Switzerland	Valtest AG, Lalden	ConcreteLIBS for analysis of element penetration (Cl and others) in concrete cores	ConcreteLIBS	Concrete	2018
23	Japan	Pellenc ST	Analysis of elements content in aluminum scrap high purity sorting into groups 1xxx – 7xxx	MopaLIBS	Recycling	2018
24	Japan	Pellenc ST	Analysis of elements content in aluminum scrap high purity sorting into groups 1xxx – 7xxx	MopaLIBS	Recycling	2018
25	Japan	Pellenc ST	Analysis of elements content in aluminum scrap high purity sorting into groups 1xxx – 7xxx	MopaLIBS	Recycling	2018
26	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2018
27	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2018
28	Germany	Barg Baustofflabor GmbH & Co. KG, Berlin	ConcreteLIBS for analysis of element penetration (Cl and others) in concrete cores	ConcreteLIBS	Concrete	2019
29	Germany	Fraunhofer Center for Silicon Photovoltaics CSP, Halle	ScienceLIBS for analysis of random semiconductor material and Si wafer	Science LIBS	Semiconductor	2019
30	Germany	Deutsche Edelstahlwerke Specialty Steel GmbH, Siegen	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of bright bars	Fiberlibs inline	Inline PMI	2019
31	Spain	GAIKER-IK4 Technological Center	Inline analysis of Bromine (Br) in plastic material on conveyor belt	Fiberlibs inline	Recycling	2019
32	Germany	Scanmetals	Analysis of elements content metal alloy scrap (e.g., steel, aluminum, titanium, copper and more	MopaLIBS	Recycling	2019

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33	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2019
34	Austria	Binder+Co AG	Analysis of elements content in aluminum scrap for subsequent assignment into standard alloy groups 1xxx – 7xxx	MopaLIBS	Recycling	2019
35	Japan	Japan Laser Corporation, Tokyo	Online piece by piece and volume flow analysis of ore, coal, sinterfeed and ready sinter product in the blast furnace	MineralLIBS	Bulk mineral material	2019
36	Austria	Treibacher Industrie AG, Althofen	Online analysis of Vanadium (V) in slag powder on the conveyor belt	MineralLIBS	Bulk mineral material	2019
37	Northern europe	Confidential customer	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of black bars	Fiberlibs inline	Inline PMI	2020
38	Germany	BEFESA Group	Inline analysis of steel making waste product (dust) on the conveyor belt	MineralLIBS	Bulk mineral material	2020
39	USA	O-I Glass	Online analysis of raw batch material on the conveyor belt before feeding to the glass furnace	MineralLIBS	Bulk mineral material	2020
40	Germany	BAM Federal Institute for Materials Research and Testing, Berlin	concreteLIBS for scientific and practical research on aged building materials, analysis of element contents and visualization of surface elements distribution	ConcreteLIBS	Concrete	2021
41	Germany	Georgsmarienhütte, Gröditz	Fast checking of incoming alloys	SlagLIBS	Alloys	2021
42	Germany	Confidential customer	Positive Material Identification (PMI) of billet before entering the reheating furnace in the rolling mill	Fiberlibs inline	Inline PMI	2021
43	DACH	Confidential customer	Inline analysis of molten Aluminium (hot) in a launder from top	MeltLIBS	Inline melt	2021
44	Austria	Treibacher Industrie AG, Althofen	Online analysis of Vanadium (V) in slag powder on the conveyor belt	MineralLIBS	Bulk mineral material	2021

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45	USA	O-I Glass	Online analysis of raw batch material on the conveyor belt before feeding to the glass furnace	MineralLIBS	Bulk mineral material	2021
46	Turkey	Confidential customer	SlagLIBS for analysis of BOF and LF furnace slag	SlagLIBS	Process slag	2022
47	Austria	Confidential customer	Laboratory system for the measurement of unleached and leached Vanadium slag	SlagLIBS	Process slag	2022
48	Germany	Deutsche Edelstahlwerke Specialty Steel GmbH, Siegen	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of bright bars	Fiberlibs inline	Inline PMI	2022
49	Germany	Deutsche Edelstahlwerke Specialty Steel GmbH, Siegen	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of bright bars	Fiberlibs inline	Inline PMI	2022
50	Germany	Confidential customer	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of black bars	Fiberlibs inline	Inline PMI	2022
51	Germany	Confidential customer	Positive Material Identification (PMI) in the non-destructive testing (NDT) area of bar	Fiberlibs inline	Inline PMI	2022
52	Europe	Confidential customer	Inline analysis to determine oxide layer thickness	Fiberlibs inline	Inline	2022
53	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2022
54	Germany	Steinert GmbH, Cologne	Analysis of elements content in different material streams of metal alloy scrap	MopaLIBS	Recycling	2022
55	Austria	Binder+Co AG	Analysis of elements content in aluminum scrap for subsequent assignment into standard alloy groups 1xxx – 7xxx	MopaLIBS	Recycling	2022
56	Norway	Elkem carbon	In situ analysis of coke after being discharged from the furnace	MineralLIBS	Bulk mineral material	2022
57	South Korea	Korea Zinc	SlagLIBS for analysis of 5 type of process slag	SlagLIBS	Process slag	2022
58	South Korea	Korea Zinc	SlagLIBS for analysis of 5 type of process slag	SlagLIBS	Process slag	2022

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59	South Korea	Korea Zinc	SlagLIBS for analysis of 5 type of process slag	SlagLIBS	Process slag	2023
60	South Korea	Hyundai	Positive Material Identification (PMI) of black bar by measuring in the cut surface	Fiberlibs inline	Inline PMI	2023
61	South Korea	Euro Science	Inline detection of transition zone in hot casted material in continuous casting strand	Fiberlibs Continuous Cast	Inline transition zone analysis	2022
62	Austria	Voestalpine	Lab system for measurement of filter dust	SlagLIBS	Laboratory application	2022
63	Austria	Binder+Co AG	Metal scrap sorting, especially aluminum alloys	FiberLIBSInline MKII PA	Recycling	2023
64	Germany	Salzgitter Mannesmann	Mix up test of longitudinally continuous pipes	FiberLIBSInline MKII PA	Inline PMI	2024
65	Germany	Confidential customer	Mix-up test of square and round material	FiberLIBS Inline MKII	Inline PMI	2024
66	Norway	Elkem	Analysis of elemental content in ferro alloys	SlagLIBS	Alloys	2024
67	Spain	Confidential customer	Inline analysis of steel-making waste product (dust) on the conveyor belt	MineralLIBS SP	Bulk mineral material	2025
68	Austria	Binder+Co AG	Metal scrap sorting, especially aluminum alloys	FL Inline 3-Kanal	Recycling	2025
69	Austria	Binder+Co AG	Metal scrap sorting, especially aluminum alloys	FL Inline 3-Kanal	Recycling	2025
70	Greece	Hellenic Halyvourgia	SlagLIBS for analysis of EAF and LMF process slag in the pulpit	SlagLIBS	Process slag	2025
71	Germany	RHIM&Horn&Co. Minerals Recovery GmbH Siegen	MopaLIBS for sorting refractories	MopaLIBS	Spent refractory	2025
72	Canada	Polytechnique Montréal	ConcreteLIBS for chloride inclusion and calibration for alkali elements quantification	ConcreteLIBS	Concrete	2025
73	Germany	Swisssteel Group	SlagLIBS for analysis of EAF and LMF process slag	SlagLIBS	Process slag	2025

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74	Austria	Binder+Co AG	FiberLIBSInline MKII PA	FL Inline 3-Kanal	Recycling	2025
75	Austria	Binder+Co AG	FiberLIBSInline MKII PA	FL Inline 3-Kanal	Recycling	2025