

# Valve Seats Boring Machine

## Model: BV90

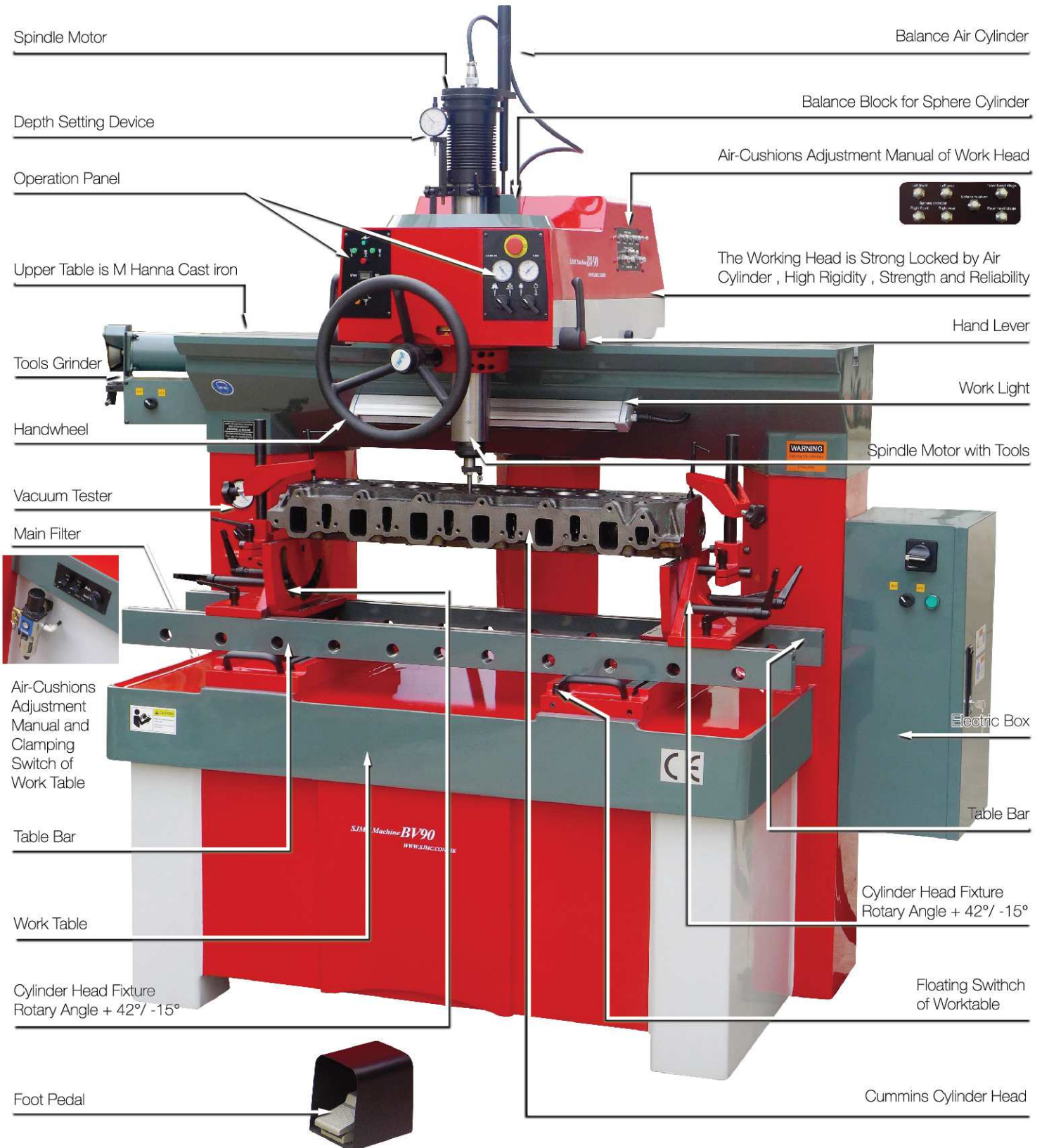
FESTO pneumatic components  
Schneider electrical components



Video Online



This product is TÜV SÜD - tested and has already gained CE certificate



Spindle Motor

Balance Air Cylinder

Depth Setting Device

Balance Block for Sphere Cylinder

Operation Panel

Air-Cushions Adjustment Manual of Work Head

Upper Table is M Hanna Cast iron

The Working Head is Strong Locked by Air Cylinder , High Rigidity , Strength and Reliability

Tools Grinder

Hand Lever

Handwheel

Work Light

Vacuum Tester

Spindle Motor with Tools

Main Filter

Electric Box

Air-Cushions Adjustment Manual and Clamping Switch of Work Table

Table Bar

Table Bar

Work Table

Cylinder Head Fixture Rotary Angle + 42°/ -15°

Cylinder Head Fixture Rotary Angle + 42°/ -15°

Floating Switch of Worktable

Foot Pedal

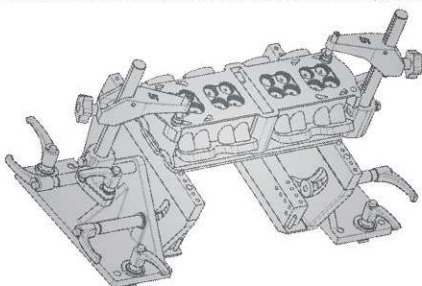
Cummins Cylinder Head

**Valve Seat Boring Machine Model: BV90** with high availability meets the requirements of boring, reaming and cutting machining for high accuracy valve guides and valve seats. Triple air-float patented centering system and powerful spindle with built-in motor. Designed for the valve seats from the smallest to the bigger diameter. This machine can repair any existing engine, from the micro-engine up to the big stationary engine, machining capacity from 18mm to 90mm. To reach the requirements of high precision machining for valve guides with a small diameter of 4mm.

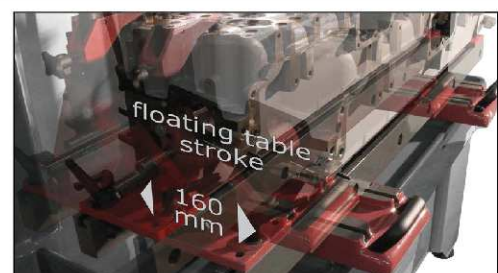
## Specifications

Model	BV90
Type of Drive System	Air / Electric
Max. Length of Cylinder Head	unlimited
Max. Width of Cylinder Head	500 mm
Max. Height of Cylinder Head	450 mm
Max. Boring Dia.	18 – 90 mm
Work Head Longitudinal Floating Travel	990 mm
Work Head Cross Floating Travel	40 mm
Sphere – Cylinder Travel	9 mm
Floating inclination angle of Spindle	5°
Table Travel	160 mm
Vertical Travel of Spindle	200 mm
Power of Spindle	1.8 kW Spindle Motor
Max. Torque of Spindle Motor	25 Nm
Spindle Speed	50 – 800 rpm stepless
Power of Tools Grinder	0.18 kW
Tools Grinder Rotation Speed	2800 rpm
Clamper Rotary Angle	+ 42°/ -15°
Required Rated Air Pressure	6 Bar / 85 PSI
Required Max. Air Flow	400 L / Min
Required Continuous Air Flow	60 L / Min
Length of Machine	1685 mm
Width of Machine	1050 mm
Max. Height of Machine	2180 mm
Min. Height of Machine	1980 mm
Roughness of Finishing	Ra 0.6
Package Size ( LxDxH )	1860x1150x2200 mm
N.W. / G.W.	1500 Kg / 1800 Kg

\* All technical data and photos are subject to change due to designing without notice.

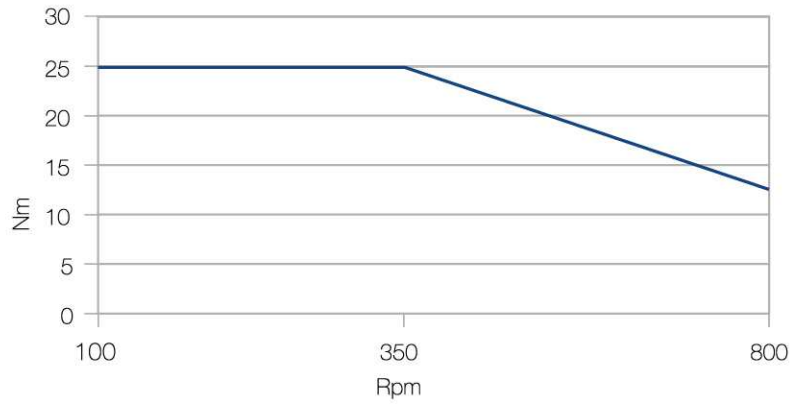


Cylinder Head Fixture



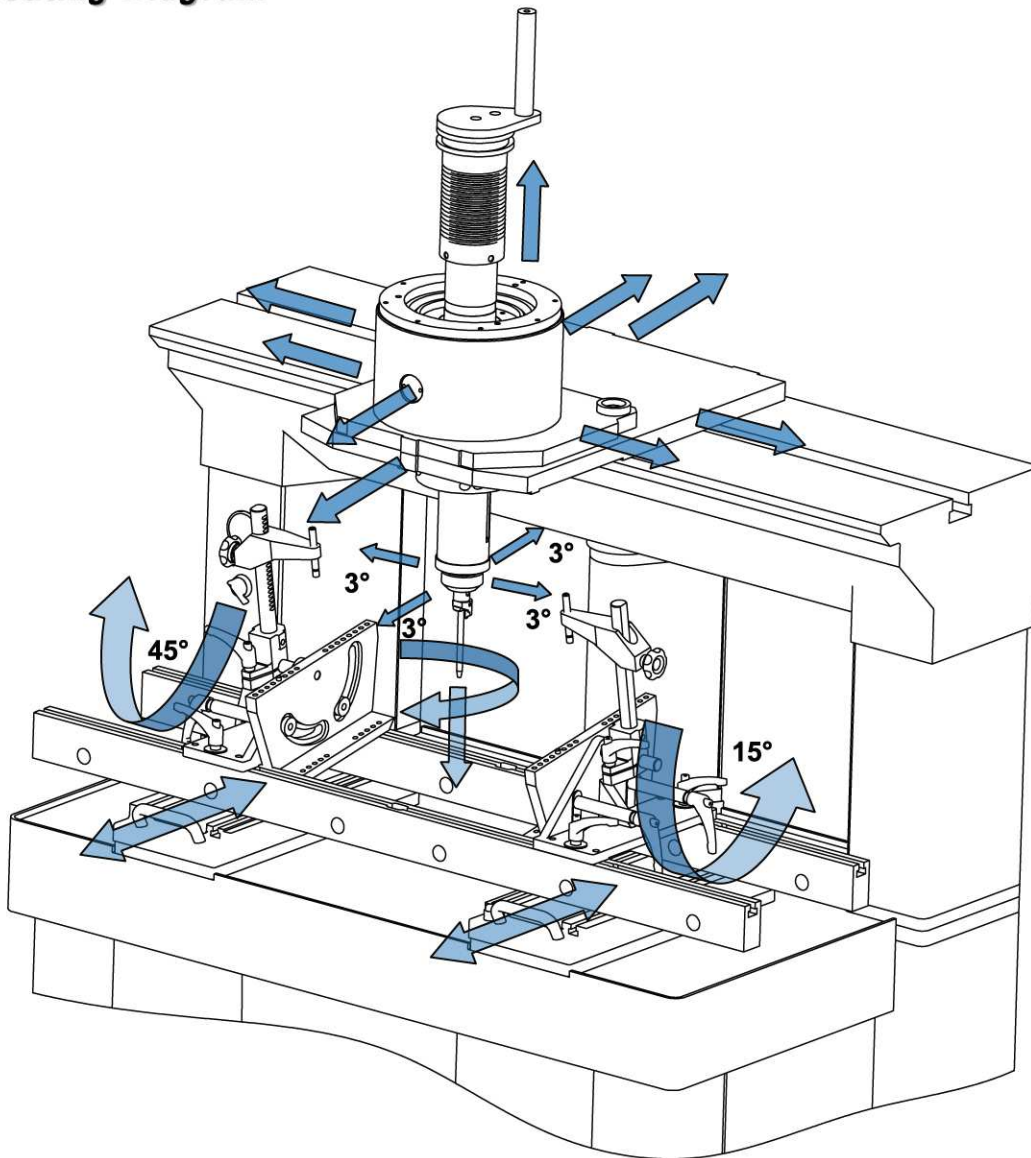
Air Floating Worktable

## Spindle Motor Torque Curve



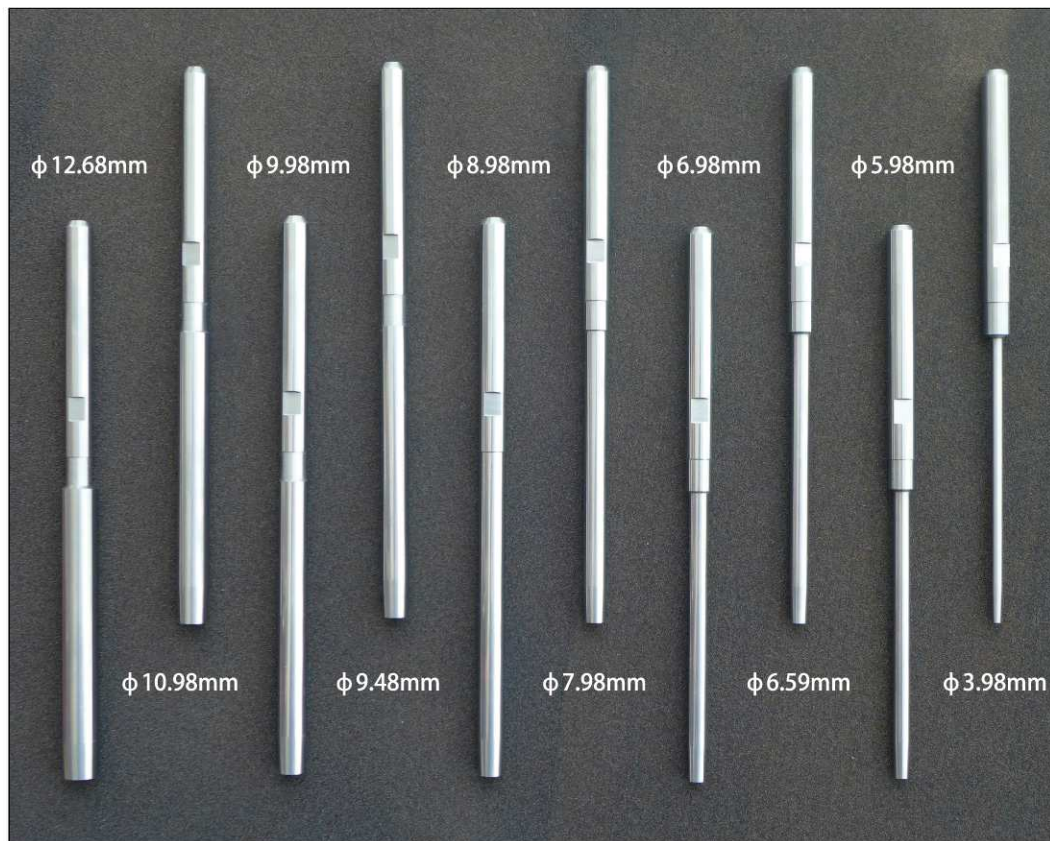
1.5 kW spindle motor is controlled by YASKAWA vector frequency converter ,  
low speed constant torque , high speed constant power

## Air Floating Diagram



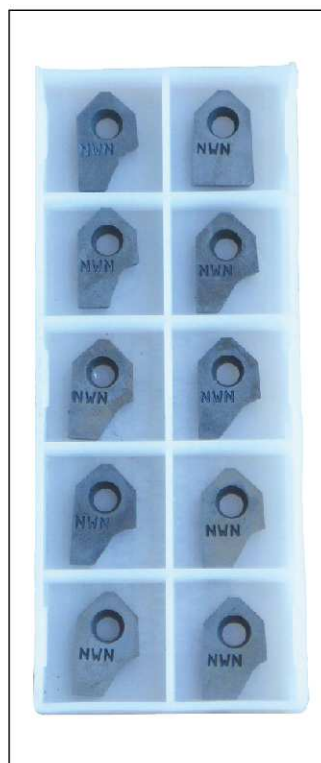
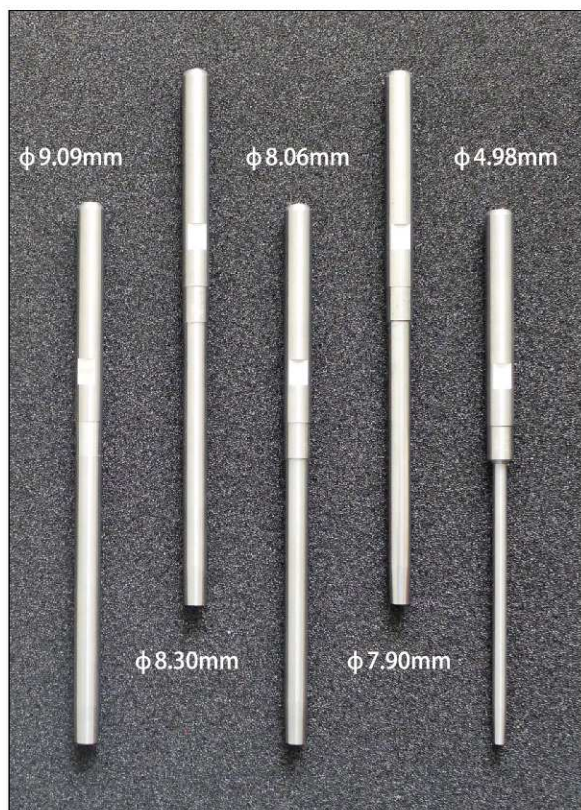
## Accessories

### 1 Carbide Pilots $\phi$ 9.52 Standard



Please refer to the appendix of pilots page No.76~77

### 2 Carbide Tip



Please refer to the appendix of Carbide Tips page No.52~75

\* The BV90 is equipped 15 pieces of Carbide Pilots as standard Acc. You can free to choose any size

\* The BV90 is equipped 10 pieces of Carbide Tips as standard Acc. NEWEN tips Made in USA

3 NWN5100F Tool Unit 18~40 mm



NWN5100F Fits Tip Holders  
NWN2000 , NWN2001 ,  
NWN2002

4 NWN5300 Tool Unit 40~80 mm



NWN5300 Fits Tip Holders  
NWN2003 , NWN2004 ,  
NWN2005

<p>5 Dial Gauge</p> 	<p>6 Vertical Level for Valve Seat</p> 	<p>7 Tools Setting Device</p> 	<p>8 Vacuum Pad</p> 
<p>9 Leveling Instrument</p> 	<p>10 Special Level for Valve Seat</p> 	<p>11 Adaptor for morse #2 to Taper ISO30</p> 	<p>12 Pneumatic Vacuum Cleaner</p> 

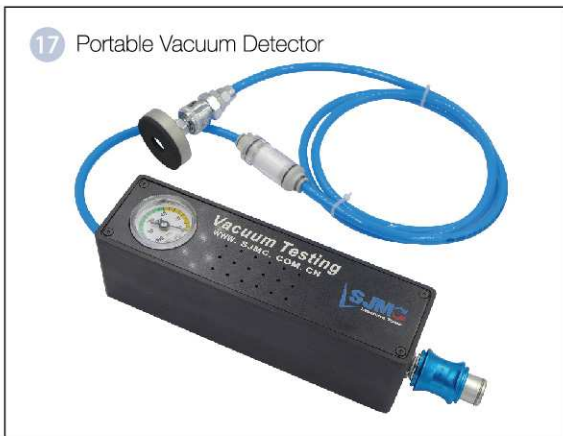
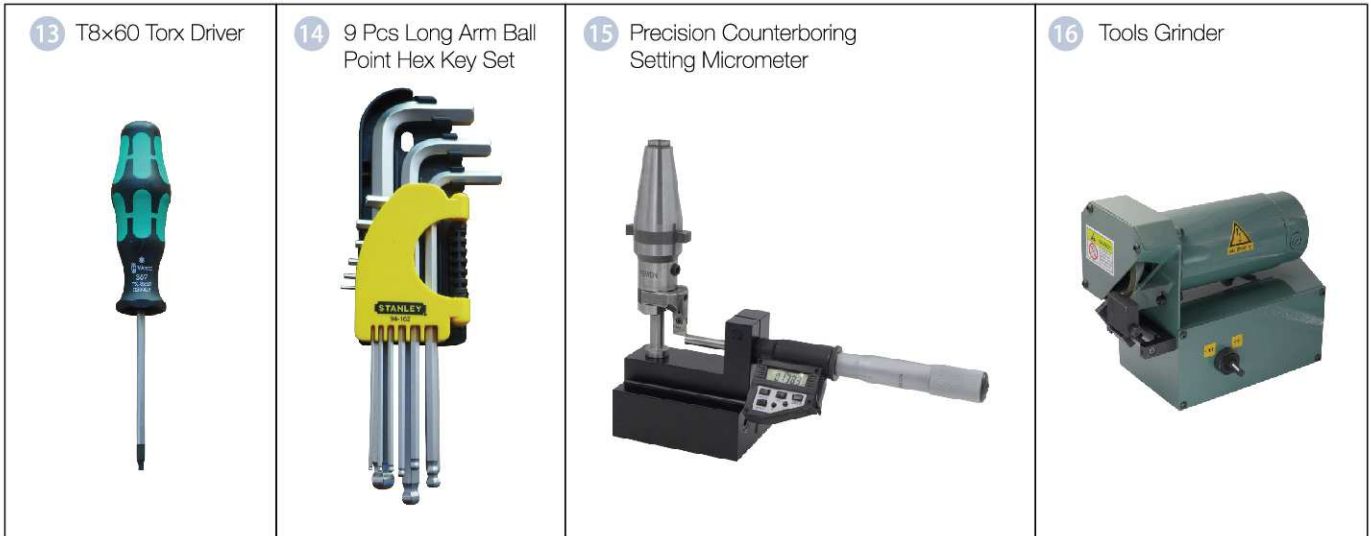


Table of Standard Acc. and Optional Acc.

Standard	1, 2, 3, 4, 5, 6, 7, 8, 13, 14, 16
Optional	9, 10, 11, 12, 15, 17

\* Special size of Carbide Pilots and Carbide Tip, please contact with our sales staff

### Required Space

