

# WHERE TECHNOLOGY MEETS TRADITION

2014 MARKS THE 81ST YEAR MIZUNO HAS BEEN BUILDING GOLF CLUBS. DUNCAN LENNARD VISITS JAPAN TO MEET A BRAND WITH A CHERISHED PAST, A CHANGING PRESENT AND A CHALLENGING FUTURE

\*PHOTOS Aotani Takeru

Some 15 miles from Hiroshima, nestled among mountain ranges used by the US Air Force to reflect the 1945 atomic blast, lies an isolated foundry. Invisible from the road and accessed via a nondescript side lane, it would be almost impossible to find unless you knew where you were going. Despite the presence of a large fleet of skips, each laden with metal billets, and the distant thump of heavy machinery, you would be hard pressed to know what goes on here. Only a blue Mizuno banner, draped incongruously across one of the buildings, gives the game away.

This is the home of Chuo Industries Ltd, forgers of some of the best golfing metal money can buy. The Mizuno MP29s and MP14s Tiger Woods used as

an amateur were born here. So were the MP64s Luke Donald favours. At its peak, the company can churn out 6000 heads a day, each one given the grain flow forging treatment that has helped make Mizuno's irons respected worldwide.

Chuo Industries are not part of Mizuno itself, but a business partner. They also make car parts for Toyota and Mazda, as well as Japan's phenomenal 200mph bullet trains. Opened in 1938, the plant is old enough to have survived the A-Bomb, restarting production within eight months. Some 25 years later, the firm signed a deal to forge irons exclusively for Mizuno. It's still in place today.

The deal reveals much about the culture of Mizuno. The Chuo foundry is some 200 miles west of the brand's Osaka HQ. Today it is a silky 90-minute bullet train ride away,

where the ticket collector bows to you and station announcements are delivered in honeyed female tones that make Joanna Lumley sound like Ray Winstone. Four decades ago, the travel and logistics were rather more complex; but after Mizuno had witnessed the quality in the Chuo forgings, nothing else mattered.

What Mizuno saw in the Chuo operation was a rare feel for how to convert a lump of metal into something supremely functional. By the end of the 20th century, this feel had been enhanced by the foundry's insight that the structure of steel, like wood, has a grain – and that, used properly, this grain could imbue a golf club with heightened performance.

"In each rod there is a natural grain to the steel," confirms Tamio Hirasaki of Chuo Industries. "The grain acts as lines

of structural integrity. If we can orient and preserve these lines throughout our forging process, we can ensure every clubhead we produce will offer enhanced consistency and feel."

Chuo's forging process, detailed overleaf, treats the steel with a rare mixture of reverence and brutality. But the result is always the same – a clubhead, emerging from a single block of steel, fashioned to let its package of design technologies do their jobs.

"Technology, R&D, these are our passions," says Shinya Matsushita, director of Mizuno's golf division. "Our company has grown through creating the best products in the market – and this will remain our priority."

## TECHNOLOGY AND TRADITION

Mizuno was born in 1906, at the tail end of the Meiji Restoration – a political and cultural realignment commonly credited with modernising Japan. In some ways, Mizuno exemplifies the spirit of the Restoration. One of its stated goals was to blend "western advancements" with traditional, "eastern" values: in founding Mizuno's sporting goods business

RIGHT: The soft teardrop of the MP-T4 wedge – forged in Hiroshima.



on that most western of pursuits – baseball – Rihachi and Rizo Mizuno did just that. Modern sports were still in their infancy in Japan, and the brand didn't consider making golf clubs for 15 years. "In 1921 Rihachi made a thorough investigation into the golf markets of the US and Europe," says Matsushita. "He discovered almost half the sales in the sports industry were from golf production. He believed golf would become popular in Japan too."

Consequently, Mizuno became the first Japanese distributor of Wilson in Japan. "But Rihachi quickly grasped the need of R&D specialised for Japanese consumers," adds Matsushita. "This was when he began club development within Mizuno."

Mizuno's first clubs, named Star Line, emerged in 1933. Built to accommodate the height and power of the Japanese player, they reveal an attention to custom fitting that has never waned.

So began eight decades of fascination with golf club design and technology – a heritage proudly displayed in the foyer of Mizuno's Osaka headquarters. Here you will find a work of art in the form of a 1936 All Nippon 2-iron, its sabre-like sole sculpted into the most graceful curve imaginable. Nine dots are crammed onto its minuscule sweetspot; 10 groove lines mark the heel. Almost every item charts the march of technology: a 1983 Vanguard LX, complete with golf's first carbon-graphite head; its updated model, three years later, with zirconia added; or the 1990 Pro Ti 110, the world's first pure titanium club. A further museum at the brand's assembly and customising wing, Mizuno Technics, some 80 miles north-east of Osaka, houses more treasures, hewn from everything from hickory to graphite to gold.

## MARKET FORCES

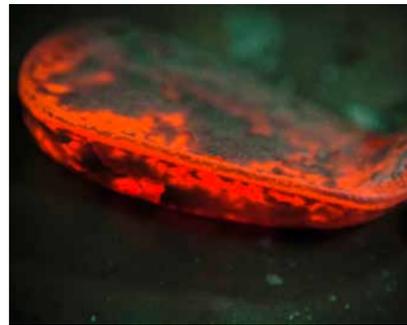
Thanks in no small part to its iron forgings, Mizuno began to dominate the world's Tours. In Europe, from 1995 to 2004, more sets of Mizuno irons were used than any other brand. In America, Mizuno irons finished top of four PGA Tour categories in 1997. The following year they were the most played clubs on both the US and European Tours.

It seemed the natural culmination of a process that began in 1977, when Seve Ballesteros signed a 10-year contract with the company and the brand's irons were first inducted into America's Hall of Fame. Golfers of a certain age will remember the likes of Ballesteros, Nick Faldo, Ian Woosnam and Sandy Lyle leading a host of top-name Mizuno-sponsored players during the '80s and '90s wielding the legendary TP-9 irons.

Today, however, the landscape is rather different. While it is estimated that 80 per cent of current tour professionals used Mizuno before sponsorship deals drew



**EACH BILLET IS PUMMELED BY A HUGE PNEUMATIC PRESS, CAPABLE OF PACKING 1 000 TONS OF FORCE**



ABOVE: The six-metre rods are made of 1025E Pure Select steel, named for the 0.25% of carbon added to give the steel the right blend of hardness and malleability. ABOVE RIGHT: The metal is heated to 1200°C before it receives the first of two forgings. TOP RIGHT: Clubheads are checked rigorously throughout their creation, both at the Chuo forging plant and then at Mizuno Technics, the brand's club refinement, assembly and custom-fit facility.

them to other brands – and despite the fact Donald and Stacy Lewis are prominent Mizuno players – the brand's presence today is undeniably not what it was at the turn of the century.

Despite those sponsorships, Mizuno has rarely shown the same appetite for marketing that it has for R&D. The more tour endorsement moved from genuine brand affinity to a megabucks numbers game, the less Mizuno wanted to be a part of it. Tellingly, Luke and Stacy are both committed Mizunophiles.

Even away from the tour, the brand's marketing shuns hype. Product launches are accompanied not by gaudy images and gauche performance claims, but by earnest

design themes, honestly expressed. Sincere? Certainly. Old-fashioned? Possibly. The fact remains that where other companies holler to get your attention, Mizuno tends to clear its throat. Mizuno's quality has never been in dispute but, as Matsushita concedes, how far quality takes you in today's promotion-saturated marketplace is open to question.

"It's fair to say we haven't been loud enough in marketing. Louder brands have been selling more and taking our share, even in Japan, where foreign brands have been marketed strongly since the '90s.

"The trick for us moving forward will be to market our company and products in a way that remains true to the ethos of the brand, increases market share, and allows

us to continue to invest in our key values of R&D, technology and innovation. And of course, we have some plans in place for how this will be done."

## ADDING THE PERSONAL TOUCH

If the slender south-west-to-north-east sweep of Japan itself somewhat resembles a golf club, Osaka would be on the hosel. An economic maelstrom built on its history as a rice-trading centre, its population swells by a million commuters head for work. And on one of its busiest streets, rubbing bricks and mortar with fashionable multi-national chains, is the Mizuno Store.

Although impressive in its scale and range of equipment, the store is perhaps more notable for the new face of Mizuno it is presenting. For high up above the streets, on the store's seventh floor, is a darkened indoor golf school. Six golfers are swinging lustily, if not always successfully, into elaborate course simulators: two coaches are on hand to monitor their progress, aided by cameras that record their swings from face-on and down the line, and replay them – with a five-second delay, in slow motion.

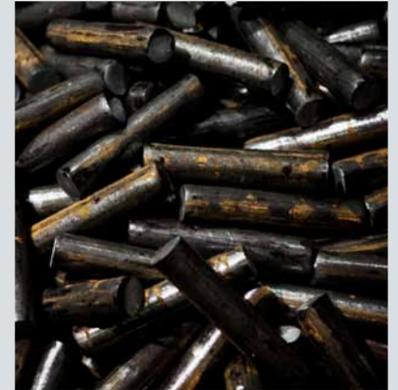
Meanwhile, on the floor below, there is an expansive and sophisticated custom-fitting area. "We do 60-70 fittings a month," says Kazuo Iwasa, a licensed Mizuno fitter. "In

# THE MAKING OF A MIZUNO

## PART 1 FORGING AT THE CHUO FOUNDRY



**1** The six-metre steel rods are fed through a machine, where a laser chops them into 10in lengths, usually called billets. The entire head will be created from this one piece.



**2** Each billet is heated to 1200°C, before being stretched and bent to the angle that will roughly form the head and hosel. The process ensures that the grain is preserved.



**3** The billet is placed on a forging mold where it is pummelled four times by a huge pneumatic press, capable of packing 1000 tons of force.



**4** After this first of two forgings, a machine called a cookie cutter trims off the excess metal, known as the flash.



**5** Each clubhead is reheated back to red hot and placed into a second mold and squeezed to create the ideal golf club shape. The clubhead is trimmed a second time.



**6** Each head is shot-blasted clean before being stamped with the appropriate Mizuno markings, and minutely inspected. Finally, the head is forged, and ready for grinding.



A robot picks up each head and buffs it with increasingly fine grades of cloth



# THE MAKING OF A MIZUNO

## PART 2 FINAL PREP AT MIZUNO TECHNICS



**1** When heads arrive, a hole is drilled for the shaft. The heads are then given just a rough grinding as they are yet to be adjusted for loft and lie, which can scratch them.



**2** An engineer carries out a loft/lie check. He places the head in a vice and bends the hosel with a tool. A computer monitors his work. The iron is adjusted to 0.25 of a degree.



**3** The clubhead is given the After Barrel Process – basically a treatment of the club by hundreds of thousands of small, angular stones in water. The process takes two hours.



**4** The head, now smooth and clean in matt silver, has its face milled, and then any custom-engraving is added before the grooves are etched in by laser.



**5** The clubhead is now polished, the only machine-based part of the process. A robot picks up each head and buffs it with increasingly fine grades of buffing cloth.



**6** The heads are plated and painted. The finished head is shafted and gripped. Lofts and lies are given a second check. Finally the clubs are boxed, ready for dispatch.

Japan we are known to be a fitting brand, so even other brands send people to us."

Iwasa must take a two-day custom-fit test every year, including written and practical exams. There is a hierarchy to be climbed, with the very best achieving Master Fitter status.

As the European Tour's mobile workshop attests, Mizuno has a history for customising equipment for the tour pro. But the brand believes it has found a marketing lever for itself by taking the value inherent in optimising equipment, and bestowing it on all. The Store's golf school and fitting centre blend to do just that.

And the company's commitment to custom fit has been intensified on a global scale. "We feel now that just bringing good stuff to golfers is not enough," says Matsushita. "Good products alone will not sell. So we need to concentrate more on individuals, bring out customised product, so that when a golfer buys from Mizuno, they know they are getting their perfect clubs. If I could picture what will be the biggest change at Mizuno over the next 10 years, it would be this."

### QUALITY CONTROL

Mizuno's obsession with quality and quality control goes some way to explaining why, despite the brand's global reach, its identity remains resolutely Japanese. That is echoed in its sales. Mizuno writes 50 per cent of



ABOVE: Forged irons may be polished by machine, but Mizuno still believes in the authority of the craftsman. Clubs needing loft or lie adjustments are positioned on absorbent silver rubber. TOP RIGHT: Once in position, Mizuno master fitters including Luke Donald's clubfitter Tomo Ito, are happy to use the ancient ways to make the necessary adjustments. ABOVE RIGHT: Mizuno forge four heads per year for each of Luke Donald's wedges.

its golf business within Japan. Although the country's golfing population of nine million is about a third the size of America's, it does three times as much business here.

While some R&D is carried out at the brand's Atlanta-based American HQ, most is still done in Osaka. Forging is of course carried out in Hiroshima; but the third, vital part of Mizuno's operation is the impressive Mizuno Technics facility, based in the Mizuno brothers' home town of Yoro. The centre for club refinement, assembly and customising, Mizuno Technics is where the brand's values of technology, quality and individualism align. More than 100 people work here. Thirty finish the forged heads arriving from Chuo – a process that involves everything from grinding to painting – in any

combination of 11 colours (see panel). Forty more are on the assembly line, matching heads with shafts and grips, and generally prepping clubs for dispatch. The factory builds 2000 clubs every day.

Clubs built at Yoro are for the Japanese and Korean markets – but the company has set up similar custom assembly operations in its global territories. For the UK that is in Cumbernauld, 15 miles north-east of Glasgow, where a 12-strong assembly line turns around custom orders in three to five days. Though branching out in Scotland, the plant is still rooted in Japan.

"All parts that go out to Scotland are ordered from Mizuno Technics," says Takashi Ito, president and CEO of Mizuno Technics. "We oversee assembly overseas, visiting each

factory regularly to make sure they are doing the right thing. Their staff also comes here to get trained."

Mizuno believe its way forward will be through this blend of high quality and custom fit. How the strategy will affect Mizuno's fortunes remains to be seen, but one thing is certain: the decision to host the 2020 Olympic Games, complete with golf, in Tokyo, will give the company a massive shot in the arm – if one can use that idiom in the context of the Olympics.

Since its inception, Mizuno has been heavily involved in the Games. Back in 1948, the company donated bamboo poles for the pole vault in London's Games, despite the fact Japan weren't allowed to compete. And last year, Mizuno's CEO and Rihachi's grandson, Masato Mizuno, resigned his position and salary to head up Tokyo's recently successful 2020 bid.

"Mizuno has always been about getting people enthused through sport," Matsushita says. "Our company was founded on the wave of enthusiasm for sport created by the first modern Olympics, in 1896; it is great to think that, 124 years later, the company is still around and able to contribute to the event that sparked its creation." 🇯🇵

*Sports Network Ltd has been the exclusive Mizuno distributor in New Zealand for 25 years. For more information, ph 09 479 8632 or email james@sportsnetwork.co.nz*