



AVL Looms





AVL Looms

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AVL *Looms*

AVL Optional Equipment

Hand and Flyshuttles

Overhead Beater

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Patent Denter

Electric Bobbin Winder

Shuttle Tray

Single-Box Flyshuttle Beater

Double-Box Flyshuttle Beater

Four-Box Flyshuttle Beater

Automatic Cloth Advance System

Air Assisted Dobby



The AVL Story

AVL Looms in the World

Since its inception in 1976, AVL Looms has revolutionized the world of handweaving. Today, AVLs are found in over 80 countries around the globe and are widely recognized for their high quality and innovative design.



Jim Ahrens tinkering around

AVL Looms derives its heritage from the designs and inspirations of Jim Ahrens (1906-2000). Mr. Ahrens, originally a mechanical engineer by trade, started designing looms in the late 1930s. After World War II, along with his first wife, he became a production handweaver and owner-operator of a weaving shop.

This early experience eventually led Jim to work in a textile research laboratory operated by the U.S. Department of Agriculture. In the late 60's, he began designing a radically different loom that combined the best parts of handweaving with the knowledge he had gained during his years working with industry.

Today, AVL Looms represents the best of Mr. Ahrens' thinking along with the years of experience AVL's own staff have gained in working with weavers throughout the world.

Handweaving has long been a popular craft. It is now an increasingly viable small-scale industry, in part, because of the technical innovations pioneered by AVL.



The AVL Story

These advancements have afforded a new intermediate level of weaving technology — a technology intended to meet weaver's needs well into the 21st century.

It became apparent soon after we began production that the sophistication and unique features of AVLs made them suitable in many weaving environments and our products began to attract attention beyond the U.S. In the fall of 1980, AVL representatives attended a U.N. sponsored trade conference in Geneva. There they met with government and business representatives from Western Europe and many developing nations to learn about their specific needs in handweaving.

We discovered that most countries wanted weaving equipment that would allow their weavers to be many times more productive and at the same time would extend their abilities to create new kinds of woven goods. Naturally, they needed to acquire these capabilities without huge outlays of capital or technical expertise. Our handweaving production looms filled the need. Today, AVL Looms fill needs specified by organizations with global reach including the United Nations Industrial Development Organization and the World Bank.

AVL looms are found in countries at all levels of economic development. They are used in all the countries in Western Europe and of course, in all 50 states. But they are also found in a wildly diverse set of other countries as well. You might well happen across one of our looms in places as diverse as Argentina and Lesotho, Burkina Faso and Russia, Malaysia and Jamaica. Agents in the United Kingdom, Japan, Taiwan, Malaysia, Germany, and Israel currently represent us.

And we are, of course, also citizens of cyber-space. You can find us on the Web at:

www.avlusa.com

www.avlusa.com



Who Buys AVL Looms and Why

Production Weavers

Whether involved in short or long production runs, production weavers use AVLs because they are the most versatile, easiest to operate, by far the fastest handlooms available, and because they produce a higher quality fabric.

Home Weavers

Weaving is delightful and easy on an AVL. Beginners are able to produce professional quality fabrics within a few hours. Advanced weavers enjoy being able to create complex fabrics comfortably and effortlessly.

Textile Design Firms

Sample weavers and stylists particularly appreciate the AVL Compu-Dobby system that speeds and enhances the weaving design process. The Compu-Dobby makes design changes so accessible that it invites experimentation.

Small-scale Industry

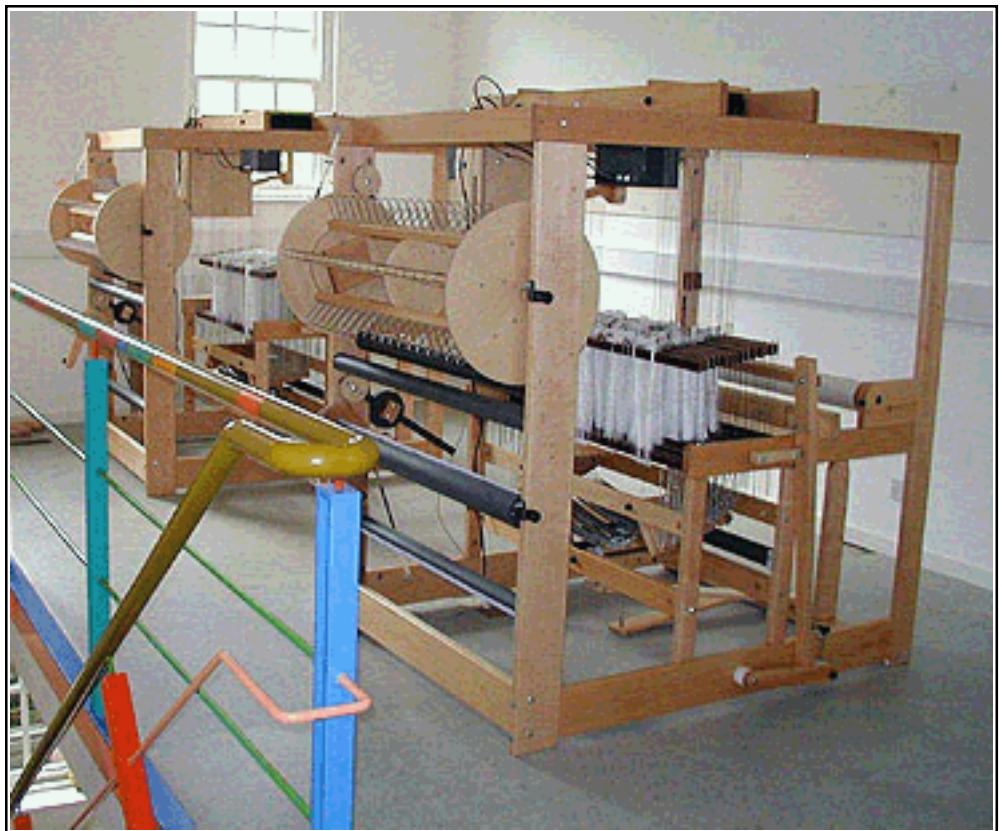
People involved in small weaving industries use AVL looms. Since the weaving drafts can be programmed, even an unskilled person can be weaving beautiful patterns in less than one day.



Who Buys AVL Looms and Why

College and Universities

Schools that wish to teach their students on the highest quality and most up-to-date weaving equipment invest in AVL looms. Highly regarded institutions, such as North Carolina State University School of Textiles, Rhode Island School of Design, and Savannah College of Art & Design use AVLs in order to give their students hands-on experience with the design and creation of complex and intricate weaves. Post-graduate work is now available on the AVLs located at the Ann Sutton Foundation in the United Kingdom.



AVL Technical Dobby Looms at the Ann Sutton Foundation.



AVL Headquarters

Visit AVL Headquarters in Chico, California

We cordially invite you to visit us in Chico, California, our home since 1980, where each and every loom is carefully fabricated and built. We offer guided tours through our new facility on Morrow Lane where we moved in September 2000.



Tours are not the only educational possibility on Morrow Lane. Since 1999, we have sponsored *The AVL Weaving School*. We offer instruction in an intimate classroom setting with a ratio of no more than eight students per instructor. Class offerings are designed to help you make the best use of AVL products and are tailored to the needs of each class. Best of all, the school is situated above the AVL Assembly Area, so you can watch your loom being put together as you learn how to use it.

**AVL Looms, Inc.
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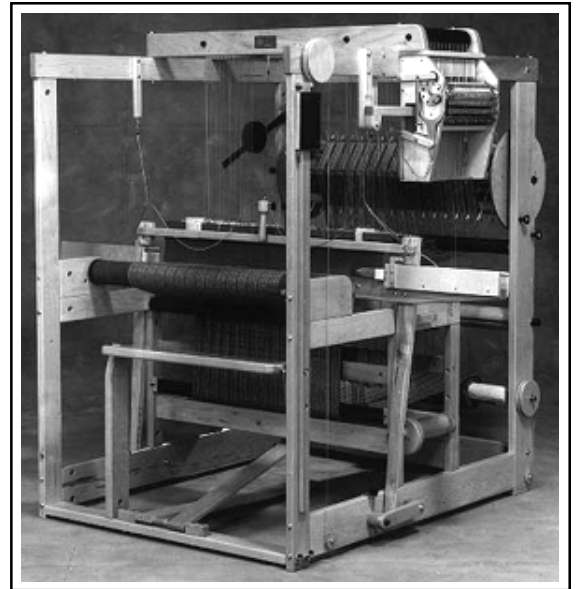
**530 893-4915
530 893-1372 fax #
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www.avlusa.com**



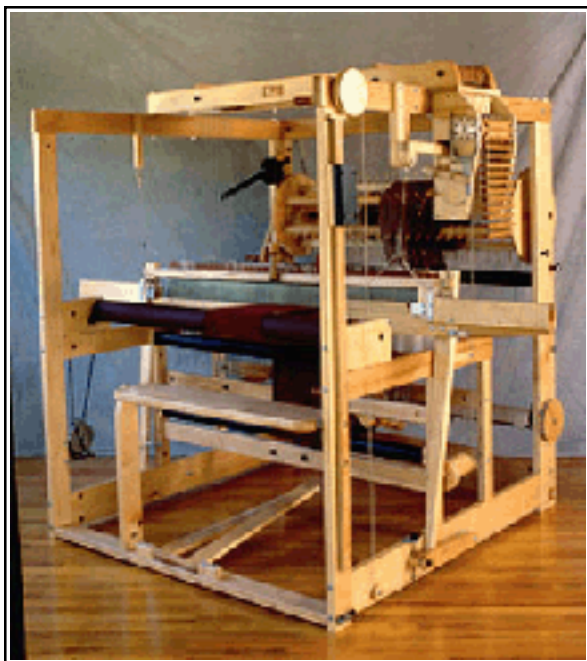
Production & Technical Dobby Looms

AVL Production and Technical Dobby Looms were designed primarily for production handweaving and small-scale industry use. They are equipped with either 16 or 24 harnesses and can be ordered from 30" (75 cm) to 72" (183 cm) weaving widths.

Today, however, AVL dobby looms are widely praised in the world of art for their versatility and ease of use. AVL dobby looms bridge the wide performance gap between hobby looms and power looms and offer a number of unique benefits.



24 Harness Technical Dobby Loom



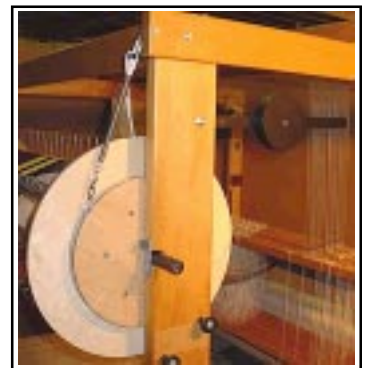
16 Harness Production Dobby Loom

Produces a Superior Fabric

AVLs include a number of wonderful timesaving devices that result in a superior piece of cloth. These devices include:

Automatic Warp Tensioning

... One of the key features on an AVL loom is our unique Automatic Warp Tension System. With the *dynamic* AVL system, once the tension is set, it never needs re-adjustment. In fact, there's NO foot brake! The tension always stays the same and adjusts itself with every pick.



Warp Tensioning System



Production & Technical Dobby Looms

Automatic Cloth Advance ... Newly re-designed in 2001, the AVL Automatic Cloth Advance System actually moves the fabric forward with every beat. Where consistency of weft spacing is important, the AVL Auto Advance is a MUST! No matter how you beat, the weft spacing will always be the same ... exactly the same. The new system can control pickage from 4 to 120 picks per inch.



Auto Cloth Advance



Sticky Cloth Beam

Sticky Cloth Beam ... Perhaps the most distinctive item on an AVL loom is our so-called “sticky” cloth beam. The Sticky System permits an AVL loom to utilize two separate tensions. One for the warp and the other for the finished cloth. That means that you’ll never have to worry about matting or distressing the finished fabric. It also means that you can set the warp tension *at the warp beam* ... where it belongs. And don’t worry about the AVL System harming your warp or finished fabric. AVL’s have been used on silk sett at over 200 ends per inch.

Easy to Operate

Want to weave all day? Then you need a loom that takes the unnecessary tedium out of the process. Look for:

Spring Lever System ... Harness weight has been reduced to an absolute minimum and “harness float” eliminated with the use of an adjustable spring-loaded harness return system. Spring levers allow the weaver to individually adjust each shaft. The spring-lever system results in a superior shed and an incredibly light, snappy action. Amazingly, the ultimate benefit of this revolutionary system is that the further one pushes down on the treadle, the *easier* it gets!



Production & Technical Dobby Looms

Built-in Bench ... Many AVLs feature a built-in bench which fixes the relationship of your sacroiliac to the beater, thus reducing the likelihood of suffering from “weaver’s fatigue”. The looms, while heavy in their solid hardwood construction, are light to the touch and a joy to use.

Large Production Capacity

To be productive a loom has to be weaving. Long warps and bolts of fabric are crucial:



Built-In Bench



*Cloth Storage
System*

Automatic Cloth Storage System ... Only an AVL sends finished fabric to the back of the loom where it’s under its own separate, lighter tension which eliminates any possibility of being matted, crushed, or distressed. With the AVL Cloth Storage System, you can store as much as 100 yards of finished fabric without it ever getting in your way. Best of all, the fabric can be removed while the warp is still on the loom and the tension is never bothered.

Industrial-strength Sectional Beam ... AVL’s six-sided Sectional Beam is the sturdiest on the market. Its one-yard circumference virtually insures even tension. When used in conjunction with the Tension Box and its Track & Mounting System, one person can put on long 100-150 yard warps, all alone. For short warps, try our Warping Wheel. It does away with multiple cones or spools.

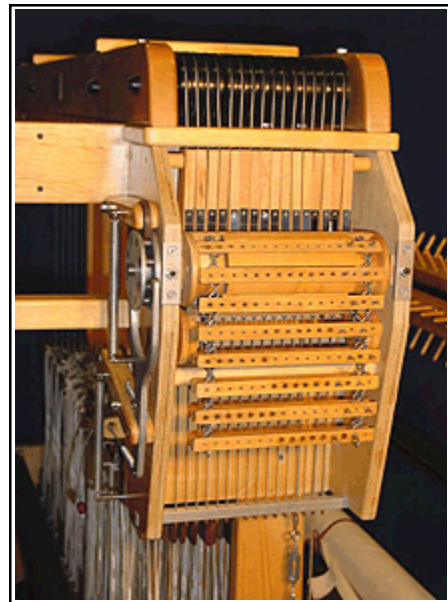


Production & Technical Dobby Looms

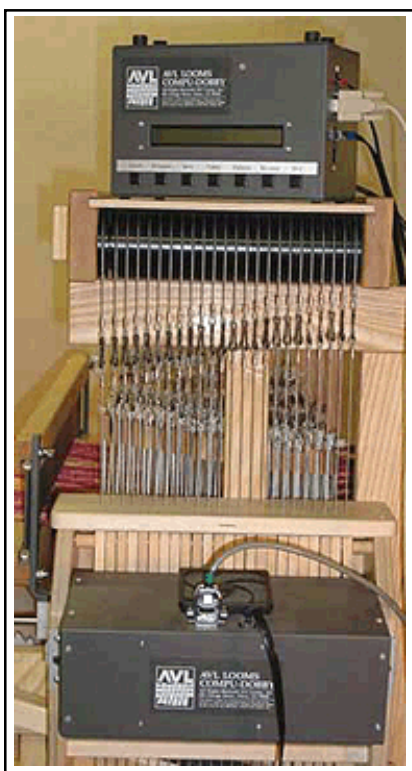
The Dobby

A simple and reliable programming unit that is easily “programmed” by any weaver with basic pattern-drafting knowledge. AVL revived the use of the dobby in the late 70’s, since then, use of this 19th century programming device has mushroomed into a 21st Century marvel!

Single Mechanism Dobby ... For over 24 years, we have used the same reliable mechanism. One rugged arm sweeps down, determines the appropriate harnesses, and forms them into a perfect shed. There are no sliding parts that can get jammed (as on European-style dobbies); only a single pivot point. AVL dobbies are ultra-reliable.



Mechanical Dobby Box



Compu-Dobby II

Compu-Dobby™ ... In 1982, we had a great idea – computerize the dobby! What a concept. Today, Compu-Dobby is practically a generic term. But today’s AVL Compu-Dobby is far from common. For example, AVL offers a built-in view screen that lets you know just where you are in your weaving sequence. The AVL Compu-Dobby is compatible with four AVL weaving programs (for Mac and Windows) plus a half-dozen more third party software packages. That’s ten pieces of software to choose among; no other loom can open the world of computer design to you like an AVL.



Production & Technical Dobby Looms

Weaving Cartridge ... Another AVL exclusive. It allows you to de-couple the Compu-Dobby from the Computer, thus allowing the use of both devices (loom and computer) simultaneously. A must for all schools or any place where the computer can't be in the same room as your loom.



Weaving Cartridge

Speed

A flick of the wrist sends the flyshuttle speeding across the shuttle race in an easy, unbroken rhythm. This gentle rhythm produces greater uniformity in the cloth and increases the weaving rate dramatically.

AVL Flyshuttle System ... Only AVL offers you a choice of Single, Double, or Four Box Flyshuttle Beaters. Want to weave pick-and-pick? The AVL two and four box beaters are counter-balanced. When the set of boxes on the left go down, the ones on the right go up and vice versa. It's easy and you'll never try to throw a shuttle into a filled box.



Shuttles

End-Feed, Fixed-Bobbin Shuttles ... An essential part of the Flyshuttle System are the shuttles themselves. With AVLs shuttles, you'll never have to fiddle with selvages again. No more "floating" selvages; no more loops or uneven edges ... and you'll soon be pushing 60 picks per minute.



Production & Technical Dobby Looms

Choice

Each AVL loom is built to your specification. You get a customized loom at a surprisingly affordable price.

Metal or Polyester heddles ... For production weaving, polyester heddles are a must because they are so much lighter and less noisy. They're also less likely to break warp ends. Metal heddles are best if one does a lot of short warps. The key is choice. It's up to you.



Poly Heddles

One, two, or even three Warp Beams ... How many other looms can even add a second beam? Let alone a third (which is a special order from us, but it's not that rare). Plus the integration between the multiple beams and Automatic Warp Tension System means that you won't be tromping about with two or three separate foot brakes. No matter how many beams you weave with, there's never any guessing.

Overhead or Bottom Swing Beater ... The features on AVL beaters are unmatched. For example, the AVL Overhead employs a pivoting reed that always strikes the fell of the cloth exactly at 90 degrees. And the beam won't wobble because it's secured by a steel pipe that runs through the center of the loom. The Bottom Swing? Unlike other looms, the amount of beat-up is adjustable. Choose among a light, medium or heavy setting and change it whenever you want. Plus ALL AVL beaters can add a weight for that extra heavy beat.



Bottom Swing Beater



Production & Technical Dobby Looms

SPECIFICATIONS:

Production Dobby Looms (16 harness)

	<u>30"</u> (75cm)	<u>40"</u> (100cm)	<u>48"</u> (120cm)	<u>60"</u> (150cm)	<u>72"</u> (183cm)
Height	70" (178cm)	70" (178cm)	70" (178cm)	70" (178cm)	70" (178cm)
Overall Width	45" (114cm)	55" (140cm)	62" (157cm)	74" (188cm)	86" (218cm)
Front to Back	62" (157cm)	62" (157cm)	62" (157cm)	62" (157cm)	62" (157cm)
No. of Heddles	1,600	1,600	1,600	2,000	2,400
Weight	350 lbs. (159kg)	360 lbs. (164kg)	400 lbs. (182kg)	450 lbs. (205kg)	500 lbs. (227kg)

Technical Dobby Looms (24 harness)

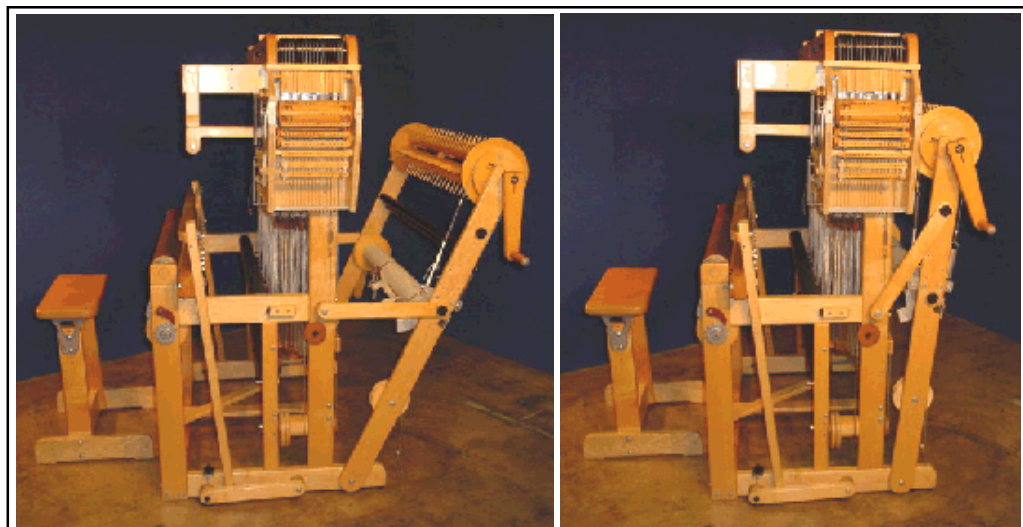
	<u>30"</u> (75cm)	<u>40"</u> (100cm)	<u>48"</u> (120cm)	<u>60"</u> (150cm)
Height	70" (178cm)	70" (178cm)	70" (178cm)	70" (178cm)
Overall Width	45" (114cm)	55" (140cm)	62" (157cm)	74" (188cm)
Front to Back	62" (157cm)	62" (157cm)	62" (157cm)	62" (157cm)
No. of Heddles	2,400	2,400	2,400	3,000
Weight	365 lbs. (166kg)	375 lbs. (170kg)	425 lbs. (193kg)	475 lbs. (216kg)



Folding Dobby Loom

The Folding Dobby Loom is a sturdy, rugged loom that gives you all of the benefits of an AVL Production loom in a compact form.

This loom's unique versatility makes it an excellent choice for the weaver who wants to produce exciting, very high-quality multi-harness fabrics quickly and easily or for the professional designer or school.



40" Folding Dobby Loom (open and folded)

With its 16 harnesses, the weaver can do three-block Damask, fancy 16-harness twills, up to 14-block summer and winter weaves, and much more. In addition, when doing 12- or 14-harness weaves, two or four harnesses are available for the selvages.

With a dobby, it's all so easy.

This sturdy loom has been designed to take up a minimum amount of space and can be folded (without affecting the warp), so it can easily pass through a standard doorway or be set out of the way when not in use. It also has the automatic warp tensioning and adjustable spring-loaded harness return systems that are basic to AVL loom designs. Additional options include a single or double flyshuttle beater and double warp beams (either plain or sectional).

SPECIFICATIONS:

Folding Dobby Looms

	30" (75cm)	40" (100cm)
Height	62" (157cm)	62" (157cm)
Overall Width	45" (114cm)	55" (140cm)
Front to Back	48" (122cm)	48" (122cm)
<i>When Folded</i>	32" (81cm)	32" (81cm)
No. of Heddles	1,600	1,600
Weight	280 lbs. (127kg)	300 lbs. (136kg)



Studio Dobby Loom

The AVL Studio Dobby Loom was designed for use in the classroom or design studio. Economical, rugged, and computer interfaced, it's an effective tool for teaching weaving and an exceptional platform for sampling and textile design.



24 Harness Studio Dobby Loom with Compu-Dobby II

As part of our development process, AVL surveyed weaving instructors to describe a loom that would be “perfect” in a teaching environment. Not surprisingly, they cited the following features as most desirable:

- ♦ *Indestructible*
- ♦ *Computer Capable*
- ♦ *Compact*
- ♦ *Versatile*
- ♦ *Maintainable*
- ♦ *Inexpensive*

And these are exactly the features we engineered into the Studio Dobby Loom (SDL).



Studio Dobby Loom

Indestructible

The SDL is strong. Framed in thickly dimensioned ash, the loom is fitted with steel brackets, stranded cables, and special hardware that holds tight. Its metal parts are finished with durable powder coating instead of paint. Its lacquer finish is nearly impervious to liquids.

Compact

The SDL is small, yet it affords a very practical 20" weaving width — perfect for sampling and instruction.

Maintainable

The SDL is easy to maintain. It carries the same time-tested dobby found on our bigger looms. Because the loom is constructed from such hefty materials and is so mechanically straight forward, maintenance is minimal.

Computer Capable

The SDL comes with a Compu-Dobby as part of its standard equipment. The AVL Compu-Dobby was completely re-engineered in 1998 and represents the latest in handloom/computer interfacing.

Versatile

One can weave almost anything on an SDL. Although its main purpose is clearly to make samples, it's sturdy enough for rugs or blankets. The SDL features a Sliding Beater, similar to the one originally developed for our Rug Looms, which insures an even beat.

Inexpensive

An AVL Studio Dobby Loom can fit into even the most cramped budgets. But our design team didn't cut any corners, rather they carefully analyzed each of the essential aspects of the weaving (and learning-to-weave) process and came up with a rugged, capable loom at a startling low price.



Studio Dobby Loom

Standard Equipment:

- ♦ AVL Compu-Dobby*
- ♦ Standard Beam
- ♦ Sliding Beater
- ♦ 25 Heddles/Harness plus 200 extra heddles
- ♦ Stainless Steel Reed (your choice of 8, 10, 12, or 15 dents)
- ♦ Built-In Shelf
- ♦ Tool Holder
- ♦ Kiln-Dried Ash Construction
- ♦ Illustrated Instruction Manual

** please note: Software and Computer not included*

SPECIFICATIONS:

Studio Dobby Loom

	20" (50cm)
Height	49" (124cm)
Overall Width	43" (109cm) with Compu-Dobby and Warp Beam Handle
No. of Heddles	25 per harness plus 200 extra heddles
Weight	175 lbs. (80kg)
Length	45 1/2" (1.15 M)
Foot Print	26" (66 cm) x 43 1/2" (1.1 M)
Harnesses	16 or 24
Beater	Sliding - or - Overhead
Beams	1 or 2 Plain Beams - or - 1 Sectional Beam
Power	115 or 220 VAC (for Compu-Dobby)



Workshop Dobby Loom

Meet the *California Traveler*

AVL's smallest, most transportable, and least expensive dobby loom is the Workshop Dobby Loom. The Workshop Dobby Loom (WDL) is AVL's answer for weavers looking for a loom to take to conferences, seminars, and classes.

Springing from the fertile imaginations of AVL's experienced team of Chico-based textile engineers, the WDL is truly a "*California Traveler*". It can be disassembled into three discrete components, in a matter of minutes, and can fit in any car or van — or it can be checked as baggage.



Eight Harness Workshop Dobby Loom

The WDL has a full 16-inch weaving space, so it's perfect for quick workshops or seminar warps and projects.



IDU ... ready to travel

At the heart of the WDL is the revolutionary new **Interchangeable Design Unit (IDU)**.

The IDU includes the harnesses, beams, and dobby mechanism and as its name implies, can be inter-changed with another unit — with the warp on. Using the Workshop Dobby Loom's X-frame base, an 8 shaft IDU can be placed on the base, while another IDU is being warped; be it 8, 16, or 24 harnesses.



Workshop Dobby Loom

Harnesses use lightweight phenolic laminate harness sticks and are held rigid by a pair of textile industry constant-tension springs that keep the polyester heddles at an even tension.

The front beam is AVL's famous "sticky" beam — sandpaper that allows the user to start a warp without the use of an apron. Tension is controlled at the warp beam using a smaller version of the same Automatic Warp Tension System found on Workshop Dobby Loom's bigger cousins at AVL.

*The second major component set, the **X-Frame Base**, is a sturdy foundation upon which the IDU can be rested. The Base unit can be assembled or taken down in a matter of minutes.*



WDL X-Frame



Inserting the Shuttle

*The third and last piece of the Workshop Dobby Loom is AVL's latest electronic component: **Compu-Dobby III™**. The new Compu-Dobby III is a diminutive version of other members of the AVL computer dobby family. It attaches to the loom with four mounting screws and has completely eliminated the need for complicated adjustment routines. Simply tighten the four thumbscrews and the dobby is ready to go - it's effortless.*

Compu-Dobby III represents a huge breakthrough in the computer dobby arena because of its use of highly advanced technology. The **Integrated Chipset Technology (ICT)** used on Compu-Dobby III has led to the most dramatic breakthrough of all - the WDL's price!



Workshop Dobby Loom

Standard Equipment on the Workshop Dobby Loom includes:

- ♦ Interchangeable Design Unit
- ♦ Sticky Cloth Beam
- ♦ Warp Beam with Automatic Warp Tensioning System
- ♦ 8, 16, or 24 Phenolic Harnesses
- ♦ Dobby Slide Plate Unit
- ♦ Castle-Based Carrying Unit

- ♦ X-Frame Base
- ♦ Twin Dobby Treadle Unit
- ♦ Easy-Assemble Side Frames (four rails)

- ♦ Compu-Dobby III
- ♦ Integrated Chipset Technology
- ♦ Detachable Power Supply
- ♦ RS-232 Communications Cable

- ♦ Plus ...
- ♦ Instructional CD-ROM
- ♦ Instruction Manual
- ♦ One-Year Warranty on all Parts and Labor

SPECIFICATIONS:

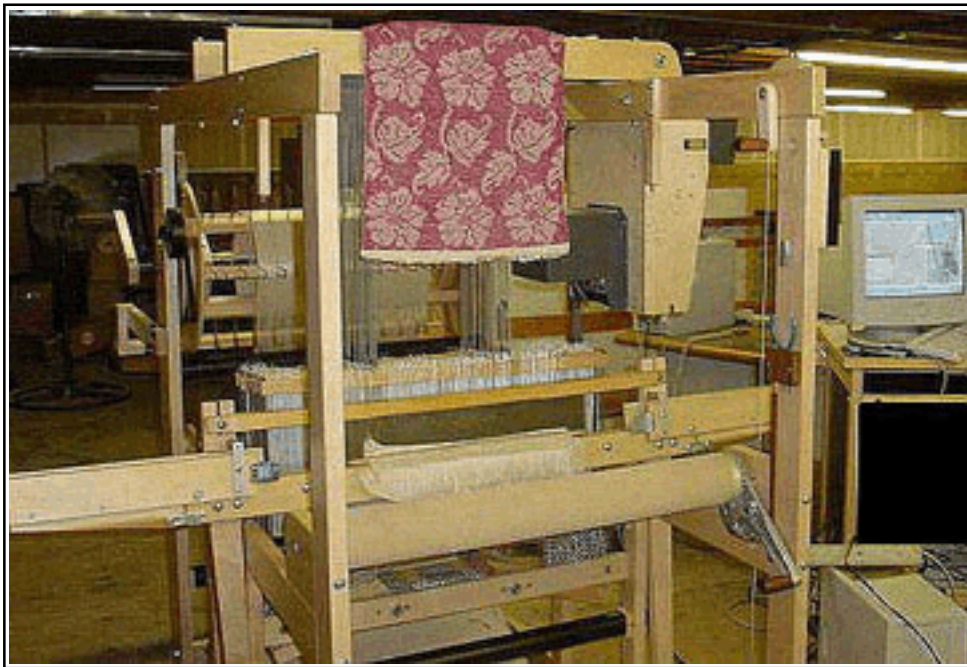
Workshop Dobby Loom

Height	43" (109cm)
Width	26" (66cm)
Front to Back	39" (99cm)
No. of Heddles	25 Polyester Heddles per Harness
Weight	48 lbs. (22kg)



AVL 40

Introducing the Ultimate Dobby System



AVL 40

A Complete System

AVL 40 is the most far-reaching and most technically sophisticated dobby loom ever produced by AVL. Years of development have resulted in the world's first regularly produced 40 harness loom.

40 harnesses. Just think of the possibilities. There are even over one trillion different design combinations ... and that's before you add color. Best of all, the 40 harnesses are on an AVL loom, so you will still benefit from the same great features that have made AVL the most respected name in the handweaving world. The revolutionary eLift, Compu-Dobby®, Automatic Warp Tension, Automatic Cloth Storage System, Single-Box Flyshuttle Beater, and a High Capacity Sectional Beam are all standard equipment with **AVL 40**. Automatic Cloth Advance, Selvage Rollers, and over 120 other options are also available.



AVL 40

eLift© Arrives

By now you may be wondering how you are going to lift 40 harnesses. Your worry is over because the lift is controlled by the system. eLift is here.

eLift uses a stepping motor similar, albeit much larger, to the motors found in floppy disk drives. So, there are no treadles; just a simple foot pedal. Tromp once and the harnesses go up. Tromp again and they gently go down. Remarkably, there are no special power requirements for eLift. It simply plugs into your wall. No muss. No fuss. No worry.



eLift System Mounted into the Dobby Box



AVL 40

AVL 40 / Sizes and Features

AVL 40 is available in four weaving widths: 30", 40", 48", and 60".

Standard Equipment includes:

- ♦ AVL 40 Harness Compu-Dobby
- ♦ Automatic Warp Tension
- ♦ Automatic Cloth Storage System
- ♦ Single-Box Flyshuttle System
- ♦ AVL "Sticky" Cloth Beam
- ♦ High Capacity Sectional Beam
- ♦ eLift or airLift (your choice)
- ♦ 4000 Polyester Heddles
- ♦ Fully Equipped Computer with Windows'98 or equivalent
- ♦ and introducing ... AVL ServiceCAM
- ♦ Two-Year Warranty on all Parts and Labor
- ♦ One-Year Warranty on all Electronics and Pneumatics

SPECIFICATIONS:

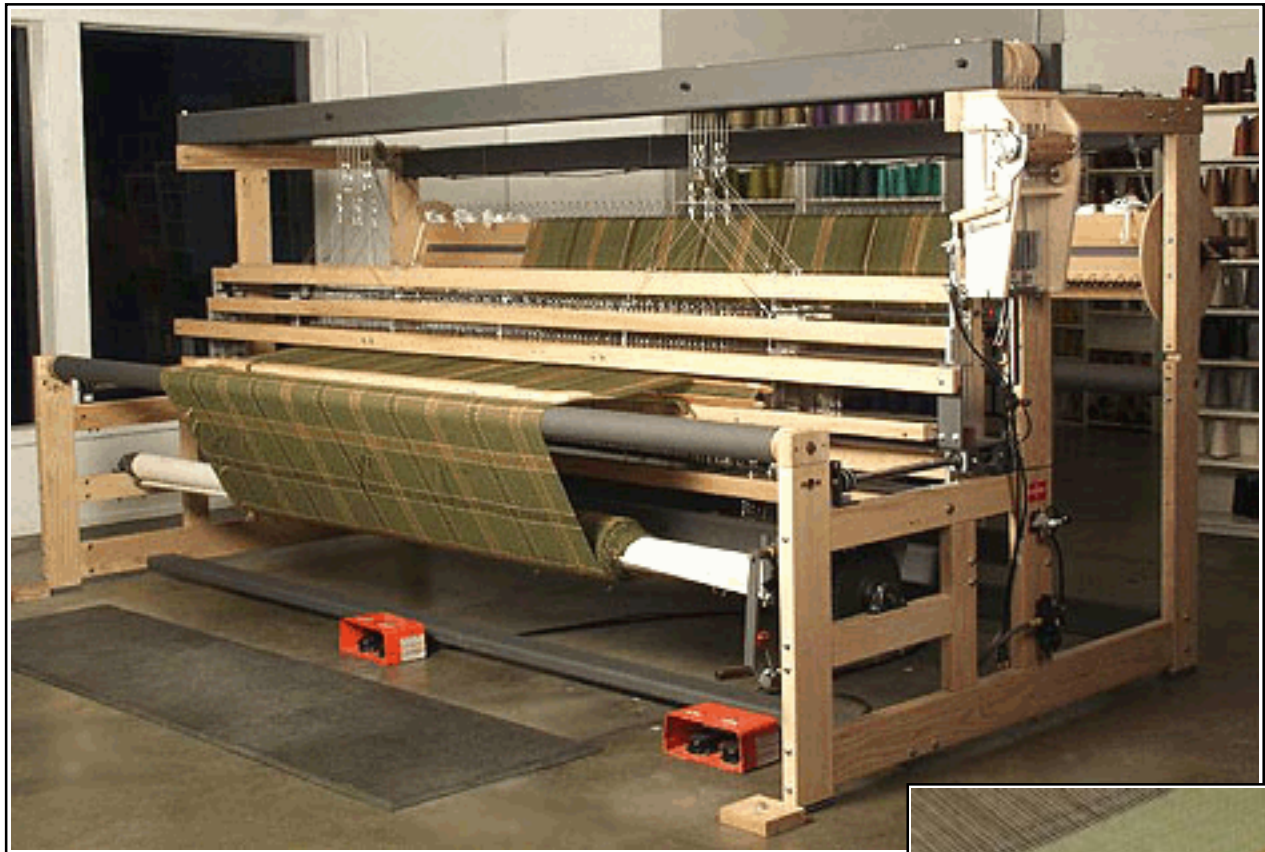
AVL 40

	30" (75cm)	40" (100cm)	48" (120cm)	60" (150cm)
Height	70" (178cm)	70" (178cm)	70" (178cm)	70" (178cm)
Overall Width	45" (114cm)	56" (140cm)	62" (157cm)	74" (188cm)
Front to Back	62" (157cm)	62" (157cm)	62" (157cm)	62" (157cm)
No. of Heddles	4,000	4,000	4,000	4,000
Weight	400 lbs. (182kg)	440 lbs. (200kg)	480 lbs. (218kg)	520 lbs. (236kg)



Professional Dobby Rug Loom

The AVL Professional Dobby Rug Loom is the ultimate heavy-duty loom, precision engineered for rug weavers who need AVL-style responsiveness and complete versatility.



12' Professional Dobby Rug Loom

To provide maximum AVL performance, the Professional Dobby Rug Loom combines the design flexibility of the AVL dobby with high tech features such as an air-powered shed and an efficient sliding beater.



The Professional Dobby Rug Loom also features extra-sturdy construction with the largest pieces of kiln-dried hardwood that AVL has ever used. All rollers and warp beams are steel and the beater is reinforced with steel as well.



Professional Dobby Rug Loom



But, it is the special components created specifically for the demands of rug weaving that make AVL's Dobby Rug Loom an exceptional value:

- ◆ Our unique Sliding Beater is mounted on parallel stainless steel rods, so each beat is at the perfect angle to the fell line. Integrated slide bearings will allow the weaver to pull even a twelve-foot beater with virtually no effort. And, unlike overhead beaters, this one stays where you put it for convenient pick-up and tapestry work.

- ◆ The Air-Powered Dobby provides effortless operation no matter how wide your loom. Even a twelve foot loom opens with ease. And the extra large shed will stay open until you let it down with another tap of your toe.



Top: Four Foot Rug Loom; Bottom: 12' Rug Loom



Professional Dobby Rug Loom

- ♦ The Air-Powered Warp Tension System gives optimum warp tension control possibilities. The combination of a powerful air cylinder, aircraft cable, and worm gear advancing system gives a tremendous range of sensitivity, yet maximum tension at all times.

Standard Features on all Dobby Rug Looms include:

- ♦ Air-Powered Warp Tension
- ♦ Air-Powered Shed Opening
- ♦ Apron with Apron Rod
- ♦ Dobby System (8 or 12 harness): 20 dobbie bars with pegs, dobbie peg wrench, 100 dobbie chain ties
- ♦ Illustrated Instruction Manual
- ♦ Extra Sturdy Kiln-Dried Hardwood Construction
- ♦ Steel Heddles
- ♦ Reed (your choice of 4, 5, 6, 8, or 10 dents)
- ♦ Tool Holder
- ♦ Two-Year Warranty on all Parts and Labor

SPECIFICATIONS:

Dobby Rug Looms

	4' (1.2m)	6' (1.8m)	8' (2.4m)	10' (3m)	12' (3.65m)
Height	75" (1.9m)	75" (1.9m)	75" (1.9m)	75" (1.9m)	75" (1.9m)
Overall Width	66" (1.67m)	90" (2.29m)	114" (2.9m)	138" (3.5m)	162" (4.1m)
Front to Back	84" (215m)	84" (215m)	84" (215m)	84" (215m)	84" (215m)
No. of Heddles	400	600	800	1,000	1,200
Weight	900 lbs. (409kg)	1300 lbs. (591kg)	1600 lbs. (727kg)	1900 lbs. (864kg)	2300 lbs. (2045kg)

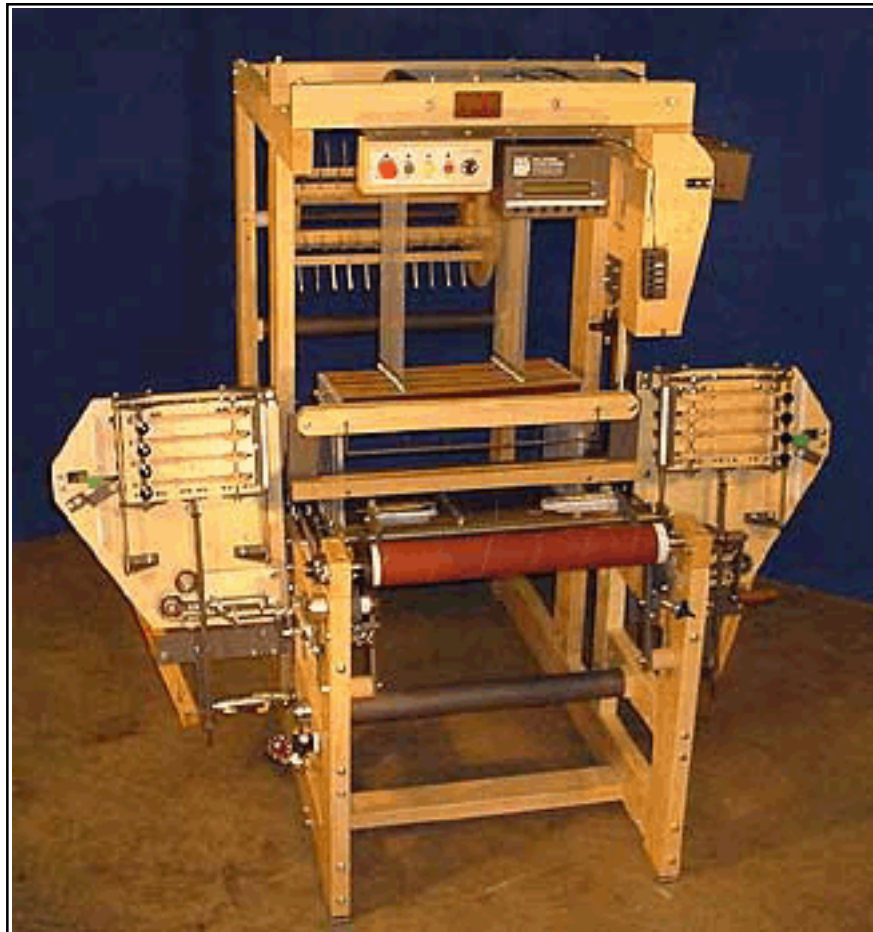
*Note: AVL is now taking orders for WIDER Rug Looms. Up to 15 feet (4.5 Meters).
Call for price.*



Industrial Dobby Loom

A Powerhouse That's Easy To Love

The AVL Industrial Dobby Loom offers a wide range of weaving options for industrial sampling or small scale production. It represents a startling union of advanced electronics and pneumatics with AVL's tried and true loom technology.



24 Harness Industrial Dobby Loom

Fabrics: Light, medium, and even heavy-weight fabrics of virtually all yarn types; natural, spun, and filament are all capable of being woven on the IDL. The wide range of applications extend from plain weaves to complex 24 harness dobby.

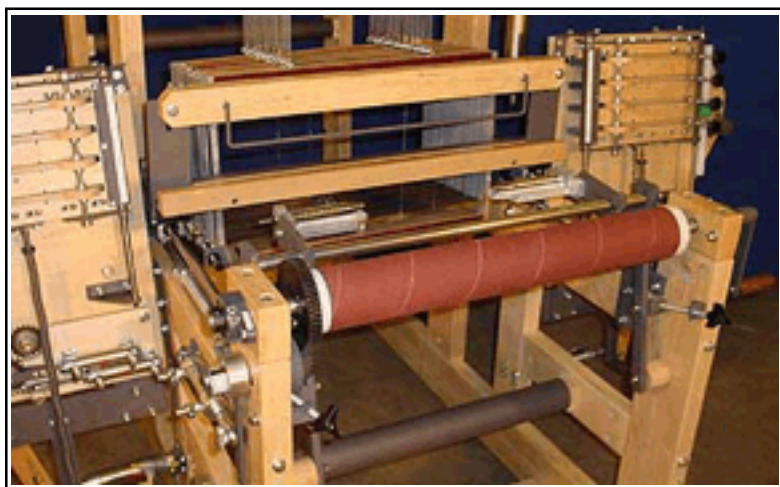


Industrial Dobby Loom

Yarns: Spun yarns of natural and man-made fibers as well as filament yarns in a very wide range of yarn counts are all possible. The loom performs well with medium density cotton, heavy novelty yarns (chenille), and super-fine silk among others.

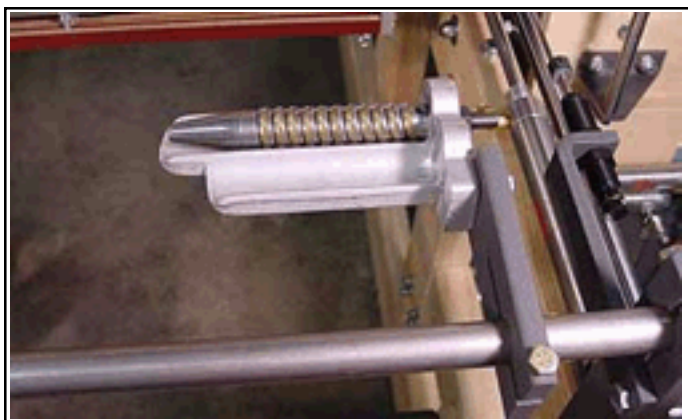
Widths: The IDL is available in three reed widths: 24" (61 centimeters), 40" (1 meter), and 60" (152 centimeters).

Loom Frame: Sturdy ash members connect to the heavy-duty side frames with special locking hardware to help insure rigidity and low vibration. The control units are housed in fully enclosed boxes of the finest Finnish birch.



Four-Box Shuttle System

Reed Motion: The sley rides on twin stainless steel rods. The beat is even and smooth, always striking the fell line at a perfect 90° angle. Self-aligning bearings ensure a lifetime of smooth performance.



Right Pressure Roller

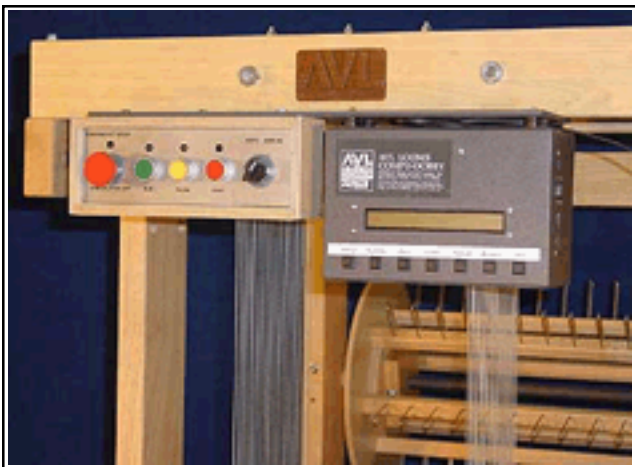
Computer Optimized Design: A standard twenty-four harness AVL Compu-Dobby® controls the lifting motion. When linked to the controlling computer, patterns can be changed in a matter of seconds. A newly re-designed Dobby mechanism features a machined plate that rides on specially manufactured slide rods and linear bearings. These high-grade materials result in a smooth action that will require virtually no attention.



Industrial Dobby Loom

Advanced Pneumatic Drive: The IDL is driven entirely by air. Using pneumatics in conjunction with advanced electronics increase longevity; decreases vibration; and makes the loom clean and easy-to-maintain.

Sensor Control: Another unique feature of the IDL is the strategic use of sensors throughout the loom. Photo sensors and reed switches are used to sense all motions and send them back to the control unit for constant monitoring of the system. The photo sensors, for example, are used to *see* whether there's a shuttle in a box. If the shuttle isn't seen there, it won't be thrown, which adds to the safety of the operator.



IDL Control Panel

Color Selection: The IDL comes equipped with a 4x4 shuttle-box system. The color is controlled directly from the controlling computer. Color can be alternated automatically or defined on a pick by pick basis.

Push-Button Operation: A control panel in the center of the loom includes push-buttons for the following operations: start, pause, stop, and emergency stop. There is also a switch for toggling between automatic and manual operation.

In manual mode, each loom function can be individually controlled, including: advance, dobby, shuttle, and beater. So, the user can control each aspect of the weaving to make adjustments or changes as needed.

Warp Let-Off: Warp tension is controlled by AVL's celebrated Automatic Warp Tension system. The loom can use either one or two individually tensioned sectional or standard warp beams. AVL's tension system is highly sensitive and maintains a constant tension from start to finish.



Industrial Dobby Loom

Cloth Take-Up: A slip-free, gear-driven, take-up with a special sliding pick density system is a highlight of the loom. The pneumatically driven take-up is unique in the industry and provides a wide range of pickage.

SPECIFICATIONS:

Industrial Dobby Looms

	24" (61cm) Sample Loom	40" (100cm) Production Loom	60" (152cm) Production Loom
Height	75" (190cm)	75" (190cm)	75" (190cm)
Full Width	79" (200cm)	95" (241cm)	115" (292 cm)
Front to Back	77" (196cm)	77" (196cm)	77" (196cm)
No. of Heddles	2,400	2,400	3,000
No. of Harnesses	24	24	24



Compu-Dobby System

The AVL Compu- Dobby® System was completely re-designed in 1998. It fits neatly into the AVL mechanical dobby head and is a fast, reliable means to accomplish complex and sophisticated weaves with ease.

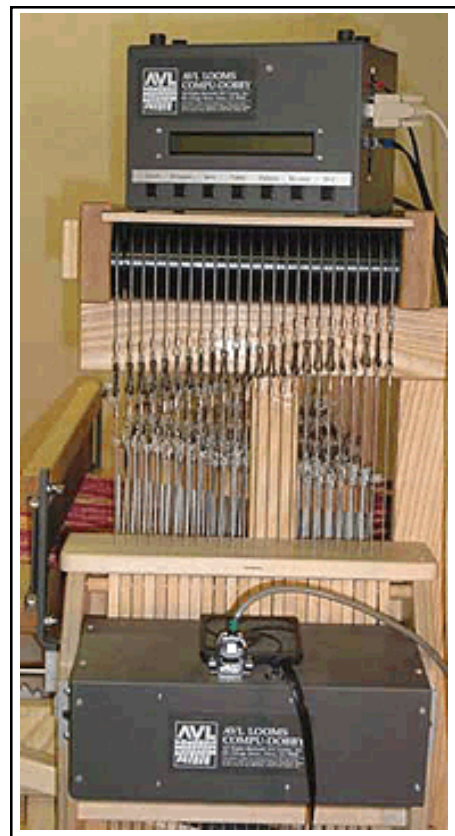
The Compu-Dobby does far more than merely free you from the tedium of inserting pegs into dobby bars.

It allows your imagination to soar. You input and edit a design at your screen and immediately execute it on your loom. It's still handweaving, but with greater efficiency and infinitely more creative control.

When used with the AVL Weaving Cartridge, the Compu-Dobby may be detached from your computer. The re-programmable Cartridge can hold up to ten patterns which frees the computer for other uses.

A Compu-Dobby can be purchased with or added to any AVL dobby loom. It features:

- ♦ Full compatibility with Apple Macintosh and Windows/Intel computers.
- ♦ A wide variety of design software, including AVL's own: *SwiftWeave*, *WeaveMaker Mi*, and *WeavePoint*. Plus third-party software including: *Fiberworks*, *PCW*, *InfoDesign*, *Patternland*, *Pointcarre*, *ProWeave*, *WeaveIt*, and *ScotWeave*.
- ♦ An on-board video display terminal which gives you up-to-the-second information about your weave, direction, current pick, and more.
- ♦ Easy mounting on any AVL dobby loom in less than half hour.



Compu-Dobby II



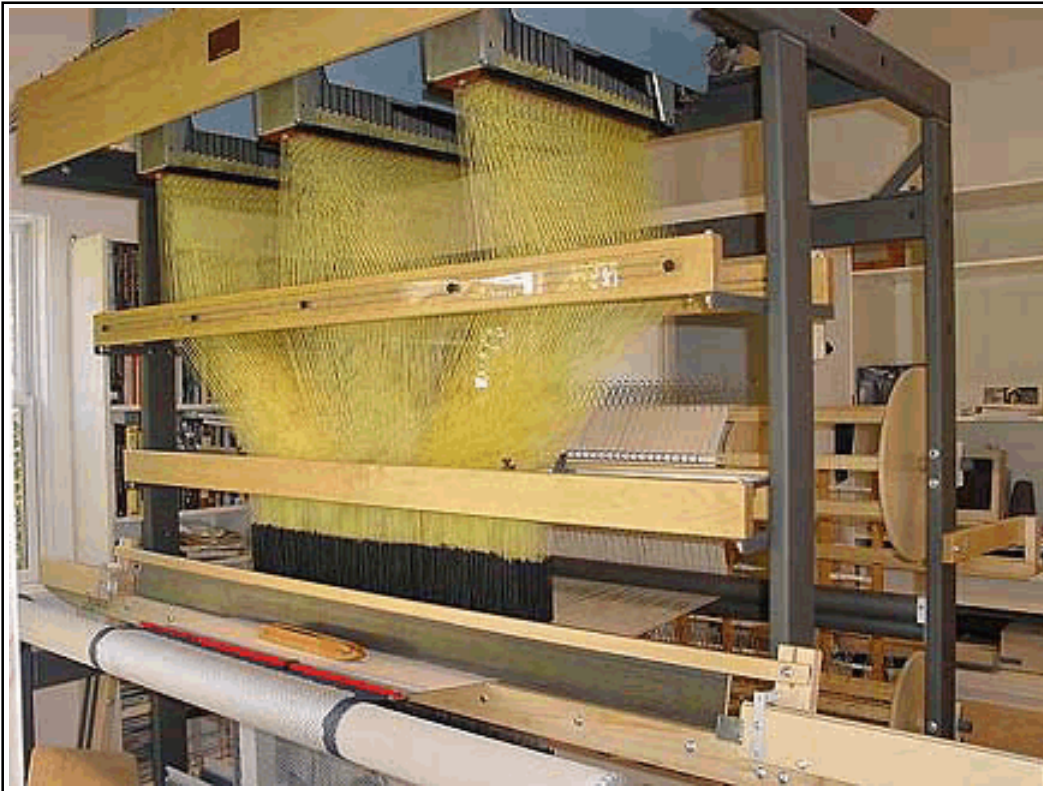
Compu-Dobby System

- ♦ The AVL Weaving Cartridge that allows you to detach the Compu-Dobby from the computer thus freeing up your computer for other uses.
- ♦ Either 16- or 24-harness versions.
- ♦ Air-Driven Compu-Dobbies are also available for the AVL Professional Dobby Rug Loom.



Jacquard Loom

Introducing The AVL Compu-Jacq® Loom



Six Foot AVL Compu-Jacq Loom, 1728 Harnesses

Handweaving will never be the same. The AVL Compu-Jacq Loom yields unprecedented design freedom, the same quality AVL loom that revolutionized loom design in the 80s.

The new Compu-Jacq Loom is the result of a collaboration between AVL and TIS, of Lyon, France. The marriage of AVL's renowned loom with TIS' compact jacquard modules results a particularly adaptable and efficient device.



Right: AVL Compu-Jacq Loom at Savannah College of Art & Design



Jacquard Loom

The AVL Compu-Jacq gives you individual control over each thread, thus yielding the equivalent of 576, 1152, or 1728 or more “harnesses”. The design possibilities are endless. Just look at these features:

- ♦ extra-sturdy AVL-style loom construction
- ♦ capacity to weave up to two picks per second
- ♦ flexible warp density (unlike other jacquards, the Compu-Jacq can be set for about any warp density)
- ♦ module design ... add up to eight jacquard modules (576 hooks per head)



Top: jacquard weaving of a portrait.



Left: 1728 harnesses.



Jacquard Loom

- ♦ ultimate design capability ... draw, paint, or scan your images ... Compu-Jacq can weave it
- ♦ all this plus the standard AVL features:
- ♦ automatic warp tension
- ♦ automatic cloth storage
- ♦ sliding beater



Three TIS Jacquard Heads on an AVL Compu-Jacq Loom



Jacquard Fabric



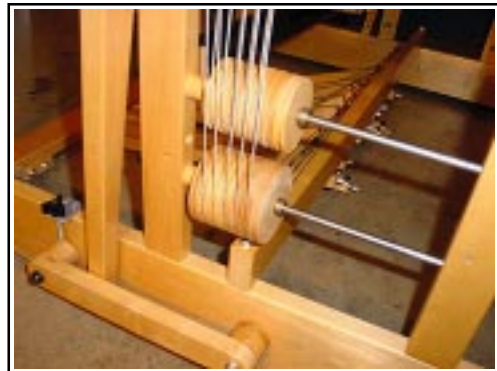
Modular Loom

The AVL Modular Loom has been called an AVL “dobby loom without the dobby”. Any accessory (“module”) on the dobby loom can be added to a Modular loom without the drilling of a single hole.

You can start with the basic loom of four harnesses and six treadles and AVL’s easy-to-use side tie-up system. Then add harnesses, treadles, and other optional accessories as you need them. You can expand to as many as twelve harnesses and fourteen treadles as your interest grows. Then add a dobby head whenever you’re ready. You can be assured this is one loom you won’t be outgrowing in a year or two.



40” Modular Loom



Pulley System



Modular Loom

Standard Features on all Modular Looms include:

- ♦ Automatic Warp Tensioning
- ♦ Automatic Cloth Storage System
- ♦ AVL Side Tie-Up Harness System (4 harnesses, 6 treadles, 30 side tie-up cords)
- ♦ Apron with Apron Rod
- ♦ Built-In Bench (free standing bench with small frame 40" loom)
- ♦ Illustrated Instruction Manual
- ♦ Kiln-Dried Hardwood Construction
- ♦ Polyester Heddles
- ♦ Reed (your choice of 6, 8, 10 or 12 dents)
- ♦ Tool Holder
- ♦ Two-Year Warranty on all Parts and Labor

SPECIFICATIONS:

Modular Looms

	<u>40"</u> (100cm)	<u>48"</u> (120cm)	<u>60"</u> (150cm)	<u>72"</u> (183cm)
Height	62" (157cm)	70" (178cm)	70" (178cm)	70" (178cm)
Overall Width	49" (124cm)	57" (145cm)	69" (175cm)	84" (213cm)
Front to Back	48" (122cm)	61" (155cm)	61" (155cm)	61" (155cm)
No. of Heddles	800	800	1,200	1,600
Weight	250 lbs. (114kg)	350 lbs. (159kg)	375 lbs. (170kg)	400 lbs. (182kg)



Home Loom

Something old, something new at AVL. Although the Home Loom was introduced in 1989, it is derived from a loom originally built in 1949 by Jim Ahrens. The Home Loom is AVL's marriage between the high technology found in our other looms and the "high touch" environment of a living room, family room, or study.



40" Home Loom

The Home Loom, though, doesn't skimp on quality. It features the same kiln-dried hardwood construction, triple-coat lacquer finish, and attention to even the smallest detail found on all other AVL looms.



Home Loom

The Home Loom can be equipped with up to eight harnesses and ten treadles and uses the same convenient side tie-up system found on our Modular loom.

The Home Loom is the perfect loom for the weaver who's just starting out and looking for high quality at a reasonable price.

Standard Features on all Home Looms include:

- ♦ AVL Side Tie-Up Harness System (4 harnesses, 6 treadles, 30 side tie-up cords)
- ♦ Ability to add four harnesses and treadles
- ♦ Illustrated Instruction Manual
- ♦ Kiln-Dried Hardwood Construction
- ♦ Locking Brake Warp Tension System
- ♦ Heddles (800)
- ♦ Lathe-Turned Standard Warp Beam
- ♦ Standard Beater with Carbon Steel Reed (your choice of 6, 8, 10 or 12 dents)
- ♦ Two Aprons with Three Steel Rods
- ♦ Two-Year Warranty on all Parts and Labor

SPECIFICATIONS:

Home Looms

	40" (100cm)	48" (120cm)
Height	48" (120cm)	48" (120cm)
Overall Width	50" (127cm)	58" (147cm)
Front to Back	41" (104cm)	41" (104cm)
<i>When Folded</i>	28" (71cm)	28" (71cm)
No. of Heddles	800	800
Weight	125 lbs. (57kg)	140 lbs. (64kg)



Warping Equipment



Sectional Warp Beam System

This system consists of a sectional warping beam, tension box, and cone rack or spool rack. And now, for short warps, try the Warping Wheel with the Sectional Beam.

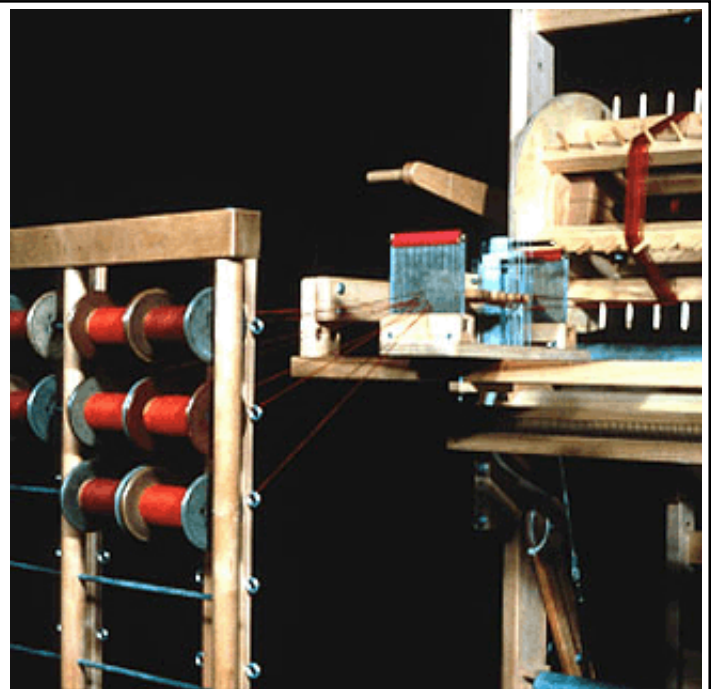
The system is designed to make long warps (up to 100 yards or more depending on the material) totally manageable.

The AVL Sectional Warp Beam

Available with either one yard or one-half yard circumferences. Both have one inch sections that are easily removable for infinite flexibility. It has been engineered so that absolutely no torsional deflections will occur under the heaviest of warp tensions. This strength is essential to help avoid uneven tensioning in the warp and thus the resulting variations in the cloth.

The AVL Tension Box

Places proper tension on the warp ends and has a moveable front reed section so the width of the band being fed onto the sectional beam can be accurately regulated. It also has a unique heddle system that is used for conveniently putting a cross in each section.





Warping Equipment



Revolution Counter

Another AVL innovation. The Revolution Counter is an invaluable addition to the Sectional Beam. It helps keep track of each revolution of the beam while winding on, so you never end up with a short section. Better still, the counter can be reversed to keep track of how much you've woven off.

The AVL Spool Rack

The Spool Rack holds 104 spools, yet fits compactly in a 46" x 20" space and stands 46 1/2" tall. There is no better way to make economical use of your valuable yarns than by winding them on spools. And the AVL Spool Rack can be used for warping both our Standard and Sectional Beams. Constructed with hard rock maple and steel.

The AVL Cone Rack

Holds 56 cones or spools. The advantage of a multi-use cone rack over a simple spool rack is that when doing production runs, the sectional beam can be filled directly from the cones of yarn as purchased.



AVL Warping Wheel

For short warps of approximately 20 yards, try the revolutionary Warping Wheel. It does away with the need for racks of cones or spools and allows you to create sections of 20, 30, even 40 ends per inch with just a single cone.



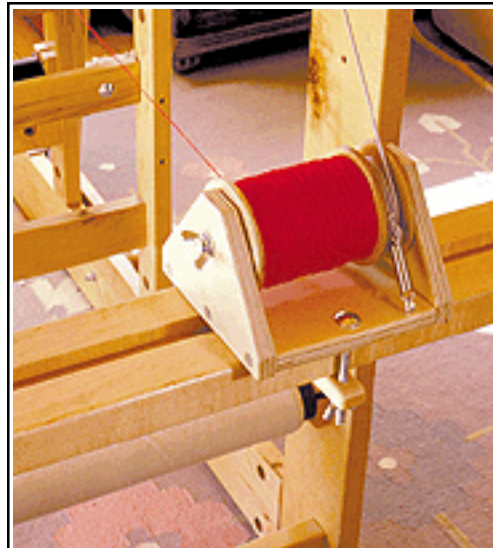
Warping Equipment

The AVL Wall-Mounted Beam Winder

Allows the warp beam to be removed from the loom while winding on the warp. Weavers who don't want the warping process to monopolize their loom have found the Beam Winder to be an invaluable aid. It allows for the warping of both standard and sectional warp beams off the loom.

Warp Beam Flanges

An option for all standard beams. They are used to support the edges of the warp and eliminate the need for winding paper, cardboard, sticks, etc., into the warp.



Selvage Rollers

AVL's Selvage Roller System lets you maintain an even tension throughout a fabric. Selvage Rollers are especially useful when your edges require different tension than the rest of the cloth. The system requires the use of the AVL Track and Mounting System.



Optional Equipment

Hand and Flyshuttles

A special bobbin and tensioning system is used on our end-delivery shuttles which completely eliminates the need to hand manipulate each weft shot. This unique system increases weaving speed tremendously, at the same time producing more uniform and clean selvages.



Overhead Beater

Unlike other overhead beaters that are only pivoted at the top and, therefore, tend to strike up on the fell, the doubly-articulated AVL overhead beater will always beat at a perfect 90 degree angle. The benefit is reduced effort and a superior fabric. The system may be ordered as a standard beater or with any of the AVL flyshuttle beaters. Available on 48", 60", and 72" looms.

Raddle

Used with plain warp beams, dented four to the inch with a removable top to hold the threads in place, it allows the warp to go on more quickly and with less tension problems. For use on all looms with plain warp beams.

Patent Denter

A favorite accessory of AVL weavers around the world. The Patent Denter is a creeping reed hook that automatically advances from one dent to the next. Works on reeds up to 30 dents per inch.

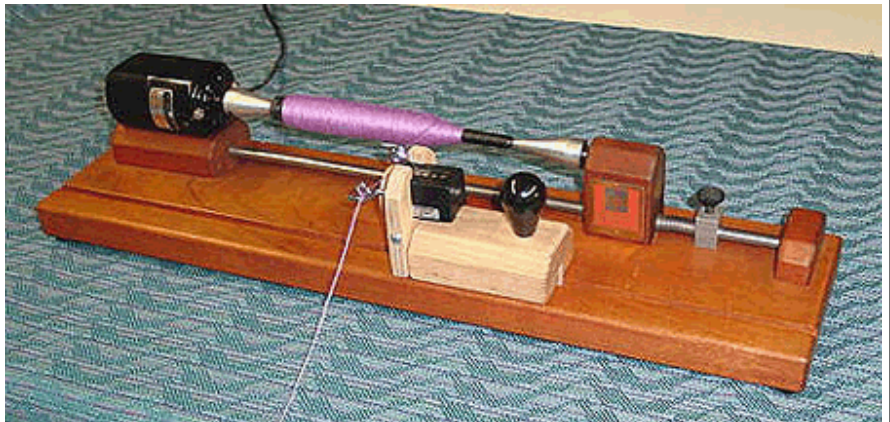




Optional Equipment

Electric Bobbin Winder

For quick and efficient winding of bobbins and spools, the AVL Electric Bobbin Winder is a must. Our winder's heavy hardwood base, foot control, and manually operated Thread Guide help to further smooth the process. An optional AVL Yardage Counter can be added to the Thread Guide.



Shuttle Tray (set of two)

Our handy and popular Shuttle Trays are a great solution to the age-old problem of where to put those pesky extra shuttles. The trays mount on the cloth beam supports which places them in the perfect spot to make a shuttle change. (Full frame looms only.)

Single Box Flyshuttle Beater

Greatly speeds up the weaving process and increases uniformity of the woven cloth. Available for all Dobby and Modular looms, except the Studio Dobby Loom.

Double Box Flyshuttle Beater

A double box flyshuttle beater accommodates the use of two shuttles so that alternating threads (pick-and-pick) can be easily utilized in the weft.

Four Box Flyshuttle Beater

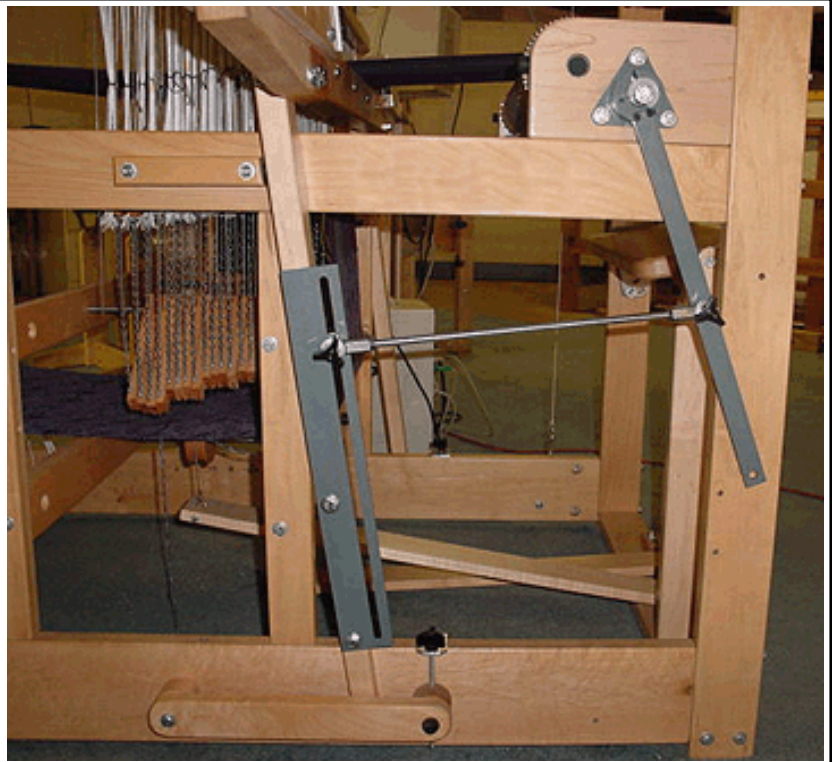
For specialized weaves; the four-box holds four flyshuttles and allows for a wide variety of weft changes.



Optional Equipment

Automatic Cloth Advance System

Newly redesigned in 2001, the Automatic Cloth Advance actually moves your fabric forward one pick per beat. Particularly useful for doing open weaves, such as drapery fabric, where consistency in the weft spacing is critical. Also insures uniformity when more than one weaver is using the same warp.



Air Assisted Dobby

All AVL Dobby Looms are capable of being converted to a pneumatic lifting system. The Air Assisted Dobby is an easy and extremely effective add-on that alleviates all effort from lifting.