Vacumate – Regular Top

Article No. VM1218RP

The Datron Vacumate vacuum table module is a very flexible system for securing small, flat work pieces. The principal of the system is simply an assembly that has over one thousand holes in a grid pattern and uses a flow of air pulling downward through the holes, sucking your flat piece to the table surface. No gaskets are required with this system. On the aluminum top is a thin permeable card stock that distributes the vacuum evenly while acting as a sacrificial substrate for any cut-through of your work piece. Typically the vacuum pump (not included) is specified depending on the application. If the application requires the milling of holes and a lot of open areas, the pump can be configured for this situation so parts will not lift as vacuum is lost. The system is ideal for milling, drilling and engraving of flat materials such as aluminum, brass, plastic and even steel. A dense-hole version of the module is available for securing even smaller pieces. Common applications include: Nameplates, tags, signs, instrument panels, engraving plates and cookie cutting pieces out of large sheets.

The Vacumate consists of a 12” x 18” x ¾” thick anodized aluminum base that is used to distribute the vacuum through channels. It is secured to the machining table with six M6 machine screws (included). A 3/8” aluminum top secures to the base with eighteen 10-32 machine screws. The top has over one thousand micro holes drilled, with a slight counter-bore or cup to distribute the vacuum to a broader area. A small aluminum block mounts to the side of the assembly that has a ¾” brass barbed fitting for the supply hose. It is recommended to use ¾” (inside diameter) wire re-enforced hose (not supplied) to connect your vacuum pump to the table. The Vacuumate system comes with a starter kit of four 12” x 18” permeable stock pieces and one 1/8” magic board piece.

In order to use the system, you need to use a permeable stock on the surface. This is not only for the cut-through capability but the stock is required to distribute the vacuum evenly. In some applications, the stock can be used several times. Datron supplies the card stock in 24” x 36” sheets and is pre-printed with a grid to assist the machine operator in set-ups. Also available is 1/8” thick Magic Board which is ideal for situations when the operator may need a thicker sacrificial material on a cut-through, milling pockets in the surface for part locations or drilling holes for location pins. This material can also be machined true for high tolerance depth applications.

The 12” x 18” x 1 1/8” assembly is a modular system. The matrix of holes feed right to the outer edges so that the modules can be mounted beside each other with minimal loss of vacuum between the units. Up to four modules can be mounted in a 24” x 36” configuration on an M8 or M10 Datron machining system. The dense-hole version can also be mounted as one or more of the units for situations requiring more vacuum. In the case when multiple modules are required, an optional manual or electric manifold is available to control each module or zone individually. This can offer more flexibility when working with different size work pieces. The electric manifold is ideal for automated configurations.
**Vacumate - Dense Top**

Article No. VM1218DH

The Datron Vacumate vacuum table module is a very flexible system for securing small, flat work pieces. The principal of the system is simply an assembly that has over five thousand micro drilled holes in a grid pattern and uses a flow of air pulling downward through the holes, sucking your flat piece to the table surface. No gaskets are required with this system. On the aluminum top is a thin permeable card stock that distributes the vacuum evenly while acting as a sacrificial substrate for any cut-through of your work piece. Typically the vacuum pump (not included) is specified depending on the application. If the application requires the milling of holes and a lot of open areas, the pump can be configured for this situation so parts will not lift as vacuum is lost. The system is ideal for milling, drilling and engraving of flat materials such as aluminum, brass, plastic and even steel. Common applications include: Nameplates, tags, signs, instrument panels, engraving plates and cookie cutting pieces out of large sheets.

The Vacumate consists of a 12” x 18” x ¾” thick anodized aluminum base that is used to distribute the vacuum through channels. It is secured to the machining table with six M6 machine screws (included). A 3/8” aluminum top secures to the base with eighteen 10-32 machine screws. The top has over five thousand micro holes drilled, with a slight counter-bore or cup to distribute the vacuum to a broader area. A small aluminum block mounts to the side of the assembly that has two ¾” brass barbed fittings for the supply hoses. It is recommended to use two ¾” (inside diameter) wire re-enforced hoses (not supplied) to connect your vacuum pump to the table. The Vacumate system comes with a starter kit of four 12” x 18” permeable stock pieces and one 1/8” magic board piece.

In order to use the system, you need to use a permeable stock on the surface. This is not only for the cut-through capability but the stock is required to distribute the vacuum evenly. In some applications, the stock can be used several times. Datron supplies the card stock in 24” x 36” sheets and is pre-printed with a grid to assist the machine operator in set-ups. Also available is 1/8” thick Magic Board which is ideal for situations when the operator may need a thicker sacrificial material on a cut-through, milling pockets in the surface for part locations or drilling holes for location pins. This material can also be machined true for high tolerance depth applications.

The 12” x 18” x 1 1/8” assembly is a modular system. The matrix of holes feed right to the outer edges so that the modules can be mounted beside each other with minimal loss of vacuum between the units. Up to four modules can be mounted in a 24” x 36” configuration on an M8 or M10 Datron machining systems. In the case when multiple modules are required, an optional manual or electric manifold is available to control each module or zone individually. This can offer more flexibility when working with different size work pieces. The electric manifold is ideal for automated configurations.

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Quadramate
Article No. 0A01076

The Datron Quadramate vacuum table system is a very flexible system for securing flat work pieces. The principal of the system is simply an assembly that has over five thousand micro drilled holes in a grid pattern and uses a flow of air pulling downward through the holes, sucking your flat piece to the table surface. No gaskets are required with this system. On the four aluminum top is a thin 24” X 36” permeable card stock that distributes the vacuum evenly while acting as a sacrificial substrate for any cut-through of your work piece. Typically the vacuum pump (not included) is specified depending on the application. If the application requires the milling of holes and a lot of open areas, the pump can be configured for this situation so parts will not lift as vacuum is lost. The system is ideal for milling, drilling and engraving of flat materials such as aluminum, brass, plastic and even steel. Common applications include: Nameplates, tags, signs, instrument panels, engraving plates and cookie cutting pieces out of large sheets.

The Quadramate consists of four 12” x 18” x ¾” thick anodized aluminum bases that is used to distribute the vacuum through channels. The bases are secured to a 5/8” aluminum sub-plate that can be secured to the machining table by either screws or vacuum (second small pump – Item No. xxxxxxx). Four 3/8” x 12” X18” aluminum tops are secured to the base with machine screws. The four combined tops have over five thousand micro holes drilled, with a slight counter-bore or cup to distribute the vacuum to a broader area. Four small aluminum blocks mount to the side of the assembly with a ¾” brass barbed fitting for the supply hoses. Four ¾” (inside diameter) wire re-enforced hoses are supplied for connecting to your vacuum pump. The Quadramate system comes with a starter kit of four 24” x 36” permeable stock pieces and one 1/8” thick magic board piece.

In order to use the system, you need to use a permeable stock on the surface. This is not only for the cut-through capability but the stock is required to distribute the vacuum evenly. In some applications, the stock can be used several times. Datron supplies the card stock in 24” x 36” sheets and is pre-printed with a grid to assist the machine operator in set-ups. Also available is 1/8” thick, 24” x 36” Magic Board which is ideal for situations when the operator may need a thicker sacrificial material on a cut-through, milling pockets in the surface for part locations or drilling holes for location pins. This material can also be machined true for high tolerance depth applications.

The 24” x 36” x 1 1/8” assembly weighs approximately 100 pounds and requires at least two people to lift on and off the machine. An optional manual or electric manifold is available to control each module or zone individually. This can offer more flexibility when working with different size work pieces. The electric manifold is ideal for automated configurations.

Please note, the four supplied tops are the regular-hole pattern design (approximately 1,300 holes per top). A dense hole version can be used on one or more of the modules if extra vacuum is required in your application. The dense-hole top is quoted separately.

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