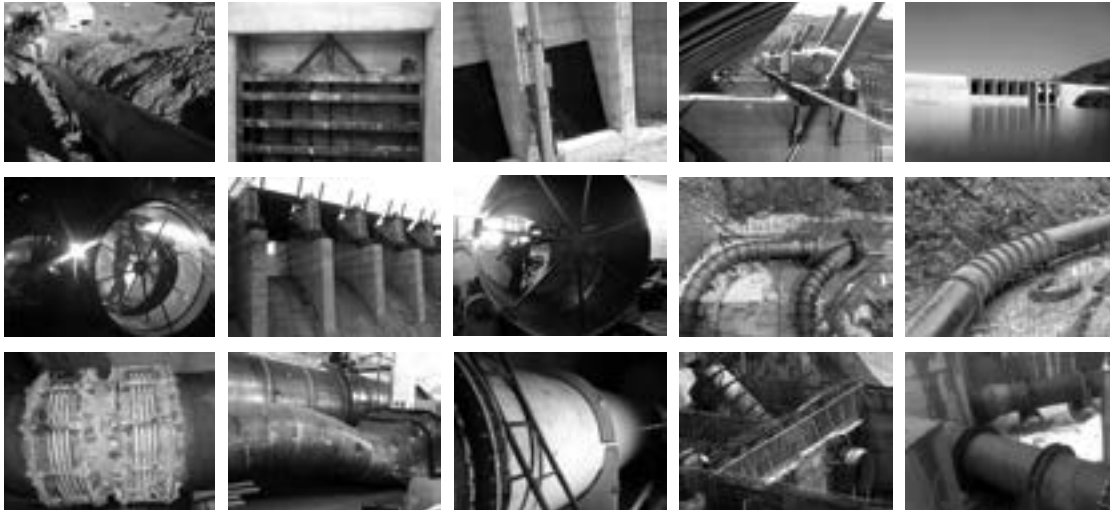




HYDROMECHANICAL

**prosem**



# Hydromechanical Equipment

Prosem Engineering, with its specialized team have been giving service in fields such as planning studies, final design, detail design, technical specifications, bidding review and consultancy for hydromechanical equipments that are involved in dams, hydroelectrical power plants, irrigation projects and similar facilities.

## Final and Detail Design

- Trashracks
- Penstock Branches
- Segment Gates
- Slide Gates
- Fixed Wheel Gates
- Flap Gates
- Watertight Tunnel Access Gates
- Buried Penstocks
- Exposed Penstocks
- Long Penstocks
- Tunnel Steel Linings



Transient Analysis

Corrosion Protection

Technical Specifications

Tender Documents

Tender Evaluation



# Recent Works

Examples of projects.



**Devecikonađı HEPP**  
Spillway Segment Gates  
H = 9530 mm, W = 8700 mm  
R = 10 m



**Devecikonađı HEPP**  
Spillway Segment Gates  
H = 9530 mm, W = 8700 mm  
R = 10 m



**Devecikonađı HEPP**  
Fixed-Wheel  
Ps = 16 m  
H = 5500 mm  
W = 4200 mm



**Devecikonađı HEPP**  
Trashracks



**Vizara HEPP**  
Penstock Branches



**Vizara HEPP**  
Penstock  
Steel, 4000 m,  $\phi = 1.4$  m



**Pařa HEPP**  
Penstock, Flexible Joint



**Arpa HEPP**  
Penstock Branches



**Arpa HEPP**  
Penstock  
L = 870 m,  $\phi = 2$  m



**Devecikonađı HEPP**  
Cebri Boru,  $\phi = 4200$  m



To get detailed information  
you can visit our website

[www.prosem.biz](http://www.prosem.biz)



# Recent Projects

Recent Hydromechanical Equipment Projects - Gates

PROJECT	TYPE	HEAD (m)	SPAN (m)	HEIGHT (m)	HOISTING SYSTEM
Arpa HEPP	H	110	2600	2600	-
Manavgat HEPP	FW	7	3500	3500	Hydraulic
	FW	4	3000	2000	Hydraulic
	S	6	1000	700	Hydraulic
	FW	5	3600	4000	Hydraulic
	FW	11.5	2300	2300	Hydraulic
Tüfekçikonağı HEPP	FW	4.5	2000	1000	Screw
	S	4.5	1000	800	Screw
	FW	2	1800	900	Screw
	S	3.5	600	600	Screw
Angutlu-I HEPP	KN	5.5	7200	2500	Hydraulic
	FW	6	3000	2000	Hydraulic
	FW	6	2000	2000	Screw
	FW	6.5	3000	2000	Screw
	S	7.5	1000	800	Screw
	S	7	1000	1000	Screw
	FW	6	3000	2000	Screw
Angutlu-II HEPP	FW	10.5	3800	3800	Hydraulic
	FW	4	3000	3000	Hydraulic
	FW	2.5	4000	2000	Screw
	S	4	1000	800	Screw
	FL	3.5	4000	2000	Lifting Beam
	FW	3.5	4000	2000	Screw
Bağbaşı HEPP	FW	9.5	3800	3800	Hydraulic
	FW	4.5	2000	1500	Screw
	FW	2	2500	1200	Screw
	S	3	1000	800	Screw

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H: Hinged

FW: Fixed-Wheel

S: Slide

FL: Flap



# Recent Projects

Recent Hydromechanical Equipment Projects - Gates

PROJECT	TYPE	HEAD (m)	SPAN (m)	HEIGHT (m)	HOISTING SYSTEM
Bağbaşı HEPP	FW	110	2600	2600	-
	FW	7	3500	3500	Hydraulic
Hemşin HEPP	S	4	3000	2000	Hydraulic
	FW	6	1000	700	Hydraulic
		5	3600	4000	Hydraulic
Köprübaşı HEPP	FW	11.5	2300	2300	Hydraulic
	FW				
	FW	4.5	2000	1000	Screw
	S	4.5	1000	800	Screw
	S	2	1800	900	Screw
	S	3.5	600	600	Screw
	FW				
	FW	5.5	7200	2500	Hydraulic
	FW	6	3000	2000	Hydraulic
		6	2000	2000	Screw
Büyükbahçe HEPP	FW	6.5	3000	2000	Screw
	FW	7.5	1000	800	Screw
	FW	7	1000	1000	Screw
	FW	6	3000	2000	Screw
	S	10.5	3800	3800	Hydraulic
	FW				
	FW	4	3000	3000	Hydraulic
	FW	2.5	4000	2000	Screw
	FW	4	1000	800	Screw
		3.5	4000	2000	Lifting Beam
Devecikonağı HEPP	FW	3.5	4000	2000	Screw
	FW	9.5	3800	3800	Hydraulic
	FW				
	FW	4.5	2000	1500	Screw
	SG	2	2500	1200	Screw
	3	1000	800	Screw	

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S: Slide

FW: Fixed-Wheel

SG: Segment



# Recent Works

Recent Hydromechanical Equipment Projects - Penstock

PROJECT	PIPE TYPE	DIAM- ETER (mm)	STATIC HEAD (m)	LENGTH (m)
Akdere Div. Weir and HEPP	GRP	1700	145	4050
Angutlu-I HEPP	Steel Lining	3000	80	445
Angutlu-II HEPP	Steel Lining	3000	50	170
Arpa Div. Weir and HEPP	Fr. Stand. Pen. Ins. T./ Buried Steel	2000	330	868
Bağbaşı Div. Weir and HEP	Buried Steel	1800	195	320
Büyükbahçe Div. Weir and HEPP	Buried Steel	1600	210	456
Devecikonağı Dam ve HEPP	Concrete Encased Steel Penstock	4200	33	26
Güneşli-2 Div. Weir and HEPP	Concrete Encased Steel Penstock	3000	60	220
Kale HEPP	Buried Steel	2080	135	3520
Kaletepe Div. Weir and HEPP	Buried Steel	1400	220	750
Kayaköprü-1 Div. Weir and HEPP	Exposed / Jacked Steel Pipe	1800	280	714
Kayaköprü-2 Div. Weir and HEPP	Concrete Encased Steel Penstock	2000	90	71
Kıran Div. Weir and HEPP	Concrete Encased Steel Penstock	2800	55	41
Köprübaşı Div. Weir and HEPP	Buried Steel	2100	105	254
Mavi Div. Weir and HEPP	Concrete Encased Steel Penstock	1600	188	254
Telli 1-2 Div. Weir and HEPP	Fr. Stand. Pen. Ins. T./ Buried Steel	1700	210	3029
Vizara Div. Weir and HEPP	Buried Steel	1400	275	4000



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This brochure was prepared by Prosem Engineering.