More Than
Since 1988
1.000 References

ATBIN
INDUSTRIAL GROUP

- Industrial Ovens
- Aluminum Solution Furnaces
- General Industrial Furnaces
- Tempering Furnaces
- Atmosphere Controlled Furnaces
- Bell Type Furnaces
- Salt Bath Furnaces
- Melting & Holding Furnaces
- Firing of Ceramic Furnaces
- High Temperature Furnaces

Medium Capacity Furnaces

ATBIN
INDUSTRIAL GROUP

High Capacity Furnaces

Medium Capacity Furnaces

Industrial Controllers & Meters

Automation & Control Equipments

Field Instruments

Thermocouples & Sensors

Combustion Systems (Krom Schroeder collaboration)

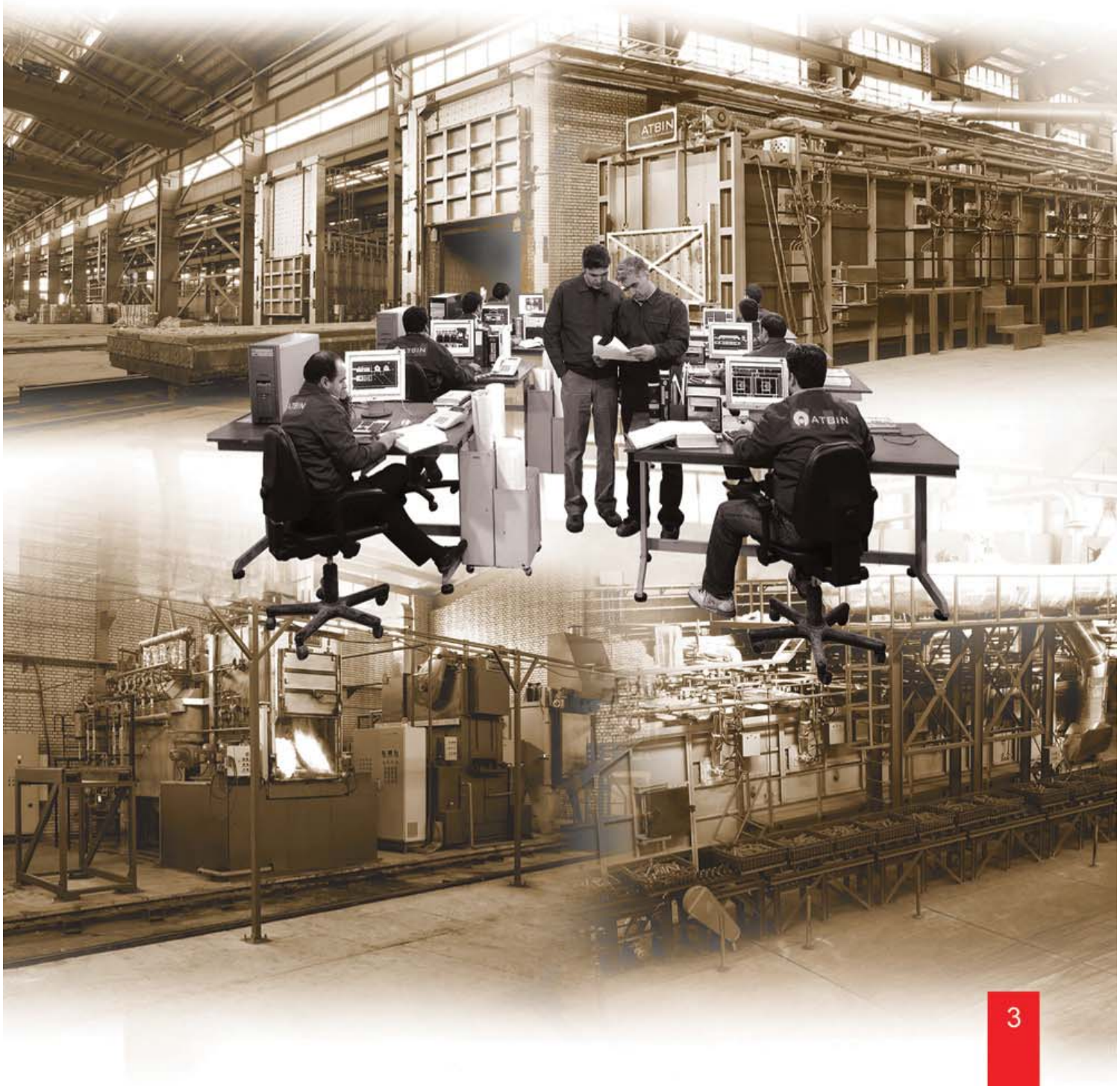
Insulating Materials (Isolite collaboration)

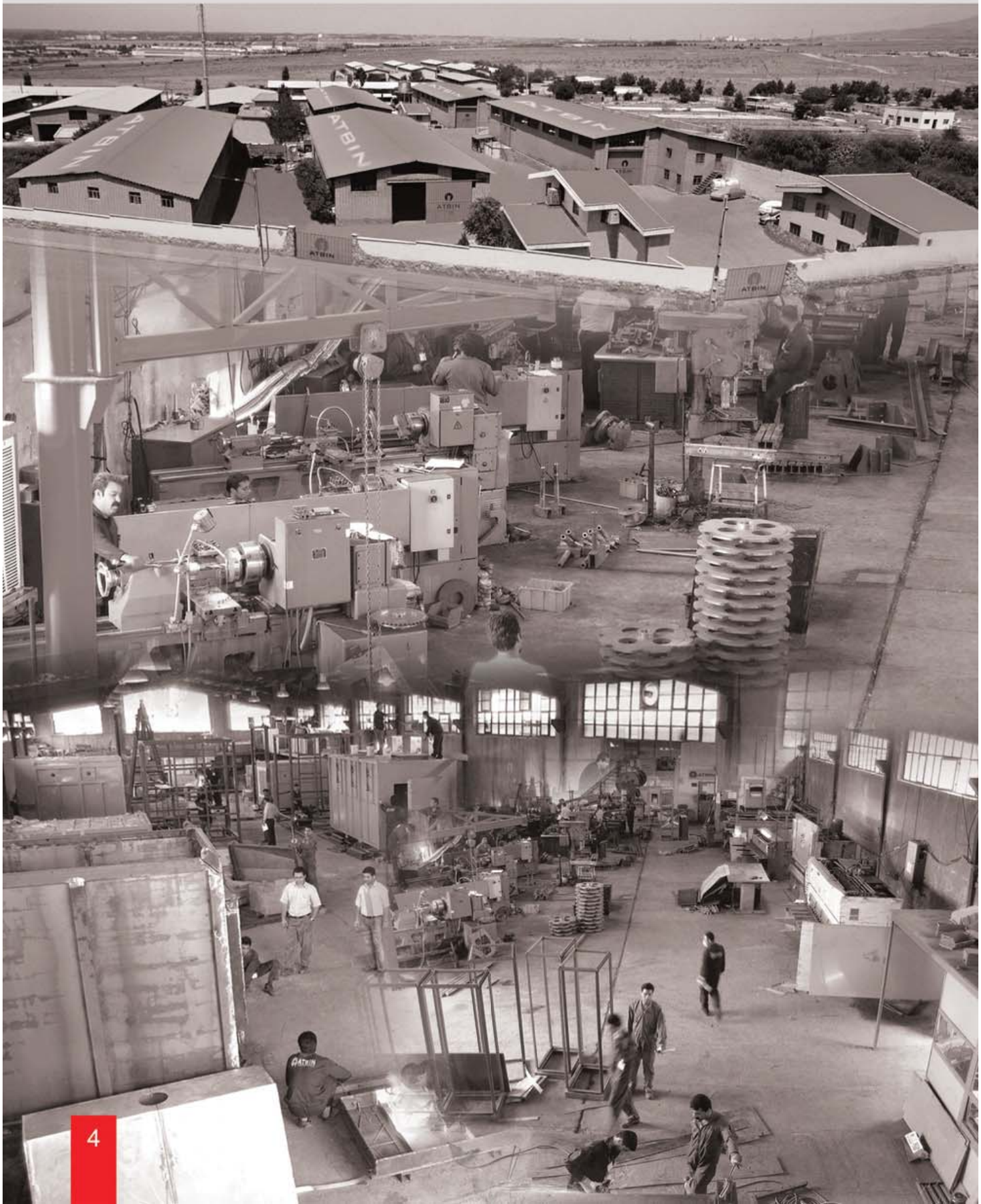
Contents

Introduction

With over two decades of experience and 500 personnel, ATBIN Industrial Group is one of the pioneers in the region heat treatment industries.

At the time being other than having exports to 17 countries worldwide, thousands of ATBIN furnaces are in operation throughout the region and several heat treatment projects are either in progress or already executed by ATBIN. Higher technology furnaces are produced under licenses of creditable European and Asian companies.

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ATBIN at Int'l & Domestic Trade Fairs

Trade Fairs

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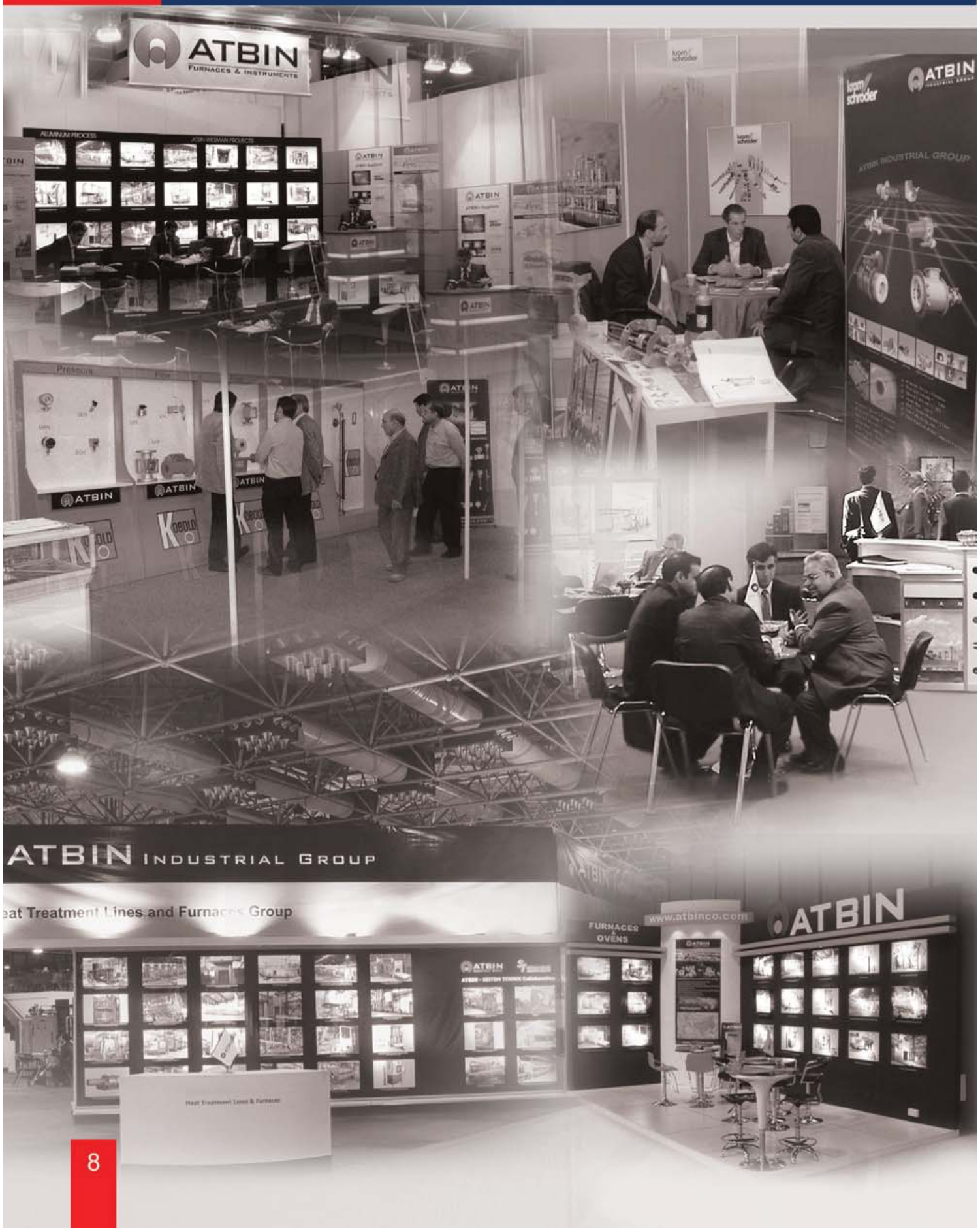
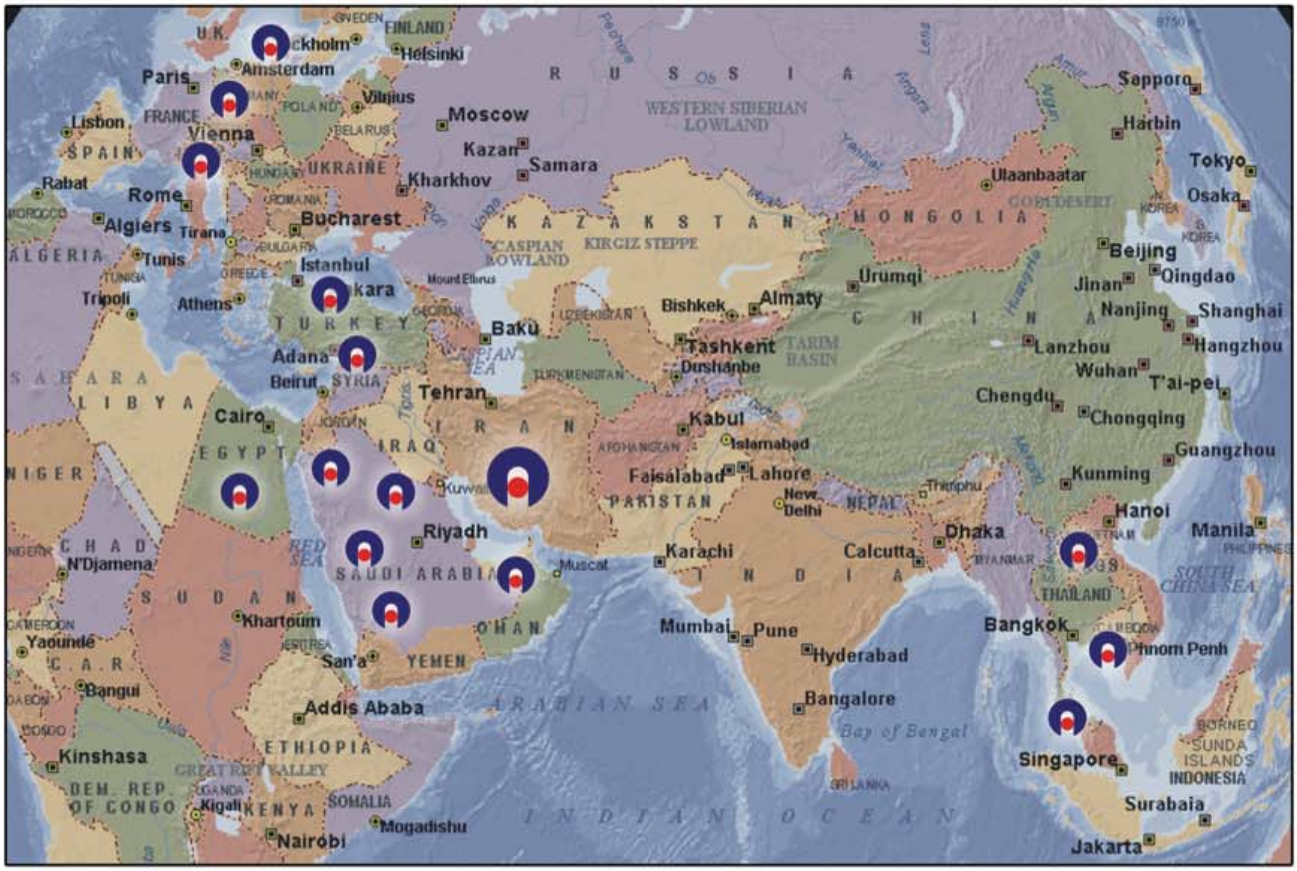
Trade Fairs

ATBIN at Int'l & Domestic Trade Fairs



ATBIN's Exports

Export to seventeen countries in the world



- Having complied with internatinal standards and principles of furnace design and manufacturing, ATBIN now is in the lead of and the only furnace manufacturer in the region exporting to Europe.

ATBIN at a Glance

ATBIN Industrial Group

- Ceramic Fibers & Firebricks
- Combustion Systems
- Thermocouples & Sensors
- ATBIN Projects, Industrial Furnaces & Ovens
- Controllers & Meters
- Industrial Automation
- Instruments & Control Equipments

CNG Cylinders Hardening Lines

- Walking Beam Austenitizing Furnace
- Automatic Quenching System
- Continuous Tempering Furnace with Hot Air Circulating System
  - Conveyer
  - Walking Beam
- PLC-controlled Automation & Monitoring System

Steel Industry Furnaces

- Bogie Hearth Heat Treating Furnaces
- Rotary Hearth Heat Treating Furnaces
- Rolling Lines Preheating Furnaces
  - Pusher Type
  - Walking Hearth Type
  - Walking Beam Type
- Preheating and Hardening Walking Beam Furnaces

Automotive Industry Furnaces

- Fuel-fired/Electrical Isothermal Annealing Line including:
  - Austenitizing Furnace
  - Fast Cooling Zone
  - Hot Air Circulating Furnace
- Automotive Parts Heat Treating Furnaces
- Core Paint Drying Line
- Stabilizer Bar Hardening Line
- Helical/Leaf Springs Heat Treatment Furnaces
- Piston Graphitizing Furnaces
- Aluminum Parts Heat Treating Furnaces

Gas Carburizing Lines

- Main Carburizing Furnace
- Preheating Furnace with Hot Air Circulating System
- Tempering Furnace with Hot Air Circulating System
- Endothermic Gas Generator
- Charging and Transportation System
- Washing Machine

Atmosphere Controlled & Vacuum Furnaces

- High Temperature Atmosphere Controlled & Vacuum Furnaces
- Pressurized Auto Clave
- Atmosphere Controlled Furnaces
- Gas Nitriding Furnaces
- Continuous Furnaces with Endothermic Atmosphere
- Vacuum Furnaces (Driers)
- Bell Type & Pit Type Atmosphere Controlled & Vacuum Furnaces
- Roller Hearth Furnaces for Bright Annealing of Pipes and Sections with Controlled Atmosphere

Aluminum Industry Furnaces

- Aluminum Melting & Holding Furnaces up to 35 Ton
- Aluminum Annealing & Homogenizing Lines
- Aluminum Solution Furnaces According to Aerospace Standards
- Aluminum Ageing Furnaces
- Gas Nitriding Furnaces
- Sheet Preheating Furnaces
- Continuous Aluminum Solution Furnaces
- Aluminum Coils Annealing Furnaces

Electricity Industry Furnaces

- Vacuum Driers
- Bell Type Annealing Furnaces
- Drying Ovens
- Varnish Baking Ovens

General Industrial Furnaces

- Teflon Firing Lines
- Rotary Furnace for Powder Drying
- Fuel-fired/Electrical Industrial Furnaces
- Bell Type Furnaces
- Tempering Furnaces
- Salt Bath Furnaces
- Ceramic Firing Furnaces
- High Temperature Furnaces

Industrial Ovens

- Electrical Industrial Ovens
- Fuel-fired Industrial Ovens Equipped with Heat Exchanger
- Fuel-fired/Electrical Continuous Ovens
- Electrical Ovens for Glass and Composite Sheet Forming
- Vacuum Ovens

High Temperature Furnaces up to 1800 °C

- Electrical High Temperature Furnaces
- Gas-fired High Temperature Furnaces
- Elevator Hearth Furnaces
- Car Bell Furnaces
- High Temperature Atmosphere Controlled Furnaces

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Medium Capacity Furnaces at a Glance

- **1- Industrial Ovens with Air Circulating System**
  - A. Batch Type Electrical Ovens
  - B. Continuous Electrical Ovens
  - C. Fuel-fired (Gas/Gas-Oil) Ovens
- **2- Aluminum Solution Furnaces**
- **3- General Industrial Furnaces**
- **4- Tempering Furnaces**
- **5- Atmosphere Controlled Furnaces**
  - A. Inert Gas Atmosphere Controlled Furnaces
  - B. Gas Nitriding Furnaces
- **6- Bell Type Industrial Furnaces**
- **7- Salt Bath Furnaces**
- **8- Melting & Holding Furnaces**
- **9- Firing of Ceramic Furnaces**
- **10- High Temperature Furnaces**

Industrial Ovens

Continuous Ovens

Fuel-fired (Gas/Gas-Oil) Ovens

MEDIUM CAPACITY
FURNACES

General Industrial Furnaces

Melting & Holding Furnaces

High Temperature Furnaces

Tube Furnaces

Atmosphere Controlled & Vacuum Furnaces









Bell Type Furnaces

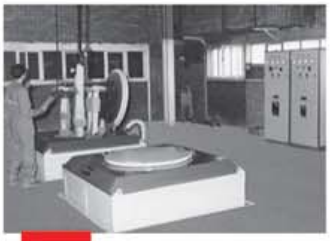



Tempering Furnaces






Salt bath Furnaces



ATBIN INDUSTRIAL GROUP

Ovens & Aluminum Solution Furnaces

1- Industrial Ovens with Air Circulating System

A. Batch Type Electrical Ovens

B. Continuous Electrical Ovens

C. Fuel Fired (Gas/Gas-Oil) Ovens

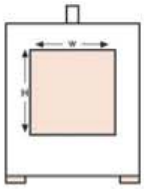
2- Aluminum Solution Furnaces
with Air Circulating System

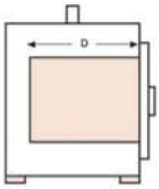
Industrial Ovens with Air Circulating System

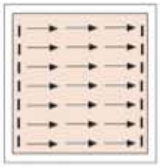
ATBIN

A. Batch Type Electrical Ovens

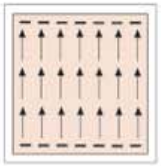
AF 16000C



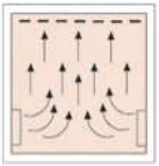




Horizontal Air Flow



Vertical Air Flow



Combination Air Flow

Model	Max. Temp. 250°C		Max. Temp. 400°C		Internal Dimension (mm)			Volume (Liter)	Air Circulation System			Loading System			Supply Voltage
	Max. Power (kW)	Insulation Thickness (mm)	Max. Power (kW)	Insulation Thickness (mm)	H	W	D		V	H	C	Shelf	Trolley	Wagon	
AF 125	4.5	80	6	120	600	420	500	125	•			•			380V-3 Phase+N
AF 250	9	80	12	120	750	550	600	250	•	•		•			
AF 400	12	80	15	120	800	700	700	400	•	•		•			
AF 600	15	80	18	120	1000	800	750	600	•	•		•			
AF 1000	18	80	24	120	1000	800	1250	1000			•	•	•		
AF 2000	24	80	33	120	1500	1200	1200	2000			•		•	•	
AF 4000	31	80	42	120	1800	1500	1500	4000			•		•	•	
AF 6500	42	80	63	120	2000	1800	1800	6500			•		•	•	
AF 10000	63	80	75	120	2400	2200	2000	10000			•		•	•	
AF 16000	72	80	100	120	2600	2500	2500	16000			•			•	
AF 25000	100	80	130	120	2800	2500	3500	25000			•			•	

- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.
- Horizontal air flow ovens of more than 400 lit volume are subject to dimension modulations.

Industrial Ovens with Air Circulating System

ATBIN

A. Batch Type Electrical Ovens

AF 5400C

Applications:

- Heat treatment: stress relieving, aging, ...
- Drying of paint, resin, powder, welding electrods, glassware, components and parts, ...
- Baking, curing and sterilizing of different types of materials
- Quality control tests in different temperatures for long periods

AF 7200H
Bi-Celular Oven

AF 7200H
Bi-Celular Oven

Extra Options:

- Cable entry port
- Fitting and inert gas connection
- Viewing port or window on door
- Interior light
- Internal chamber moisture control and display
- Double-door design
- Continuous system

A. Batch Type Electrical Ovens

AF 15000C

Electrode Baking Ovens

AF 20000C

Electrical Ovens for Glass & Composite Sheets Forming

AF 45000C

AF 20000C

AF 2000C

Loading

Industrial Ovens with Air Circulating System

ATBIN

A. Batch Type Electrical Ovens

AF 125H

Specifications:

- Air circulation: vertical / horizontal / combination
- High temperature uniformity
- High temperature stability
- Without radiation in internal chamber
- High quality heating elements
- Loading: shelf runner / trolley / wagon
- Damper with manual control
- High grade insulation
- Variety of temperature control systems
- High quality casing
- Door sealing by means of silicon rubber band

AF 1000H

AF 1500H
Special Dimension

AF 125V

Industrial Ovens with Air Circulating System

ATBIN

A. Batch Type Electrical Ovens

AF 4000C

AF 2000C

AF 2000C

AF 16000C
Special Dimension

AF 16000C

B. Continuous Electrical Ovens

AFC 4000C
Special Continuous Oven

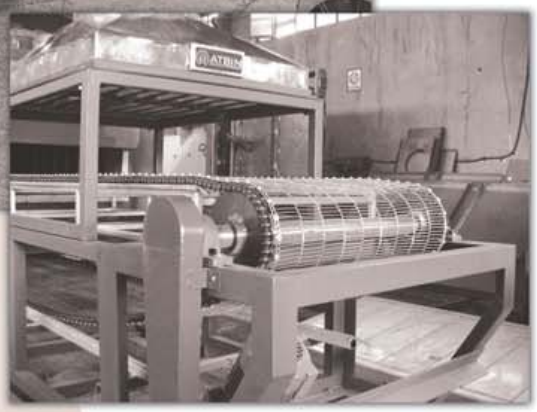
AFC 3000C

AFC 7000C

AFC 5000C

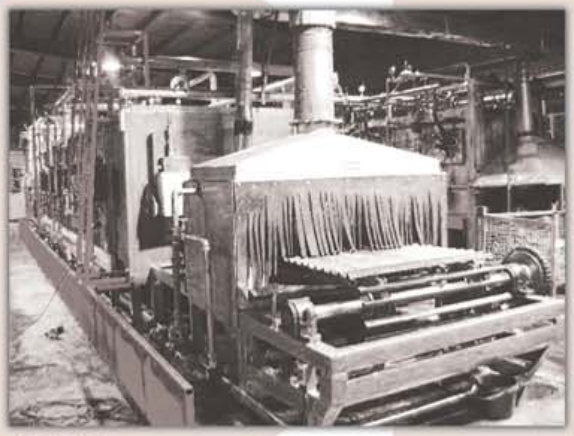
AFC 15000VB

AFC 9000C



Continuous Ovens with Hot Air Circulation

- Electrical/Fuel-fired heating system
- Conveyorized movement system (chain, mesh belt, ...)
- Three zones of preheating, heating and cooling
- Adjustable output speed and heating cycles



AFC 17000VB

AFC 5000C

Industrial Ovens with Air Circulating System

ATBIN

C. Fuel Fired Ovens

AF 6300B

AF 2000B

Applications:

- For drying, varnish baking, paint & resin drying, metalic parts preheating, electrode baking, paper, filter & plastitc dryers

Specifications:

- Hot air circulation
- High temperature uniformity
- High temperature stability
- Heat-exchanger for indirect heat transfer
- No combustion products inside the operating chamber
- Without radiation in internal space
- High quality fuel-fired burners
- Loading: shelf runner / trolley / wagon
- Damper with manual or automated control
- High grade insulation

C. Fuel Fired Ovens

AF 21000B

Gas-fired industrial oven

- Capacity: 25m^3
- Temperature: 450°C
- Equipped with heat exchanger for indirect heating
- Special design of the air ducts, number and location of the circulating fans according to the loading method and in an arrangement to reach to the best thermal uniformity

AF 25000B

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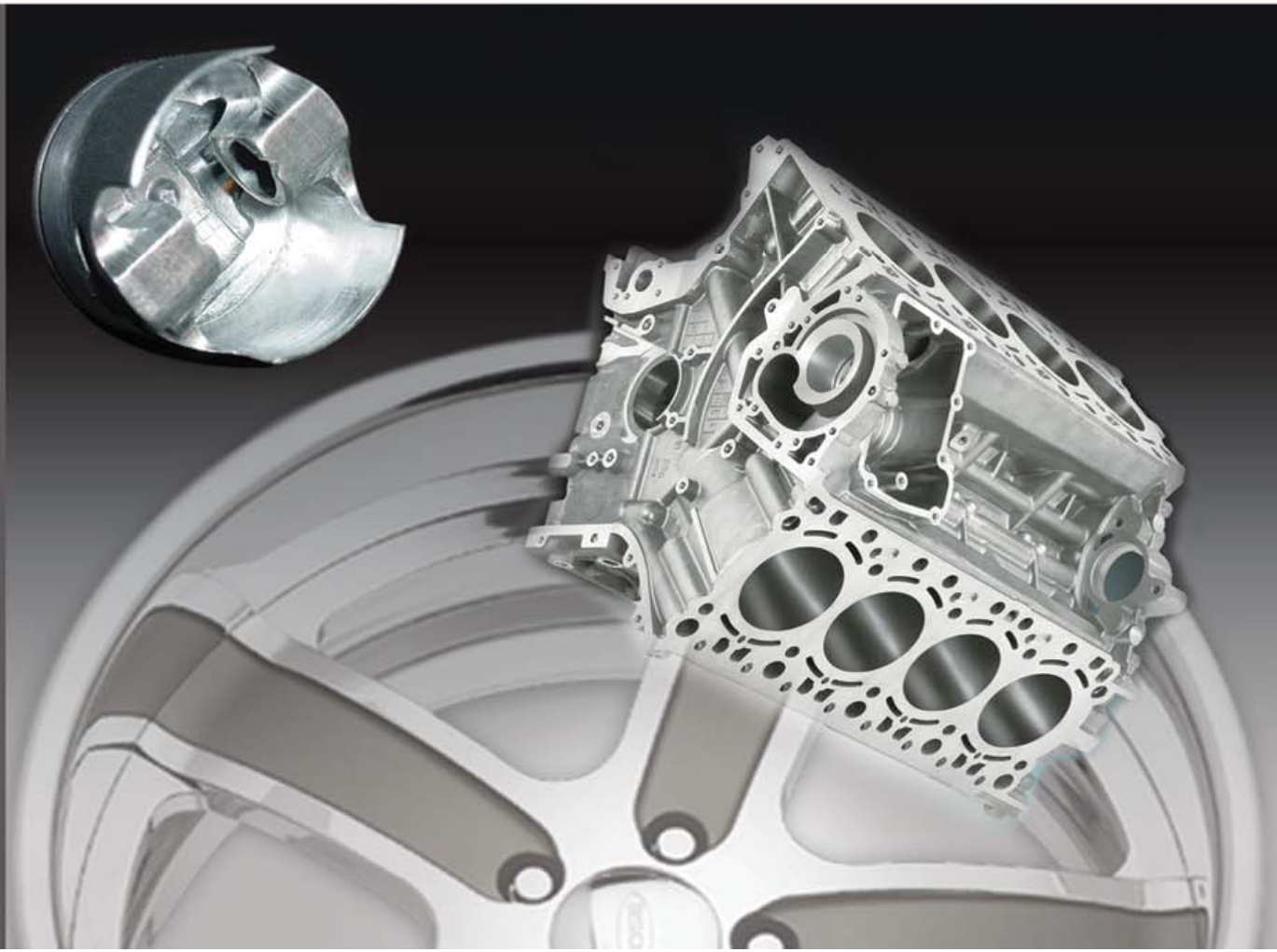
Aluminum Solution Furnaces



2 Aluminum Solution Furnaces

ATBIN

AIS 5400

Aluminum Solution Furnaces

AIS 4200

AIS 1700

Aluminum Solution Furnaces

- For solution heat treating of various types of cast and wrought aluminum alloys (T4, T6, T7)
- Excellent thermal uniformity according to aerospace standards (±3°C)
- Hot air circulation system
- No direct radiation on treated parts

- Electrical/Fuel-fired heating system
- Adjustable discharging speed between 5-15 seconds
- Equipped with quench tank with adjustable quench temperature
- Automatic charging and discharging system

AIS 1700

ATBIN INDUSTRIAL GROUP

Medium Capacity Furnaces

- 3- General Industrial Furnaces
- 4- Tempering Furnaces
- 5- Atmosphere Controlled Furnaces
  - A. Inert Gas Atmosphere Controlled Furnaces
  - B. Gas Nitriding Furnaces
- 6- Bell Type Industrial Furnaces
- 7- Salt Bath Furnaces
- 8- Melting & Holding Furnaces
- 9- Firing of Ceramic Furnaces
- 10- High Temperature Furnaces

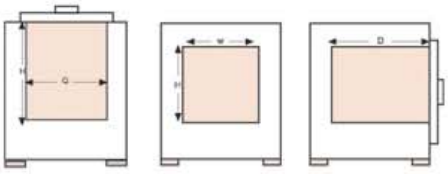
3 General Industrial Furnaces

ATBIN

Applications:

- Heat treatment: hardening, annealing, normalizing, homogenizing, spheroidizing, ...

AIW 10000



AIH series AI series

Model	Max. Temp. (°C)	Internal Dimensions (mm)			Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		H	W	D				
ALF 18	1200	230	230	350	18	4	K	220V-Single Phase
AI 40	1200	250	400	400	40	9	K	380V-3Phase+N
AI 60	1200	300	400	500	60	13	K	
AI 80	1200	350	350	650	80	18	K	
AI 160	1200	450	500	700	160	26	K	
AI 320	1200	550	650	900	320	38	K	
AI 600	1200	650	800	1150	600	51	K	
AI 1000	1200	800	1000	1250	1000	80	K	
AI 2000	1200	1000	1000	2000	2000	100	K	

Model	Max. Temp. (°C)	Internal Dimensions (mm)		Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		Q	H				
AIH 100	1200	460	560	100	27	K	380V-3Phase+N
AIH 180	1200	600	650	180	33	K	
AIH 350	1200	700	900	350	42	K	
AIH 500	1200	800	1000	500	54	K	

- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.

General Industrial Furnaces

AI 4000
with controlled cooling rate

ROB System for Elements

- Facilitation in the replacement of the elements
- Increase in efficient life time of heating elements
- With no limitation for installing on various positions

General Industrial Furnaces

AIW 1500B

Specifications:

- Heating from two or three sides
- Short heat-up time
- Heating elements embedded in grooves or in ceramic plates or muffle type
- Electronic control system with thyristor
- Electrical/Fuel-fired heating system
- Over temperature protection
- Excellent uniformity
- High quality heating elements
- Multi-layer insulation

AI 600B

AI 600B

AIW 1000

General Industrial Furnaces

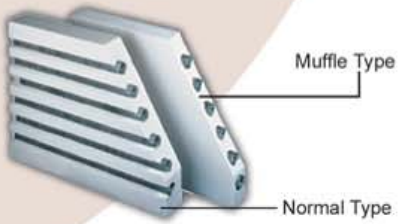

AIH 500


AI 600

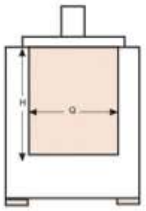

AI 320


AIH 500

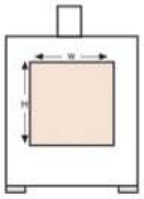

AI 60
Special model



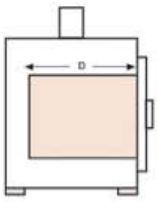
Tempering Furnaces with Air Circulating System



AITH series



AIT series



AIT 500 Roller Hearth

Model	Max. Temp. (°C)	Internal Dimensions (mm)			Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		H	W	D				
AIT 120	750	450	450	600	120	26	K	380V-3 Phase+N
AIT 250	750	600	600	750	250	30	K	
AIT 500	750	750	750	900	500	50	K	
AIT 1000	750	800	800	1600	1000	65	K	

Model	Max. Temp. (°C)	Internal Dimensions (mm)		Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		Q	H				
AITH 200	750	600	800	200	26	K	380V-3 Phase+N
AITH 300	750	600	1000	300	38	K	
AITH 500	750	800	1000	500	50	K	

- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.

Tempering Furnaces with Air Circulating System

AITW 7000

AITH 500

Bogie Hearth Tempering Furnace

- 2 fall-rise type doors
- 2 separated bogies for efficient loading/unloading
- 8 circulating fans to reach to a suitable termal unifotmity
- Special bogie lining for heavy loadings

Applications:

- Heat treatment: tempering, ...
- Baking of welding electrodes

Specifications:

- High grade insulation
- High quality heating elements
- Heating elements on ceramic tubes
- Superalloy internal chamber
- High temperature uniformity
- Equipped with fans for air circulation
- Door safety switch
- Electronic control system with thyristor

AIT 1000

Tempering Furnaces with Air Circulating System

AITH 500

AIT 500

Special AIT 1000

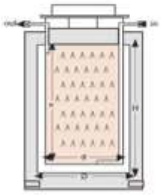
AIT 500

AIT 250

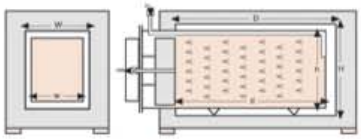
Atmosphere Controlled Furnaces

ATBIN

A. Inert Gas Atmosphere Controlled Furnaces



ABR Series



AIR Series

AIR 400

Model	Max. Temp. (°C)	Internal Dimensions of Furnace (mm)			Internal Dimensions of Retort (mm)			Volume of Retort (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		H	W	D	h	w	d				
AIR 40	1150	350	450	600	250	300	550	40	21	K	380V-3Phase+N
AIR 60	1150	400	480	650	350	350	600	60	27	K	
AIR 100	1150	450	550	700	350	400	650	100	33	K	
AIR 150	1150	550	650	780	450	500	700	180	38	K	
AIR 200	1150	700	750	900	400	600	800	190	48	K	
AIR 400	1150	700	750	1100	550	700	1000	385	69	K	

Model	Max. Temp. (°C)	Internal Dimensions of Furnace (mm)		Internal Dimensions of Retort (mm)		Volume of Retort (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		Q	H	q	h				
ABR 100	1150	670	600	500	550	100	35	K	380V-3 Phase+N
ABR 180	1150	770	750	600	650	180	46	K	
ABR 250	1150	790	900	620	800	240	55	K	

- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.

Atmosphere Controlled Furnaces

ATBIN

A. Inert Gas Atmosphere Controlled Furnaces

AIR 150

ABR 800

Atmosphere Controlled Furnace with Inert Gas & Vaccum Furnace

Applications:

- Heat treatment under protective atmosphere (inert & reduction): annealling, brazing, sintering, ...

Specifications:

- Models:
  - AIR series: Front loading
  - ABR series: Top loading
- Gasket sealed retort
- Inlet and outlet gas valve
- Batch type or continuous models with conveyor
- Electronic control system with thyristor
- High quality insulation with ceramic fiber
- Gas safety system is available
- Vacuum system is available

Vacuum Furnace
Special Dimension

Atmosphere Controlled Furnaces

A. Inert Gas Atmosphere Controlled Furnaces

ABR 100 Vacuum Furnace

- **ATBIN Old Design**

in Atmosphere Controlled Furnaces:

- Max. Temperature 1000°C
- Heat resistant steel retort
- Indirect Heating

ATBIN New Achievement

ATBIN New Achievement

in Atmosphere Controlled Furnaces:

- Max. Temperature 1300°C
- Elimination of the Retort Deformation Problems
- Increase Thermal Efficiency
- Economical

AIR 80
Double-Door Special Dimension

AIR 60

Atmosphere Controlled Furnaces

ABR 300 Gas Nitriding Furnace

Gas Nitriding Furnaces

Application:

- Gas Nitriding treatment through ammonia craking

Atmosphere Controlled Furnaces

ATBIN

B. Gas Nitriding Furnaces

Specifications:

- Refractory body made of high grade ceramic fiber boards
- Equipped with high quality heating elements
- Internal retort made of superalloy steel
- Perfect sealing of the door and retort
- Multi-layer insulations
- Programmable PID control system
- Mini-PLC for process automation
- Well-distributed inlet and outlet gas system ensuring even distribution of gas throughout the retort
- N_2 and NH_3 pressure control system
- Complete control and measurement of the internal gases
- Outlet gas burn-off system including a sparker and pilot flame
- Emergency flame outlet
- Easy to change the retort chamber
- Electrical control system with thyristor

Optional Accessories:

- Rapid air cooling of retort by a fan
- High temperature oxygen sensor
- NH_3 special regulators

Bell Type Industrial Furnaces

AIB 1600

AIB 2200

ATBIN Bell Type industrial furnaces with exquisite capabilities are available in two models:

- General heat treatment
- Atomosphere controlled heat treatment

From among its specifications, high operational pace and volume with a minimum space occupation can be enumerated:

- Various dimensions
- Selectable number of loading stations

Bell Type Industrial Furnaces

AIB 600

Applications:

- General heat treatments and atmosphere controlled heat treatments

Technical Specifications:

- Refractory ceramic boards
- Multi-layer insulations
- Easy loading and loadable by on-unit cranes
- Rotating door for internal space for minimum thermal loss
- Smooth vertical motion of furnace on two metal columns
- Excellent uniformity
- Electronic control system with thyristor
- Without causing disturbing harmonies in the power network
- Over temperature protection

Technical Specifications of Atmosphere Controlled Bell Type Furnaces:

- Superalloy retort
- Cylinder-shape retort design with curved ceiling and special boosters
- Long life and maximum efficiency and high speed in retort changing
- Completely sealed retort
- Equipped with water cooling for sealing system
- Possibility of special design under vaccum

Extra Options:

- Mechanization of all furnace and loading motions
- Fast cooling system
- Installation of gas measurement and control systems
- Gas safety system availability

AIB 800

Salt Bath Furnaces

ASH 70/100

Type of Salt:

- Tempering: AS 140, AS 220, AS 235, AS 300
- Hardening: GS 430, R2/GS 750, R2/GS 540, R2/GS 430, GS 540, GS 750, GS 960
- Carburizing: Ceconstant 50, Ceconstant 80, Constant 110/C3, GS 540
- Nitriding: TF1/AB1

ASL 50/80

Salt Bath Furnaces

ATBIN

Specifications:

- Heating from all sides
- Insulating of furnace with ceramic fibers
- Heating elements on ceramic tubes
- Electronic control system with thyristor
- Application of two zones for optimal uniformity
- Emergency exit for molten salt

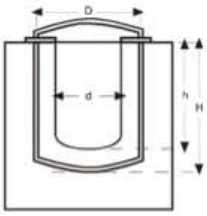
Pot:

- Pot made of low carbon steel, Cr-Ni steel, inconel or titanium

Applications:

- Nitriding
- Carburizing
- Carbunitration
- Tempering
- Heat treatment

ASH 40/30



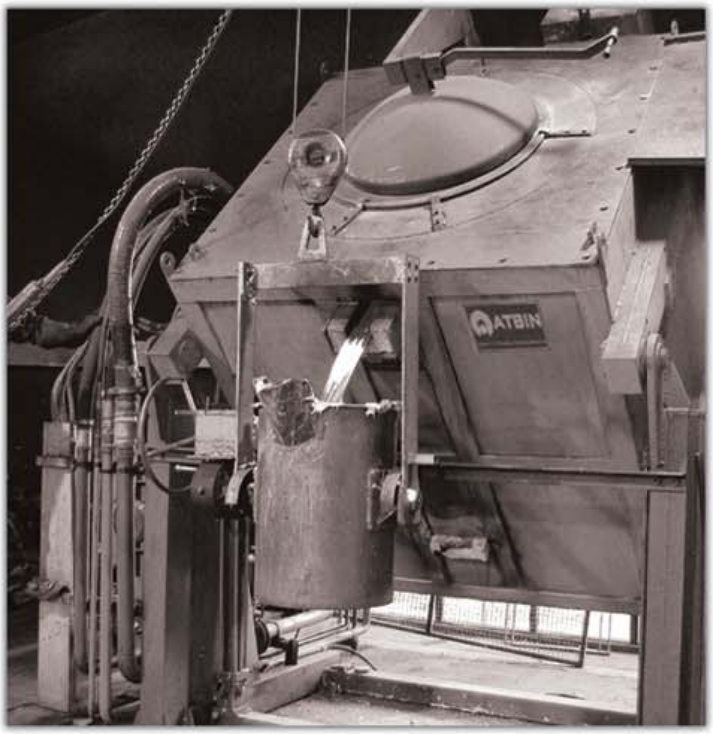
SALT BATH FURNACES 750°C

Model	Internal Dimension (mm)				Max. Power (kW)
	D	H	d	h	
ASL 20/35	400	400	200	350	12
ASL 25/45	450	500	250	450	16
ASL 30/50	500	550	300	500	21
ASL 40/50	600	550	400	500	28
ASL 50/80	700	850	500	800	45
ASL 60/80	800	850	600	800	58
ASL 70/100	900	1050	700	1000	71
ASL 80/120	1000	1250	800	1200	90

SALT BATH FURNACES 1100°C

Model	Internal Dimension (mm)				Max. Power (kW)
	D	H	d	h	
ASH 20/35	400	400	200	350	18
ASH 25/45	450	500	250	450	26
ASH 30/50	500	550	300	500	33
ASH 40/50	600	550	400	500	39
ASH 50/80	700	850	500	800	55
ASH 60/80	800	850	600	800	68
ASH 70/100	900	1050	700	1000	85
ASH 80/120	1000	1250	800	1200	105

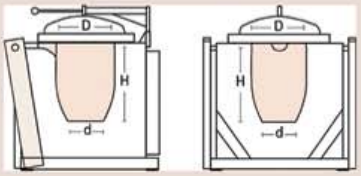
- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.
- The power of the above-mentioned furnaces shall differ depending on amount of salt, charge, heat treatment cycle as well as pot material.



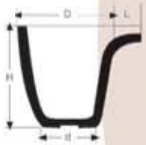
AMT 600 Al/B

Gas-fired Aluminum Melting Furnace

- Capacity: 600kg
- Crucible: SiC, TP 587 H
- Tilting Type



No.	Cap. ac. kg Cu	H (mm)	D (mm)	d (mm)	L (mm)
TP 173 G	120	490	325	240	75
TP 173	120	490	300	235	95
TP 184	200	600	350	260	120
TP 400 G	225	615	350	260	120
TP 723 G	270	635	350	260	120
TP 600	300	805	355	260	130
TP 843	300	675	420	255	155
TP 982	430	800	435	295	135
TP 89	500	740	545	325	135
TP 12	500	940	440	295	150
TP 16	900	970	540	360	160

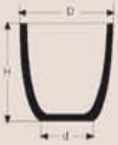


No.	Equivalent	H (mm)	D (mm)	d (mm)	L (mm)
TP 287	BU 200 K	600	530	305	130
TP 287 H		700	530	305	130
TP 387	BU 250 K	630	615	355	160
TP 412	BU 350 K	800	615	355	160
TP 412 H	BU 400 K	900	615	355	160
TP 587	BU 600 K	900	780	435	200
TP 587 H	BU 700 K	1000	780	435	200
TP 800	BU 800 K	1000	880	450	200
TP 800 H		1250	880	450	200
GP 1800/1S*		1000	880	350	175
GP 1800/1S*		1250	880	350	175

Model	Crucible	Crucible Capacity AL- Alloy (kg)	Max. Power (kW)	Max. Temp. (°C)	Supply Voltage
AMT 50/AL	A 150	50	18	1000°C	380V-3 Phase+N
AMT 100/AL	TP 843	100	25		
AMT 200/AL	TP 387	200	45		
AMT 350/AL	TP 412	350	60		
AMT 600/AL	TP 587	600	90		
AMB 150/CU	A 150	150	18	1250°C	380V-3 Phase+N
AMB 300/CU	TP 843	300	25		
AMB 600/CU	TP 287	600	50		

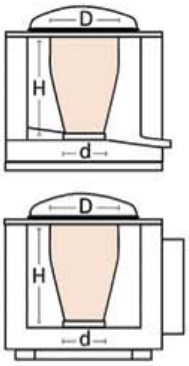
- For holding the molten metal in temperature, only 30-50% total power will be consumed.
- The real capacity is 10% less than the nominal capacity of the crucible.
- In the Chart, the maximum capacity of crucibles has been mentioned.

Model ac. kg Al	H (mm)	D (mm)	d (mm)
A 70	360	295	205
A 80	375	305	215
A 90	380	315	225
A 100	400	325	230
A 120	410	345	245
A 130	420	350	250
A 150	450	370	260
A 175	480	380	270
A 200	500	400	285
A 250	515	420	300
A 300	540	440	315
A 350	590	475	330
A 400	600	500	340
A 500	650	510	350



Model ac. kg Al	Equivalent	H (mm)	D (mm)	d (mm)
BU 100	BC 166	400	527	305
BU 125	BC 167	450	527	305
BU 150	BC 168	490	527	305
BU 175	BC 169	550	527	305
BU 200	BC 171	600	527	305
BU 210	BC 202	500	615	355
BU 250	BC 302	630	615	355
BU 300	BC 401	700	615	355
BU 350	BC 402	800	615	355
BU 350 H	BU 450	900	615	355
BU 500	BC 247	750	775	435
BU 600	BC 263	900	780	435
BU 700		1000	780	435
BU 750		880	870	450
BU 800		1000	870	450
BU 800 H		1250	880	450

AMB 600 Al



Bale-out Furnaces

Model	Crucible	Crucible Capacity AL- Alloy (kg)	Power (kW)	Max. Temp. (°C)	Supply Voltage
AMB 50/AL	A 150	50	18	1000	380V-3 Phase+N
AMB 100/AL	A 300	100	25		
AMB 200/AL	BU 200	200	45		
AMB 300/AL	BU 300	300	55		
AMB 400/AL	BU 400	400	60		
AMB 500/AL	BU 500	500	70		
AMB 150/CU	A 150	150	18	1000	380V-3 Phase+N
AMB 300/CU	A 300	300	25		
AMB 400/AL	A 400	400	35		
AMB 500/CU	A 500	500	40		
AMB 600/CU	BU 200	600	50		

- For holding the molten metal in temperature, only 30-50% total power will be consumed.
- In the Chart, the maximum capacity of crucibles has been mentioned.
- The real capacity is 10% less than the nominal capacity of the crucible.

AMT 600/Al

Applications:

- Melting and holding of non-ferrous metal (Al alloys & Cu alloys)

Specifications:

- Heating from all sides
- Heating elements on ceramic tubes
- Emergency exit for molten metal
- Electronic control system with thyristor
- Models: bale out / tilting
- Excellent heat insulation for maximum energy saving

Crucible:

- Graphite / SiC crucible
- With spout / without spout

AMB 150/Cu

AMB 300/AL

AMT 420 Al/B

AMB 50/Cu

- Location of thermocouple and temperature measurement could be in one of the following methods:
  - Thermocouple installed at the internal furnace wall, measuring the temperature at the rear of the crucible
  - Thermocouple installed inside the crucible wall (applicable just for stationary furnaces)
  - Thermocouple installed inside the molten metal by means of special ceramic tubes
- Easy maintenance & repairing of the lining by means of new isolation techniques
- Optional ventilation system to remove process vapors and gases

AMT 350 Al/B

Firing of Ceramic Furnaces

ATBIN

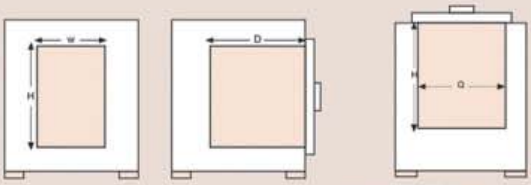
AC 1000

Application:

- Firing of ceramics, glassware, porcelain, stoneware, ...

Specifications:

- Heating from all sides
- Slow heat-up rate
- Temperature uniformity
- Heating elements on ceramic tubes or in grooves
- Models: front loading / top loading



AC series ACH series

Model	Max. Temp. (°C)	Internal Dimension (mm)			Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		H	W	D				
AC 150	1200	640	440	560	150	18	K	380V-3 Phase+N
AC 300	1200	770	540	680	300	26	K	
AC 450	1200	960	620	760	450	33	K	
AC 650	1200	1050	680	830	600	41	K	
AC 1000	1200	1000	800	1250	1000	51	K	
AC 1500	1200	900	900	1900	1500	70	K	
AC 2200	1200	1000	1000	2200	2200	96	K	
AC 3300	1200	1200	1000	2800	3300	124	K	

Model	Max. Temp. (°C)	Internal Dimension (mm)		Volume (Liter)	Max. Power (kW)	Thermo Couple	Supply Voltage
		Q	H				
ACH 120	1200	500	650	120	24	K	380V-3 Phase+N
ACH 180	1200	600	650	180	30	K	
ACH 350	1200	700	900	350	38	K	

- The powers cited above are nominal and subject to modulation.
- Other dimensions are available.

Firing of Ceramic Furnaces

AC 4000

AI 160

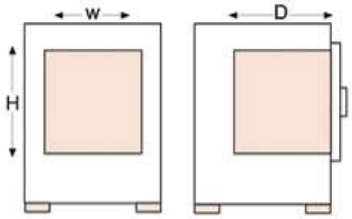
AC 450

AC 120

High Temperature Furnaces up to 1800°C

ATBIN

AHT 64/17



Specifications:

- Low weight and compact design
- Minimum thermal loss and low power consumption
- High accuracy in high temperatures
- High grade Al_2O_3 insulation
- Double-wall construction with low external casing temperature
- High quality $MoSi_2$ heating elements
- Fast heat-up
- Door with parallelogram type movement
- Possibility of design for controlled atmosphere (Ar, N_2, O_2)
- Programmable control system with computer control
- Equipped with double type B termocouples & over temperature protection system
- Temperature ranges: 1600°C / 1750°C / 1800°C
- Loading type: front loading / elevator hearth

AHT 40/17

Model	Max. Temp. (°C)	Internal Dimensions (mm)			Volume (Liter)	Max. Power (kW)	Supply Voltage
		H	W	D			
AHT 05/16	1600	200	150	150	5	5	220V1/PE
AHT 10/16		200	200	250	10	10	220V1/PE
AHT 12/16		250	200	250	12	10	220V1/PE
AHT 40/16		350	300	350	40	12	400V2/PE
AHT 64/16		400	400	400	64	13	400V2/PE
AHT 05/17	1750	200	150	150	5	5	220V1/PE
AHT 10/17		200	200	250	10	10	220V1/PE
AHT 12/17		250	200	250	12	12	220V1/PE
AHT 40/17		350	300	350	40	13	400V2/PE
AHT 64/17		400	400	400	64	14	400V2/PE
AHT 10/18	1750	200	200	250	10	10	220V1/PE
AHT 16/18		260	200	300	16	12	400V2/PE

- Other Dimensions are available.

High Temperature Furnaces up to 1800°C

AHT 12/17

AHT 64/17 Elevator hearth

AHTR 10/18

Specifications:

- Temperature: up to 1800°C
- Possible operating atmospheres:
  - Argon
  - Nitrogen
  - Helium

AHTR 200/18

ATBIN INDUSTRIAL GROUP

AIC FZE (ATBIN Int'l Co FZE)
PO Box 191308,107 A, Mohd Al Habrosh
Bldg , Mina Rashid Ave., Dubai, UAE
Tel: 00971 4 345 1600 / 345 3263
Fax. 00971 4 345 3264
URL: www.atbinco.com
Email: info@atbinco.com

اية أي سي م م ح (شركة أتبين الدولي)
رقم رخصة: ٠٦٦٠٧ صندوق بريد: ١٩١٣٠٨
بناء محمد الحبرش، شارع مينا راشد، دبي، امارات العربي المتحدة
هاتف: ٠٠٩٧١ ٤ ٣٤٥ ١٦٠٠ / ٣٤٥ ٣٢ ٦٣
فكس: ٠٠٩٧١ ٤ ٣٤٥ ٣٢ ٦٤
موقع الانترنت: www.atbinco.com
بريد الكتروني: info@atbinco.com