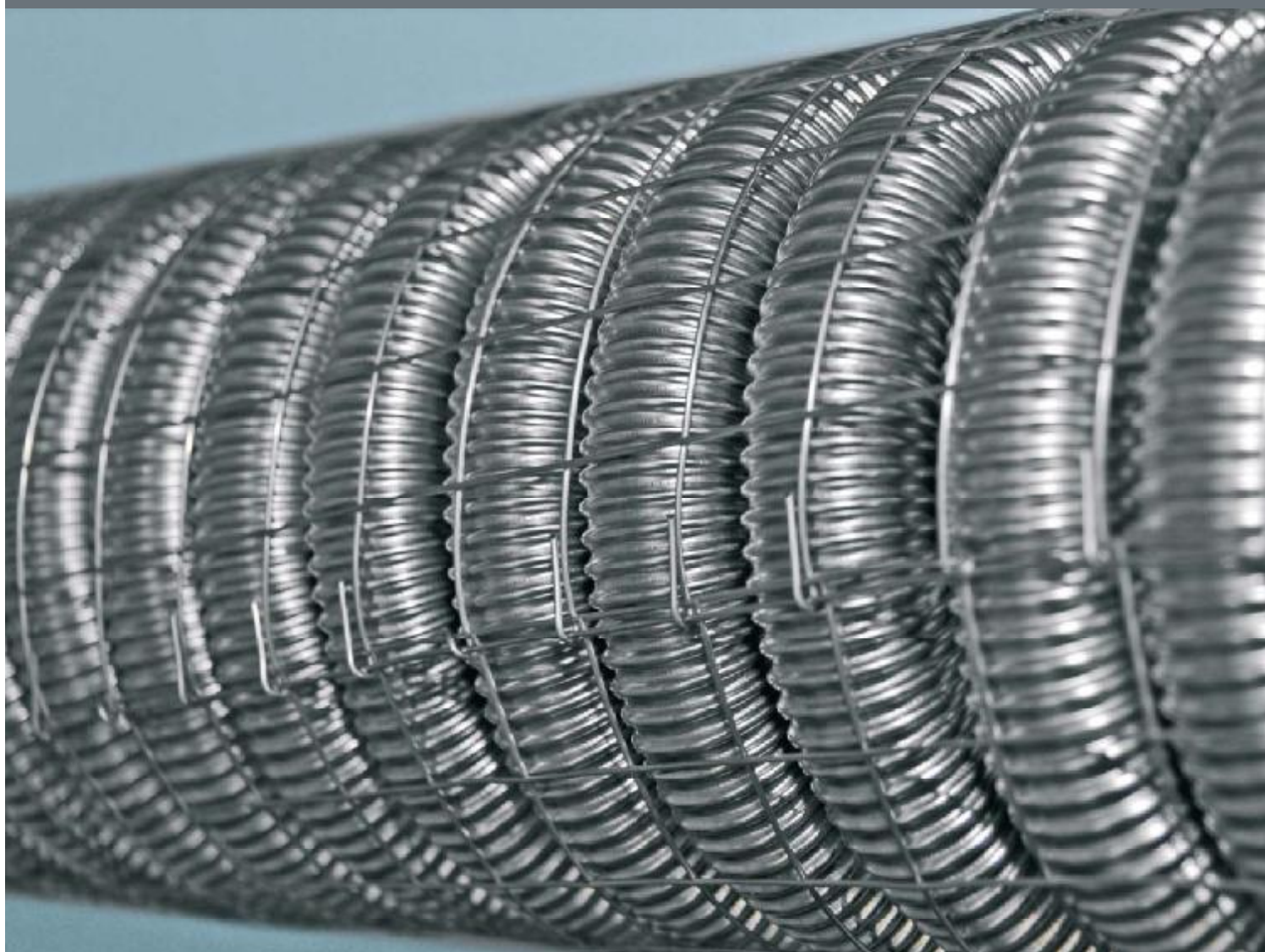


# SPIRAFLEX

Effective energy transfer



# The effective heat / cooling energy exc

## Maximur

### Maximum heat exchange without calcification

Vortices are formed in the helically corrugated pipe. These keep the water in a constant state of turbulence and exchange. The core current is heterodyned by a swirl component formed by the pipe geometry, which creates additional vortices. On the one hand this generates maximum heat exchange while on the other it prevents calcification.

### Dimensions / technical data

Type	nominal bore	dimensions			bending radius m min.	surface area m <sup>2</sup> /m	weight kg/m	volume l/m dm <sup>3</sup> /m
		ID mm	AD mm	s mm				
SFX 16/20	DN 15	16.0	20.0	0.2	0.05	0.083	0.24	0.20
SFX 22/25	DN 20	22.0	25.5	0.2	0.075	0.108	0.30	0.37
SFX 30/34	DN 25	30.0	34.0	0.2	0.15	0.146	0.40	0.80
SFX 39/44	DN 32	38.9	43.8	0.3	0.20	0.188	0.63	1.30
SFX 48/55	DN 40	48.0	55.0	0.3	0.25	0.235	0.70	2.00

Material: 1.4404

### Better performance

With a corrugated pipe it is possible to construct a smaller storage tank to get the same performance or to generate more heat from a given tank size. Using a corrugated pipe can increase efficiency by up to 50 % compared with conventional pipes.

### Comparison SPIRAFLEX and rigid piping systems:

- greater surface area
- greater flexibility
- reduced wall thickness, which gives better energy transfer
- higher turbulence
- changes from laminar to turbulent flow at low velocity

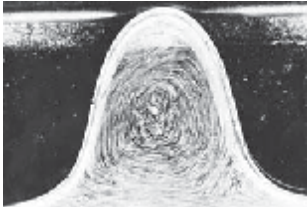
### Comparison SPIRAFLEX and a parallel corrugated pipe:

- reduced flow resistance
- self-purifying effect through water turbulence, no calcification
- endless system, no connections
- higher mechanical load capacity
- improved hygiene due to avoidance of dead-water zones



# Change pipe from BRUGG

## in energy transfer



Spirally corrugated pipe: no dead-water zones, constant turbulence



Parallel corrugated pipe: a standing vortex, which forms a dead-water zone

### The advantages at a glance

- up to 50 % greater surface area
- maximum heat exchange thanks to optimized wall thickness
- highly flexible
- calcification is prevented by the turbulent flow
- quality assurance by means of helium test
- „endless“ manufacture
- high mechanical load capacity
- more compact construction for hot water tanks
- improved hygiene since there are no dead water zones
- can be customized, e.g. special stainless steel types, wall thicknesses etc.
- can be delivered as drum, ring or register



### You can choose your delivery lengths and type

Our „endless“ production line makes it possible to deliver lengths up to 1 km in one piece. Quality assurance is guaranteed by means of a helium test. The piping can be delivered as a drum, a ring or a register.

# Connectors

## Connectors

May have internal or external screw. There are five standard options available for different connectors made of stainless steel or brass.

Type	material	dimensions
DN 15	1.4404	R ½
DN 20	1.4404	R ¾
DN 25	1.4404	R 1
DN 32	1.4404	R 1¼



### Non-weld connector with external screw

The screw connector presses in a graphite seal which guarantees 100 % tightness.

Type	material	dimensions
DN 15	1.4404	R ½
DN 20	1.4404	R ¾
DN 25	1.4404	R 1
DN 32	1.4404	R 1¼



### Non-weld connector with internal screw

The screw connector presses in a graphite seal which guarantees 100 % tightness.

Type	material	dimensions
DN 15	MS	R ½
DN 20	MS	R ¾
DN 25	MS	R 1
DN 32	MS	R 1¼



### Non-weld connector with internal screw

The screw connector presses in a graphite seal which guarantees 100 % tightness.

Type	material	dimensions
DN 20	1.4404	25x4x150 R ½
DN 25	1.4404	33x6x150 R ¾
DN 25	1.4404	38x5x150 R 1
DN 32	1.4404	44x5x150 R 1¼
DN 40	1.4404	56x10x150 R 1¼
DN 40	1.4404	56x8x150 R 1½



### Welded connector with internal screw

The connector is screwed into the pipe and subsequently welded in place. This is the optimum construction for boiler ducts or similar constructions.

Type	material	dimensions
DN 40	1.4404	55x165 R 1¼



### Customized connector at request of customer, e.g. with internal screw

The connector is pushed into the flanged pipe and welded in place.



# Applications



**NIROFLEX® for fermenters / biogas plants**  
NIROFLEX®, a version of SPIRAFLEX with stronger material, is used with resounding success in biogas plants.



**SPIRAFLEX for multityping**  
The all-round pipe is also used in multityping heat exchangers.



**SPIRAFLEX for industrial heat exchangers**  
Narrow bending radii combined with maximum heat exchange, similarly used in industrial applications.



**SPIRAFLEX for heat exchangers in wells**  
The simple and flexible installation of SPIRAFLEX is "well-suited" for this purpose.



**SPIRAFLEX and NIROFLEX® for geothermal applications**  
Various tests have shown that SPIRAFLEX has excellent characteristics for geothermal applications.



**SPIRAFLEX for hot water tanks**  
The optimum use for SPIRAFLEX is in hot water tanks. Thanks to the corrugated profile, hot water tanks can have optimally reduced dimensions.

# Pipe systems for the future

District heating – Industry – Petrol stations – System packages



## Your partner for pipe systems

We are the people you should talk to when you need to find efficient solutions for transporting liquid materials. With our project engineers, development department, in-house production unit and our professional team of fitters, we have the know-how and the resources to look after your projects competently and reliably. For all types of heating systems, petrol station construction, industrial plant construction and system packages.

## International network

Our global partnership network can be reached on site at any time. More than 34 partners in 20 different countries will look after you wherever you are.

## Customer-specific solutions

Brugg is the full service provider in the field of single-wall, double-wall and insulated pipe systems. This know-how allows us to manufacture project-specific customised items.

## Give us a call!

Our engineers would be pleased to advise you and find a made-to-measure solution.

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