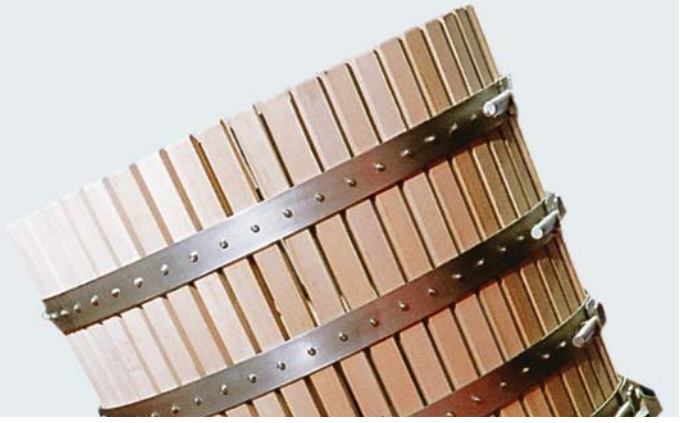
WINE BUSINESS MONTHLY • April 2005

Product Review: Basket Presses

The Renaissance of the Basket Press

Curtis Phillips



WHEN I WENT to UC Davis, the basket press was considered a plaything of amateurs. Professionals would use continuous presses or one of those new-fangled tank presses, some of which actually could be *programmed* to run by themselves, thanks to the latest in relay-logic control (the now ubiquitous PLC—Programmable Logic Controller—being a thing of the future). Even the current UC Davis winemaking textbook, *Principles and Practices of Winemaking*, which was published some years after my time, reflects this opinion by noting that, "The use of vertical basket presses is now limited almost exclusively to home winemakers."

During this time, however, the UC Davis teaching winery was equipped with a tank press while the UCD "experimental" winery, where I worked, made all the wine for the professors and researchers using a pair of enormous and ancient hydraulic-ram basket presses. Using these beasts to press 20 tons of Symphony—a hybrid grape developed in the UC Davis School of Viticulture lab—was my introduction to the wine industry. (I wonder if they ever got all that green slime off the ceiling?)

BASKET PRESSES

Basket presses range from simple presses in which a wooden basket with vertical slats provides the restraining surface and a capstan is used to apply the pressure, to modern, automated and computerized presses fabricated entirely out of stainless steel and that use hydraulically actuated rams.

With the exception of the option for stainless steel baskets, the smallest basket presses (i.e., those with capacities of less than three hectoliters or so) haven't really changed much. Therefore, in this article, we will be concentrating upon the most modern presses that have capacities of at least five hectoliters (130 gallons).

Recently, the basket press has been experiencing something of a renaissance. A few years ago, few brands of large (over 10 hectoliter capacity) basket presses were available in the U.S.; however, several manufacturers, including many that had previously left this part of the market, are now vying for attention in this sector. The basket press never really disappeared, of course. Many wineries are just too small to justify even the smallest membrane presses.

BASKET PRESS ADVANTAGES

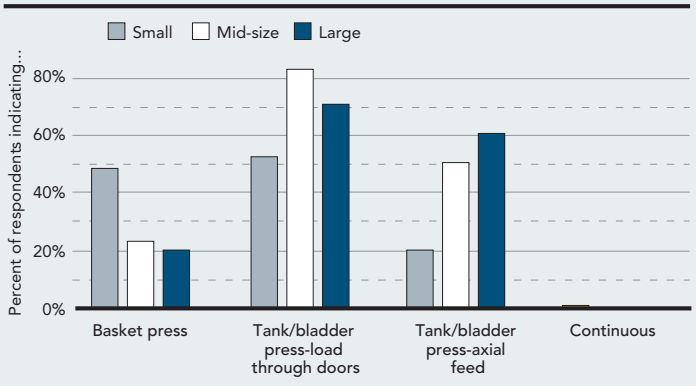
The pursuit of quality appears to have driven the basket press' renaissance. Stainless steel baskets, quick-loading rigs and computerized control systems are not cheap. Despite their expense, these presses are finding homes. The decision seems to be led by an overriding desire for attaining the maximum quality in the winery.

Part of this is merely logistical. One cannot "unblend" wine. Making wine in smaller individual batches allows the winemaker more control over the final blend. While this approach to winemaking doesn't *require* a basket press, modern basket presses fit nicely with this approach.

In addition to logistics, despite an almost complete lack of substantive scientific data, anecdotal evidence supports the perceived wisdom of the industry that basket presses yield higher quality press wine. Every winemaker questioned for this article cited the quality of the press wine as the primary reason for purchasing a modern basket press.

The particular varietals produced by the winery can also influence press choice. Wineries that specialize in delicate and finicky varietals such as Pinot

Basket presses are primarily used by small wineries



SOURCE: 2003 WBM WINERY EQUIPMENT SURVEY

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Noir or Viognier tend to prefer basket presses. Conversely, the hard-to-press varietals such as Riesling, Muscat or Symphony are frequently pressed in tank presses where the press can be tumbled frequently. Similarly, some varietals such as Sauvignon Blanc and Muscat don't really reveal their varietal character unless they're pressed a little hard.

For the most part, basket presses tend to have the strongest presence in wineries smaller than 5,000 cases in annual production. It should be noted that according to the 2003 *WBM* "Winery Equipment Survey" (March 2004), 42 percent of wineries use a basket press, either alone or in conjunction with one of the various tank press designs. When these results are broken out by winery size, we find that 48 percent of small wineries (under 50,000 cases) use a basket press while just 23 percent of mid-sized and 20 percent of large wineries do so.

South Africa's **Klein Constantia Estate** has a press setup that is very familiar to many U.S. winemakers. Winemaker **Adam Mason** uses two smaller Mori presses to supplement Klein Constantia's main press (a Velo membrane press with a 10,000 kg capacity). When asked about the presses, Mason noted that "The 10-ton press is incapable of taking very small loads as the bag risks bursting as it inflates against the drainage channels on the interior of the press, so the Moris were brought in as a solution."

A similar setup can be found at the **Louis M. Martini Winery**, which has a **Vaslin-Bucher** JLB basket press in addition to their main tank press. As noted below, however, Martini is using their basket press in a small winery within their larger operations.

BASKET PRESS LIMITATIONS

Part of the reason for the seeming eclipse of the basket press is due to some very real limitations of the design. The design tends to be inefficient for press yields and cycle time (the time needed to fill, press, empty and refill).

The lower press yields generally found with basket presses are mainly a result of the way the grapes are pressed. Basket presses press on one side of a cylinder of must. The juice or wine is expelled out the sides of the basket in a direction perpendicular to the force applied to the press cake. The pressure of the ram on the pomace press cake tends to close off the channels that allow the juice to be expelled from the press, so the juice can then be pressed out of the middle of the press cake.

Furthermore, traditional basket presses tend to be labor-intensive to load and empty. As we will see, press manufacturers are attempting to address these limitations. However, it should be remembered that essentially all other press designs have been developed in attempts to improve upon the basic basket press design.

The Europress EVP structure is built from industry-standard enameled mild steel, but an all stainless steel press frame is available. A fully automatic digital control system is also available as an option.

PRESSES EVOLVE

The **moving head press** was one of the first attempts to improve the basket press. The moving head press is like a basket press that has been turned on its side. The mechanical modifications of the basket press have been to mount the screen on its side and to provide a motor drive of an axial screw or hydraulic ram to move the pressing head. The pomace is pressed from one or both ends. Overall, this design was unpopular with the U.S. wine industry. Few examples remain in service here. (Vaslin-Bucher, however, is still making the venerable Vaslin press of this design.)

One of the perceived limitations of basket and moving head presses is that juice channels in the pomace cake are closed off as the ram(s) apply pressure to the cake. The bladder press design was one attempt to circumvent this tendency.

In a **bladder press**, a cylindrical rubber tube is mounted down the axis of the press. This is surrounded by a perforated or slatted cage. When the bladder is inflated, the pomace is pressed from the inside out so that the cake becomes an annulus rather than a cylinder. Horizontal versions of these presses are rotated as the pressure increases so as to develop a uniformly thick cake of skins. The pressure is nor-

Basket Press Suppliers

COMPANY	CITY	STATE	COUNTRY	PHONE	WEBSITE
AWS/Prospero Equipment	Windsor Pleasantville	CA NY	USA USA	800-953-3736 888-732-1222	*www.wineryequipment.com*
Carlsen & Associates	Healdsburg	CA	USA	707-431-2000	*www.carlsenassociates.com*
ConeTech	Santa Rosa	CA	USA	707-577-7500	*www.conetech.com*
Criveller Company	Windsor Niagara Falls Lewiston	CA ONT NY	USA Canada USA	707-838-2222 905-357-2930 905-358-5202	*www.criveller.com*
KLR Machines, Inc.	Sebastopol	CA	USA	707-823-2883	*www.klrmachines.com*
Les Pressoirs Coquard	Bezannes		France	032-636-5857	n/a
St. Patrick's of Texas	Austin	TX	USA	512-989-9727	*www.stpats.com*
ColloPack Solutions	Napa	CA	USA	707-258-3940	*www.collopack.com*
TCW Equipment	Saint Helena	CA	USA	707-963-9681	*www.tcw-web.com*
EuroMachines, Inc.	Cordelia	CA	USA	707-645-6922	*www.euromachinesusa.com*
Napa Fermentation Supplies	Napa	CA	USA	707-255-6372	*www.napafermentation.com*

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mally supplied by an external compressed air supply; however, small vertical bladder presses tend to be operated by water pressure.

Small-lot, experimental and pilot winemaking are areas where the basket press design has a clear advantage over most other designs. Mainly they are about as efficient at pressing at one-quarter capacity as they are at pressing at full load. By contrast, bladder presses work much better when they are processing full loads. Membrane presses tend to be better at pressing partial loads than bladder presses, but even so, they aren't really as good at greatly under-capacity operation as are basket presses.

The **membrane press** is the definitive tank press. The chief difference between a bladder and a membrane press is that while bladder presses have an axially mounted, balloon-like bladder, the membrane in a membrane press is the same shape and size as one half of the press, and is mounted at the diameter of the cylindrical press. This means that the membrane can be sucked back against one hemisphere of the press so that the entire volume of the press can be filled with grapes. The membrane can then be inflated to press the grapes against the drain screens in the opposite hemisphere of the press. For all but the smallest wineries, membrane presses have become the most popular batch-press design.

The latest versions of the membrane press (or tank press) may include PLC control, inert internal atmosphere, and even improved centerline drains and dual membrane pressing.

According to the 2003 *WBM* "Winery Equipment Survey," the number of wineries using membrane presses greatly exceeds the number of those using basket presses. It should be noted, however, that many wineries own both types.

This short progression of press designs omits the succession of continuous press designs that have appeared over the years. As the name implies, continuous presses can achieve throughputs that the batch designs can't match. These presses tend to generate a great deal of suspended solids. Indeed, juice from a continuous press generally needs to be clarified, usually with a centrifuge, prior to fermentation. Only a small fraction of wineries, however, use a continuous press (see table on p14).

Beyond the niche among very small and experimental wineries, the basket press did become a little scarce during the 1970s, 1980s and 1990s. Basket presses tend to have small capacities, difficulties in applying uniform pressure to all parts of the cake, a tendency to squirt juice at high pressures, and require more labor to load and unload. However, because of the advantages mentioned previously, such as logistics, certain varietals that work better with basket presses and especially the pursuit of high quality wine, basket presses are making a comeback.

The Vaslin-Bucher model JLB is distributed by KLR Machines

PRESS PRICE TAGS

Within individual types of basket presses, there are certain economies of scale that are seen as the size of the press increases. The smallest presses of a given type will have the highest cost per hectoliter of gross capacity. This cost can decrease dramatically as the press size increases, but this savings is sometimes obscured by the added cost of additional features added to some of the larger presses.

Small, manually pumped basket presses have the lowest initial costs, but this is tied to their limited capacities. Wineries should expect to pay about $1,000 to $1,500 per hectoliter (1 hl is about 26 gallons) of gross capacity. The same could be said for the upright bladder [basket] presses (or water presses).

Substituting an electric hydraulic pump for the hand pump will double the price tag for the smallest models, but an electric/hydraulic press with about five hectoliters of capacity should cost about $7,000. This works out to $1,400 per hectoliter. Roughly speaking, this is about the same price per hectoliter of gross pressing capacity that one sees for membrane presses.

Things change considerably when one moves to basket presses larger than five hectoliters in capacity. Unlike their smaller brethren, these top-end basket presses are not cheap, running about $3,200 per hectoliter of capacity, and are pushing three times the cost of both smaller basket presses and membrane presses.

To this end, buying one of these presses may be likened to buying a Rolls Royce: If you have to ask how much it costs, you can't afford it. Obviously, it is not as simple as that. These presses are pitched directly at those wineries that are producing wine at higher price points. For wineries in this rarefied market, the pursuit of wine quality usually trumps the cost of equipment.

Like most winery equipment, basket presses have become even more expensive due to the rapidly increasing cost of stainless steel. This trend hasn't been helped by the decline of the U.S. dollar against most other currencies as most presses, excluding Carlsen, are manufactured overseas.

CHOOSING THE RIGHT SIZE

When choosing a press, a good rule of thumb is that a winery should have a press (or presses) that can press all the pomace from its largest fermentor. There is little point in getting a single 50-ton press if the winery is fermenting Pinot Noir in half-ton MacroBins®.

Similarly, the road to winemaker perdition runs through wineries with 10-ton fermentors and 70L presses. The "micro-winery" at Martini stands as a good example in that the pomace from one of Martini's three-and-a-half-ton fermentors fills their press.

WHAT TO LOOK FOR

The main aspects to look for in a basket press are ease of operation and the robustness of the design. If a press is prone to breaking down, it doesn't really matter if it produces the best press wine.

According to the 2003 *WBM* "Winery Equipment Survey," the average press age is about nine years old. Individual press-parts, such as the hydraulic pump, flexible hydraulic lines, any PLC, relays or computerized control, or the main hydraulic seals, will wear out given enough time. However, if replaced as needed and well maintained, a press should last for decades.

Ease of operation includes ease of loading and unloading the press as well as automation of the press cycle. The current trend is toward removable and forkliftable baskets and press pans. This allows the winery to own two or more complete basket assemblies. This in turn allows one basket to be filled while the other is being pressed. Even though this adds a few thousand dollars to the price of the press, it enables the winery to minimize the time between press loads to just a minute or so. Many winemakers view a second basket and pan as a good way to save money in the long run by spending money initially.

Computerized control systems are available for many of these modern basket presses and are the same PLCs that are used to control most tank/membrane presses. Since they are proven technology, the PLCs themselves are pretty robust. Nevertheless, they are another point of potential failure.

These controls allow the winemaker to pre-program very sophisticated press cycles that, ideally, match each varietal, or even vineyard or individual block, to be pressed. The winemakers that have presses with automatic controls all seem to like them, though most admitted that they don't use the full capabilities of the control system. Both **Damien Parker** (**Joseph Phelps**) and **Ralf Holdenried** (Louis M Martini) noted that they make any press-cuts by taste rather than by program.

Bob Betz, of **Betz Family Winery**, prefers a press without computerized controls. "The press [an American basket press now made under license by **Carlsen & Associates**] has the winemaker making the press fraction decisions and not a computer program; the winemaker controls the rate of press, the total pressure and, most importantly, has continuous and immediate access to the press juice, in real time. Standing right at the press pan port, the winemaker can continuously taste the juice as it is being pressed."

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One of the most important features of a press is the ease with which it can be cleaned and sanitized. To this end, you may want to avoid presses with wooden cages. A wood surface is fine in an anaerobic environment, like the inside of a full barrel. Barrels tend to be replaced pretty regularly anyway. In a press, however, wood is merely a *Brettanomyces*, *Acetobacter* and *Pediococcus* inoculation point. This is exacerbated by the fact that presses tend to have fairly long operational lives, spanning several decades rather than just a few years. As a winemaker myself, I would consider a stainless steel basket much more important than a computerized control system.

Most modern presses use food-grade vegetable oil as their hydraulic fluid while a few use water. Each has its own disadvantages: water can freeze and rupture hydraulic lines if the temperature drops below freezing and extra attention to pressure is not given (also when water is present in the press when it is not in use) while oil attracts dirt and isn't as easy to clean up.

Although we aren't really discussing small basket presses, small hand-crank presses do exist. Although manual basket presses are available in sizes up to 300 liters (0.3 hl), they are not generally recommended for commercial wineries of any significant level of production, except as a supplement to other, less labor-intensive presses.

REDS VS. WHITES

The trend toward stainless steel press baskets makes it easier to convert a modern basket press from pressing red musts back to pressing white grapes. All the same, sometimes it can be more difficult to press white grapes in a basket press than in a membrane press. This is because, for white grapes, the press has to do the double job of releasing the juice from the individual berries as well as separating that juice from the skins and seeds in the white pomace. Since red varietals are fermented prior to pressing, the juice has already been released from the berries during fermentation.

Like many winery operations, winemakers remain divided as to whether the hassles of pressing whites in a basket press outweigh the perceived benefits. Martini winemaker **Michael Martini** noted that his attempts to press whole-cluster white grapes resulted in a very inadequate press cake, with many unpressed berries in the center. At the same time, **Melissa Stackhouse** at **La Crema** routinely uses a basket press to press such white varietals as Chardonnay and Viognier.

Operationally, all of the presses described in this article can be used to press both red must and white grapes. No consensus points to any one of these presses as being particularly suited for one or the other.

NEW PRESSES AVAILABLE

Some of the most prominent press manufacturers, along with some of their newest presses, include the following:

Carlsen & Associates: Carlsen & Associates has long been a dominant force in winery equipment. The Carlsen-integrated Waukesha positive displacement pump is perhaps the most ubiquitous pump in the industry. As we saw in last month's Unified Symposium "Highlights" issue, Carlsen & Associates was showing off their new press at this year's show.

Although the model seen at Unified had manual controls, Carlsen is making PLC available as an option this year, using the same Siemens PLC that they

Basket Press Manufacturers

MANUFACTURER	VENDOR	MODEL	SYSTEM TYPE	CAPACITY (L)	BASKET & PAN MATERIALS	OPERATING FLUID
Aton	Napa Fermentation Supplies	Aton	Hydraulic Ram	220 – 480	Stainless	Oil
Carlsen & Associates	Carlsen & Associates	(Licensed press design from American Basket Press)	Hydraulic Ram	800	Stainless	Oil
Defranceschi	Valley Pipe & Supply Inc.	AMOS AVP	Hydraulic Ram	1,000	Stainless	Oil
Diemme	ColloPack Solutions	Vintage 23	Hydraulic Ram	2,300	Stainless	Oil
EuroMachines (Scharfenberger)	EuroMachines	EuroPress EVP	Hydraulic Ram	300 – 1,400	Wood, SS as option	Oil
Hypac	TCW Equipment	Hypac	Hydraulic Ram	800 – 1,300	Wood, SS, Enamel	Oil
Les Pressoirs Coquard	(none in U.S.)	Coquard VP	Hydraulic Ram		Stainless	Oil
Marzola	n/a	Marzola	Hydraulic Ram		Wood, SS, Enamel	Oil
Mori	TCW Equipment	Mori	Hydraulic Ram	133 – 850	Wood, SS	Oil
Pillan	AWS/Prospero Equipment	Tico	Hydraulic Ram	Up to 300	Wood	Oil
Pillan	Napa Fermentation Supplies	Tico	Hydraulic Ram	68 – 220	Wood, SS	Oil
Revinsa	ConeTech	Revinsa Basket Press	Hydraulic Ram	1,200 – 3,000	Stainless	Oil
TCW	TCW Equipment	TCW	Manual	10 – 130	Wood, SS as option	Oil
Vaslin-Bucher	KLR Machines	JLB	Hydraulic Ram	525 – 2,000	Stainless	Oil
Zambelli	Napa Fermentation Supplies	2020-2070	Manual	7.5 – 326	Wood	Oil or none
Zambelli	St. Patrick's of Texas	H	Hydraulic Ram	72 – 500	Wood, SS as option	Oil
Zambelli	St. Patrick's of Texas	RP	Manual	30 – 133	Wood, SS as option	Oil or none

* Estimated price range ** Partial list only, wineries not listed for small presses *** Wineries using American Basket Press Alfa 2N **** Pricing not disclosed

already install on their Puleo tank presses.

The keynote feature of the Carlsen press is the movable hydraulic head. The entire mast and ram assembly rolls on tracks, and can be pushed away from the press pan and basket so that the entire diameter of the basket can be accessed during filling.

When asked about this design feature, **Jim Carlsen** noted that the movable mast and ram greatly decreases the loading and unloading time for the press. "My goal is to be able to cycle eight hectoliters of pomace in under an hour. This would allow the winemaker to process the same amount of grapes per day in one of our eight-hectoliter presses that he could process in one of my competitor's 12-hectoliter presses. [We can do that] if we can cycle the press one and a half times to each one of their press cycles. You can't reduce the actual pressing time, only the time spent filling and emptying the press."

Similar to some of the latest European press designs, the Carlsen press also features a perforated bottom press-plate that helps drain the center of the pomace cake. Depending upon the number of orders received, Carlsen is planning to make about a dozen of these presses this year.

Vaslin-Bucher: Although mainly known for their membrane presses in the U.S., Vaslin-Bucher has a fairly broad portfolio of winery equipment, ranging from destemmer-crushers, to presses, to reverse osmosis and cross-flow filters.

The Vaslin-Bucher JLB 20 features PLC for control of the pressing cycle, a quick emptying operation, thanks to a patented automatic demoulding of the press cake after pressing, and stainless steel construction for those parts of the press that normally contact grapes or juice.

The Diemme Vintage 23 features PLC control, hydraulic basket-lift and a forkliftable pomace pan. It also has a 2,300-liter (608 gal) capacity, putting it at the upper end in terms of size.

The JLB 20, which is rated for 2,000 kg (4,400 lbs) of fermented pomace, has two smaller siblings: the 1,200 kg (2,400 lbs) capacity JLB 12 and the 500 kg (1,100 lbs) capacity JLB 5.

The Vaslin-Bucher JLB series has been available in the U.S. for several years, and these presses appear to have a large following among the high-end wineries using basket presses. Louis M. Martini Winery installed one as part of their "micro-winery" project. Michael Martini notes that the JLB press is very gentle. "Indeed, it's too gentle to use on whole-cluster whites. It's a lot softer than [press wine from] a tank press, with no green, pressed seeds or flavors in the press wine."

Martini noted that they installed the press because they needed a press that was sized appropriately for "pressing the three-and-a-half-ton-lots for the Martini micro-winery."

Martini associate winemaker Ralf Holdenried noted that operationally, the JLB press "has lower yields than a tank press, but in turn, we add back a higher proportion of the press wine from the JLB than we would from a membrane press. This makes up for some of the lower yields, especially for the tougher varieties such as Cabernet Sauvignon and Merlot.

"It's a fairly straightforward press," noted Holdenried. "However, you *can* break it if you're not careful. You can control the pressures fairly accurately, but yields vary so much from tank to tank that we haven't gotten into taking different press cuts. We drain the fermentors overnight before loading the press, so we only get 80 or 90 gallons of press wine per load."

Operationally, filling the JLB is a one-person job. In part this is because of the way that Martini has installed the fermentors in the micro-winery, but the process is greatly aided by the two sets of forklift-portable press pans and baskets (cages) that Martini purchased with the press. "We take the press cage over to the fermentor and place it directly under the door. The pomace is then raked out into the cage. [The operator] then jumps back on the forklift and takes the cage back to the

CONTROL SYSTEM	KEYNOTE FEATURES	PRESS COST*	EXISTING USERS**
Automatic		$6,100 - $10,000	(many)
PLC (option)	Moveable Press Head	$29,000	Betz Family Winery, Basel Cellars, Cadence Wines***
PLC (option)		****	(new)
PLC		****	(new)
PLC (option)	All SS as option	****	(new)
Automatic		$20,000 - $30,000	Saxum
Automatic		****	
Automatic		****	La Crema, Mondavi
Manual or PLC (option)		$7,200 - $13,000	Klein Constantia
Manual or Automatic		Up to $4,500	(many)
Automatic		$2,200 -$2,700	(many)
PLC (option)	SS Slatted basket	$52,000 - $74,000 (FOB Spain)	Joseph Phelps
Manual		$185 - $4,000	(many)
PLC	PLC Control	$45,000 - $55,000 $25,000 - $65,000	Vineyard 29, Martini Winery
Manual		$180 - $1,200	(many)
Manual or Automatic		$6,100 - $8,000	
Manual		$260 - $1,400	

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press. While the press is running, [the operator] can take the second cage to the next fermentor."

In the U.S., Vaslin-Bucher is distributed by its U.S. subsidiary, **KLR Machines**.

Revinsa: The current generation of Revinsa basket presses, which are represented in the U.S. by **ConeTech**, is one of the broader ranges of modern basket presses. Rated capacities range from 12 hectoliters (316 gallons) up to 30 hectoliters (790 gallons). The Revinsa boasts an all-stainless-steel basket design that mimics the geometry of traditional wooden basket staves. Reportedly this minimizes shear force on the pomace, thus decreasing the amount of suspended solids in the press wine. Additionally, the Revinsa features a fairly low maximum operating pressure of just 2.6 BAR, which is comparable to the pressures used in most membrane presses.

Damien Parker, winemaker at **Joseph Phelps,** installed one of the 20 hl presses a few years ago when Joseph Phelps started processing significant quantities of Pinot Noir. "I brought in the Revinsa because I like the design of the stainless-steel basket. I also like the people at ConeTech and have been doing business with them for years," he said. "It's harder to load and unload than our tank presses, but particularly on the Pinot Noir, the press wine is usually clear enough and tastes good enough to send to the free-run tank. Of course, we taste as we go, so anything that is doubtful is settled out in barrels."

Hypac: Hypac is an Australian entry in the basket press market and has been a supplier to the Australian wine industry for more than two decades. Not surprisingly, most of Hypac's installed base is in Australia and New Zealand. However **Saxum Vineyards**' **Justin Smith**, in Paso Robles, Calif., has a Hypac. "So far I am delighted and impressed with the overall quality and ease of operation of the press. I am amazed at the clarity and quality of the juice that gets filtered through the skins."

Hypac makes basket presses ranging from seven hectoliters to 20.5 hectoliters in nominal capacity. Hypac is distributed by **TCW Equipment** (formerly The Compleat Winemaker) in the U.S.

Diemme: Another well-regarded tank-press manufacturer, Diemme, is also reentering the vertical basket press market this year. Like the Vaslin-Bucher, the Diemme press, called the Diemme Vintage 23, features PLC control, hydraulic basket-lift and a fork-liftable pomace pan.

The Vintage 23 has a nominal 2,300 liter (608 gal) capacity, putting it at the upper end in terms of size. **ColloPack Solutions** represents Diemme in the U.S.

Defranceschi: The Italian winery equipment group Defranceschi S.p.A. recently purchased the German manufacturer **AMOS G.m.b.H.** The merger, which was announced at last year's InterVitis/InterFructa, is a move by Defranceschi to extend their product line beyond their traditional stronghold of fermentors and tank presses to a wider range of winemaking equipment. It also means that the interesting AMOS vertical basket press, called the AMOS AVP 10 (which has a nominal 1,000 liter/264 gal capacity) can be ordered through Defranceschi's distributors worldwide (**Valley Pipe and Supply** in the U.S.).

Europress EVP: Another recent entry into the U.S. basket press market is the Europress EVP. The press was only recently introduced but is now available to U.S. customers. Scharfenberger had introduced the EVP at last year's InterVitis/InterFructa trade show. The standard EVP structure is built from industry-standard enameled mild steel, but an all stainless steel press frame is available as an option. In either case, the EVP features a stainless press pan and hydraulic ram. A stainless steel basket is available as an option. The Standard EVP is fitted with semi-automatic controls. A fully automatic digital control system is available as an option.

Europress is distributed in the U.S. by **EuroMachines**.

A unique feature of the Carlsen & Associates press is the movable mast and ram which greatly decreases the loading and unloading time for the press.

Marzola: Mazola is one of the more numerous large basket press brands in the U.S. Installations include top-end facilities like Pinot Noir and Chardonnay specialist **La Crema**, Syrah specialist **Robert Biale**, Napa landmark **Robert Mondavi Winery** as well as **CSU Fresno**. The press has a solid reputation for providing quality at a relatively reasonable price.

Marzola had been represented in the U.S. by ConeTech, but that is no longer the case. (*WBM* was unable to contact Marzola's new U.S. representative for this story.)

Mori: Having a more established presence than some of its competitors, Mori presses had been making substantial inroads into the U.S. wine industry. High-profile wineries around the world, such as South Africa's Klein Constantia Estate, use Mori presses on both red and white varietals. In terms of size, the Mori presses range from 1.3 hectoliters (35 gallons) up to 8.5 hectoliters (230 gallons). Only the largest model is in the same "weight class" as the other presses listed here.

Klein Constantia winemaker Adam Mason uses a couple of Mori presses. He noted that, "They are very mobile and dead easy to use.

"So far, I have no complaints with the Mori presses. The quality of press juice is very high. We opted for some polyethylene baskets over the standard wooden baskets for hygiene reasons. Unfortunately they weigh about twice that of the wooden ones, but it is a small price to pay," he said.

Mori is distributed by TCW Equipment.

FINDING THE RIGHT PRESS

Modern basket presses are finding their niche. All of the winemakers interviewed for this article view the design as yielding better and more usable press wine. There was no consensus among the winemakers as to which of these presses was preferable to the others; they all liked the press that they had been using. All of the winemakers however did cite the quality of the press wine as *the* main reason for choosing a basket press in the first place.

It should be remembered that even though for reds press wine only affects 20 percent of the total yield (roughly 30 gallons per ton), the extent to which this wine can be used is quite often the difference between profit and loss.

It appears that reports of the demise of the basket press had been greatly exaggerated. It also seems that, as part of the continuing pursuit of quality, these new basket presses have evolved a great deal beyond the old ratchet-and-crank level of technology. **wbm**