



**Engineered by SHUTON** 

### **XTREM DYNAMICS**



It redefines **SHUTON**'s philosophy in the search for technologies and materials to improve the rigidity of ballscrews, with the aim of increasing Dynamics, and subsequently the Performance of the machine.

#### HIGHER PERFORMANCE

Improvement in ballscrew acceleration and feed speeds for a better performance for longer duration in extreme applications.

#### **INCREASED UPTIME**

Improvement of ballscrew life for increasing the machine uptime.



#### HIGHER RIGIDITY

Efficient rigidity oriented at enhancing the machining quality of the parts, optimizing the natural frequency of the system and improving motor parameters Kv and Kp, and the jerk.

#### HIGHER DYNAMICS

Improvement of accelerations and feed speeds of the drive, keeping optimum temperature and noise levels.

### HIGHER DURABILITY

Parallel improvements in materials, treatment and manufacturing processes contribute to an additional increase of the ballscrew life.



#### LESS MAINTENANCE

Improvement of ballscrew performance and life for a reduction of life-cycle costing (LCC)

# Continuous innovation allows the development of engineering solutions that are applied to the multiple needs of the market.



 Efficient rigidity focused at improving the machining time in the most demanding production sectors, such as automotive and aeronautics.



 High dynamics and high loads for the development of plastic injection applications, presses and other heavy duty applications.



 Solutions for extremely demanding applications include extreme designs of the COMPLEX and i+ references, which deliver efficient results.

## SHUTON PRIME

 Reengineering of short pitch internal recirculation ballscrew range for optimised positioning and smooth rotation in low speed applications.

### CUSTOMISED SOLUTIONS

 Double start ballscrews, nuts with cooling systems, triple effect wipers, rotary nut systems, special nut designs, internal shaft cooling, etc.



iBallscrew smart ballscrew. Monitoring 4.0 allows the detection of lack of lubrication, vibrations or an increase in temperature, which may decrease machining performance and uptime.

STARTS	NUT TYPE	RECIRCULATION	TECHNOLOGY	ISO	CUSTOMISED SOLUTIONS
Single	Single	S	Prime	1	Refrigeration
Double	Single preloaded	U	Complex	3	Nut oiling
	Double	В	HDL	5	Extra circuits
	Compact				Special wipers
	TUC				Rotary nut system

### **Ballscrew Range**

**Diameter:** 20, 25, 32, 40, 50, 63, 70, 80, 90, 100, 120, 140, 160,

200 mm

**Pitch:** 5, 6, 8, 10, 12, 15, 16, 20, 24, 25, 30, 32, 40, 50, 60,

64, 80 mm, other please check

**Ball diameter:** 3.175, 3.969, 4.762, 6.35, 7.938, 9.525, 12.7, 15.88,

19.05, 22.225, 25.4 mm

Circuits: up to 20 circuits depending on the case

Shaft length: up to 15 metres in a single piece



**Shuton**, with over 40 years of international presence, has its own technology research centre and collaborates closely with external technology centres and universities.

The Flexible Delivery Agreement philosophy allows Shuton to offer an agile and flexible supply proposal to match customer delivery needs, while maintaining the ballscrews superior quality and performance.





### WHERE TO FIND US?

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