

# Ugitech offers a wide range of wires and bars for the production and manufacture of support parts for exhaust systems (exhaust hangers).

## During the production of these wires, - All these grades have excellent properties for cold forming. special attention is focused on the points that ensure a perfect finish to the exhaust hangers.

- Chemical analysis.
- Mechanical properties.
- Weldability and corrosion resistance.
- Surface finish.
- Diameter and tolerances.
- Packaging.

### **Chemical analysis**

Ugitech manufactures a wide range of products that meet the requirements of the exhaust hangers market.

Our fully integrated manufacturing process allows us to ensure stable analyses guaranteed for a regular and homogeneous behavior of the wire.

			С	Si	Mn	Cr	Ni	Nb	Ti
Austenitic grades	UGI® F4307	304L	0.03	1.00	1.00 / 1.50	18.0 / 19.0	9.20 / 10.0		
Ferritic grades	UGI <sup>®</sup> F4511	430LNb	0.02	0.50	0.60	16.0 / 17.0		12xC / 0.30	
	UGI® F4601L	409Cb	0.05	0.30 / 0.70	0.30 / 0.80	11.0 / 12.0		10xC / 0.60	
	UGI <sup>®</sup> F4601LG	409CbNi	0.05	0.30 / 0.70	0.30 / 0.80	11.0 / 12.0	0.75 / 1.00	10xC / 0.60	
	UGI® F4512	409	0.02	0.50	0.30 / 0.80	11.0 / 12.0			6xC / 0.75

- UGI® F4307: Excellent corrosion resistance associated with very good cold forming properties. This grade may be subject to price fluctuations linked to raw material.
- Stabilization of the grades with Niobium or Titanium eliminates the risk of sensitization of the structure during welding operations.
- Ferritic stainless steels are not sensitive to stress corrosion, moreover, due to their low Nickel content, they are only slightly affected by price fluctuations linked to raw material.
- 4601LG should be preferred to 4601L when exposed to more aggressive environments (wet or marine areas, regions subject to winter salting, etc.)
- When welding heavy thicknesses, stabilization with Titanium will guarantee a fine grain structure in the welded zone.
- Stabilization with Niobium, on the other hand, guarantees a structure with less risk of sensitization.

#### **Mechanical properties**

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he narrow range of m	erties and the r	he low strain	Our Wires <sup>2</sup>		Diameters	Tolerance	
arts.	ow an easy benu			UGI® F4307	304L		
			UTS (MPa)	UGI® F4511	430LNb		
Austenitic grades	UGI® F4307	304L	650 / 850 <sup>1</sup>		409Cb 409CbNi 409	5.00mm / 14.00mm*	Tolerance 9
Ferritic grades	UGI <sup>®</sup> F4511	430LNb	500 / 700 <sup>1</sup>	UGI <sup>®</sup> F4601L			
	UGI® F4601L	409Cb	520 / 720 <sup>1</sup>	UGI <sup>®</sup> F4601LG			
	UGI <sup>®</sup> F4601LG	409CbNi	520 / 720 <sup>1</sup>				
	UGI® F4512	409	450 / 650 <sup>1</sup>	UGI® F4512			

\* Other diameters on request.

#### Weldability and corrosion resistance

Ugitech offers a wide range of austenitic and ferritic grades allowing welding operations without risk of cracking or intergranular corrosion.

#### Surface finish

The wire offered by Ugitech follows a specific process route that guarantees a regular surface finish in order to limit the the risks of surface corrosion and allowing an easy to use in forming machines.

The wire can be cleaned or lubricated.



1 UTS ranges given as an indication, to be specified on a case-by-case basis according to the need.

2\_ Also available in polished drawn bars, diameters 3 to 30 mm h9

3\_ For other packaging, please contact us.

#### **Diameters and tolerances**

### Packaging

Forming wires for the "Exhaust hangers" end-use are delivered in 500 kg or 1000 kg wrapped coils.

On request, a cardboard core can be used in the center of the spool.

The coils can be delivered in clockwise or counterclockwise winding.







#### **Swiss Steel Group**

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