

## Ugitech

Stainless steel  
experience at time  
disposal



Ugitech



# A variety of grades to meet individual needs

## Watch case

Size range 20 to 80mm

Ugitech designation (EN)	Other designation	Remelted	Main Specs	Machinability	Corrosion resistance	Sealing & cleanliness	Polishability	Scratch resistance Hardness
<b>Austenitics</b>								
UGIMA® 4404	316L							
UGI® 4435 ICH	316LMo							
UGI® 4435 IRH	316LMo							
UGI® 4441 HUP	316LVM	ESR	ISO 5832-1					

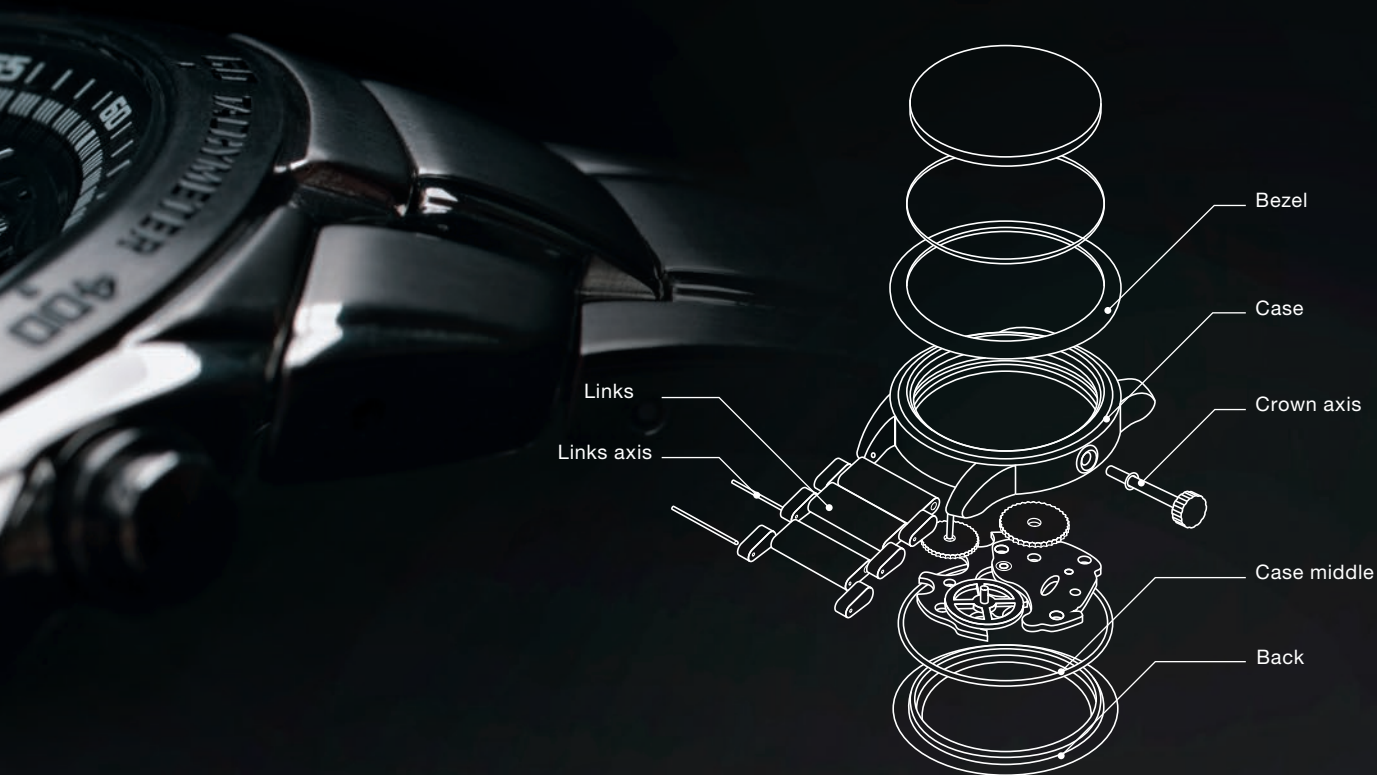
## Watch strap

Size range 1.0 to 18mm available in drawn wires, bars and shaped wire

Ugitech designation (EN)	Other designation	Remelted	Main Specs	Corrosion resistance	Cleanliness	Polishability	Scratch resistance Hardness	Yield Strength
<b>Austenitics</b>								
UGIMA® 4404	316L							
UGI 4435 ICH	316LMo							
UGI® 4435 IRH	316LMo							
UGI® 4441 HUP	316LVM	ESR	ISO 5832-1					
UGI® 4472 HUP (diam < 14mm)		ESR	ISO 5832-9					
UGI® 4455 HUP	XM 19	ESR						
<b>Cobalt-based alloys</b>								
UGIALLOY® PHYNOX®		VAR	ISO 5832-7					
UGIALLOY® KC35N		VAR or ESR	ISO 5832-6					

PHYNOX® is a registered trademark of Aperam





## Watch movement

Size range 1.0 to 15mm

Ugitech designation (EN)	Other designation	Remelted	Main Specs	Machinability	Abrasion resistance Hardness	Seizure resistance	Non-magnetic
<b>Austenitics</b>							
UGIMA® 4305	303			██████████	██████	██████	██████
UGIMA® 4570	303Cu			██████████	██████	██████	██████
UGIMA® 4404	316L			██████████	██████	██████	██████
UGIMA® 4598	316LCu			██████████	██████	██████	██████
UGI® 4435 ICH	316LMo			██████████	██████	██████	██████
UGI® 4435 IRH	316LMo			██████████	██████	██████	██████
UGI® 4441 HUP	316LVM	ESR	ISO 5832-1	██████████	██████	██████	██████
UGI® 4472 HUP		ESR	ISO 5832-9	██████████	██████	██████	██████
UGI® 4455 HUP	XM 19	ESR		██████████	██████	██████	██████
<b>Martensitics</b>							
UGI® 4116N			EN 10088-3	██████████	██████	██████	██████
UGI® 4197	420F MOD		ASTM F899	██████████	██████	██████	██████
<b>Maraging Steel</b>							
UGIALLOY® DURIMPHY®		VAR		██████████	██████	██████	██████
<b>Cobalt-based alloys</b>							
UGIALLOY® PHYNOX®		VAR	ISO 5832-7	██████████	██████	██████	██████
UGIALLOY® KC35N		VAR or ESR	ISO 5832-6	██████████	██████	██████	██████

PHYNOX® and DURIMPHY® are a registered trademark of Aperam

# Sizes ranges, certified packagings and controls

## Bars

	Size range	Surface finish	Tolerances	Packaging
<b>Round bars ex-mill</b>	$1 \leq \varnothing < 20$	Ground, drawn	h7, h8, h9	<ul style="list-style-type: none"> <li>– Wooden boxes for all ground products (on request for other surface finishes)</li> <li>– Strapping around alveolar polypropylene fabric (Akilux)</li> </ul>
	$20 \leq \varnothing \leq 80$	Turned, polished and ground	h9, h10	
<b>Round bars ex-stock</b>	$1.8 \leq \varnothing < 20$	Ground, drawn	h7, h8, h9	<ul style="list-style-type: none"> <li>– Customer-specific packaging on request</li> </ul>
	$20 \leq \varnothing \leq 80$	Turned, polished and ground	h9, h10	

## Drawn wires

	Size range	Surface finish	Tolerances	Packaging
<b>Round wire</b>	1 – 15mm	Matt	Up to ISO 6 according to application	Coils, carriers, bars up to 15mm
<b>Shaped wire</b>	2 to 70mm <sup>2</sup>	Bright finished	To within 0.01mm, standard deviation 0.002mm	Coils

## Certified inspection possibilities as per ISO 17025

Nature of test	Measured characteristics	Method reference
<b>Physical-chemical analysis</b>	Chemical Analysis	X-ray fluorescence, spectrometry, combustion and infrared absorption
<b>Grain size determination</b>	Grain size index	NF EN ISO 643 ASTM E112
<b>Determination of non-metallic inclusion content</b>	Inclusion content	ISO 4967*, ASTM E45
<b>Detection of metallurgical defects by chemical attack</b>	Micrographic observation	ASTM A604 / 604M
<b>Determination of delta ferrite</b>	Delta ferrite content	AMS 2315
<b>Mechanical properties:</b> <b>Tensile test</b> <b>Mechanical properties:</b> <b>Hardness test</b>	Rp02, Rm, A %, Z % HRC, HB, HV	ISO6992-1, ASTM E8 / E8M  ISO 6506-1, ISO 6507-1, ISO 6508-1

\* Cleanliness contains control according to DIN 50602 applicable to specific watchmaking requirements (on demand)

# On demand services: cutting, specific traceability, stress relieving

## Swiss Made

### “Tailor-made watch products” solutions

- Stress relieving heat treatment on bars for very precise parts (Bezel...).
- Bars cut to length (350mm to 1,300mm) with copy of marking on the section.
- End finishes adapted to the machining process.
- Optimized packaging for machine storage and loading.

### “Specific bar loader” solutions

- Bars for LNS Quick Load from 350 to 1,300mm.
- Bars for Tornos MultiSwiss 6x14 of 1,500mm.
- Bars deburred, chamfered and/or pointed.

### “Custom lengths” solutions

- Billets or bars sawing Ø 3 to 70mm within a length range from 6 to 4,000mm.
- Chamfered 30° or 45°.

### Services provided by Ugitech Suisse SA:

8 Route de Sorvillier  
Case postale 154 CH-2735 Bévillard  
Phone.: +41 32 491 66 11  
E-mail: [info@ugitech.ch](mailto:info@ugitech.ch)  
[www.ugitech.ch](http://www.ugitech.ch)

## Tailor made services ex-mill Ugitech SA

- Sawing, cutting to length
- Heat treatment
- Marking (laser, hard stamping, ink) on section or on line marking
- Packaging
- Traceability
- Customer-dedicated stock items
- End finishes





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Applications specifically suggested for material described herein are made for the purpose of illustration only to enable the reader to make its own evaluation and are not intended as warranties, either express or implied, of fitness for any purposes.