Reliable

Reliable quality products

Trustable

We put our reputation in first position

Responsible

What we promise what we do.

We believe, we can, we just do it.

GOODWILL

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GOODWILL

Reliable, Trustable, Responsible.

Goodwill focus on grinding technology,
One-stop solution for
your grinding requirement.

SCREW THREAD GRINDING MACHINES

SKR 7612
内螺纹磨削中心
Internal Thread Grinding Center

机床主要用途
内螺纹磨削中心为CNC控制机床，机床在一次装夹中能自动完成螺母的螺纹滚道面、外圆面及肩面的磨削加工。本机床主要适用于滚珠丝杠厂、汽车转向器厂以及其它机械制造行业，用于单件、多品种及大批量滚珠丝杠螺母的磨削加工。

Main usage
The SKR7612 internal thread grinding center is controlled by CNC system, and it can grind the raceway, external circular surface and shoulder of nuts. This machine is mainly used in ballscrew factory, auto steering and other machinery factories. It is suitable for single-piece work with lots of kind and big batch production.

机床工作精度

圆弧内螺纹磨削精度	
基本导程极限偏差	0.004mm
有效长度内导程累积公差	0.006mm
中径圆度	0.005mm
表面粗糙度	Ra≤0.4μm
外圆磨削精度	
圆柱度	0.003 mm
表面粗糙度	
肩面	Ra0.63μm
外圆	Ra0.4μm

Working Accuracy

Thread accuracy achievable	
Limit lead error	0.004mm
Accumulative error in an effective range of length	0.006mm
Roundness at pitch circle	0.005mm
Roughness	Ra≤0.4μm
Cylindrical surface	
Cylindricity	0.003 mm
Roughness	
At end face	Ra0.63μm
At cylindrical surface	Ra0.4μm

机床数控系统配置
该机床为为五轴内螺纹磨削中心，采用德国SIEMENS公司828D 系统,机床中各数控轴名称如下：

>内、外砂轮磨头的横向移动 X轴
>工作台纵向移动 Z轴
>头架主轴旋转 C轴
>内螺纹磨头螺旋升角自动回转 A轴
>驱动器部分X、Z、C、A采用SIEMENS公司的数字化交流伺服放大器和数字化交流伺服电机。 机床配有网口，以便和PC机进行通讯。

CNC system
Equipped with a SIEMENS 828D CNC system, the internal thread grinding center has five programmable axes, which are described as follows:
>Axis X : Cross feed of internal/external grinding head
>Axis Z: Longitudinal table movements)
>Axis C: Rotation of work spindle
>Axis A: Auto swivelling of the internal grinding head for helix angle adjustment
Each of axes X, Z, C & A is driven by a digital AC servo amplifier and a digital AC servo motor. The machine is equipped ,with web ports for communication with an external PC.

机床技术特点
>机床采用SIEMENS828D控制各伺服电机进给运动，具有自动循环磨削功能、单行程或双行程磨削功能。
>自动循环磨削时可实现自动周期进给及补偿,自动修整砂轮。
>机床配置金刚滚轮修整器，通过数控系统能完成砂轮的自动修整、修整量的自动补偿等功能。
>内磨砂轮主轴具有螺旋升角数控自动调整、调整后自动夹紧的功能。
>机床配自动对刀机构，加工前可在线测量工件磨削起始点,外圆端面加工余量。

Features
>This machine is equipped with a SIEMENS 828D system, which can control the feed of every axis driven by its servo motor. It can achieve automatic recycle grinding, one-way or two-way grinding.
>In automatic recycle grinding, the wheel dressing and grinding feed can be made automatically.
>With a diamond rolling dresser, the machine can dress the grinding wheel and compensate the amount of dressing to the feeding automatically with the help of the CNC system.
>The helix angle of the internal attachment can be adjusted automatically and the attachment can be clamped automatically then.
>Equipped with an auto-aligning device, the beginning position of grinding at a workpiece and its grinding allowance at the cylindrical & end surfaces can be measured on-line.

机床主要规格参数

>最大工件回转直径:	165mm
>最大工件安装长度	160mm
>可磨工件直径	
内螺纹	12-80mm
外圆	20-120mm
>最大磨削工件长度	
内螺纹	150mm
外圆	150mm
>中心高	200mm
>可磨螺纹的螺距	1-24mm（公制）
>可磨内螺纹的最大螺旋角	左12°，右12°
>砂轮主轴转速	
内螺纹	30000 rpm
外圆	1672 rpm
>砂轮尺寸	
内螺纹	
最大直径	80mm
最小直径	10mm
外圆	400-500mm

Main Specifications

>Max. swing diameter	165mm
>Max. length of workpiece to be fixxed	160mm
>Grinding diameter	
Internal thread	12-80mm
External circular	20-120mm
>Max. length of workpiece to be ground	
Internal thread	150mm
External circular	150mm
>Center height	200mm
>Pitch of thread to be ground	1-24mm Metric
>Max. helix angle of internal thread to be ground	12° (LH),12° (RH)
>Speed of work spindle	
Internal thread	30000 rpm
External circular	1672 rpm
>Wheel size	
Internal thread	
Max. diameter	80mm
Min. diameter	10mm
External circular	400-500mm

SKR 7620B
内螺纹磨削中心
Internal Thread Grinding Center

机床主要用途
SKR7620B内螺纹磨削中心主要用于滚珠丝杠行业，适用双圆弧滚珠螺母内螺纹、外圆及肩面的复合精密磨削加工。

Main usage
SKR7620B internal thread grinding center is mainly used in the ball-screws industry to grind the internal thread, cylindrical surface and shoulder of raceway with Gothic profile of nut precisely.

机床工作精度

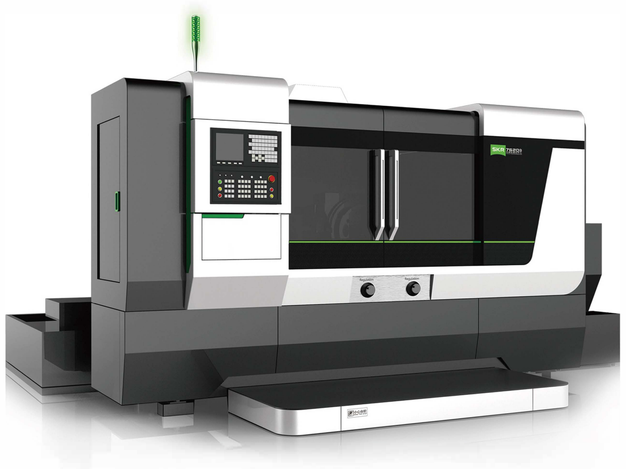
圆弧内螺纹磨削精度	
基本导程极限偏差	0.004mm
有效长度内导程累积公差	0.006mm
中径圆度	0.005mm
表面粗糙度	Ra≤0.4μm
外圆磨削精度	
圆柱度	0.003 mm
表面粗糙度	
肩面	Ra0.63μm
外圆	Ra0.4μm

Working Accuracy

Thread accuracy achievable	
Limit lead error	0.004mm
Accumulative error in an effective range of length	0.006mm
Roundness at pitch circle	0.005mm
Roughness	Ra≤0.4μm
Cylindrical surface	
Cylindricity	0.003 mm
Roughness	
At end face	Ra0.63μm
At cylindrical surface	Ra0.4μm

机床数控系统配置
>数控系统：西门子828D数控系统
>内数控轴(五轴3联动)：
>头架工件主轴　C轴　全闭环
>工作台进给轴　Z轴　全闭环
>外圆进给　U轴
>内磨进给　X轴　全闭环
>内磨砂轮架螺旋升角　A轴

CNC system
>CNC system: SIEMENS 828D
>Programmable axes (five axes including three synchronous ones)
>Work spindle　axis C (full close-looped)
>Worktable traverse　axis Z (full close-looped)
>Cross-feed of wheelhead for cylindrical grinding　axis U
>Cross-feed of wheelhead for internal grinding　axis X (full close-looped)
>Helix angle of wheelhead for internal grinding　axis A



机床技术特点
>采用内螺纹磨、外圆磨双砂轮架布局，可在一次装夹中完成滚珠螺母的外圆、端面和内螺纹的加工。
>实现了砂轮主轴螺旋升角运动的自动化控制。
>内磨砂轮主轴为高速电主轴。
>外磨砂轮主轴为高精度动静压主轴，有效降低工件表面粗糙度。
>用户可选配测量装置，实现工件自动对刀。

Features
>The machine can grind the internal thread, cylindrical surface & end face in one setting up for it employing two wheelheads for internal & cylindrical grinding respectively.
>The adjustment of the helical angle can be obtained by means of automatic control.
>The internal wheel spindle is a high speed electrical spindle.
>The wheel spindle for cylindrical grinding is a hydrodynamic & hydrostatic one with high precision. So the roughness of the work ground can be improved greatly.
>An auto measuring probe is equipped to obtain alignment of pre-cut thread groove.

机床主要规格参数

>最大工件回转直径	200mm
>最大工件安装长度	200mm
>可磨工件直径	
内螺纹	20-150mm
外圆	20-120mm
>最大磨削工件长度	
内螺纹	150mm
外圆	200mm
>中心高	210mm
>可磨螺纹的螺距	1-24mm（公制）
>可磨内螺纹的最大螺旋角	±12°
>头架顶尖孔锥度	莫氏5号
>工件磨削时主轴转速	
内螺纹	0.2-100rpm
外圆及肩面	50-150rpm
>砂轮主轴转速	
内螺纹	24000 rpm
外圆	3000 rpm
>砂轮尺寸	
内螺纹最大直径	100mm
最小	16mm
外圆	400-500mm
>砂轮线速度	
内螺纹	28米/秒
外圆	45米/秒
>机床整体尺寸	3100x2050x2400mm
>机床重量	6500kg

Main Specifications

>Max. rotary diameter of a workpiece to be ground	200mm
>Max. length of a workpiece mounted	200mm
>Diameter of a workpiece to be ground	
Internal thread	20-150mm
Cylinder	20-200mm
>Max. length of workpiece to be ground	
Internal thread	150mm
Cylinder	200mm
>Center height	210mm
>Pitch of thread ground	1—24mm(metric)
>Max. helix angle of thread to be ground	±12°
>Taper of bore of workhead	Morse #5
>Speed of work spindle when grinding	
For internal thread	0.2-100rpm
For cylinder & shoulder	50-150rpm
>Speed of wheel spindle	
Internal thread	24000 rpm
Cylinder	3000 rpm
>Wheel size	
Max. diameter for internal thread	100mm
Min. diameter for internal thread	16mm
Cylindrical grinding	400-500mm
>Peripheral speed of grinding wheel	
Internal thread grinding	28m/sec
Cylindrical grinding	45m/sec
>Overall dimension	3100x2050x2400mm
>Weight	6500kg

SK 7420X15
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
The machine is mainly used for grinding of screws with Whitworth & Acme thread and ball-screws precisely.

机床工作精度
机床磨削滚珠丝杠能达到P3级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠可达6级（符合JB2886－1992）。

Ball-screws:P3 (GB/T17587.3-1998) (ISO3408-3:2006), measured under dynamic state;The dynamic measuring debile is as the test tool for leadscrew.
Acme screws:P6 (JB2886-92);

机床数控系统配置
>采用西门子828D数控系统,实现四轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
V轴:修整器滑座垂直运动
其中C、Z两轴联动,实现螺纹运动;配置两个电子手轮,可对机床各数控轴的运动进行手动控制。

CNC system
>There are four programmable axes controlled by the SIEMENS 828D CNC system, including three synchronous ones.
>No. of programmable axes
Axis Z:Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X:Wheelhead cross feed
Axis C:Rotation of work spindle
(With angular encoder)　　full close-looped
Axis V:Vertical feed of dresser slider
Out of the above NC axes, C-axis and Z-axis are in a gang to make thread movement; Two electric hand-wheels can operate each NC axis by hand.

机床技术特点
>后置式电机静压轴承砂轮主轴,使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍,大大提高了机床的加工效率。
>智能式磨削软件,通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure doubles workpiece speed, thus increasing the machining efficiency greatly.
>By the inteligent grinding software in man-computer interactive conversation, different wheel profiles can be achieved conveniently.

机床主要规格参数

>最大安装直径	200mm
>最大顶尖距	1500mm
>最大可磨直径	150mm
(用中心架时为50mm)	
>最小可磨直径	20mm
>可磨螺纹最大长度	1360mm
>工作台最大行程	1400mm
>可磨螺纹的螺距	3～24mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹头数	1～99（任意）
>工作台回程速度	3000mm/min
>砂轮架快速进退速度	1000mm/min
>头架主轴工作转速	0.5～45r/min
>砂轮最大线速度	45m/s
>砂轮尺寸	
外径×内径	φ400～φ300×φ203mm
宽度	10mm
>工件最大重量	100kg

Main Specifications

>Max. mounting diameter	200mm
>Max.center distance	1500mm
>Max. diameter of thread to be ground	150mm
(It is 50mm when grinding with steady rest.)	
>Min. diameter of thread to be ground	20mm
>Max. length of thread to be ground	1360mm
>Max. travel of table	1400mm
>Pitch of thread to be ground	3～24mm
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Worktable speed(In return)	3000mm/min
>Speed of wheelhead rapid approach & withdrawal	1000mm/min
>Wheel spindle speed	0.5～45r/min
>Max. wheel peripheral speed	45m/s
>Wheel size	
OD×ID	φ400～φ300×φ203mm
Width	10mm
>Max. workpiece weight	100kg

SK 7432X12
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
The machine is mainly used for grinding screws with Whitworth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统,实现五轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动,实现螺纹运动;W、V两轴联动,通过金刚石滚轮对砂轮进行修整;配置两个电子手轮,可对机床各数控轴的运动进行手动控制。

CNC system
>Equipped with a SIEMENS 828D CNC system, the machine is controlled with five programmable axes including three synchronous ones.
>No. of Programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;Wheel dressing is conducted by a formed diamond roller;Two electric hand-wheels can control each NC axis by hand.

机床主要工作精度
机床磨削滚珠丝杠能达到P2级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠可达6级（符合JB2886－1992）。

Working Accuracy
The accuracy of ball-screws can be reached to grade P2 (GB/T17587.3-1998) (ISO3408-3:2006) after ground.
The dynamic measuring device is as the test tool for leadscrew.
The accuracy of Acme screws can be reached to grade 6 (JB2886-1992) after ground.

机床技术特点
>后置式电机静压轴承砂轮主轴,使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍,大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高,修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发,使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件,通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>Optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>CNC wheel dresser can dress grinding wheel into various required profiles.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation , wheel dressing and grinding can be operated with convenience and accuracy.

机床主要规格参数

>最大安装直径	320mm
>最大顶尖距	1200mm
>最大可磨直径	250mm
>最小可磨直径	20mm
>工作台最大行程	1100mm
>可磨螺纹最大长度	1000mm
>可磨螺纹的螺距	1.5～48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>工作台纵向回程速度	3000mm/min
>砂轮架横向快速进退速度	1000mm/min
>头架主轴工作转速	0.5～75r/min
>砂轮主轴转速	1720～2150 r/min
>砂轮最大线速度	45m/s
>砂轮尺寸	
外径×内径	ϕ500～ϕ400×ϕ305mm
宽度	10mm
>工件重量	80Kg

Main Specifications

>Max. mounting diameter	320mm
>Max. center distance	1200mm
>Max. diameter of thread to be ground	250mm
>Min. diameter of thread to be ground	20mm
>Max. travel of table	1100mm
>Max. length of thread to be ground	1000mm
>Pitch of thread to be ground	1.5～48mm
>Max. lead of thread to be ground	300mm
>Max.helix angle	±25°
>Worktable longitudinal traverse speed(In return)	3000mm/min
>Speed of wheelhead rapid approach & withdrawal	1000mm/min
>Work spindle speed	0.5～75r/min
>Wheel spindle speed	720～2150r/min
>Max. wheel peripheral speed	45m/s
>Wheel size	
O.D×I.D	ϕ500～ϕ400×ϕ305mm
Width	10mm
>Machine weight	80Kg

SK 7432X15
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
The machine is mainly used for grinding of screws with Whitworth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统，实现五轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，通过金刚石滚轮对砂轮进行修整；配置两个电子手轮，可对机床各数控轴的运动进行手动控制。

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with five programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.

机床工作精度
机床磨削滚珠丝杠能达到P2级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠可达6级（符合JB2886－1992）。

Working Accuracy
Ball-screws:P2 (GB/T17587.3-1998) (ISO3408-3:2006, measured under dynamic state;The dynamic measuring device is as the test tool for leadscrew.
Acme screws: P6 (JB2886-1992).

机床技术特点
>后置电机式静压轴承砂轮主轴，使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍，大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高，修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件，通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>CNC wheel dresser can dress grinding wheel into various required profiles automatically.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation , wheel dressing and grinding can be operated with convenience and accuracy.

机床主要规格参数

>最大安装直径	320mm
>最大顶尖距	1500mm
>最大可磨直径	250mm
>最小可磨直径	20mm
>可磨螺纹最大长度	1360mm
>可磨螺纹的螺距	1.5～48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹头数	1～99（任意）
>工作台回程速度	3000mm/min
>砂轮架快速进退速度	2500mm/min
>头架主轴工作转速	0.5～75r/min
>砂轮主轴转速	1720～2150r/min
>最大砂轮线速度	45m/s
>砂轮尺寸	
外径×内径	φ500～φ400×φ305mm
宽度	10mm
>工作最大重量	100Kg

Main Specifications

>Max. mounting diameter	320mm
>Max. center distance	1500㎜
>Max. grinding diameter	250㎜
>Min. grinding diameter	20㎜
>Max. grinding length	1360㎜
>Pitch og thread to be ground	1.5～48㎜
>Max. thread lead	300㎜
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Speed of worktable (in return)	3000㎜/min
>Wheelhead rapid approach & withdrawal speed	2500㎜/min
>Work spindle speed	0.5～75r/min
>Wheel spindle speed	1720～2150r/min
>Max. peripheral speed of grinding wheel	45m/s
>Wheel size	
O.D×I.D	φ500～φ400×φ305mm
Width	10mm
>Max. workpiece weight	100Kg

SK 7432X15GX
高精高效数控丝杠磨床
High persision high efficiency CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的高效精密磨削。

Main usage
The machine is mainly used for grinding screws with Whit-worth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统，实现六轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
A轴:砂轮架转筒水平回转运动
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，通过金刚石碟轮对砂轮进行修整；A轴回转运动实现螺旋升角的自动调整。配置两个电子手轮，可对机床各数控轴的运动进行手动控制。

机床工作精度
机床磨削滚珠丝杠达到P1级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠达到5级（符合JB2886－1992）。

Working Accuracy
Ball-screws: P1 (GB/T17587.3-1998) (ISO3408-3:2006), measured with a professional leadscrew dynamic tester.
Acme screws: P5 (JB2886-1992).

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with six programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis A: Swivel of wheel spindle
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.

机床技术特点
>后置式电机与静压轴承组合的砂轮主轴,使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍,大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高,修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件,通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。
>绿色制造技术全面提升整机安全及环境防护,全面提升机床液压、润滑系统防漏、防渗技术及导轨、电机、光栅防护系统。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>The CNC wheel dresser can dress grinding wheel into various required profiles automatically.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation, wheel dressing and grinding can be operated with convenience and accuracy.
>The green manufacturing technology is fully embodied on the machine by improving machine operating safety, machine hydraulic system, oil leakage level, motor and grating scale protection.

机床主要规格参数

>最大安装直径	320mm
>最大顶尖距	1500mm
>最大可磨直径	250mm
>最小可磨直径	20mm
>可磨螺纹最大长度	1360mm
>可磨螺纹的螺距	1.5~48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹头数	1～99（任意）
>工作台回程速度	3000mm/min
>砂轮架快速进退速度	2500mm/min
>头架主轴工作转速	0～100r/min
>砂轮主轴转速	1720～2150r/min
>最大砂轮线速度	45m/s
>砂轮尺寸	
外径×内径	φ500～φ400×φ305
宽度	10mm
>工作最大重量	100Kg

Main Specifications

>Max. mounting diameter	320mm
>Max. center distance	1500mm
>Max. diameter of thread to be ground	250mm
>Min. diameter of thread to be ground	20mm
>Max. length of thread to be ground	1360mm
>Pitch of thread to be ground	1.5~48mm
>Max. lead of thread to be ground	300mm
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Speed of worktable (in return)	3000mm/min
>Speed of wheelhead rapid approach & withdrawal	2500mm/min
>Speed of work spindle	0～100r/min
>Speed of wheel spindle	1720～2150r/min
>Max. peripheral speed of grinding wheel	45m/s
>Wheel size	
OD×ID	φ500～φ400×φ305
Width	10mm
>Max. workpiece weight	100Kg

SK 7432X20
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
The machine is mainly used for grinding of screws with Whitworth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统，实现五轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　全闭环控制
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，通过金刚石滚轮对砂轮进行修整；配置两个电子手轮，可对机床各数控轴的运动进行手动控制。

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with five programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.

机床工作精度
机床磨削滚珠丝杠能达到P2级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠可达6级（符合JB2886－1992）。

Working Accuracy
Ball-screws:P2 (GB/T17587.3-1998) (ISO3408-3:2006, measured under dynamic state;The dynamic measuring device is as the test tool for leadscrew.
Acme screws: P6 (JB2886-1992).

机床技术特点
>后置电机式静压轴承砂轮主轴，使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍，大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高，修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件，通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>CNC wheel dresser can dress grinding wheel into various required profiles automatically.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation , wheel dressing and grinding can be operated with convenience and accuracy.

机床主要规格参数

>最大安装直径	320mm
>最大顶尖距	2000mm
>最大可磨直径	250mm
>最小可磨直径	20mm
>可磨螺纹最大长度	1800mm
>可磨螺纹的螺距	1.5～48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹头数	1～99（任意）
>工作台回程速度	3000mm/min
>砂轮架快速进退速度	2500mm/min
>头架主轴工作转速	0.5～75r/min
>砂轮主轴转速	1720～2150r/min
>最大砂轮线速度	45m/s
>砂轮尺寸	
外径×内径	φ500～φ400×φ305mm
宽度	10mm
>工作最大重量	100Kg

Main Specifications

>Max. mounting diameter	320mm
>Max. center distance	2000mm
>Max. grinding diameter	250mm
>Min. grinding diameter	20mm
>Max. grinding length	1800mm
>Pitch of thread to be ground	1.5～48mm
>Max. Thread lead	300mm
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Speed of worktable (in return)	3000mm/min
>Wheelhead rapid approach & withdrawal speed	2500mm/min
>Work spindle speed	0.5～75r/min
>Wheel spindle speed	1720～2150r/min
>Max. peripheral speed of grinding wheel	45m/s
>Wheel size	
O.D×I.D	φ500～φ400×φ305mm
Width	10mm
>Max. workpiece weight	100Kg

SK 7432X20GX
高精高效数控丝杠磨床
High precision high efficiency CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的高效精密磨削。

Main usage
The machine is mainly used for grinding screws with Whit-worth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统，实现六轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
A轴:砂轮架转筒水平回转运动
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，通过金刚石碟轮对砂轮进行修整；A轴回转运动实现螺旋升角的自动调整。配置两个电子手轮，可对机床各数控轴的运动进行手动控制。

机床工作精度
机床磨削滚珠丝杠达到P1级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。
磨削梯形丝杠达到5级（符合JB2886－1992）。

Working Accuracy
Ball-screws: P1 (GB/T17587.3-1998) (ISO3408-3:2006), measured with a professional leadscrew dynamic tester.
Acme screws: P5 (JB2886-1992).

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with six programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis A: Swivel of wheel spindle
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.

机床技术特点
>后置式电机与静压轴承组合的砂轮主轴,使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍,大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高,修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件,通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。
>绿色制造技术全面提升整机安全及环境防护,全面提升机床液压、润滑系统防漏、防渗技术及导轨、电机、光栅防护系统。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>The CNC wheel dresser can dress grinding wheel into various required profiles automatically.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation, wheel dressing and grinding can be operated with convenience and accuracy.
>The green manufacturing technology is fully embodied on the machine by improving machine operating safety, machine hydraulic system, oil leakage level, motor and grating scale protection.

机床主要规格参数

>最大安装直径	320mm
>最大顶尖距	2000mm
>最大可磨直径	250mm
>最小可磨直径	20mm
>可磨螺纹最大长度	1800mm
>可磨螺纹的螺距	1.5~48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹头数	1～99（任意）
>工作台回程速度	3000mm/min
>砂轮架快速进退速度	2500mm/min
>头架主轴工作转速	0～100r/min
>砂轮主轴转速	1720～2150r/min
>最大砂轮线速度	45m/s
>砂轮尺寸	
外径×内径	ϕ500～ϕ400×ϕ305
宽度	10mm
>工作最大重量	130Kg

Main Specifications

>Max. mounting diameter	320mm
>Max. center distance	2000mm
>Max. diameter of thread to be ground	250mm
>Min. diameter of thread to be ground	20mm
>Max. length of thread to be ground	1800mm
>Pitch of thread to be ground	1.5~48mm
>Max. lead of thread to be ground	300mm
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Speed of worktable (in return)	3000mm/min
>Speed of wheelhead rapid approach & withdrawal	2500mm/min
>Speed of work spindle	0～100r/min
>Speed of wheel spindle	1720～2150r/min
>Max. peripheral speed of grinding wheel	45m/s
>Wheel size	
OD×ID	ϕ500～ϕ400×ϕ305
Width	10mm
>Max. workpiece weight	130Kg

SK 7432X30、X40
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
The machine is mainly used for grinding of screws with Whitworth & Acme thread and ball-screws precisely.

机床数控系统配置
>采用西门子828D数控系统，实现五轴三联动控制。
>控制轴数
Z轴:工作台纵向运动　　配置光栅尺　　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　　配置角度编码器　　全闭环控制
V轴:修整器滑座垂直运动
W轴:修整器拖板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，通过金刚石滚轮对砂轮进行修整；配置两个电子手轮，可对机床各数控轴的运动进行手动控制。

机床工作精度
机床磨削滚珠丝杠能达到P3级，精度符合GB/T17587.3－1998（ISO3408-3:2006）；检验工具为丝杠动态测量仪。磨削梯形丝杠可达6级（符合JB2886－1992）。

Working Accuracy
Ball-screws:P3(GB/T17587.3-1998)（ISO3408-3:2006); measured with a professional leadscrew dynamic tester
Acme screws: P6 (JB2886-1992).

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with five programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Table longitudinal traverse
(With grating scale)　　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(With angular encoder)　　full close-looped
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.

机床技术特点
>后置式静压轴承砂轮主轴，使工件磨削后的表面质量大大提高。
>多次优化的头架使磨削时工件的转速提高一倍，大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高，修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件，通过人机交户方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>Good surface finish is promised due to direct-driven wheel spindle hydro-static bearings on the spindle.
>The optimized workhead structure makes work spindle speed double, thus improving machine efficiency greatly.
>CNC wheel dresser can dress grinding wheel into various required profiles automatically.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation , wheel dressing and grinding can be operated with convenience and accuracy.

机床主要规格参数

	SK7432X30	SK7432X40
>最大安装直径	320mm	320mm
>最大顶尖距	3150mm	4200mm
>最大可磨直径	250mm	250mm
>最小可磨直径	20mm	20mm
>可磨螺纹最大长度	2940mm	3950mm
>可磨螺纹的螺距	1.5～48mm	1.5~48mm
>可磨螺纹最大导程	300mm	300mm
>可磨螺纹最大螺旋升角	±25°	±25°
>可磨螺纹头数	1～99（任意）	1~99(任意）
>工作台回程速度	3000mm/min	3000mm/min
>砂轮架快速进退速度	2500mm/min	2500mm/min
>头架主轴工作转速	0.5～60r/min	0.5~60r/min
>砂轮主轴转速	1720～2150r/min	1720~2150r/min
>最大砂轮线速度	45m/s	45m/s
>砂轮尺寸		
外径×内径	φ500～φ400×φ305	φ500~φ400×φ305
宽度	10、25、32mm	10mm
>工件最大重量	200Kg	400kg

Main Specifications

	SK7432X30	SK7432X40
>Max. mounting diameter	320mm	320mm
>Max. center distance	3150mm	4200mm
>Max. diameter of thread to be ground	250mm	250mm
>Min. diameter of thread to be ground	20mm	20mm
>Max. length of thread to be ground	2940mm	3950mm
>Pitch of thread to be ground	1.5～48mm	1.5~48mm
>Max. lead of thread to be ground	300mm	300mm
>Max. helix angle	±25°	±25°
>No. of starts	1～99(any)	1~99(任意）
>Speed of worktable (in return)	3000mm/min	3000mm/min
>Speed of wheelhead rapid approach & withdrawal	2500mm/min	2500mm/min
>Speed of work spindle	0.5～60r/min	0.5~60r/min
>Speed of wheel spindle	1720～2150r/min	1720~2150r/min
>Max. peripheral speed of grinding wheel	45m/s	45m/s
>Wheel size		
O.D×I.D	φ500～φ400×φ305	φ500~φ400×φ305
Width	10、25、32mm	10mm
>Max. workpiece weight	200Kg	400kg

SK7450AX50
数控丝杠磨床
CNC Leadscrew grinding machine

机床主要用途
主要用于各种三角螺纹、梯型丝杠及滚珠丝杠的精密磨削。

Main usage
This machine is mainly used for grinding screws with Whitworth & Acme threads and ballscrews precisely.

机床主要工作精度
机床精度按国家专业标准JB/T2858.3-1999,螺距在6mm以内的螺纹,螺距精度可保证为:

V2πp	0.006mm
V300p	0.012mm
Ep	0.062mm
Vup	0.041mm
螺纹中径尺寸变化量	0.005mm
全长中径尺寸变化量	0.030mm
螺纹表面粗糙度	Ra 0.32μm

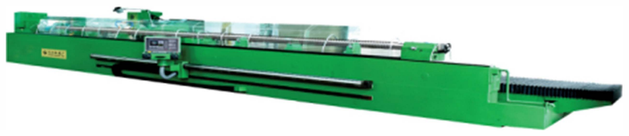
Working Accuracy
In accordance with the Chinese standard concerned,
the pitch error of a screw with pitch not longer than 6mm is surely less than the followers:

V2πp	0.006mm
V300p	0.012mm
Ep	0.062mm
Vup	0.041mm

Error of pitch diameter over a rotation of 360 degree 0.005mm
Error of pitch diameter over entire length of thread 0.030mm
Roughness
Ra 0.32μm

机床数控系统配置
>采用西门子828D数控系统，实现五轴三联动控制。
>控制轴数
Z轴:砂轮架拖板纵向运动　配置光栅尺　全闭环控制
X轴:砂轮架横进给运动
C轴:头架主轴回转运动　配置旋转编码器　全闭环控制
V轴:修整器滑座垂直运动
W轴:修整器托板水平运动
其中C、Z两轴联动，实现螺纹运动；W、V两轴联动，
通过金刚石滚轮对砂轮进行修整；配置两个电子手轮，
可对机床各数控轴的运动进行手动控制。

CNC system
>Equipped with a SIEMENS 828D CNC system , the machine is controlled with five programmable axes including three synchronous ones.
>No. of programmable axes
Axis Z: Longitudinal feed of wheelhead
(with grating scale)　full close-looped
Axis X: Cross-feed of wheelhead
Axis C: Rotation of work spindle
(with angular encoder)　full close-looped
Axis V: Vertical feed of dresser slider
Axis W: Horizontal feed of dresser slider
Out of above NC axes, C-axis and Z-axis are linked to perform thread movement;
Wheel dressing is conducted by a formed diamond roller;
Two electric hand-wheels can control each NC axis by hand.



机床技术特点
>多次优化的头架使磨削时工件的转速提高一倍,大大提高了机床的加工效率。
>多次优化的CNC砂轮修整器使各种形状砂轮的修整精度更高修整柔性更好。
>恒温、大流量、双重过滤冷却系统的升级及多点式工件淋浴冷却装置的开发，使滚珠丝杠加工精度受温度的影响程度大大减小。
>智能式磨削软件,通过人机交互方式灵活方便的实现各种砂轮形状的修整和不同工件的磨削。

Features
>The optimized workhead structure makes work spindle speed double,thus improving machine efficiency greatly.
>CNC wheel dresser can dress grinding wheel into various required profiles automaticany.
>Oil chiller, high-flow and powerful cooling system and double-filtering system together ensure the temperature influence in grinding process to the minimum.
>With the intelligent grinding software in man-computer interactive conversation , wheel dressing and grinding can be operated with convenience and accuracy.

机床主要规格参数

>最大安装直径	500mm
>最大顶尖距	5800mm
>最大可磨直径	250mm
>最小可磨直径	50mm
>可磨螺纹最大长度	5000mm
>砂轮架拖板最大行程	5300mm
>可磨螺纹的螺距	1.5～48mm
>可磨螺纹最大导程	300mm
>可磨螺纹最大螺旋升角	±25°
>可磨螺纹的头数	1～99（任意）
>砂轮架拖板回程速度	3000 mm/min
>砂轮架进退速度	2500 mm/min
>头架主轴转速	0.5～27r/min
>砂轮主轴转速（交流变频）	1340～1670 r/min
>砂轮线速度	35m/s
>砂轮尺寸	
外径×内径	400～500×305mm
宽度	10mm、25mm
>工作最大重量	500Kg

Main Specifications

>Max. mounting diameter	500mm
>Max. center distance	5800mm
>Max. diameter of thread to be ground	250mm
>Min. diameter of thread to be ground	50mm
>Max. length of thread to be ground	5000mm
>Max. travel of wheelhead	5300mm
>Pitch of thread to be ground	1.5～48mm
>Max. lead of thread to be ground	300mm
>Max. helix angle	±25°
>No. of starts	1～99(any)
>Speed of wheelhead (in return)	3000mm/min
>Speed of wheelhead approach & withdrawal	2500 mm/min
>Wheel spindle speed	0.5～27r/min
>Wheel spindle speed (AC variable frequency)	1340～1670 r/min
>Peripheral speed of wheel	35m/s
>Wheel size	
O.D×I.D	400～500×305mm
Width	10mm、 25mm
>Max. workpiece weight	500Kg