TPX

DRO HORIZONTAL BORING AND MILLING MACHINE

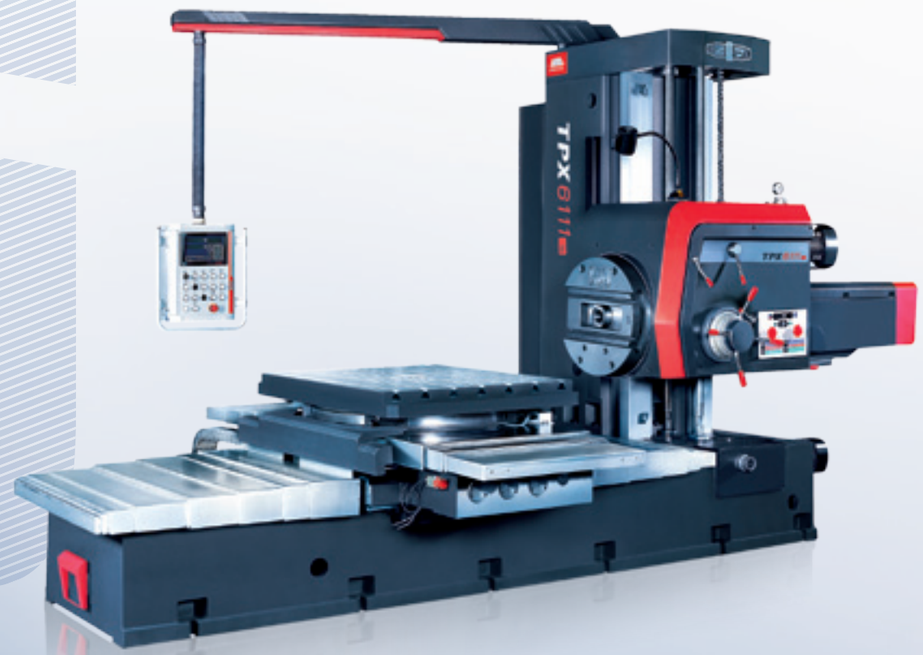
Convenient Economic
Efficient Reliable

LARGE TORQUE

MULTIPLE PROCEDURES

STABILITY

HEAVY CUTTING



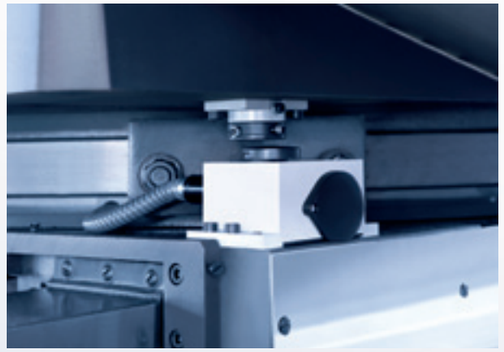
The TPX series horizontal milling and boring machines are based on a classic design, suitable for rough and finished boring, capable of milling large and box type components. They excel at inner hold boring, cylindrical turning and grooving by radial feed of facing plate. A 4x90 optical positioning device allows for machining accuracy when turning large pieces. The precision digital read out measurement systems ensures accuracy of coordinates and lineation.

High Quality Spindle

The three-layer mechanism ensures high rotational accuracy and the three-point support provides high rigidity and accuracy.

User-friendly Layout

The hanging operation panel provides flexible and convenient centralized operation. Hydraulic preselection controls speed and feed rate.



Accurate & Stable Optical Aiming

The worktables 4x90 optical positioning device ensures high positioning accuracy and high precision turnover.

Electro-hydraulic Interlock

All moving components feature electro-hydraulic interlocks. Only one component moves while others are clamped automatically.

Workpiece Sample: Flange type component

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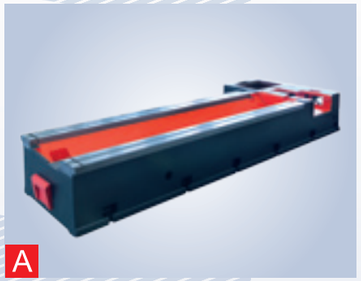
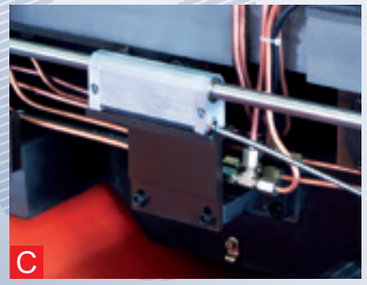


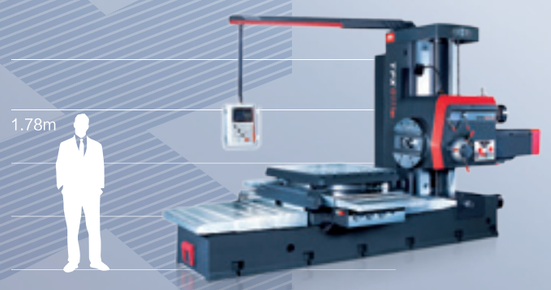
Bed Our high quality castings feature polished and hardened guideways. The castings are internally reinforced to maximize rigidity and stability.

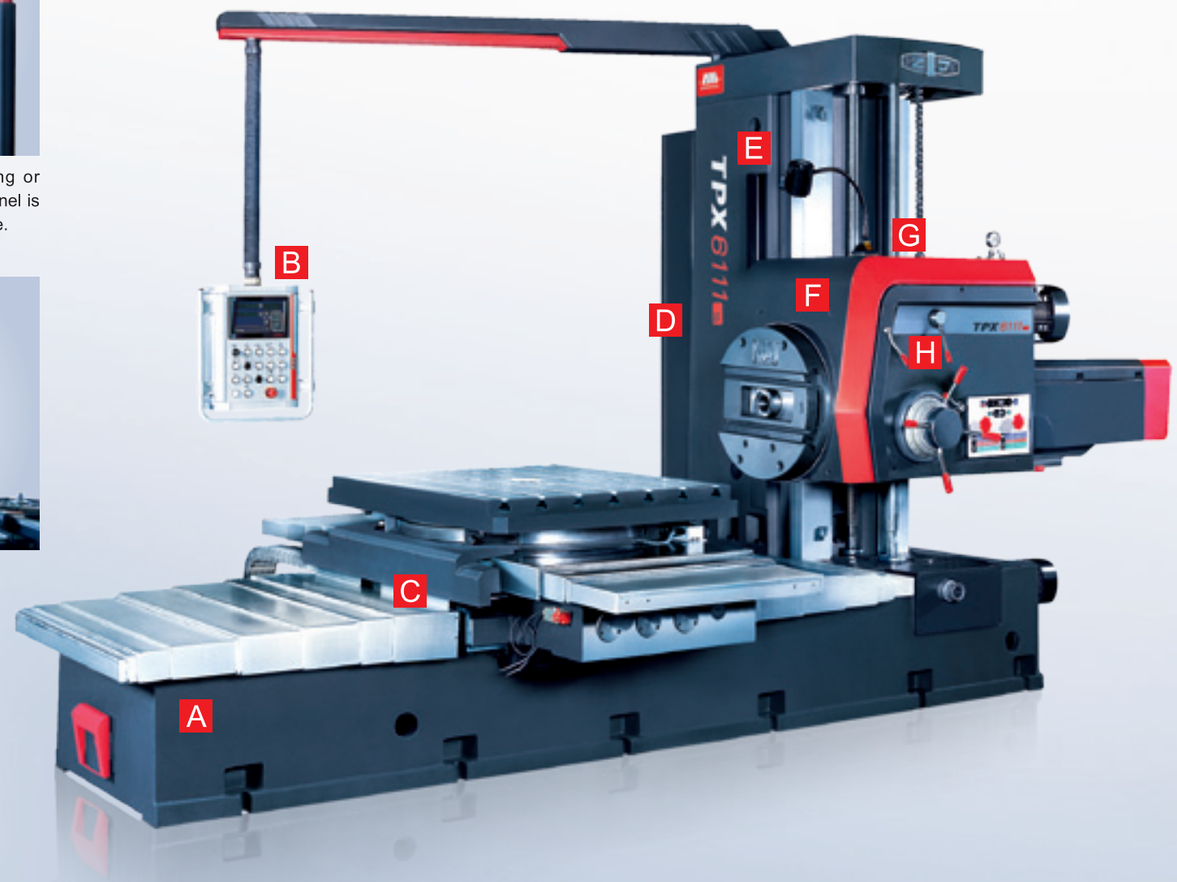
Control Panel Available in hanging or swing-arm arrangements, the control panel is easy to use and reduces operator fatigue.

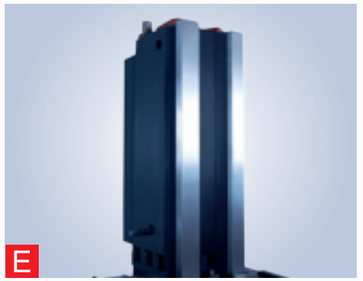


Internal Design Easy to install, steady, and precise with a fully-enclosed structure to prevent oil, coolant, and chip intrusion.

Control System PLC



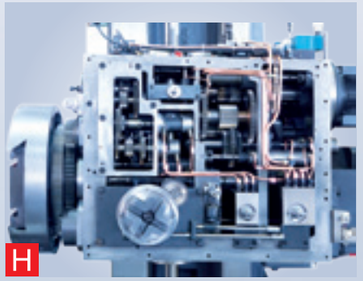




Column Made of high quality castings with ground and hardened guideways, the optimized structural design easily supports the assembly.

Protective Enclosure Welded high quality steel plates form an excellent protective cover.

Hydraulic System Pressure adjusted via relief valve. Variable speed achieved via a rotary valve.



Headstock Primary speed is controlled via switches on the headstock itself, a variety of rotational speeds are possible.

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MAIN SPECIFICATIONS

Item		Unit	TPX6111B	TPX6111B/2	TPX6111B/3	TPX6113	TPX6113/2	T(P)X6211	T(P)X6213	T(P)X6511×2	T(P)X6513×2
Spindle	Diameter	mm	110	110	110	130	130	110	130	110	130
	Taper	—	Morse No6 (ISO7:24No50)	Morse No6 (ISO7:24No50)	Morse No6 (ISO7:24No50)	Metric 80 (ISO7:24No50)	Metric 80 (ISO7:24No50)	Morse No6 (ISO7:24No50)	Metric 80 (ISO7:24No50)	Morse No6 (ISO7:24No50)	Metric 80 (ISO7:24No50)
	Max Torque	N.m	1225	1225	1225	3136	3136	1225	3136	1225	3136
	Max Axial Thrust	N	12250	12250	12250	31360	31360	12250	31360	12250	31360
	Speed Settings	—	22	22	22	24	24	22	24	22	24
	Speed Range	r/min	8-1000	8-1000	8-1000	4-800	4-800	8-1000	4-800	8-1000	4-800
	Main Motor Power	kW	7.5	7.5	7.5	15	15	7.5	15	7.5	15
Facing Plate	Max Torque	N.m	1960	1960	1960	4900	4900	1960	4900	1960	4900
	Diameter	mm	600	600	600	750	750	600	750	600	750
	Speed Range	r/min	4-200	4-200	4-200	2.5-125	2.5-125	4-200	2.5-125	4-200	2.5-125
	Speed Settings	—	18	18	18	18	18	18	18	18	18
Worktable	Dimensions	mm	1100×960	1100×960	1250×1100	1600×1400	1800×1600	Optional	Optional	According to request	According to request
	Max Load	kg	5000	5000	5000	8000	10000	—	—	—	—
	T-slot Size	mm	22	22	22	28	28	—	—	—	—
	T-slot Count	—	7	7	7	9	11	—	—	—	—
Machining Range	X-axis Max Travel	mm	900	1250	1600	1600	2000	2000(Can be longer)	1750(Can be longer)	According to request	According to request
	Y-axis Max Travel	mm	900	900	1200	1400	1800	1600	1600/2000/2500	1600(Y1/Y2)	1600/1800(Y1/Y2)
	Z-axis Max Travel	mm	1400	1400	1400	2000	2000	—	—	0/1000/1250/1750 (Z1/Z2)	0/1000/1250/1750 (Z1/Z2)
	W-axis Max Travel (Spindle)	mm	600	600	600	900	900	600	900	600(W1/W2)	900(W1/W2)
	U-axis Max Travel (Facing Plate Slide)	mm	180	180	180	250	250	180	250	180(U1/U2)	250(U1/U2)
	B-axis Rotary Angle	°	360	360	360	360	360	—	—	—	—
	Min Distance Between Spindle Centerline and Worktable	mm	0	0	0	0	0	—	—	—	—
Feed	Rapid Traverse	mm/min	X/Y/Z/W:2500	X/Y/Z/W:2500	X/Y/Z/W:2500	X/Y/Z/W:2500	X/Y/Z/W:2500	X/Y/U/W:2500	X/Y/U/W:2500	X/Y/Z/W:2500	X/Y/Z/W:2500
	Feed range of axes for each spindle revolution	mm/rev	0.04-6/0.01-1.88 (X/Y/Z/W)	0.04-6/0.01-1.88 (X/Y/Z/W)	0.04-6/0.01-1.88 (X/Y/Z/W)	0.05-8/0.01-2 (X/Y/Z/W)	0.05-8/0.01-2 (X/Y/Z/W)	0.04-6/0.01-1.88 (X/Y/W/U)	0.05-8/0.01-2 (X/Y/W/U)	0.04-6/0.01-1.88 (X/Y/W/U)	0.05-8/0.01-2 (X/Y/W/U)
	Speed Range (X)	mm/min	—	—	—	—	—	—	—	2.5-112	2.5-112
Accuracy	Linear Measurement Reading Accuracy (X/Y/Z-axis)	mm	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
	Linear Measurement Reading Accuracy (B-axis)	°	0.001	0.001	0.001	0.001	0.001	—	—	—	—
General Specs	Dimensions (L x W x H)	mm	4910×2454×2750	4910×2870×2750	5028×3359×3079	6995×3647×3442	7030×4665×3800				
	Machine Weight	kg	11500	13000	14000	24000	28000				