

ECO FLEX

METAL HOSES



MADE IN
UKRAINE





ECO-FLEX LLC is a Ukrainian company with its own complete manufacturing cycle, facilities located in Kharkiv. We specialize in manufacturing and selling stainless steel hoses and further products manufactured from it.

Our main values:

- Quality
- Technical support
- Reliable and long term partnership.



Video
about the
Company

COMPANY HISTORY



History
of the
Company

2007
was founded
and registered
as ECO-FLEX TM,
starting to supply
stainless steel hoses
in Ukraine

2010
becomes
the Ukrainian market
leader with stainless
hoses for gas and
water and starts
cooperating
with producers
of heat equipment.



As a manufacturer ECO-FLEX LLC has the biggest in Ukraine distribution network in selling of the metal hoses for gas and water equipment connection. Also company has long term and stability business relationships with manufacturers of heating equipment and stainless steel hoses around the world.

Company offers wide range of products manufactured from the corrugated stainless steel hoses:

for engineering (to connect gas and water equipment)

for heat exchangers (boiler hoses)

for sprinkler systems

for industrial use (braided)

metal hoses as semi-finished products

OEM-hoses

2012/13
started its own overall manufacture stainless steel metal hoses and products from it.

2016
started first export deliveries to the European countries.

2020
implementing ISO 9001 quality management system.

2021
starting manufacturing of OEM products

GAS EURO

**APPLICATION AREA**

Connection gas to domestic appliances where absolute safety is obligatory.

ADVANTAGES

High flexibility.
 Additional PVC cover as protection from environmental and external influence.
 Extremely damage resistant.
 Safety.
 Long working life.

DN	Connection	Connection Type	Length, mm
12	1/2"	M/F; F/F	500 - 2000

GAS STANDARD/SUPER

**APPLICATION AREA**

Connection gas to stoves, boilers and other types of gas equipment.

PRODUCED IN TWO VARIANTS

Without coating.
 With PVC coating.

DN	Connection	Connection Type	Length, mm
12	1/2"	M/F; F/F	300 - 5000
16	3/4"	M/F; F/F	300 - 5000



WATER HOSES

WATER SUPER



APPLICATION AREA

Connection of different water-using equipment: boilers, water heaters, towel dryers, radiators, etc.

ADVANTAGES

Effortless installation.
Resistant to corrosion.
Extremely damage resistant.
Long working life.

DN	Connection	Connection Type	Length, mm
12	1/2"	M/F; F/F	200 - 2000
16	3/4"	M/F; F/F	200 - 2000
20	1"	M/F; F/F	200 - 2000
25	1 1/4"	M/F; F/F	200 - 2000

WATER HEAT



APPLICATION AREA

Connection of boilers, water heater connections, storage and buffer tanks, fancoil systems.

PRODUCED IN TWO VARIANTS

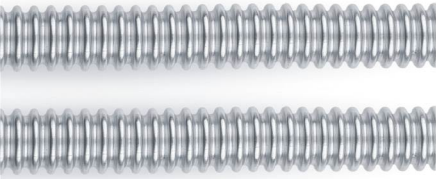
With insulation - covered with TC insulation to decrease thermal losses.
Without insulation.

DN	Connection	Connection Type	Length, mm
12	1/2"	M/F; F/F	200 - 2000
16	3/4"	M/F; F/F	200 - 2000
20	1"	M/F; F/F	200 - 2000
25	1 1/4"	M/F; F/F	200 - 2000



Water
Hoses

METAL HOSES



Hose material is AISI304 or AISI316L other stainless steel grades available upon request. Open pitch hoses. Mated with quick-lock fittings or fittings set.



Info
about
PROFI

DN	Inner/Outer diameter, mm	Min. single bending radii, Rmin, mm	Working pressure at 20 °C, bar	PN according ISO 10380
12	12,3/16,5	18	16	16
16	16,6/21,4	25	16	16
20	20,6/26,1	30	10	10
25	26,1/31,6	35	8	6
32	32,6/38,6	45	4	2,5

HEAT PUMPS



Flexible metal hose in TC insulation designed special for heat pumps connections. Available for diameters DN25 and DN32. Pressures range up to 8 bar (depending on nominal diameter). Hose material is AISI316L.

Open pitch hoses. Insulation – TC, thickness 9 mm, temperature range -30 °C - +100 °C

DN25 - Mated with quick-lock fittings or fittings set

DN32 - Mated with fittings set

DN	Inner diameter, mm	Outer diameter, mm	Working pressure at 20 °C, bar	Fitting size
25	26,1	31,6	8	1 1/4"
32	34,1	40,4	4	1 1/2"

QUICK-LOCK FITTINGS



Designed specially for quick safe and durable installation of metal hoses without using any special tools.

MAXIMAL WORKING TEMPERATURE 280 °C

MAXIMAL WORKING PRESSURE 16 bar

FITTING MATERIAL brass

CONNECTION TYPE Male, Female, Coupling

DN	Male	Female	Coupling
16	3/4"	3/4"	DN16-DN16
20	3/4", 1"	3/4", 1"	DN20-DN20
25	3/4", 1"	3/4", 1"	DN25-DN25

SOLAR HOSES



TYPES OF METAL HOSES FOR SOLAR SYSTEMS
 S1 – SINGLE
 S2 – TWIN
 with silicone
 electric cable

Metal hose with special EPDM insulation for high temperatures up to +175 °C with external protection covering against harsh weather & UV-radiation. It's an ideal solution for connecting solar systems with both indoor and outdoor application. Material of hose – AISI304, 304L, 316L. Mated with quick-lock fittings or fittings set.

DN	Connection	Length of coils, m
16	3/4"	10, 15, 20, 25, 50
20	1"	10, 15, 20, 25, 50
25	1 1/4"	10, 15, 20, 25, 50

FITTINGS SET



Installation of metal hoses with using of special tool.

FITTING SET INCLUDES
 Nut nickel-plated brass
 Lock ring AISI304
 Gasket biconite

DN	Fittings	DN	Fittings
12	1/2"	25	1 1/4"
16	3/4"	32	1 1/2"
20	1"		

SELF ASSEMBLING



Designed for quick assembling of fittings set to the metalhose. Can be used for all types of Profi Metalhoses.

For metalhoses DN12-DN25

Pipe cutter	4-28, mm
Hammer	hammer for expanding
Nozzle for expanding	DN12, DN16
Nozzle for expanding	DN20, DN25
Instruction	included

Corrugated Metal Hoses Braided and Unbraided

Other dimensions
of metal hoses
are available
upon request



Close pitch
Flexibility- maximal

Marking	DN	Type	Inner diameter, mm	Outer diameter, mm
01.0	12	Unbraided	12,1±0,2	17,1±0,2
01.1	12	Halfbraided	12,1±0,2	17,8±0,2



Standard pitch
Flexibility- standard

02.0	12	Unbraided	12,2±0,2	16,7±0,2
02.1	12	Braided	12,2±0,2	17,7±0,2
02.0	16	Unbraided	16,3±0,2	21,8±0,2
02.1	16	Braided	16,3±0,2	22,8±0,2
02.0	20	Unbraided	20,1±0,3	26,4±0,3
02.1	20	Braided	20,1±0,3	27,6±0,3
02.0	25	Unbraided	25,6±0,3	32,3±0,3
02.1	25	Braided	25,6±0,3	33,5±0,3



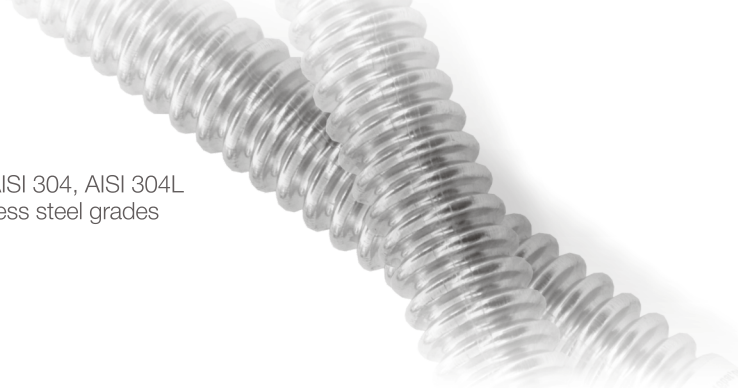
Open pitch
Flexibility- minimal

03.0	8	Unbraided	8,2±0,2	11,8±0,2
03.0	12	Unbraided	12,3±0,3	16,5±0,3
03.0	16	Unbraided	16,6±0,3	21,4±0,3
03.0	20	Unbraided	20,6±0,3	26,1±0,3
03.0	25	Unbraided	26,1±0,4	31,6±0,4
03.0	32	Unbraided	34,1±0,5	40,4±0,5



Video
about
Metal Hoses

Standard hose material is AISI 304, AISI 304L and AISI 316L. Other stainless steel grades available upon request.



Wall thickness, mm	Number of corrugations per 1 m	Min. bending radius (static), mm	Nom. bending radius (dynamic), mm	Working pressure at 20 °C, bar	PN according ISO 10380
0,15	464	35	110	7	6
0,15	464	45	140	40	40
0,15	313	24	140	8	6
0,15	313	45	140	75	63
0,18	274	28	160	8	6
0,18	274	58	160	60	50
0,18	266	36	170	4	2,5
0,18	266	70	170	63	63
0,20	263	46	190	3	2,5
0,20	263	85	190	46	40
0,15	321	16	Not suitable for dynamic load	18	16
0,15	238	18	Not suitable for dynamic load	16	16
0,15	204	25	Not suitable for dynamic load	16	16
0,18	192	30	Not suitable for dynamic load	10	10
0,20	177	35	Not suitable for dynamic load	8	6
0,22	175	45	Not suitable for dynamic load	4	2,5

Metal Hoses as Heat Exchangers

BOILER HOSES



Heat exchangers with corrugated hoses offer several advantages compared with traditional straight-tube heat exchangers.

ADVANTAGES

- | The large surface of the corrugated metal hose enables good heat transmission.
- | The turbulent flow increases heat transmission and reduces the build-up of lime deposits.
- | It does not require any additional pipe bending equipment, and, consequently, there are no labor costs to bend a metal hose.
- | Smaller dimensions of the finished heat exchanger are reached due to a more intensive heat exchange, reduced wall thickness and increased surface area.

DN	Inner diameter, mm	Outer diameter, mm	Wall thickness, mm
25	26,1±0,4	31,6±0,4	0,20
25	25,5±0,4	31,7±0,4	0,30
32	34,1±0,5	40,4±0,5	0,22
32	34,0±0,5	40,2±0,5	0,30



Info
about
Boiler Hoses

MATERIALS AISI

304 or 316L,
other stainless steel grades
available upon request

PRESSURE

2,5 - 10 bar
(depending on nominal diameter
and wall thickness)

DIAMETER

DN25 up to DN32

CONNECTION TYPES

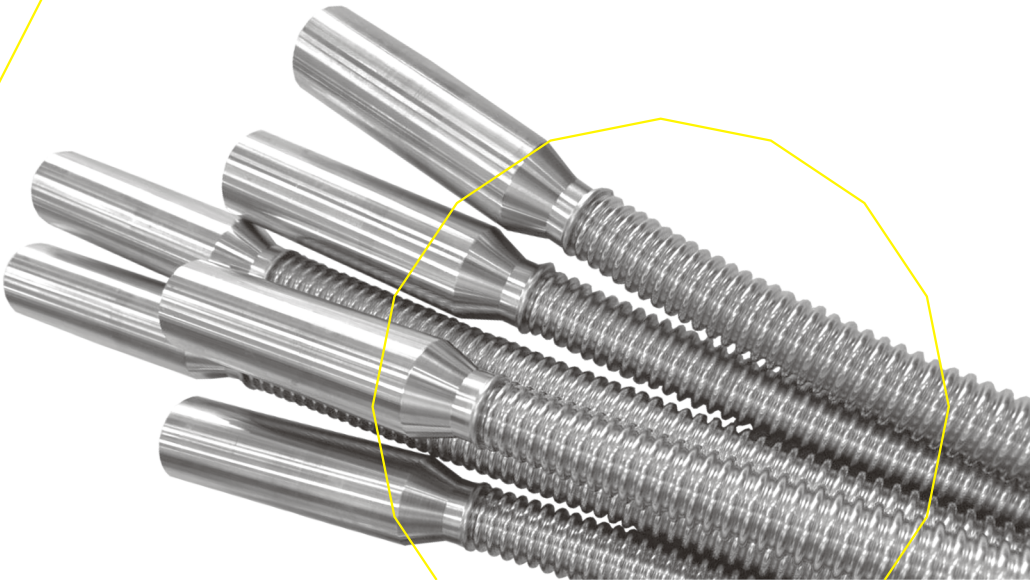
internal or external threaded pipe

other types of end fittings are
available according
to the customer
requirements

FIELD OF APPLICATION

As heat exchanger inside
storage tanks

Min. bending radius (static), mm	Working pressure at 20 °C, bar	PN according ISO 10380	Liquid Volume ±5%, l/m	Surface Area ±5%, m ² /m
35	8	6	0,653	0,135
40	12	10	0,628	0,142
45	4	2,5	1,120	0,185
47	10	10	1,070	0,168



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