

Test: Acoustic Solid "Solid Machine"

Let's get "around" to the facts

Turntables for three tone arms usually have a five figure price.

The exception: the Solid Machine.

ts all about roundness might have been what the designer of this turntable was thinking as he took the Licircle in his hand. The result: the Solid Machine, containing only round parts with the exception of the base with its three supporting legs. It can be completely assembled and mounted in roughly the same amount of time it takes to describe the complete assembly. The model we received is of highly polished aluminum, offered at an additional 520 DM to the list price and requires intensive care. If this model however does not appeal to one there are other models such as the standard "Alu-Drehbild" model surface with its very-technical look or another model with glass beads that sparkle yielding a dissimilar effect for an additional 220 DM. The ambitious goal in the development of the Solid Machine was set of producing a turntable with three tone arms, that sounded good, was easy to use and could be had for a reasonable price. This has been accomplished and will be described in the following.

The base consists of three solid sleeve-sockets that are connected to a tripod by legs. Each sleeve has a Teflon plate for decoupling. On this are handsome M 10 socket screws which find their mates in the round brackets responsible for

The most affordable drive for three tone arms: Acoustic Solid's "Solid Machine" (starting at 3,000 DM), equipped here with SME IV, Rega RB 600 and Hadcock GH 228 Export.

the leveling of the entire unit. Whether one chooses to cover the hex screws with a covering cap or prefers the rugged mechanical look, is purely a matter of taste (the author favors the mechanical look). The brackets are screwed into the base plate of the drive. The platter bearing receives a few drops of bearing oil - and presto the Solid Machine stands ready before its proud owner. A string is connected from the motor drive, which stands freely to the side, to the turntable, and then you're ready to play. If only the setting-up of a turntable was always as simple....

Now only the tone arm bases are missing - and here the assembly proceeds just as simply: base plate on the drive basis, space pin on the base plate and then the tone arm base is screwed on - and that's all. Because the base plate as well as the tone arm bases can be turned, every tone arm must be separately adjusted. The space pins are manufactured in every necessary height. For the conventional arms finished bases are available, which can be set-up by the dealer with the use of a template. Those desiring to call something exotic their own can send a template (hopefully available) to Acoustic Solid where the matching base will be custom made for them according to their request. Even although the construction appears somewhat filigree - it is not susceptible to vibration. Analog fans who have a lot of drive will be delighted with the opportunity offered by this turntable of being able to mount three tone arms. Acoustic Solid had made a Rega RB 600 and a Hadcock GH 228 available to us. A SME IV rounded out the trio.

The platter bearing of the Solid Machine is a new development from Solid Machine. The exterior bearing housing is spaciously designed and is filled in a casting, which more or less forms the bearing axle with plastic. The result is that of a bearing lining

with an extremely high sliding capacity.

The bearing bedding area consists of Teflon, the bearing balls of ceramic and the platter shaft of highly polished stainless steel. Bedding play and tolerances amount to a mere three thousandths of a millimeter.

Our turntable model had a platter of acrylic. For 186 DM less, other alternatives are available including an aluminum platter. The acrylic platter contains two holes (the platter has to be held in place in the turning mechanism somehow) which turning bothers one at first. One gets used to it, however, very quickly. Flatness and spin of the platter are completely acceptable. Ared pad of leather covers the platter and completes package, but may or may not be used depending on the sound aspect desired. The differences are noticed mainly in the midrange: without the pad the sounds are transmitted very precisely, they can, however, appear somewhat cold or hard. With the pad the sound was

more friendly and forgiving. But this is accompanied with a loss in the way of precision. The differences can be easily discerned when listening to various Hans Theesssink records or the re-issue from "Yellow Submarine". The platter weight comes with an integrated bubble, a pleasant addition for adjustment. The diameter of the socket holes should, however, be more precisely fit to the platter shaft.

A Berger synchronized motor sits in a aluminum cylinder that is set-up separately. The motor is connected to the power supply unit with a plug. On the upper surface is a pulley with two diameters for 33 and 45 revolutions per minute (a pulley for 78 is available as extra) and a toggle switch for on/off. The distance between the motor and platter should be approximately 60 centimeters.

Acoustic Solid offers two alternative drives for the Solid Machine: one features an analogue controller and the other a much more elaborate solution with a microprocessor as controller. The latter sounded, in the opinion of the author, less analogue-like and gave the impression of being somewhat stiff and not smooth in timing. The analogue controlled model also could not outbid the synchronized motor, which is the reason for its continued use

All of the tools that are required for the assembling and adjustment are enclosed in a plastic bag along with delivery. The detailed manual is comprehensive and easy to understand. Dealers speak of the service as being very good, a positive factor that is not to be underestimated. Suggestions and special requests are quickly transformed into practice, something which is not common.

The Rega RB 600 is the youngest member of the Rega family and a direct descendant of the RB 900, which is held in good repute. The arm bearings have somewhat more tolerance for the purpose of being able to offer the RB at a price of 1,300 DM. The Rega philosophy has been strictly adhered to in leaving everything out that could stand in the way of the signal, resulting in a lean, precise and quick sound, that concentrates on the essential. The workmanship is flawless, the securely mounted tone arm wire (from Klotz, a very respected manufacturer in England) is appropriately equipped with a Neutrik plug. Installation of the cartridge and adjustment can be easily carried out. Rega rejects as a matter of principle the need to adjust the height of its tone arms. This is, however, not the wisdom of the current trend - just compare the overall height of a AEC and that of a Ortofon Jubilee - several millimeters of difference provides for a noticeable difference in the sound quality. Acoustic Sound found an astonishingly simple solution: a sleeve covering the length of the tone arm shaft is provided with the matching threads for the Rega to be screwed on over the tone arm shaft. The outer circumference is fastened by means of a socket head screw in the Rega base - the result being a Rega



A filigree single point for analogue old-hands: Hadcock GH 228 Export

Exemplary: the Solid Machine offers the additional advantage that the height of the Rega arm can be adjusted at the base of the tone arm.

that is adjustable in the height.

The Shure V 15 Vx MR yielded a bright and analytical sound full of precision, which however, appeared a little thinned out. Therefore, an EMT HSD 6 was installed which also shares the enormous low energy sound offered by its classical relatives, and normally leads to a sound spectrum dominated by bass. The result of this mating was remarkable - well-rounded, rich, fullbodied and precise, leaving nothing to be desired. An excellent combination with nothing to be ashamed of, capable of fulfilling the highest expectations.

The "Hadcock GH 228 Export" arm is being produced once again, costs 1,600 DM and is completely and differently oriented. All of the parameters, and really all of them, are adjustable. The arm is, without doubt, not suited for the inexperienced. For the enthusiastic fine tuners, however, it offers a truly joyous occasion. The GH 228 is a damping one-point toe-bearing arm that has its bearing arbor in the arm base. The counterpart in the arm shaft is not the usual bushing but a small ball bearing that effectively



controls the arm's freedom of movement. The main counterweight is off-center to enable horizontal balancing. With a small supplementary weight the bearing load can be adjusted. The head shell is only slid on to the arm shaft and

fastened with a tiny socket head screw. Points for orientation are not available for the overhang or for the horizontal position. Small threads are available for the mounting of the cartridge in the headshell which excludes every cartridge that requires



The tone arms for this monument cost more than the drive: the Solid Machine in its fully expanded capacity.

a through hole for mounting. At the time when the Hadcock arm was designed this means of mounting cartridges was not being used. Today, however, through holes should be included as standard feature.

The wiring in the arm is connected with its four pole plug to the matching socket in the lift bracket. On the underside two short wires are soldered to open solder tags, then run through the arm shaft and end in a cinch connection. Thus wiring can be individually determined as also the attachment to the solder tags. The complete, separately available, arm shaft can be removed thus enabling the faster exchange of preset units. The previously described shafts from Rega, which provide for easy installation and replace the current height settings, can also be used for this arm. The Hadcock was first equipped with a Decca Super Gold

cartridge that played unusually lean, but otherwise didn't miss a thing and sounded quite harmonious. This arm harmonized excellently with a ZYX R 30 - a precise, deep bass, a delicate reproduction of pitch and a choicely selected space with the proper size relationships adds up to an analogue presentation par excellence. Concerning the sound, definitely to be recommended, with the prerequisite that one has the necessary experience in fine tuning. The third combination consisted of a SME IV with the newest system form the Audio Technica house: the AT 33 PTG. The tone arm is well known and we will report on the system later. With the interplay of these components bright, lean and well defined sound characteristics were achieved. With the tone arm-cartridge combinations applied, the Solid Machine turntable displayed a tendency towards a bright

and lean sound. This should not be seen as negative, rather as positive because on the other side it tunes one's feeling for timing and the flow of the music. The precision of the tonal presentation is likewise of high caliber. The bass doesn't reach an ultra deep level is, however, clearly structured. Cartridges that have appeared to have had a "coarse" effect in other combinations find an ideal environment wherein they can unfold their qualities. Of course the Solid Machine had to be auditioned on an Airbase, which was a clear failure. The explanation is more than likely lies in the fact that the motor had to be placed next to the Airbase on a hard surface and consequently connected with a string to the cushioned drive. Because the string is only a taut strand it cannot compensate relative to movement. A disorderly scattered sound was the result. That which leads



A ceramic ball moves on a Teflon plate: the Solid Machine's bearing clothed in plastic.

to successful results with an elastic belt drive can apparently not be carried over to a string drive.

Conclusion Acoustic Solid has produced an analogue turntable that can be mounted on a tripod, is conducive to variability and analogue playing and in addition offers sound characteristics that can be easily described as fine. The fact that all of these features are available at a very affordable price, can only strengthen the recommendation that is indeed well-deserved.

Acoustic Solid Solid Machine

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Solid Machine Small



Solid Machine



Solid One



Solid Edition



Solid One to One



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^{*} Approximate area required without motor drive