

SSH-1680 Technical Specifications

BORE DIAMETER:
3 - 60 mm
(.118 - 2.36 in)

MAXIMUM BORE LENGTH:
250 mm (9.84 in)

SPINDLE SPEED:
250 - 2500 RPM
(incrementally adjustable)

STROKE SPEED:
80 - 310 SPM

STROKE MOTOR:
.75 kW (1 HP)

SPINDLE MOTOR:
1.5 kW (2 HP)

PUMP MOTOR:
.125 kW (.17 HP)

HONING OIL CAPACITY:
96 L (25 gallons)

FLOOR SPACE:
1243 mm (w) X (49 in)
1350 mm (D) X (53 in)
1358 mm (H) (53.4 in)

WEIGHT:
720 Kg (1587 LBS)

POWER REQUIREMENTS:
380V, 50Hz, 3 PH
(SSH-1680GN50)
380V, 60 Hz, 3 PH
(SSH-1680GN60)
230, 60 Hz, 3PH
(SSH-1680D)



SSH-1680

ENTRY LEVEL POWER STROKED HONING MACHINE



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THE VALUE-PRICED SSH-1680 HAS FEATURES THAT MAKE JOBS PRECISE AND EASY

WHY HONE?

Job after job in all kinds of shops, Sunnen® Power Stroked Honing is producing work faster and with greater accuracy and consistency than I.D. grinders – especially where diameters are under 40 mm (1.57 in.).

Incomparable Quality – Sunnen Power Stroking assures constant stroke length and stroke rates. Combined with a zero shutoff means better control of bore size, finish and geometry than ever before – at high-production rates.

Saves Time And Costs By Reducing Bore Sizing

Operations – With the fast stock removal rates of the Sunnen SSH-1680, you can eliminate preliminary reaming, boring or grinding on many jobs and it allows you to rough and finish in one operation.

Run All Kinds Of Parts – The SSH-1680 is extremely versatile. It handles workpieces of almost any size or configuration and cuts all kinds of materials fast and clean.

- **Multiple land and tandem bores:** Sunnen's long stone bridges the lands, keeping them all in line and the same size. No rainbow or washout.
- **Bores with keyways or splines:** Specially designed stones and mandrels make honing keyways as easy as plain bores.
- **Blind end holes:** Sunnen tooling is easily adapted to hone to the bottom of blind bores and gives you better fits than any other process.
- **Thin-wall parts:** There are no chucks or clamps to distort or break delicate pieces. Holds tight tolerances.
- **Heavy or odd-shaped parts:** They don't have to be chucked or swung or precisely located. A simple, easy-to-make holding fixture does the trick in most cases.

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Zero Shutoff - Power stroking system can be set up to hone to size and automatically stop.

Power Stroking Standard - Both selectable manual and automatic power stroking is standard.

Solid Construction Throughout - Reinforced structural steel and cast iron provides a solid machining platform. Moving components are isolated from the base to eliminate vibration. Rigid stoker carriage and robust linkage-driven design permit more rapid stroking, which shortens cycle times. Square honing results are better than ever.

VFD Control - Spindle and stroke speed is controlled by the operator station. Vertical control panel swivels for optimum control location. There are no exposed contacts or switches to maintain. A sealed control box, completely outside the work area protects circuitry from dirt and coolant.

Foot Pedal - For ease-of-use and safety, the foot pedal starts and stops the machine.

Light and heavy feed pressure - For better control of cutting pressure.

Detachable Coolant Cart - The unique coolant reservoir is mounted on casters so it can be rolled out from the rear of the machine for easy filling and maintenance.

Long life centrifugal pump - With easy-to-clean filter basket is standard.

Built and backed by Sunnen.



Optional CE compliant safety guarding available, consisting of Lexan side guards and front light curtain.

WORKHOLDING FIXTURES FOR EVERYDAY APPLICATIONS

A variety of workholding fixtures are available for use with the SSH-1680. The Universal Honing Fixture comes standard with the machine, and can be used for most honing applications. The adjustable spindle allows the operator to eliminate mandrel runout for improved geometry. The spindle accepts all standard, in stock Sunnen tooling such as K, P20 and P28 mandrels.

The SSH-1680 can also be equipped with fixtures designed for your application.



Standard K Mandrels
Bore Diameter Range:
2,54 mm - 18.90 mm
(.100 - .741 in)

P20/P28 Mandrels
Bore Diameter Range:
P20: 19 mm - 25,40 mm
(.75 - 1.000 in)
P28: 25,15 mm - 152,40 mm
(0.999 - 6.000 in)