## GREUBEL FORSEY

ART INVENTION

#### TECHNICAL DETAILS

#### Tourbillon Cardan In titanium

# Hand-wound movement with patented Cardan Tourbillon

Cardan Tourbillon • hours and minutes • small seconds • power-reserve

#### Movement

#### Movement dimensions

• Overall diameter: 39.60 mm

• Thickness: 13.53 mm

#### Number of parts

• Movement: 389 parts

• Cardan tourbillon cages: 98 parts

• Weight of the cage: 0.92 g

#### Number of jewels

• 49

• Olived-domed jewels in gold chatons

## Chronometric power reserve

• 80 hours

### Barrels

- Four coaxial series-coupled fast-rotating barrels (1 turn in 2.7 hours), one of which is equipped with a slipping spring to avoid excess tension
- Relief-engraved text, circular-grained, black treatment, polished chamfer

#### Balance wheel

• In-house variable-inertia with 6 gold mean-time screws

(12.60 mm diameter)

## Frequency

• 21'600 vibrations/hour

## Balance spring

- Phillips terminal curve
- Geneva-style stud

## Bridges and main plates

- Titanium and nickel silver, frosted and spotted, polished bevelling and countersinks, straight-grained flanks
- Hand-bevelled and openworked cage pillars

## Movement side

- Flat black polished steel tourbillon bridge, polished bevelling and countersinks
- Gold plate engraved with the individual number, circular-grained, polished bevelling, straight-grained flanks

## Cardan Tourbillon

• Ultra-fast inner tourbillon cage (1 rotation in 16 seconds) in titanium, barrel-polished and hand-

bevelled, inclined at a 30° angle with gold counterweight

• Outer flying Cardan cages, 48-seconds cycle, double variable tilt at 30°, polished and hand-bevelled, straight-grained flanks

## Gearing

- Involute circle profile
- Conical gearing with profiled teeth

#### Displays

- Hours and minutes
- Small seconds
- Power reserve on a sector

#### Exterior

#### Case

- Titanium with high domed synthetic sapphire crystal
- Transparent back with high domed synthetic sapphire crystal
- Hand-polished bezel, caseband with hand-finished straight graining
- Titanium security screws
- Raised polished engraving "Tourbillon Cardan" and "Greubel Forsey" on a hand-punched background

#### Case dimensions

- Caseband diameter: 45.50 mm
- Bezel diameter: 46.00 mm
- Case height: 13.81 mm
- Height on synthetic sapphire crystals: 18.15 mm

#### Water resistance of the case

• Water-resistant 3 atm - 30 m - 100 ft (standard NIHS 92-20/SN ISO 22810:2010)

#### Crown

• Titanium, polished, with GF logo

#### Dial side

- Multi-level gold dial with openworked pillars, circular-grained with engraved and lacquered minute-circle, polished flanks
- Gold hour markers
- Small seconds and power-reserve indicators in gold, engraved and lacquered
- Engraved and lacquered GF logo

## Hands

- Hours and minutes in polished steel, with Super-LumiNova
- Small seconds and power-reserve in polished steel, hand-polished countersink, flat black polished head

## Strap and clasp

- Non-animal material, hand-sewn
- Titanium folding clasp, engraved GF logo