

MACHINING AND PROCESSING CAPABILITIES

Machining Capabilities By Part Dimension		Size		Machining & Special Processes	
		mm	in	Internal	External
Milling (Vertical)	Height, Width	0 - 1	0 - 2.5		
Milling (Horizontal)	Height, Width	1 - 2	2.5 - 5		
Turning (Vertical)	Diameter	2 - 4	5 - 10		
Turning (Horizontal)	Diameter	4 - 6	10 - 15		
Surface Grind	Height, Width	6 - 8	15 - 20		
OD Grind	Diameter	8 - 12	20 - 30		
ID Grind	Diameter	12 - 14	30 - 35		
Internal Hone	Diameter	14 - 18	35 - 46		
Wire Cut	Height, Width	18 - 20	46 - 51		
EDM	Height, Width	20 - 24	51 - 61		
Hobbing	Diameter	24 - 32	61 - 81		
Welding	Diameter	32 - 36	81 - 92		
CMM	Height, Width	36 - 39	92 - 99		
Milling (Vertical)	Length	39 - 42	99 - 107		
Milling (Horizontal)	Length	42 - 48	107 - 122		
Turning (Vertical)	Length	48 - 53	122 - 135		
Turning (Horizontal)	Length	53 - 57	135 - 145		
Surface Grind	Length	57 - 63	145 - 160		
OD Grind	Length	63 - 70	160 - 178		
ID Grind	Length	70 - 80	178 - 203		
Internal Hone	Length	80 - 96	203 - 244		
Wire Cut	Length	96 - 110	244 - 280		
Hobbing	Length	110 - 120	280 - 305		
Welding	Length	120 - 137	305 - 348		
CMM	Length	137 - 160	348 - 406		
		160 - +	406 - +		

Key

Within Current Capabilities

Within Capabilities with Adjustment

Outside of Current Capabilities

SECONDARY PROCESS CAPABILITY

- Assembly
- Threading
- Coating
- NDT
- Welding
- Electro-mechanical assembly, in building wire harness and cable assemblies certified to IPC/WH MA-A-620 workmanship and soldering standards
- API, Buttress, ACME, VAM, FOX and HYDRIL
- Carburizing, induction hardening, QPQ, phosphate, copper plating, molybdenum, techlube PT-14, XYLAN, chromium oxide Cr2o3, Nedox®, Magnaplate®, Armoloy®,chromate conversion, anodizing, shot peening and painting
- Dye Penetrant, Positive Material Identification and Magnetic Particle Inspection (MPI)
- TIG, SMAW, MIG & PTA on joining / Fabrication / Cladding and Hardfacing welding services in accordance with ASME IX qualification



Hard facing Welding

MATERIAL CAPABILITY

- Stainless Steel
- Carbon Steel
- Superalloy
- Inconel®
- Brass, Bronze & Copper, Copper
- AISI/ASTM A276 ASTM A182 ASTM A479, S31803,316L S20910, S17400
- (WCC, LCC), UNS G10180 (SA 105 & 182)
- UNS N06625 (P-No 43), Duplex Alloy 600 , N10276, N04400, Stellite 6 & Colmonoy-4,
- Nickel Alloy 625, 718, 925
- Nickel Aluminum Bronze C63000, Beryllium ToughMet 3AT 110

US & EU LOGISTIC HUB

UPECA operates a Logistic Hub in Chicago, USA and Székesfehérvár, Hungary for customers located in North America and Europe requiring short order lead time for its products. We can commit to 7 days lead time for client who provides good rolling forecast.

GLOBAL FOOTPRINT



GROUP PROFILE

UPECA is a unit of Senior plc, an international manufacturing group with 33 operations in 14 countries. Senior designs, manufactures and markets high technology components and systems for the principal original equipment producers in the worldwide aerospace, defence, land vehicle and energy markets.

ACCREDITATION



SENIOR FLEXONICS UPECA  
UPECA Engineering (Tianjin) Co. Ltd

No . 12 QuanHe Road, Wuqing Development Area, 301700, Tianjin China  
Tel • +86 22 5961 1718 Fax • +86 22 5961 1719 E-mail • info@seniorflexonics.com.cn  
Web • www.seniorflexonics.com.cn



UPECA

senior  
Flexonics



THE PREFERRED TURNKEY MANUFACTURER BY GLOBAL OIL & GAS COMPANIES

Energy Oil & Gas





## COMPANY OVERVIEW - SENIOR FLEXONICS UPECA

Senior Flexonics Upeca (UPECA) offers precision machining and assembly for process control, oilfield services and subsea sectors. UPECA delivers value to its customers via operational excellence that is supported by its people and processes.

## INDUSTRY EXPERIENCE

UPECA provides manufacturing services for high precision metal machining, electro-mechanical assembly and secondary processes. Backed by close to 30 years of excellent track record, we offer world-class services that meet the needs of our multi-national clientele, which are leading companies in the Energy, Oil & Gas and other Industrial sectors.

## VALUE PROPOSITION

- Turnkey Project Management from RFQ to NPI (New Product Introduction) and steady state production.
- In-house engineering teams, with dedicated machining capacity for our strategic customers.
- World class Quality and Delivery Performance.



## PRODUCT AND SERVICES

By leveraging on our manufacturing sites located in China and Malaysia, we can offer “Best Cost” pricing and supply chain solutions that strategically improves our customer’s competitive advantage in the international marketplace.

UPECA is supported by strong competencies in:

- First Article Inspection
- CAM Software for NC Programming
- CAD Tooling Design and Fabrication
- Engineering and Process-driven R&D
- Vendor Development and Management
- Turnkey Sourcing solutions
- Program Management

## OILFIELD DOWNHOLE TOOL

UPECA offers precision machining and electro-mechanical assembly parts to leading Oilfield Services companies for various applications such as Packer, Liner Hanger, Safety Valve of Completion Tools, Measurement While Drilling (MWD) and Wireline & Perforating of Directional tools.



Packer, Liner & Hanger parts



Safety Valve parts



MWD Tool parts



Wireline & Perforating Tool parts

## VALVE AND ACTUATOR

UPECA offers precision machining parts to leading Valve and Actuator companies. These components are machined from casting and solid, and assembled in various sections of the Valve and Actuator such as Cage, Stem & Plug, Pinion, Bonnet, Housing and End Cap.



Cage parts



Valve Stem & Plug parts



Pinion parts



Casting & Machining parts



Subsea Equipment parts