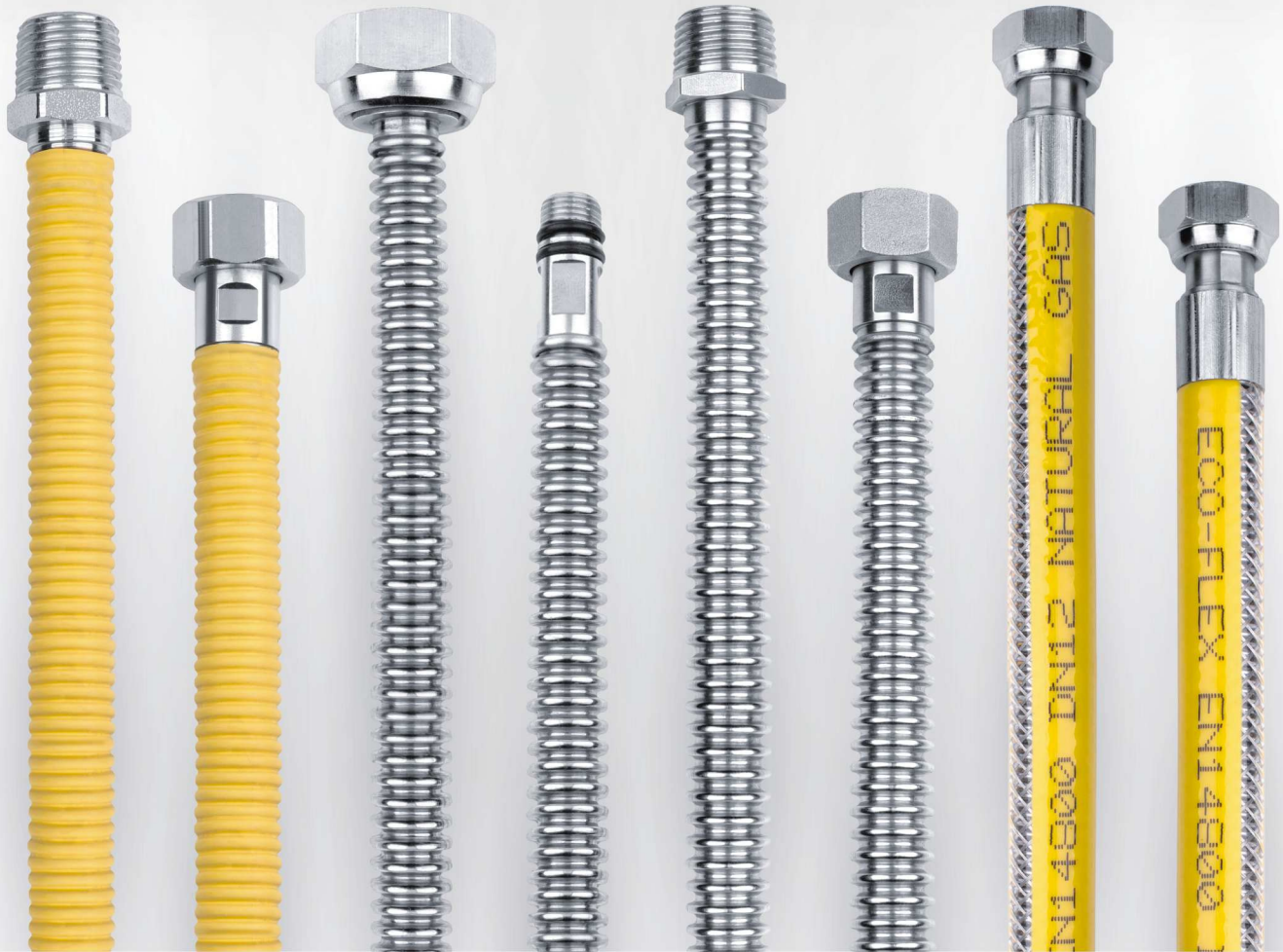
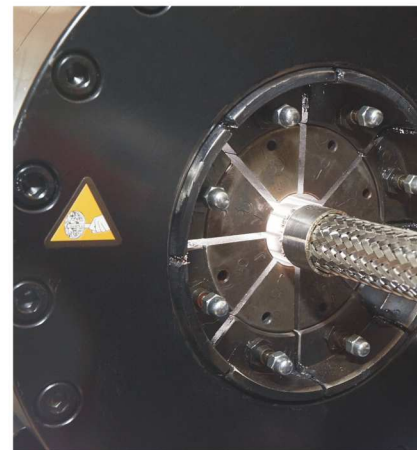


# ECO-FLEX®

METAL HOSES



## ABOUT US



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.

An important factor in the cooperation with the customer is the technical advice provided by our sales and application engineers.

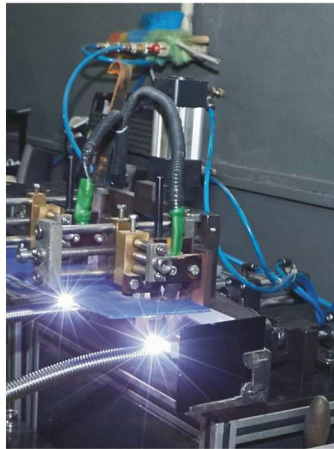
## COMPANY HISTORY

2007

was founded and registered as ECO-FLEX TM, starting to supply stainless steel hoses under its own brand from facilities in Turkey.

2010

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



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

**for engineering** (to connect gas and water equipment);  
**for heat exchangers;**  
**for sprinkler systems;**  
**for industrial use (braided);**  
**as vibration absorbers, etc.**

2012/13

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



2016

started first export deliveries to the European countries and near abroad countries.

2018

started manufacturing of the braided metal hoses.

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.

1. FOR ENGINEERING

GAS EURO



Designed as a hose that matches safety requirements according to EN 14800-2007, and is authorized to be used in all European Union (EU) countries.

Gas connection to domestic appliances where absolute safety is obligatory.

**TYPE**  
close pitch

**MATERIALS**  
AISI 304L or AISI 316L

**BRAID MATERIAL**  
AISI 304

**COVERING MATERIAL**  
fire-resistant PVC

**FITTING MATERIAL**  
AISI 316L

**DIAMETER**  
DN 12

**CONNECTION TYPES**  
Female/Female, Male/Female

DN	Connection	Pressure, bar	Length, mm
12	1/2" F/F	0,5	500, 750, 1000, 1250, 1500, 2000
12	1/2" M/F	0,5	500, 750, 1000, 1250, 1500, 2000

## GAS EXTENSIBLE



Designed to have high flexibility and extensibility.

With the help of extensibility it connects all kind of appliances with unspecified distances.

### **TYPE**

close pitch

### **MATERIALS**

AISI 304 or AISI 316L

### **COVERING MATERIAL**

fire-resistant PVC

### **FITTING MATERIAL**

AISI 303 / carbon steel

### **DIAMETER**

DN 12, DN 16, DN 20

### **CONNECTION TYPES**

Female/Female, Male/Female

Any types of diameters and end fittings are available according to the customer requirements

1. FOR ENGINEERING

WATER SUPER



Designed as an ideal solution for every kind of application, be it sanitary or industrial.

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

**TYPE**  
open pitch

**MATERIALS**  
AISI 304 or AISI 316L

**FITTING MATERIAL**  
AISI 303 / nickel plated brass

**DIAMETER**  
DN 8 / DN 12

**CONNECTION TYPES**  
Female/Female, Male/Female

DN	Connection	Pressure, bar	Length, mm
12	1/2" F/F	18	200-3000
12	1/2" M/F	18	200-3000
8	1/2" F/F	15	200-3000
8	3/8" F/F	15	200-3000
8	1/2" F - 3/8" F	15	200-3000

WATER MIX



Designed to provide quick and easy connection between faucets and pipelines.  
Kitchen and bathroom faucets connections.

**TYPE**  
open pitch

**MATERIALS**  
AISI 304

**FITTING MATERIAL**  
AISI 303 / nickel plated brass

**DIAMETER**  
DN 8

**CONNECTION TYPES**  
Male/Female

DN	Connection	Pressure, bar	Length, mm
8	M10 - 1/2" F	15	300-1000
8	M10 - 3/8" F	15	300-1000



2. FOR INSTALLERS

WATER HEAT



Flexible corrugated metal hose with standard corrugation pitch and welded ends. It is used to connect different water and gas-using equipment.

- | Radiator connections
- | Combi boilers, water heater connections
- | Storage and buffer tanks connections
- | Fancoil systems
- | Gas systems

**TYPE**  
standard pitch

**MATERIALS**  
AISI 304 or AISI 316L

**INSULATION**  
low temperature insulation TC

**FITTING MATERIALS**  
AISI 303, nickel-plated brass

**DIAMETER**  
DN 16, DN 20, DN 25

**CONNECTION TYPES**  
Female/Female, Male/Female  
other types of end fittings are  
available according  
to the customer  
requirements

DN	Connection	Pressure, bar	Length, mm
16	3/4" F/F, M/F	16	200-2000
20	1" F/F, M/F	13	200-2000
25	1 1/2" F/F, M/F	12	200-2000



WATER CONVECTOR

Flexible corrugated stainless steel metal hose with close corrugation pitch and welded ends. It is used as a connection element between of the underfloor convector systems.



I Underfloor convector systems

**TYPE**  
close pitch

**MATERIALS**  
AISI 304 or AISI 316L

**FITTING MATERIALS**  
AISI 303, nickel-plated brass

**DIAMETER**  
DN 12, DN 16

**CONNECTION TYPES**  
Female/Female, Male/Female  
other types of end fittings are  
available according  
to the customer  
requirements

DN	Connection	Pressure, bar		Length, mm
12	1/2" F/F, M/F	7	80, 100, 130, 150, 200, 250	
16	3/4" F/F, M/F	5	80, 100, 130, 150, 200, 250	

Other lengths  
are available  
upon request

## 2. FOR INSTALLERS

### FOR PROFI-SYSTEM



Available for diameters ranging from DN12 up to Dn25. Pressures range up to 18 bar (depending on nominal diameter).

Hose material is AISI304 or AISI316L other stainless steel grades available upon request.

DN	Inner diameter	Outer diameter	Wall thickness	Pressure, bar	Fittings
12	12,3	16,5	0,15	18	1/2"
16	16,6	21,4	0,18	16	3/4"
20	20,6	26,1	0,18	13	1"
25	26,1	31,6	0,20	12	1 1/4"

\* For this system only open pitch of metal hose is available

### PROFI-SYSTEM

#### for Self-Assembly



It is used for self-assembly of various systems, such as:

- | Connection of solar systems
- | Installation of cable lines
- | Air condition systems

#### PRODUCT FEATURES

for diameters 1/2", 3/4", 1", 1 1/4"

Pipe cutter	1 pcs
Hammer	1 pcs
Nozzle for expanding	2 pcs
Profi-system manual	1 pcs

#### FITTINGS SET

nut 1/2", 3/4", 1", 1 1/4"	nickel-plated brass
Nipple	Brass
Lock ring	AISI 304
Gasket	Biconic

FOR SOLAR SYSTEMS



Metal hose in special foam rubber thermal insulation, is an ideal solution for connecting solar systems with both indoor and outdoor installations. It is used to connect solar systems. Types of metal hoses for solar systems

- | S1 – SINGLE
- | S2 – TWIN with silicone electric cable

**TYPE**  
open pitch corrugated metal hose

**MATERIALS**  
AISI 316L, 304L, AISI 304

**DIAMETER**  
DN 16, DN 20, DN 25

**COATING**  
UV resistant EPDM insulation, HT type

**INSULATION THICKNESS**  
13 mm

**TEMPERATURE**  
-50/+150 °C

**CONNECTION TYPE**  
nut with internal thread DN16-3/4",  
DN20-1", DN25-1 1/4"

QUICK-LOCK FITTINGS



Fittings designed specially for quick, safe and durable installation of metal hoses without using of a special tool.

**FITTING MATERIAL**  
brass

**MAXIMAL WORKING TEMPERATURE**  
280 °C

**MAXIMAL WORKING PRESSURE**  
10 bar

**CONNECTION TYPE**  
Male, Female, Coupling

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

3. FOR MANUFACTURERS

Corrugated Metal Hoses  
Braided and  
Unbraided

- | Available for diameters ranging from DN8 up to DN25.
- | Pressure range up to PN 75  
(depending on nominal diameter and braid's quantity).



**Close pitch**  
Flexibility- maximal

Other dimensions  
of metal hoses  
are available  
upon request



**Standard pitch**  
Flexibility- standard



**Open pitch**  
Flexibility- minimal

Marking	DN	Type	Inner diameter, mm	Outer diameter, mm
01.0	12	Unbraided	12	17
01.1	12	Halfbraided	12	17,7

02.0	12	Unbraided	12,2	16,7
02.1	12	Braided	12,2	17,6
02.0	16	Unbraided	16,3	21,8
02.1	16	Braided	16,3	22,8
02.0	20	Unbraided	20,1	26,4
02.1	20	Braided	20,1	28,3
02.0	25	Unbraided	25,6	32,3
02.1	25	Braided	25,6	33,3

03.0	8	Unbraided	8,2	11,8
03.0	12	Unbraided	12,3	16,5
03.0	16	Unbraided	16,6	21,4
03.0	20	Unbraided	20,6	26,1
03.0	25	Unbraided	26,1	31,6

- Standard hose material is AISI 304, AISI 304L and AISI 316L other stainless steel grades available upon request.
- Corrugated metal hoses are manufactured with three types of corrugation.

Wall thickness, mm	Min. bending radius, mm	Nom. bending radius, mm	Working pressure At 20 0C, bar	Weight, kg
0,15	35	110	7	0,154
0,15	45	110	70	0,196
0,15	20	140	9	0,110
0,15	45	140	75	0,196
0,18	28	160	8	0,170
0,18	58	160	60	0,333
0,18	32	170	6,5	0,245
0,18	70	170	62	0,475
0,20	40	190	6	0,330
0,20	85	190	46	0,630
0,15	16	124	15	0,062
0,15	18	126	18	0,082
0,18	25	150	16	0,140
0,18	30	150	13	0,176
0,20	35	175	12	0,230

### 3. FOR MANUFACTURERS

#### HEAT EXCHANGERS

##### **Corrugated Metal Hoses as a Heat Exchangers with Welded end Fittings**

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

- | 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.

##### **MATERIALS**

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

##### **PRESSURE**

2-18 bar  
(depending on nominal diameter)

##### **DIAMETER**

from DN 8 up to DN 50

##### **CONNECTION TYPES**

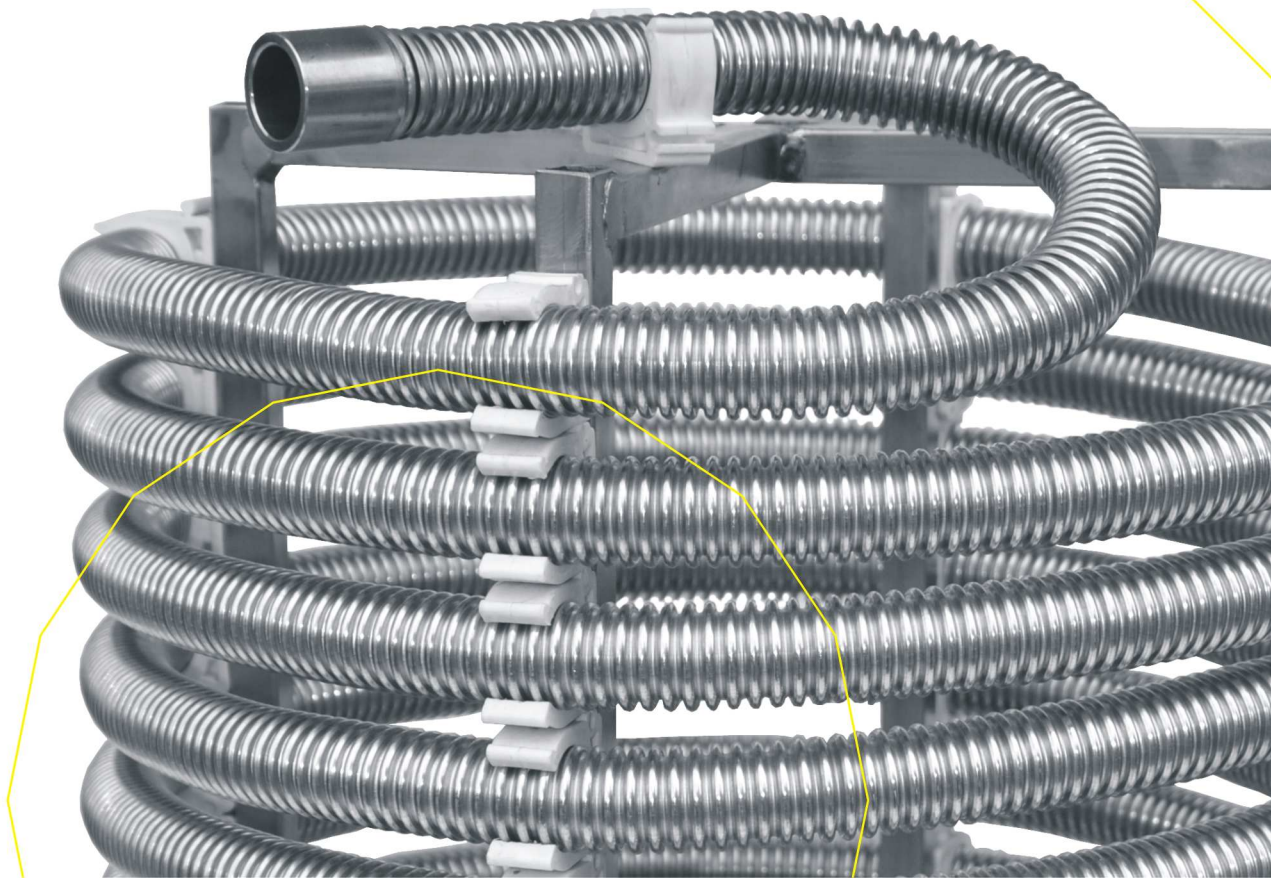
internal or external threaded pipe  
other types of end fittings are  
available according  
to the customer  
requirements

##### **FIELD OF APPLICATION**

solar-, buffer- and  
heat storage tanks

I It does not require any additional pipe bending equipment, and, consequently, there are no labor costs to bend a metal hose.

I Smaller dimensions of the finished heat exchanger are reached due to a more intensive heat exchange, reduced wall thickness and increased surface area.





ECO-FLEX LLC

10, Heorhiivska, Str.,  
Kharkiv, Ukraine, 61010  
+38 (050) 5000 266  
office@eco-flex.com.ua  
www.eco-flex.com.ua

