



ANDRITZ GROUP

ANDRITZ HYDRO TURKEY (HTR)

PRESENTATION

MARCH 2021

ANDRITZ

ENGINEERED SUCCESS



ANDRITZ HYDRO IN TURKEY (HTR)



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ANDRITZ HYDRO TURKEY



Company

ANDRITZ HYDRO Ltd. Şti.

has been established in 1991 as 100% foreign equity Turkish Company, located in Ankara under the name ELIN- ELMAK mainly acting as representative office to support the activities in Turkey, driven by the European headquarters in Vienna/Austria.

The Head Office in August '17, relocated to ITOB ORGANİZE SANAYİ BÖLGESİ 10026. Sokak No.: 11 Tekeli - Menderes 35470 Izmir.



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ANDRITZ HYDRO TURKEY - HISTORY

History

- Due to new privatization law for renewable energy in late 2007 and beginning of 2008 the first localization concepts have been developed and implemented, mainly based on activities of local manufacturings of embedded parts like draft tubes and spiral cases for CH projects as well as for LH projects.
- Beside the CH projects, in 2008, ANDRITZ Hydro Turkey won the first LH project in the private sector, which was called Kandil cascade, others were following, (e.g. Alkumru, Boyabat, Ilisu, Tatar, Pembelik, Beyhan 1, LK, Çetin, Ayvalı, Kargı, UK).
- From 1st January 2009 ELIN ELMAK became a fully consolidated “A” Daughter company of ANDRITZ Group to meet the rising local market demand, with the new registered name ANDRITZ HYDRO Ltd.Şti.





ANDRITZ HYDRO TURKEY

Products/ Activities

- Fabrication of Turbine & Generator mechanical welded components for LH and CH units, hydromechanical parts
- Engineering and contracting for Electrical Balance of Plant Systems for Large Hydro plants (full system range, SE remains in COC's)
- Turnkey Electrical balance of plant and automation systems for compact hydro power plants, incl. design and system engineering (Global CoC)
- Erection, erection supervision of large & compact hydro power plants (mech.& electrical) including commissioning of LH&CH plants.





ANDRITZ HYDRO TURKEY – BUSINESS SEGMENTS

Products/ Activities

- Award of first export / overseas CH- projects (2015) eg. Columbia, Madagaskar as well as Norway, Georgia, Afghanistan....
- Andritz Hydro Turkey became *CoC & **CEC for CH EPS and Automation in Hydro group
- Q4 - 2017 Andritz Turkey to establish a Service- and Maintenance Workshop in Izmir
- Q1- 2018 Andritz Board approval to establish a local generator pole manufacturing shop



ONE SUPPLIER - ONE INTERFACE TOWARDS THE CLIENT



- **Presence and strength of local ANDRITZ HYDRO set-up**

Key market for ANDRITZ HYDRO with service centre in Turkey

Full BOP & Automation

Workshop for steel welded constructions

Continuation in the Turkish market over decades

Growing staff and expertise

Close location to client

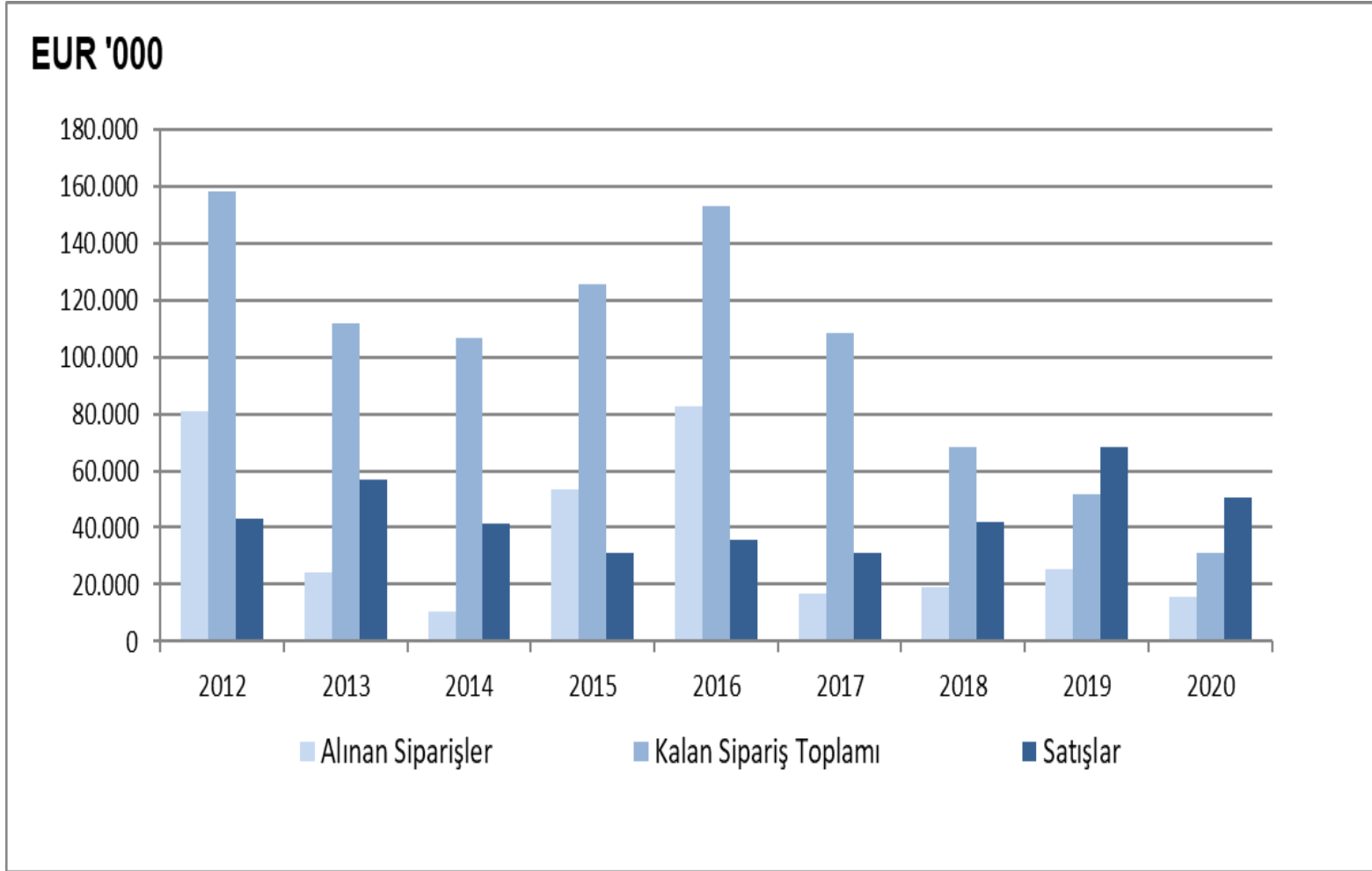
Immediate response time to client from the local set-up

Experienced project team and organisation

Trouble free Project Implementation

Efficient Spare Parts Management

ANDRITZ HYDRO TÜRKİYE



2020		
Alınan Siparişler	15.745.000	EUR
Kalan Sipariş Toplamı	30.987.000	EUR
Satışlar	50.579.000	EUR
Çalışan Sayısı	430	



LARGE HYDRO PROJECTS UNDER EXECUTION

YUSUFELİ DAM & HEPP 3 X 240MVA



HYDRO PROJECTS UNDER EXECUTION

Client:

Devlet Su Isleri

Contract Year:

2016

Scope of Work:

- Turbines
- Generators
- Penstocks
- Gates
- Transformers
- 400kV Gas Isolation Switchgear
- 400 kV Cable
- Electrical Power System
- Automation
- Installation Supervising and Commissioning





ILISU SITE MANUFACTURING AREA



ILISU PENSTOCK





SELECTED REFERENCES

LARGE HYDRO PROJECTS COMPLETED IN 2020

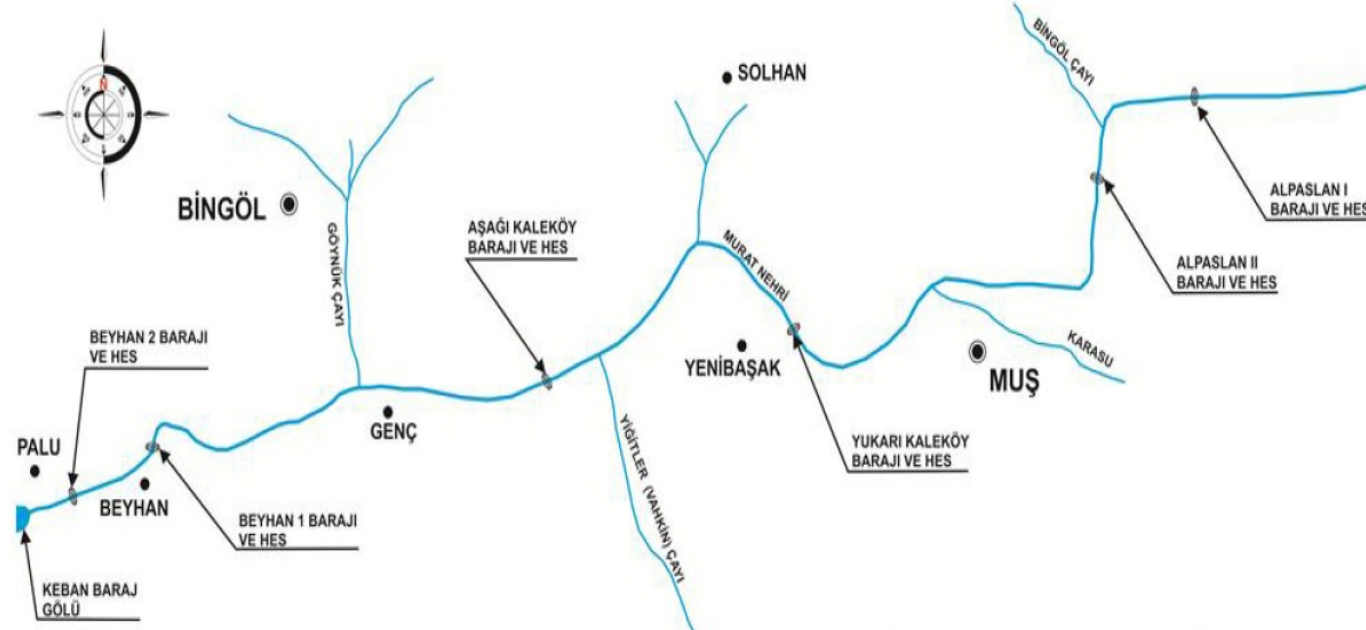
LOWER KALEKÖY



Client:
**Kalehan Genc
Enerji**

Contract Year:
2017

Scope of Work:
3 units à 186 MVA
- Generators



CETIN DAM & HEPP



- Client:
- Cetin Enerji
- (Limak Energy)

- Contract Year:
- 2011

- Scope of Work:
- 2 units à 60 MW
- 3 units à 147 MW
- - Turbines
- - Generators
- - Transformers
- 400 kV Air Isolated Switchyard
 - Balance of Plant
 - Full installation







Client:
Devlet Su Isleri

Contract Year:
2008

Scope of Work:
6 units à 204 MW + 5 MW
- Turbines
- Generators
- Penstocks
- Gates
- Auto-Transformers
400 kV&170kV AIS











SOME COMPLETED COMPACT HYDRO PROJECTS IN TURKEY

ORDU HEPP 4 x 12MW with 154 kV Switchyard



YAGMUR 2x5MW; SIRAKONAKLAR 3x6MW; TORLAR 2 x 6,5 + 1x2,5 MW HEPPs'





HTR – Service Facility in Izmir



Range of products and components in service facilities

- Service & repair workshop (Phase 1, subject for immediate approval)

ITEMS	Dimensions from-to [mm] / Weights from-to [t]	Range [MW]
Typical Core Components / Products	2500 x 2500 / 0 – 15t (single piece weight) Component Weight (undismantled) 45 t	
Targeted power range		0 – 30 MW

- Big Service & repair workshop as separate shop at a later stage (Phase 2)

ITEMS	Dimensions from-to [mm] / Weights from-to [t]	Range [MW]
Typical Core Components / Products (refer to Slide 6)	6000 x 6000 / 0 – 50t(single piece weight)	
Targeted power range		0 – 205 MW



Turbine,

Active parts :

- ✓ Runner welding work repairs due to erosion,cavitation etc...
- ✓ Wicket gate welding work repairs due to erosion,cavitation etc...
- ✓ MIV repairs (modification for sealing location)
- ✓ Governor-HPU inspection & modifications,fine tuning at workshop etc...
- ✓ Cooling water pump and other aux. inspection & modifications
- ✓ Distributor reassembly and welding repairs
- ✓ Shaft Seal reassembly and welding repairs
- ✓ Guide Bearing reassembly and welding repairs
- ✓ Bearing pads repair works
- ✓ NDT inspections,measuring and quality control activities

Non active parts :

- ✓ Wearing ring-labyrinth ring replacement
- ✓ Facing plate replacement
- ✓ Head cover welding work repairs
- ✓ Bottom ring welding work repairs
- ✓ Bushing replacements
- ✓ Draft tube cone & elbow welding work repairs
- ✓ Engineering study for steel parts which need to improve from design point of view due to erosion,abrasion etc...
- ✓ Gates & trashracks,cleaning machines repair works
- ✓ NDT inspections,measuring and quality control activities
- ✓ Sand blasting,painting and cleaning applications

Generator,

- ✓ Bearing reassembly and repairs
- ✓ Winding parts inspection, replacement and repairs
- ✓ Pole inspection and replacement
- ✓ Slipring inspection , coil ,brush replacement
- ✓ HPU and oil lubrication repairing works
- ✓ Hi-Pot & Hi-voltage test ,insulation tests

EPS & Automation,

- ✓ Storing of AT hardware & software spare part equipment.
- ✓ Panel modification, and repair activities
- ✓ EPS & AT panel installation and tests



Layout of Service Facility

- ✓ CUTTING AREA - 120 m²
- ✓ DISMANTLING AREA – 260 m²
- ✓ CLEANING AREA – 200 m²
- ✓ WELDING / GRINDING AREA - NDT AREA - 400 m²
- ✓ MACHINING AREA – 300 m²
 - Small Size equipment (Turning, Milling, Drilling)
- ✓ ASSEMBLY / TESTING AREA – 400 m²
- ✓ SAND BLASTING & PAINTING AREA – 90 m²
- ✓ LOGISTIC & PACKING AREA -220 m²
- ✓ INTERMEDIATE OPEN AIR STORAGE AREA -400 m²

Storage

- ✓ STORAGE 1
 - MECHANICAL EQUIPMENT – 60 m²
 - MECHANICAL TOOLS & EQUIPMENT
 - WELDING MACHINES

- ✓ STORAGE 2
 - ELECTRICAL & MEASURING EQUIP. – 30 m²
 - ELECTRICAL INSTALLATION TOOLS
 - ELECTRICAL & MECHANICAL MEASURING EQUIPMENT

- ✓ STORAGE 3
 - EPS EQUIPMENT – 350 m²
 - AT EQUIPMENT
 - CABLES
 - ALL AUXILIARIES

SR TURKEY





Project examples

HEPP Oymapinar / Turkey Modernization of Hydro Power Plants

Customer: ETİ Alüminyum A.S. (Member of CENGİZ Group)
Order Intake: 2007
Year of Erection: 1984
540 MW Storage Power Plant
4x135 MW Francis

- Automation & Control
- Excitation
- Monitoring & Diagnosis
- Power Plant Management
- Protection
- Synchronization
- Turbine Governor



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DEMIRKÖPRÜ / Turkey / 2007 Modernization of Hydro Power Plants




Customer: EÜAS (Owner) and TEMSAN (Main contractor)
Quantity: 2 Units (Stator windings ROEBEL bar type)
Original Supplier: ALSTOM
First Commissioning: 1960
Output: 28.8 MVA, pf. 0.8
Voltage: 10.8 kV
Speed: 300 rpm

Replacement of 2 complete stator windings ROEBEL bar type

- including supervision of erection
- Testing at the HEPP

Major features

- Second rehabilitation order in Turkey
- Cooperation with TEMSAN
- 100% delivery Weiz



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GÖKCEKAYA / Turkey / 2006 Modernization of Hydro Power Plants




Customer: EÜAS (owner)
Quantity: three units
Original Supplier: Allis Chalmers (USA)
Gen.Data: three Syn-Gen vertical
103.1 MVA; 50 Hz; pf. 0.94
Voltage: 14,4 kV
Speed: 187.5 rpm
First Commissioning: 1973

Replacement of three complete stator windings

- ROEBEL bar type including supervision of erection and testing

Major features

- First rehabilitation order in Turkey
- Cooperation with TEMSAN
- 100 % delivery Weiz



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ANDRITZ IN TURKEY SUMMARY

ANDRITZ HYDRO IN TURKEY / HIGHLIGHTS



Contracts since 1926

Turbines

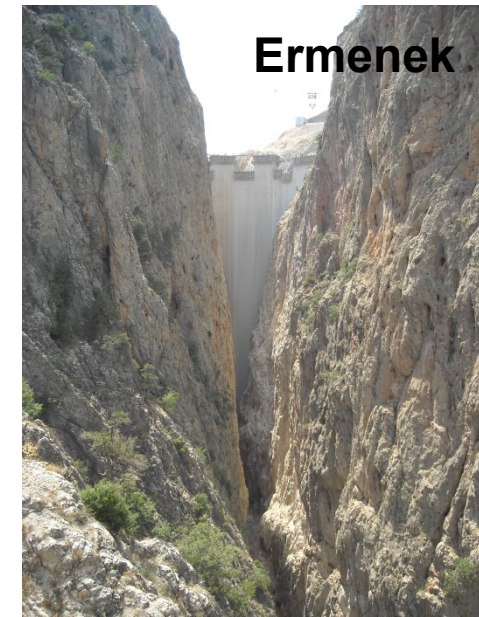
342 units - 16,0 GW

Generators

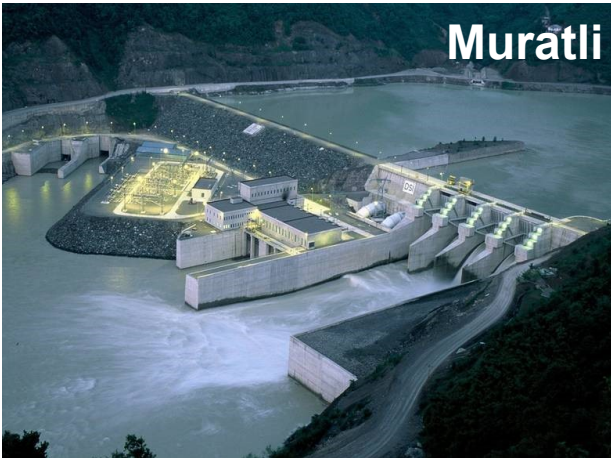
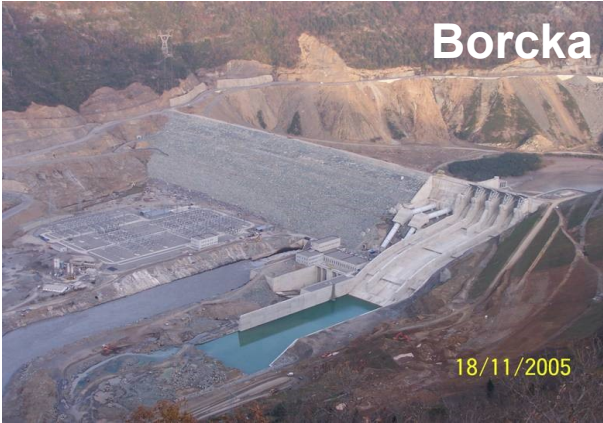
120 units – 8,300 MVA

Penstocks: 37,000 tons

Gates: 60 units



ANDRITZ HYDRO IN TURKEY / HIGHLIGHTS





1	Araklı	1	PH2	4,00	2018	4,0
2	Gürsöğüt 1	3	FSH	20,00	2018	45,0
3	Gürsöğüt 2	3	AS	10,00	2018	20,0
4	Orta	2	PH2	8,00	2018	16,0
5	Oylum 3	2	PV4	5,50	2017	8,2
6	Lower Kaleköy	3	FSH	150,00	2017	450,0
7	Çağlayan	2	FSH	5,20	2016	10,4
8	Kalecik	2	PV6	12,91	2016	25,8
9	Kavak	1	FSH	8,44	2016	8,4
10	Kavak	1	FSH	2,39	2016	2,4
11	Cicekli	2	PV4n	3,50	2015	7,0
12	Kargi	2	FSH	3,54	2015	7,1
13	Kargi	2	FSV	48,02	2015	96,0
14	Okkayasi	2	PV4	11,82	2015	23,6
15	Savsat	2	FSH	8,18	2015	16,4
16	Ulkun 1	2	AP	5,60	2015	11,2
17	Ulkun 2	2	AP	7,01	2015	14,0
18	Cardakli	2	FSH	7,91	2014	15,8
19	Cayalti 1a & 2a	2	ACATr	1,00	2014	2,0
20	Cayalti 1b & 2b	4	ACATr	2,25	2014	9,0
21	Çalılıkobası 1	2	PV3n	4,62	2014	9,2
22	Çalılıkobası 2	2	PV3n	4,48	2014	9,0
23	Delice	2	PV5n	3,44	2014	6,9
24	Derekoy	2	FSHn	2,92	2014	5,8
25	Yuruntepe 1	1	FSH	9,88	2014	9,9
26	Yuruntepe 2	1	FSH	3,46	2014	3,5
27	Yuruntepe 3	1	FSH	1,72	2014	1,7
28	Akpınar	3	FSH	3,30	2013	9,9
29	Alakopru	2	FSH	15,07	2013	30,1
30	Alakopru	1	FSH	2,79	2013	2,8
31	Ayvali	2	FSH	2,63	2013	5,3
32	Cileklitepe	2	PV4	12,44	2013	24,9
33	Delicay 1	2	PV4	16,16	2013	32,3
34	Delicay 2	2	PV6	6,27	2013	12,5
35	Kovada II	2	PV4M	28,71	2013	57,4
36	Köprüyani	2	FSH	6,20	2013	12,4
37	Yanbulu	1	FSH	6,73	2013	6,7
38	Yanbulu	1	FSH	3,08	2013	3,1
39	Upper Kaleköy	3	8225	238,00	2013	714,0
40	Akbas	2	FSH	5,45	2012	10,9
41	Akbas	1	FSH	2,14	2012	2,1
42	Alkumru	1	FSH	14,70	2012	14,7
43	Ayvali	2	FSV	67,44	2012	134,9
44	Beyhani 1	3	FSV	198,40	2012	595,2
45	Bucakkışla	2	FSH	22,58	2012	45,2
46	Cetin Lower	1	FSH	3,37	2012	3,4
47	Cetin Main	1	FSH	18,30	2012	18,3
48	Höçgören	1	FSH	10,17	2012	10,2
49	Höçgören	1	FSH	3,92	2012	3,9
50	Ordu	4	FSH	11,98	2012	47,9
51	Sukaneri	1	FSH	6,73	2012	6,7
52	Sukaneri	1	PV5	2,13	2012	2,1
53	Yaprak	1	FSH	4,92	2012	4,9
54	Cetin Lower	2	KSV	59,41	2011	118,8
55	Cetin Main	3	FSV	147,01	2011	441,0
56	Daran 1	2	FSH	24,40	2011	48,8
57	Daran 2	2	FSH	9,71	2011	19,4
58	Demerciler 2	2	FSH	1,61	2011	3,2
59	Kirigdak	2	PV5	8,72	2011	17,4
60	Kiy	2	FSH	12,30	2011	24,6
61	Mavi	2	FSH	6,00	2011	12,0
62	Pembelik	2	FSV	65,82	2011	131,6
63	Sirimtas	2	FSH	13,68	2011	27,4
64	Tatar	2	FSV	66,60	2011	133,2
65	Torlar	2	FSH	6,33	2011	12,7
66	Torlar	1	FSH	2,52	2011	2,5
67	Adacami	2	FSH	14,60	2010	29,2



**Andritz Hydro Technology
installed in
197 Turkish Power Plants**

SANTRAL	Unite	Tipi	(MW)	Tarih	Toplam	SANTRAL	Unite	Tipi	(MW)	Tarih	Toplam		
68	Balkusan 1	2	PV4	6,40	2010	12,8	100	Cakirlar	2	PV4	8,50	2007	17,0
69	Balkusan 2	2	PV3	13,40	2010	26,8	101	Gunayse	2	FSH	4,60	2007	9,2
70	Boyabat	3	FSV	176,00	2010	528,0	102	Incesu	3	FSH	5,70	2007	17,1
71	Demirgiler	1	FSH	5,24	2010	5,2	103	Lamas 3	2	PV4	7,39	2007	14,8
72	Dogancaay	6	AK	5,20	2010	31,2	104	Lamas 4	2	PV5	10,77	2007	21,5
73	Doruk	2	PV4	14,50	2010	29,0	105	Selimoglu	1	FSH	4,70	2007	4,7
74	Gökgedik	2	FSH	11,49	2010	23,0	106	Demirköprü	2	8140	28,80	2007	57,6
75	Gökgedik	1	FSH	4,29	2010	4,3	107	Caldere	1	PV4	8,91	2006	8,9
76	Ilisu	1	FSH	4,53	2010	4,5	108	Ruzgari 1	1	PV4	5,12	2006	5,1
77	Ilisu	6	FSV	222,00	2010	1.332,0	109	Ruzgari 2	1	PV5	5,39	2006	5,4
78	Kavakcali	2	PH2	5,60	2010	11,2	110	Sarmacik	4	PH2	11,01	2006	44,0
79	Princlik	3	FSH	7,40	2010	22,2	111	Tatha	2	PV4	6,44	2006	12,9
80	Sirakonaklar	1	PV4	6,10	2010	6,1	112	Gökcekaya	3	8140	103,10	2006	309,3
81	Yagmur	2	FSH	4,60	2010	9,2	113	Caygören	1	FSH	1,80	2005	1,8
82	Bilav	2	PV5	10,20	2009	20,4	114	Caygören	1	FSH	1,60	2005	1,6
83	Gunder	2	PV5	14,10	2009	28,2	115	Kizildüz	2	PV5	7,91	2005	15,8
84	Kocak	3	FSH	8,29	2009	24,9	116	Sahmallar	2	PV4	8,27	2005	16,5
85	Sayan	2	PV6	7,20	2009	14,4	117	Vaxehir	1	FSH	0,37	2005	0,4
86	Sirakonacilar	2	PV4	6,18	2009	12,4	118	Yukari Manahoz	2	PH2	11,72	2005	23,4
87	Alkumru	3	FSV	88,59	2008	265,8	119	Yamula	2	FSV	52,50	2003	105,0
88	Balkodu 1	1	PV6	12,40	2008	12,4	120	Yukari Mercan	2	PH2	7,42	2003	14,8
89	Balkodu 2	1	PH2	4,10	2008	4,1	121	Ermenek	2	FSV	153,20	2002	306,4
90	Cakit	2	FSH	10,36	2008	20,7	122	Suleymanli	2	FSH	2,67	2002	5,3
91	Hacininoglu	2	FSV	60,13	2008	120,3	123	Birkapili	1	PV	60,40	2001	60,4
92	Kale	3	PV6	11,80	2008	35,4	124	Pamuk 1&2	2	FSH	9,10	2001	18,2
93	Kandil	2	FSV	103,29	2008	206,6	125	Pamuk 3	1	FSH	5,20	2001	5,2
94	Kopruler	2	FSH	1,21	2008	2,4	126	Sanliurfa	2	FSH	27,70	2001	55,4
95	Kusluk	2	PV5	8,70	2008	17,4	127	Alpaslan I	4	8225	45,00	2001	180,0
96	Sariguzel	2	FSV	50,50	2008	101,0	128	Birkapili	1	8421	66,82	2001	66,8
97	Yedisu	2	AS	7,70	2008	15,4	129	Cal	2	FSH	1,30	2000	2,6
98	Akkoy	3	FSH	4,40	2007	13,2	130	Girlevic	2	FSH	1,40	2000	2,8
99	Aralik	2	PH2	6,45	2007	12,9	131	Mercan	2	FSH	4,70	2000	9,4

132	Muratli	2	FSV	57,50	1999	115,0
133	Borcka	2	8225	167,00	1999	334
134	Kürtün	2	8225	46,00	1999	92,0
135	Deriner	4	FSV	170,80	1998	683,2
136	Pamukova	3	AP	3,50	1998	10,5
137	Sucati	2	AS	4,77	1998	9,5
138	Camlica	3	FSV	35,16	1997	105,5
139	Fethiye	3	FSH	5,60	1997	16,8
140	Tohma	2	FSV	7,10	1997	14,2
141	Uggamlitepe	1	FSV	3,10	1997	3,1
142	Yurse	1	FSV	3,25	1997	3,3
143	Beyköy	3	4011	6,00	1997	18,0
144	Sucati	2	1001	5,10	1997	10,2
145	Birecik	6	FSV	116,30	1996	697,8
146	Karkamis	6	5210	34,80	1996	208,8
147	Ozluce	2	FSV	86,80	1993	173,6
148	Kuzgun	1	1001	2,50	1991	2,5
149	Atakoy	1	KV	5,42	1986	5,4
150	Kralkizi	2	8225	52,50	1986	105,0
151	Ataturk	8	FSV	323,70	1984	2.589,6
152	Ataturk-Haus	1	FSH	5,75	1984	5,8
153	Manavgat	2	KV	26,20	1984	52,4
154	Karacaoren	2	8425	18,50	1981	37,0
155	Köklüce	2	FSV	48,67	1980	97,3
156	Aslantas	3	FSV	41,70	1978	125,1
157	Oymapinar	4	FSV	138,50	1978	554,0
158	Suat Ugurlu	2	8425	25,50	1978	51,0
159	Karakaya	6	FSV	340,00	1977	2.040,0
160	Keban *	4	FSV	183,20	1976	732,8
161	Izmit	1	FSH	0,71	1974	0,7
162	Dogankent I	1	8425	10,25	1974	10,3
163	Dogankent	1	FSV	8,50	1971	8,5
164	Cildir	3	FSV	5,33	1970	16,0
165	Kadincik II	1	FSV	61,60	1970	61,6
166	Tortum	2	8425	9,36	1968	18,7
167	Keban *	4	FSV	183,30	1967	733,2
168	Harsit	3	FSV	8,50	1966	25,5
169	Kovada II	2	PV4	26,45	1965	52,9
170	Hazar I	1	7315	8,75	1965	8,8
171	Hazar II	2	8425	6,25	1965	12,5
172	Van Erics	2	FSV	0,35	1964	0,7
173	Igdir Kiti	2	KV	1,45	1962	2,9
174	Goeksu III	1	FSH	3,68	1959	3,7
175	Saim Gogen-Istar	2	7215	4,10	1958	8,2
176	Türkei	2	FSH	0,33	1956	0,7
177	Corum	4	7211	3,15	1956	12,6
178	Gaziantep	5	7211	3,15	1956	15,8
179	Istanbul	2	7025	0,65	1955	1,3
180	Saim Gogen-Istar	2	7215	1,60	1955	3,2
181	Saim Gogen-Istar	3	7215	4,10	1954	12,3
182	Saim Gogen-Istar	3	7215	1,60	1954	4,8
183	Kovada I-III	3	FSV	2,86	1953	8,6
184	Tortum	2	8425	7,00	1953	14,0
185	Goeksu I/II	2	FSH	3,68	1952	7,4
186	Denizli	1	7211	0,90	1952	0,9
187	Denizli	1	7211	0,90	1952	0,9
188	Afebe Istanbul	1	7211	0,60	1951	0,6
189	Afebe Istanbul	1	7211	0,60	1950	0,6
190	Antolaya	1	FSH	0,39	1938	0,4
191	Konya Eregli	2	FSH	1,06	1937	2,1
192	Hendek	1	FSH	0,06	1936	0,1
193	Taskoepue	1	FSH	0,04	1935	0,0
194	Arac	1	FSH	0,01	1934	0,0
195	Cay	1	FSH	0,09	1934	0,1
196	Karaman	1	FSH	0,02	1934	0,0
197	Ekona	1	AKW	0,29	1926	0,3

QUALITY



qualityaustria
Succeed with Quality

CERTIFICATE

Quality Austria - Trainings, Zertifizierungs und Begutachtungs GmbH awards this **qualityaustria** certificate to the following organisation:

ANDRITZ **ANDRITZ HYDRO LTD. ŞTİ.**
ITOB Organize Sanayi Bölgesi
10026. Sokak No. 11 Tekeli , Menderes
TR-35470 Izmir Turkey

QUALITY MANAGEMENT SYSTEM
complying with the requirements of standard
ISO 9001:2015

Research, development, sales, engineering, procurement, manufacturing, installation, commissioning, and project management of

- Turn-key hydro power plants
- Service, refurbishment, maintenance, optimization and operation of plants
- Turbines, Generators, Penstock, Gates
- Automation, Electrical Power Systems
- Pumps and Pumping Solutions

The **qualityaustria** certificate confirms the application and further development of an effective certificate to the following organisation:

Registration No.: 07389/20
Date of initial issue: 20 October 2011
Valid until: 30 October 2020

Vienna, 02 October 2017

Quality Austria - Trainings, Zertifizierungs und Begutachtungs GmbH,
AT-1010 Vienna, Zeltweggasse 10/3

Konrad Scheiber
Konrad Scheiber
General Manager

Dr. Mag. Anni Koubek
Dr. Mag. Anni Koubek
Specialist representative

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TR-35470 Izmir Turkey

ENVIRONMENTAL MANAGEMENT SYSTEM
complying with the requirements of standard
ISO 14001:2015

Research, development, sales, engineering, procurement, manufacturing, installation, commissioning, and project management of

- Turn-key hydro power plants
- Service, refurbishment, maintenance, optimization and operation of plants
- Turbines, Generators, Penstock, Gates
- Automation, Electrical Power Systems
- Pumps and Pumping Solutions

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Date of initial issue: 23 August 2012
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Vienna, 02 October 2017

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AT-1010 Vienna, Zeltweggasse 10/3

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Dr Axel Dick, MSc
Specialist representative

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TR-35470 Izmir Turkey

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM
complying with the requirements of standard
BS OHSAS 18001:2007

Research, development, sales, engineering, procurement, manufacturing, installation, commissioning, and project management of

- Turn-key hydro power plants
- Service, refurbishment, maintenance, optimization and operation of plants
- Turbines, Generators, Penstock, Gates
- Automation, Electrical Power Systems
- Pumps and Pumping Solutions

The **qualityaustria** certificate confirms the application and further development of an effective certificate to the following organisation:

Registration No.: 00271/20
Date of initial issue: 23 August 2012
Valid until: 30 October 2020

Vienna, 02 October 2017

Quality Austria - Trainings, Zertifizierungs und Begutachtungs GmbH,
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Konrad Scheiber
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General Manager

Eckehard Bauer, MSc
Eckehard Bauer, MSc
Specialist representative

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