Propulsive power is supplied by a single Hino four-cylinder turbocharged diesel that develops 150 hp at 3,000 rpm and drives a Hamilton 211 waterjet for a maximum speed of 20 knots. By reversing the steering and reverse controls in unison, a resultant thrust can be obtained in any direction, giving 360° thrusting ability.

Each shell cleaning vessel has an engine box and control console forming a single unit, hinged at the after end so that it can be tilted back out of the way when complete access to the Hino diesel and water pump is required. Delivery of the two Broome vessels followed closely in the wake of two for a Darwin pearl farm.

Though they shared the same overall length and beam *BH2* and *BH3* were not true sisters. One had a lower freeboard than the other, while its counterpart had a slightly deeper draught.

BH3 was designed, built and outfitted to clean pearl shell as it is lifted in baskets from the ropes of the Bynoe Harbour pearl farm, while *BH2* operates further offshore with divers collecting shell from the seabed.

As it will operate mainly in sheltered waters, *BH3* has a much lower freeboard to provide easy access to the line carrying the pearl shell baskets. Both vessels have an overall length of 10 m and beam of 2.31 m. However, *BH3* has a draught of only 0.175m compared with the 0.32 m draught of its sister.

For further information on these unique pearl vessels or other marine engineering services available, contact Maurie Bozanich at M & J Engineering & Marfine Sales, 19A Zeta Crescent, O'Connor, Western Australia 6163. Phone: (09) 337 7817; Fax: (09) 331 3499.

Excerpts from an article by Bill Beecham, in Professional Fisherman, January 1992, pp. 26-27.

Pearl dealer's concern: are consumers sated or just short of cash?

by Russel Shor

Jewellers must wait until times improve to see if customers remain in the mood for pearls. Better design and salesmanship can help improve the odds.

Just a few years ago, the pearl market was white hot-women in the United States and Japan had come to regard a pearl necklace almost as a birthright. Pearls were seen as beautiful, relatively affordable and complimentary to virtually every fashion trend. Consumers couldn't get enough of them.

Now, however, pearl dealers wonder whether women did get enough. They wonder whether today's slow market is the short-term result of recession or the start of a long slowdown caused by market saturation.

Dealers of 'bread and butter' Japanese Akoya saltwater cultured pearls and high-end South Sea cultured pearls agree that demand from the United States and Japan has slowed considerably since the 1987—1989 boom, but they disagree on how long this may last.

Optimists such as Jesse August of August Gem Corp., New York City, acknowledge the U.S. market 'has been saturated by lower quality Akoya pearl necklaces, but there remains a great deal of room to trade up when times get better'.

Ray Mastoloni of Frank Mastoloni & Son, New York City, also believes in the future, as long as dealers and jewellery manufacturers are sufficiently creative and inventive in producing interesting pearl jewellery. 'We did sell a lot of simple pearl strands during the 1980s', he says. 'They are still a staple, but perhaps the market for them is a bit saturated. Now we have to work with jewellery designers to create new designs; from this, we'll create our own new markets.'

More sceptical dealers remember the difficult years of the early 1970s, when the market for Akoya pearls fell dormant following a necklace boom the previous decade. Sales were so sparse then that the Japanese Government stepped in to bail out some pearl farmers who found themselves in debt and out of customers.

Even the most pessimistic dealers today don't foresee a return of those problems, mainly because the pearl market is much more diverse and complex now. What they do forecast for the Akoya market, however, is long-term stagnation, with periodic gluts of supply of certain sizes and qualities and softening (not free-falling) prices.

Observes one dealer: 'It's true that pearls have grown in popularity, but it will take a big boom in pearl jewellery and add-on pendants and the like to

absorb the same number of pearls as an operalength necklace'.

Short-term outlook

In the near term, supplies and prices for most Akoya pearls will remain generally stable, say dealers. Demand for the latest Japanese Akoya crop has followed the trend of recent years—heavier on larger sizes (8mm plus), lighter on smaller goods. This has created a small over-supply and softening of prices of larger goods (up to 10–15 per cent at dealer level) and a firming up of prices for smaller goods as they become scarcer.

In the high end, slowing demand in Japan means U.S. buyers will get their best shot in years. 'When prices began soaring in the late 1980s, the Japanese buyers were bidding them up. Americans weren't willing to pay the prices', says Avi Raz of A & Z Pearls, Los Angeles. 'Now that business has slowed in Japan, there are more quality goods at stable prices.'

Mastoloni says this is a good time to trade up for jewellers who previously dealt mainly in promotional qualities. 'First, it's apparent that jewellery consumers are becoming more discriminating and quality-oriented. This creates a good opportunity for trading up. Second, retailers will find that trading up is a lot more profitable. It takes a lot less effort to sell a US\$1,000 necklace than two US\$500 necklaces.'

He cautioned retailers not to sit back and wait for prices to fall in the mid-market (under US\$3,000). The price of mid-size pearls (5mm-7mm) is expected to remain stable even though the supply is tightening as farmers concentrate on larger sizes. Says Raz, 'We'll see prices go up only if there's an unexpected surge in demand'.

Mastoloni says any price decrease primarily will affect the US\$4,000 plus market, 'and the declines won't be that significant once the goods travel through the distribution chain', he says. Interim processors and distributors will absorb some of the discounts.

At the opposite end of the market, recent Far East press reports say the Chinese are working on an Akoya cultivation project in hopes of taking over — and possibly flooding — the low end as they have the freshwater market. The Chinese have succeeded in growing some Akoya pearls, say the reports, but they still lack the processing know-how to bleach them to an attractive, uniform color.

'There's a lot of talk about the Chinese', says Raz, 'but I haven't seen anything that would threaten the Japanese yet. I think the market is safe for the foreseeable future'.

South Seas supplies

Dealers say high-end South Seas pearls have always been too costly and scarce to worry about market saturation. Indeed, they believe that new, larger supplies will eventually open new sales markets once the recession ceases.

What does concern them is the U.S. luxury tax. 'I know the tax has deterred a lot of American buyers, recession or not', says Salvatore Assael of Assael International, New York City. Also, the Japanese aren't buying the quantities or outbidding competitors for South Seas pearls as they once did.

In the late 1980s, the price of South Seas pearls — white and black — soared to mind-numbing levels as Japanese demand boomed and harvests diminished because of pollution in Tahitian and Australian cultivation areas.

Now production is booming, not prices. 'The Australian harvests have improved tremendously because they've found better beds and decreased the mortality rate of the pearl oysters', says Albert Asher of Albert Asher South Seas Pearl Co., New York City. 'They've also learned to create much larger pearls by re-using oysters ... these 'veteran' oysters can produce pearls larger than 20mm.'

Not only has production increased in Tahiti and Australia, but Indonesia has emerged as a strong producer and threatens to overwhelm the Australians in the sub-15mm categories.

The Indonesians are producing big quantities of white South Seas pearls', says Assael. These pearls are extremely attractive, he says, and priced 20—50per cent below comparable Australian pearls. 'This certainly means prices will be coming down throughout the market; they've come down 20—30per cent already and will continue to drop for at least two more years.'

Other dealers agree, but hasten to add that South Seas pearls still won't be cheap. 'Prices were too high several years ago', says Asher. 'This just means they will be more normal: Japanese buyers admit now they overpaid and overheated the market.'

The dealers also say there's little danger of oversupply because lower prices will open new markets. These markets include affluent consumers who couldn't match the high prices the Japanese paid a few years ago.

The black South Seas pearl market also shows some price softening because of improved yields in Tahiti and lower Japanese demand, say dealers. As with white South Seas pearls, dealers see descending prices as an opportunity to introduce black pearls to consumers who had been priced out of the market. One dealer says, 'Black South Seas pearls will never

be a price-point item, but they've been so scarce and unaffordable in recent years that new supplies and lower prices are bound to bring more customers.'

Demand for South Seas pearl is concentrated in the Pacific Rim, say dealers. Hong Kong, Japan and other 'traditional' pearl markets take 65—70 per cent of all South Seas production, the United States about 20 per cent.

Excerpts from an article by Russel Shor, in Jeweller's Circular-Keystone, April 1992, pp. 92-93.

Australia's magnificent pearls

by David Doubile

Pinctada maxima, known in Australia as the silver lip and in Papua New Guinea as the gold lip, is cultivated in a wide belt of warm water stretching from Burma (now called Myanmar) eastward, including Indonesia and neighboring countries. This area is the source for so-called South Seas pearls, although the South Seas of legend — the islands of Polynesia — are actually home to another species of oyster, Pinctada margaritifera, that creates a smaller silver-gray or black pearl.

Australian South Seas pearls have recently emerged as the Rolls-Royces of the pearling industry: rare, robust, enormous (10 to 20 mm in diameter compared with the 2 to 10 mm range of Japanese cultured pearls), and expensive. Most cultured pearls still come from Japan, but north-west Australia has proved to be a perfect place to raise a pearl oyster. There is little industry, few people, no fertilizer run-off from agriculture — and tides as high as 33 ft.

'The big tides mix up the water, bringing a rich soup of organic particles to the oyster', Dr. Lindsay Joll of the Western Australian Marine Research Laboratories explained to me. 'But the tides don't just wash in and out of the shells. The oyster feeds itself, constantly beating the water through with tiny hairs on its gills.'

In 1956 Sam Male, with Australian and New York partners, formed Pearls Proprietary, Ltd., which joined with Japanese entrepreneur Tokuichi Kuribayashi to establish the nation's first pearl farm 250 miles up the coast from Broome, centre of Australia's pearling world. It was called Kuri Bay, after Kuribayashi.

Sam Male's son, Kim, reflected on those times when I visited him in his office in Broome's Chinatown. 'It took my father over 15 years to get enough good pearls to make a necklace', he said.

'When cultured pearls came in, they seemed as plentiful as marbles.'

With only a handful of farms, Australia was soon producing 60 to 70 per cent of the world's large South Seas pearls. But Australian oysters are not yet conceived on farms, as Akoyas are (Editor's note: They are now. See the article on the Darwin hatchery on p. 23 of this issue). Young oysters must still be found in the wild and gathered by divers on the flat sea bottom off Australia's north-west coastline.

A pearl boat serves as a divers' platform and can transport 5,000 or more live oysters in its holding tanks. Two 30-ft-long booms holding towropes extend from each side. Six tethered divers can operate simultaneously on the bottom, at depths of 20 to 60 ft, and cover a swathe 60 ft across as the boat creeps along.

On Mick Bray's 72-ft catamaran, divers in Lycraand-neoprene suits were already at work. They breathed through 'hookah' gear, standard scubadiving regulators attached to long, yellow hoses that ran to an on-board air compressor. On their backs were small, emergency air tanks.

Mick, the lead diver, shouted to us over the compressor noise: 'Your bloke will come with me on the next drift!'. Each dive is called a drift, because the boat drifts with the tide. Today was the top of the neap tide, so there was little water movement, and the water was clear.

Mick pulled on his mask, checked his hood and gloves to see that no skin was uncovered to stingers, and took a waterproof yellow switch box off a hook: 'I control the boat by signalling with this box'.

On Mick's next drift, Gary and I tumbled in and clutched the towrope. Dreamily we passed finger sponges, fan corals, an occasional anemone. Mick hung one-handed, like a trapeze artist.