

Integra Systems continues evolution with Salvagnini panel bender

As a company committed to innovation and with a proven track record of staying ahead of the field, Integra Systems – based in Melbourne’s industrial northern suburbs – always has an eye trained firmly on the future. For Paul, Erika and Russell Hughes, as well as the extended Integra family, the next stage of the company’s evolution began with the recent delivery of a bespoke Salvagnini P2lean automated panel bender.

An ideal complement to the company’s existing infrastructure, Paul Hughes, Managing Director at Integra, explains that one of the biggest advantages the P2 delivers is a boost to his business’ design capabilities.

“Most of our customers want something that’s functional but also aesthetically pleasing,” Paul expounds. “Sometimes, though, you’re compromised with sheet metal work in what you can actually achieve in terms of aesthetics because of the limitations of what you can fold. Essentially, we needed a lot more capacity in metal folding, because that’s a critical part of what we do, and we wanted something that was different to what we already had in terms of conventional CNC press brakes.

“Most of our jobs now require design and prototyping. The P2 also needed to be as much of a product development tool as it was a production tool. It had to be something that was as good for one-offs as it was for production runs.”

Integra’s strong alliance with the defence industry, and its commitment to the record build-up of Australia’s defence capability, qualified Integra for a Federal Government grant to assist with the purchase. The team at Integra have been vocal in expressing their gratitude to the Centre for Defence Industry Capability (CDIC) for providing this grant funding through the Sovereign Capability Development Fund.

In the Salvagnini P2, Paul is confident Integra has found the sweet spot that meets the company’s exacting, contemporary manufacturing requirements.

“It’s just a completely different way of bending,” he says. “A lot of bends that weren’t achievable on a press brake with conventional tooling are possible for us now. Because we’ve got the design

capability, it enables us to really get much closer to being able to make something that matches the capability of our design. On this type of machine, we can achieve a lot more detailed and precision folding that hasn’t been possible before.”

Training at the Salvagnini Academy

As part of the investment in the machine, Paul and Integra’s Design Integration Manager Steven Parker were invited to attend the Salvagnini training academies in Austria and Italy. And while, from the outside, it might have seemed a ‘tough’ part of their jobs, Paul says, as a learning experience, the trip to the Academy was invaluable.

“In buying the machine, part of the agreement was to go over and do some training,” continues Paul. “It was a really hands-on training experience. They’d present some ideas to us about interesting techniques that you can do with the machine, and then they would show us videos and how you would go about doing that. Then we’d go out into the factory where they set up a machine exactly the same as ours in their own facility that we could then actually program and see the part running.”

The first half of the week-long trip consisted of touring through Salvagnini Austria to gain further knowledge of programming and folding methods. The second half of the journey saw them travel to Sarego, Italy, where they visited Salvagnini’s second factory. While there, Paul and Steven were taken to some local factories to experience Salvagnini’s automatic material loading towers. Suffice to say, both Paul and Steve have returned to Australia armed with new techniques and progressive ways to work with sheet metal, which is already being reflected in Integra’s new designs.

“With such a complicated machine, we wanted to be sure that we could tap into the gurus who really know the machine backwards,”



The new Salvagnini P2lean Panel Bender in Integra System’s facility in Broadmeadows.



Paul Hughes, Managing Director at Integra Systems, with the new machine.

admits Paul. "So when we start pushing the boundaries of the machine, we know we've got the support there from an applications and programming point of view to be able to do what we need to do.

"We were working alongside guys who are there, basically, to create applications that have never been done before, for the purpose of demonstrating the intricate capabilities of the machine. We had a list of techniques that we'd pre-prepared in advance that we wanted to learn about as well, so it was a great opportunity to get inside their heads, to understand their methodology behind bending, and what they had in mind when they designed the P2, so we could start programming around how they've designed the machine.

"With a new machine, when everything's new, you kind of treat it with kid gloves. But the Academy visit gave us the confidence that – within reason, of course – you can get in there and really try some really creative stuff."

Putting the machine to work

With the machine up and running at Integra's Broadmeadows factory, the company's design and production team is now moving into the next phase of product development assisted by the P2.

"At the moment, we're converting stuff we've already completed onto the panel folder," explains Paul. "Going forward, we want to look at how we can improve our products, how we can make them much more functional, and drive a higher level of quality and aesthetics."

Integra staff training on the Salvagnini is also on the table since Paul and Steve's positive experiences in Italy and Austria. As part of the next step in the process, Integra is now multi-skilling its production team, so they can be moved around the manufacturing facility to where they're most needed at the time, rather than just focusing on any one particular process.

The human touch is always important to Integra's design ethos, but Paul is still very excited by the productivity improvements that the P2 can deliver.

"With this machine, the skill is in the programming," he says. "The machine does all the same tool setups automatically. It will fold everything from half a millimetre up to three millimetres with no operator intervention in terms of tooling change.

"In the past, where you might have needed 12 components joined together to make up a single, more complicated component, you can actually do the whole thing in one part on this machine. With the

design capability, we can really reduce our part count and assembly time, so it improves productivity and drives a shorter cycle time."

Kit production is also an avenue the Salvagnini P2 opens the door to for Integra Systems. Paul believes the efficiency gains the machine can deliver will boost the organisation's output significantly, which means the investment in the P2 really pays for itself.

"Instead of doing a conventional production batch where we might do 100 of one part and then 100 of another part and then 200 of another part or whatever, we can do a kit which might have four different parts in it," he says. "We can do one of each part and then assemble those, so it feeds straight into an assembly line, meaning it doesn't have to be large batch manufacture. It really enables a whole degree of flexibility."

The time spent with Salvagnini in Europe also provided Steven and Paul with some insights into their partners as an organisation. The Salvagnini teams welcomed the two Australians with open arms. Paul and Steven were impressed by the personal 'boutique feel' of the company, which mirrors the kind of experience Integra endeavours to provide customers.

It was these less tangible benefits that left a definite impression on Paul and leaves him keen to consult with his Italian partners on other machinery and tech upgrades in the future: "We really got to the right people, and the informal nature of the training meant that we got to understand a lot about the culture of the company, and how they go about things. Owning such a sophisticated piece of equipment wasn't such a daunting thing when you got to know that you really had great support behind you.

"Integra's very much a family business," Paul adds. "And a lot of our customers have got that family feel to them. Even though they partner with big businesses, a lot of local Australian companies we deal with have really got a good culture, and are very family values-orientated businesses."

"It was the same with Salvagnini – even though they're quite a large company, it didn't feel like they were just a big, mass-produced machine tool builder. Our visit was a real personalised visit to them. Down to just eating in the lunchroom with the production guys, the overall presentation and cleanliness of the factory... It had a vibe to it that everyone who worked there really cared. So that was really good to know as well." **AMT**

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