
MNK Energy

Energy Efficiency Technologies





Heating | Hot Water | ORC | Large Systems
Reliable and High Efficient Products

About Us

MNK is an engineering&manufacturing company that was founded by **M**ehmet **N**uri **K**arahan in 1999. Firstly, companies main facility is special purposed machinery.

In 2013 MNK has started Energy project with Mustafa Karahan who is 2nd generation of company and experienced in Energy sector. With its specialized engineers in design, analysis and test; MNK provides turn-key especially thermal energy project services.

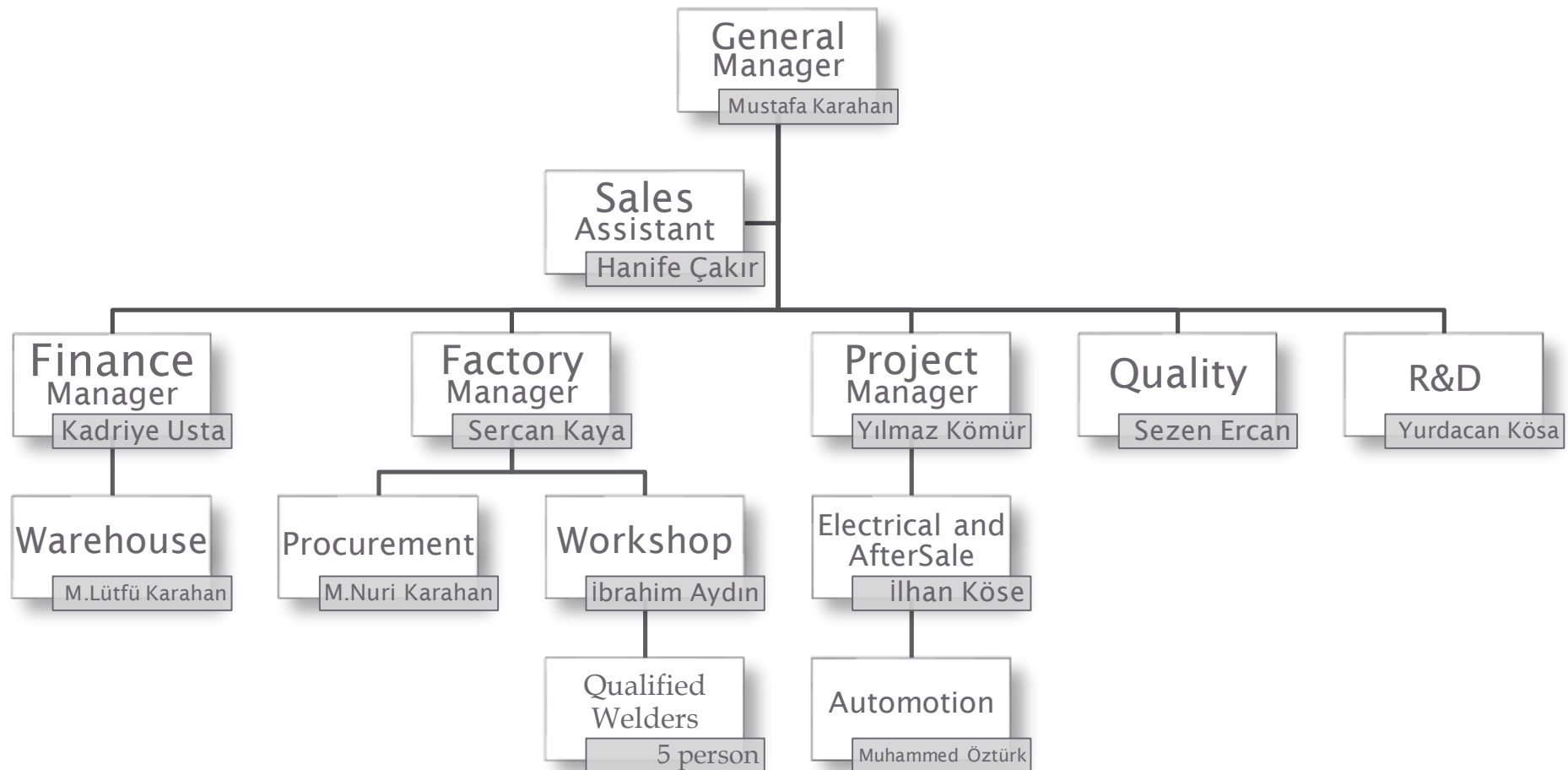
Main office is in Uludağ University, Ulutek Technology Development Zone in Bursa and Manufacturing facilities are in Kayapa O.S.B. in Bursa. MNK manufacturing facilities just cover high precision and quality Pressure Vessel Welding works.

MNK has an special design Heat Recovery Solutions for companies which needs custom designs.

At a Glance

- 1999** MNK Mechanical Co. established by Mehmet Nuri Karahan
- 2013** transformed to MNK Energy&Boiler by Mustafa Karahan
- 2014** launched The R&D office into Technology Improvement Zone
- 2014** started to manufacturing facility in Nilufer Industrial Zone Factory
- 2014** commissioned Turkey's biggest Steam Accumulator(2 unit 225 m³)
- 2015** first key-turn Steam Boiler Plant export to Germany
- 2016** commissioned Turkey's biggest Agricultural based Biogas Plant
- 2017** signed contract European biggest LFG based ORC Plant
- 2018** first patent (GasketFree Air Sealing Damper)

Organization Chart



Design

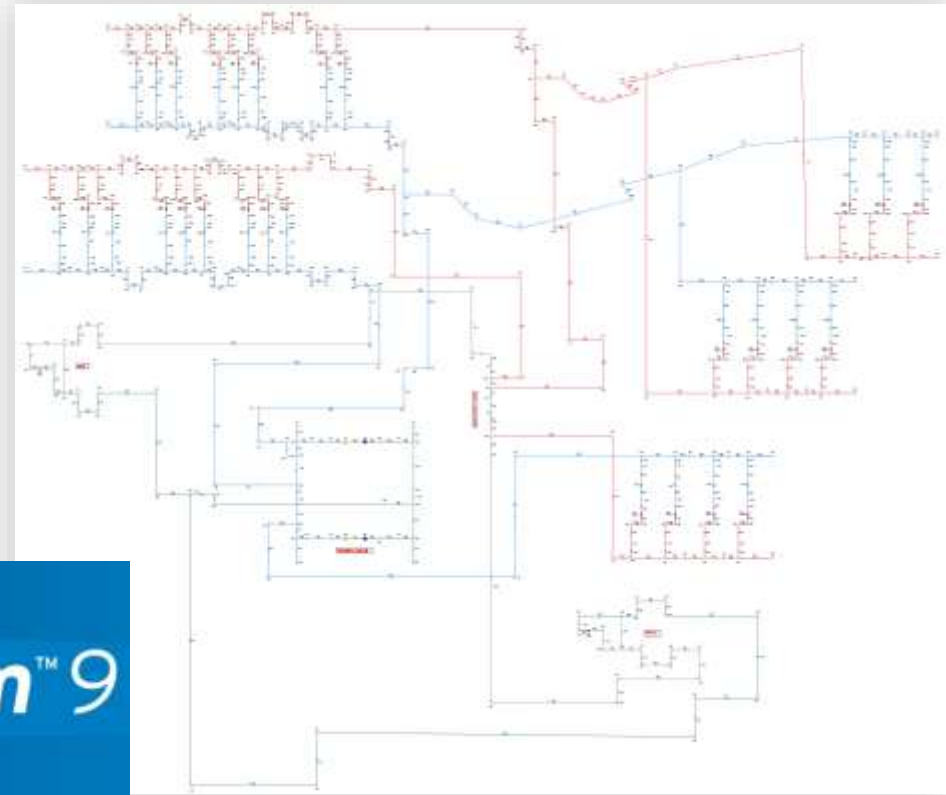


Incompressible Flow Analysis

AFT Fathom is practical fluid dynamic simulation software used to calculate pressure drop and flow distribution in liquid and low velocity gas piping and ducting systems.

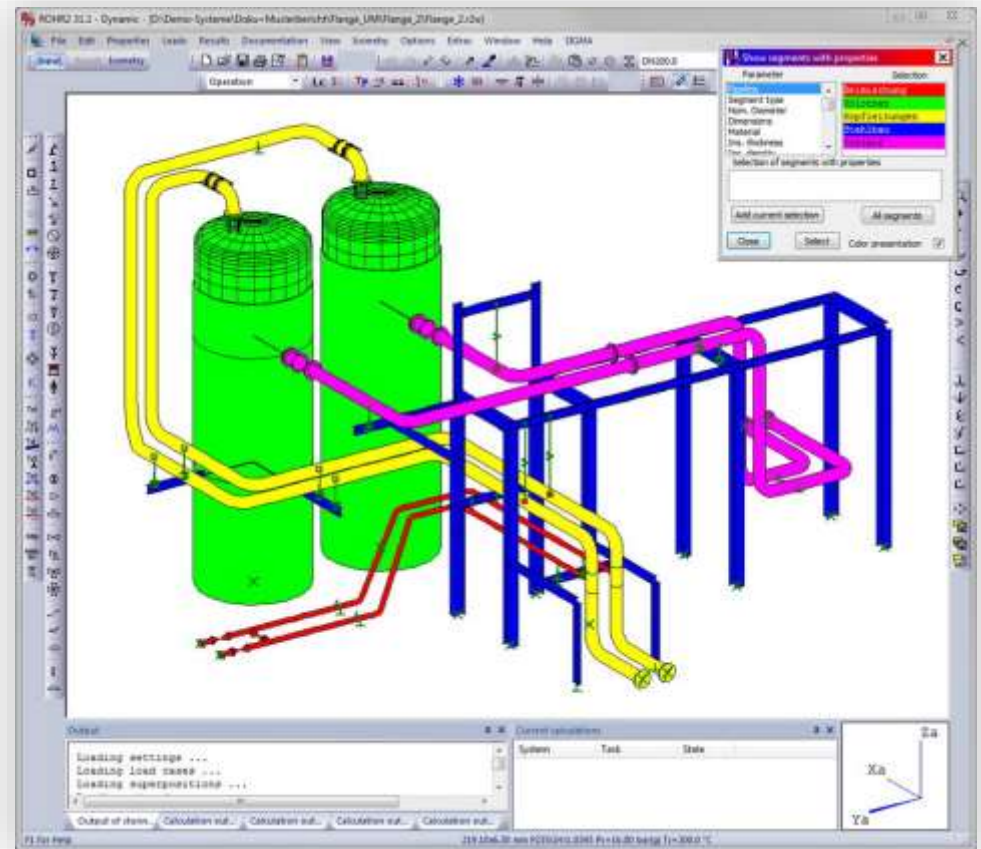
*Incompressible Pipe Flow Analysis
& System Modeling Software*

AFT Fathom™ 9



Pipe Stress Analysis

ROHR2 is the leading Software for Pipe Stress Analysis, a standard tool for pipe static and structural framework analysis.



www.mnkenerji.com



High Quality
Manufacturing
Facilities

List of Equipments

Lifting, Positioner

Machine	Brand	Capacity	Quantity
Crane	Özfatihler	25 ton	1 pc
Crane	Özfatihler	5 ton	1 pc
Forklift	JAC	3 ton	1 pc
Hand Pallet Truck	JAC	5 ton	1 pc
Hand Pallet Truck	JAC	3 ton	1 pc
Welding Positioner	MNK	40 ton	1 pc
Welding Positioner	MNK	30 ton	1 pc
Welding Positioner	MNK	20 ton	1 pc

List of Equipments

Cutting, Bending, Forming

Machine	Brand	Capacity	Quantity
Plasma Cutter	Durma 260A	3,5 m X 12 m	1 pc
Mobile Plasma Cutter	SAF 130A		1 pc
Oxygen Cutter	Durma	3,5 m X 12 m	1 pc
Mobile Oxygen Cutter	Tanaka		1 pc
Sheet Bender	Bendmak	2 m - 25 mm	1 pc
Hydraulic Press	Borhanlı	150 ton	1 pc
Booster Tube Bender	Cansan	65 mm	1 pc
Tube Expander(Mandrel)	Yurtbaşı	3"	1 pc

List of Equipments

Machining

Machine	Brand	Capacity	Quantity
Radial Driller	TOZ	80 mm X 1 m	1 pc
Magnetic Driller	AEG	80 mm	1 pc
Universal Driller	Tiryaki	50 mm	2 pcs
Lathe	TOZ	600 mm X 3000 mm	1 pc
NC Milling Machine	First	800 mm X 400 mm	1 pc
Pipe Notcher Machine	Cesurbend	90 mm	1 pc
Tube End Preparation Mac.	Babcock	101,6 mm	1 pc
Sheet Beveller	NKO	50 mm	1 pc

List of Equipments

Welding

Machine	Brand	Capacity	Quantity
SAW Weld. Machine	ESAB	1000A	1 pc
MIG Welding Machine	ESAB	400A	1 pc
MIG Welding Machine	Buğra	400A	3 pc
Column Boom Positioner	ESAB	4 X 5 m	1 pc
TIG Welding Machine	ESAB	300A	10 pcs
TIG Welding Machine	Blueweld	400A	4 pc
SMAW Weld. Machine	Oerlikon	500A	1 pc
Nozzle Beveller	NKO	16 mm Thickness	1 pc

List of Equipments

Surface Preparation, Painting

Machine	Brand	Capacity	Quantity
Infrared Temperature for Painting	TESTO	830	1 pc
Surface Profile for Sandblasting	PosiTector	0 – 1200 µm	1 pc
Humidity Meter for Painting	TESTO	625	1 pc
Surface Thickness for Painting	TESTO	0 – 1330 µm	1 pc
Sandblast&Painting Booth	MNK	12X10X8 m	1 pc
Sandblast Machine	Endüstri GM	200 liter	1 pc
Screw Compressor	Dalgakıran	45 kW	1 pc
Airless Painting Machine	Wagner	600Watt 110Bar	1 pc

List of Equipments

Acceptance Test

Machine	Brand	Capacity	Quantity
Boiler Tube Cleaning Mac.	MNK	1,5 kW	1 pc
Multimeter	FLUKE		1 pc
FlueGas Analyzer for Accept. Test	TESTO	300 LX	1 pc
Digital Pressure Indicator	SIKA	E2	1 pc
Energy Analyser	Schneider		1 pc

References



KÖRFEZ ENERJİ



ORTADOĞU ENERJİ

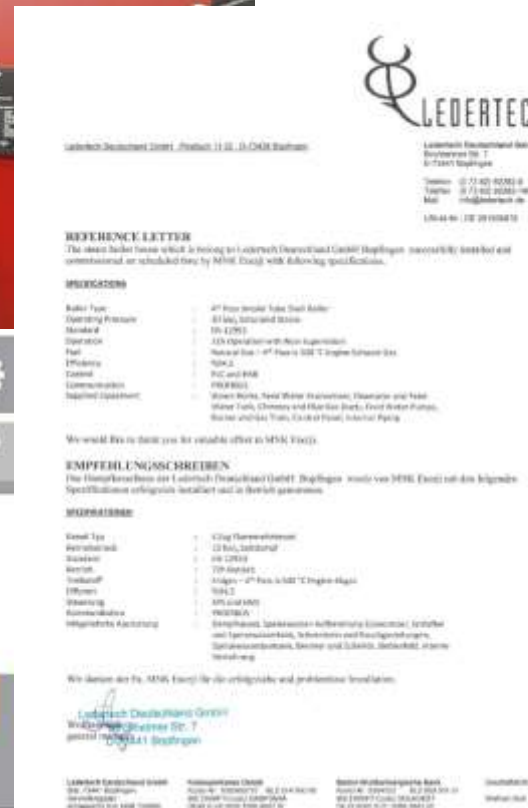
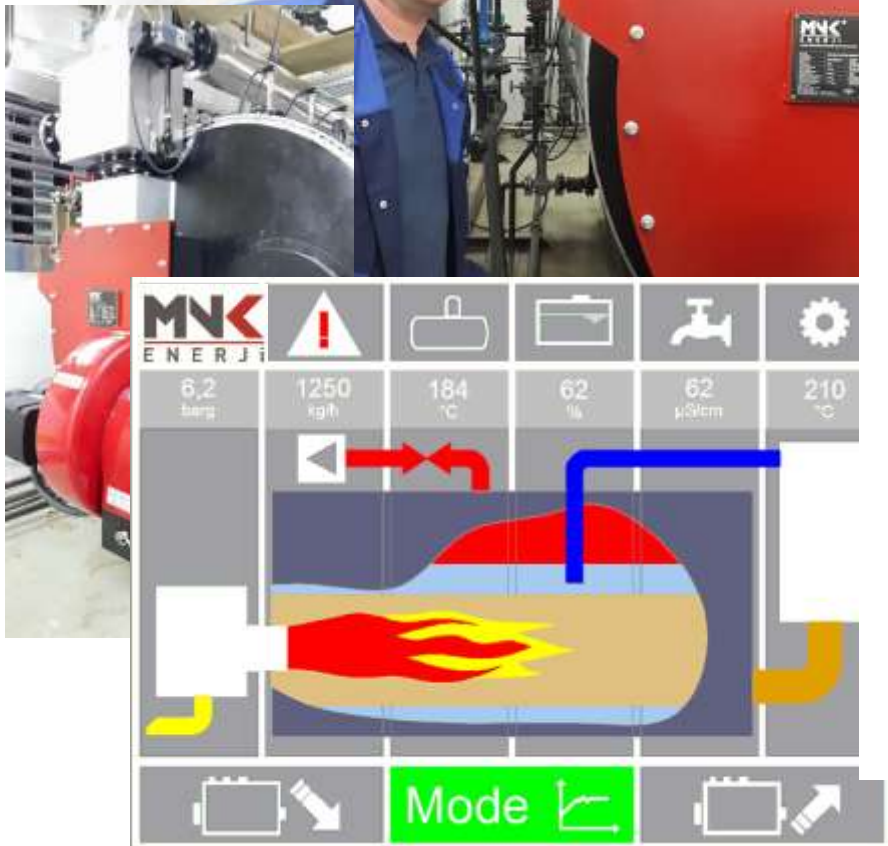


PETROGAS
GAS SYSTEMS



ŞİŞECAM





LEDERTECH Deutschland GmbH



4 Pass Boiler
Waste Heat
Boiler and Fired
Boiler in Same
Body Working in
Germany



**4 X 17 MW
Superheated
Shell Boiler for
1.800 MW Alba
Power Plant**



ORTADOĞU ENERJİ

2 unit
Thermal Oil
Heat Recovery for
ORC



halkalı kağıt®
karton sanayi ve ticaret A.Ş.



First and Single
Natural Gas, Syngas
Biogas Fired Steam
Boiler 6,3 tph
10 bar_g



POLMAR 
Automotive Plastics

3 Pass Fired
Steam
Accumulator
Nominal 7 tph
Peak 30 tph
(for 3 min)



Steam Boiler
For Turkey Largest
Energy Efficiency
Laboratory



10 Units
1 MW Biogas Engine
Waste Heat
Boiler to Produce
12 bar_g Steam





Gasket
Free

Bi-Plane
%100
Air Sealing
Dampers



nuh
yapı ürünleri a.ş.



Waste Steam
Recovering and
Accumulation

Factory



R&D Office in TechnoPark

