

THE Connector

2020 HAS BEEN A TOUGH YEAR FOR THE FGP GROUP...

HOW DOES 2021 LOOK?

Sir Peter Wall

Non-Exec Chairman

FGP Systems, FGP Lufton & RSC



We are on a rollercoaster and it's not an enjoyable one. This time last year the FGP Group was enjoying strong growth and delivering excellent performance against our very demanding targets for On Time Deliveries and Quality. These are the things our customers most hold dear. So much so that our investors agreed the highest ever employee bonus for group performance over FY 2019-20.

Last March, with the onset of the pandemic the outlook quickly became pretty grim. Whilst defence demand has held up well, commercial aerospace has plummeted and it may take years for that demand to recover fully. The impact on our order book has been considerable across our two manufacturing sites.

Meanwhile our eager sales team has been successful in achieving some diversification and have successfully on-boarded three new customers in the

past 12 months; even so, total customer demand remains well down. The toll this has taken on the business has been very tough and losing employees to redundancy has been a horrible experience, especially, of course, for those who have left, but also for the FGP family as a whole.

Where now? I believe there might be scope for cautious optimism. A Brexit deal has removed some doubts about the immediate future, and the arrival of a range of Covid-19 vaccines brings the possibility of a return to some sort of normality by the summer.

We hope that will restore business confidence and start to increase our order book to previous levels. It's interesting that new product introduction (NPI) now forms 18% of our work compared with 4% a year ago. This tells us that things are changing quickly,

and we should see some new production orders coming our way, both from our traditional customers and some new ones.

It is crucial that our customers continue to trust us to play a full part in their supply chains. Broadening our capabilities with our investment in superfinishing and our new RSC treatment lines at Lufton will enhance our ability to do this.

This year we need to build back to where we were pre Covid, then strive to go beyond that. This positive view would only be possible with the professionalism, commitment and skills you all bring to our workforce.

On behalf of the Board of Directors thank you for all your efforts and let's look forward to a brighter year than the last one.



SEA KING HELICOPTER XZ920

Renamed Finley

As many of you will know Chris Eckersley's son Finley Eckersley is a keen enthusiast for all things aviation, but nothing compares to the news they received when Mick Sherry, Base Manager of HeliOperations Training School on Portland invited Finley to visit the site.

Following the visit Steve Gladston CEO of HeliOperations decided to formally rename Sea King helicopter XZ920 to Sea King helicopter "Finley".

The newly named Sea King helicopter will be flown to Bournemouth for a re-spray,

returning two weeks later with the name "Finley" newly stencilled on its fuselage. Upon return Sea King helicopter "Finley" will be one of three fully operational Sea King helicopter's based out of the Portland site alongside "Dara" and "Damien". Once COVID restrictions are eased HeliOperations have said "We'll have to get Finley his own ID card".

Congratulations from all the Team at FGP & RSC to Finley and his family on such wonderful news, we cannot wait to see the newly renamed Helicopter in all its glory.



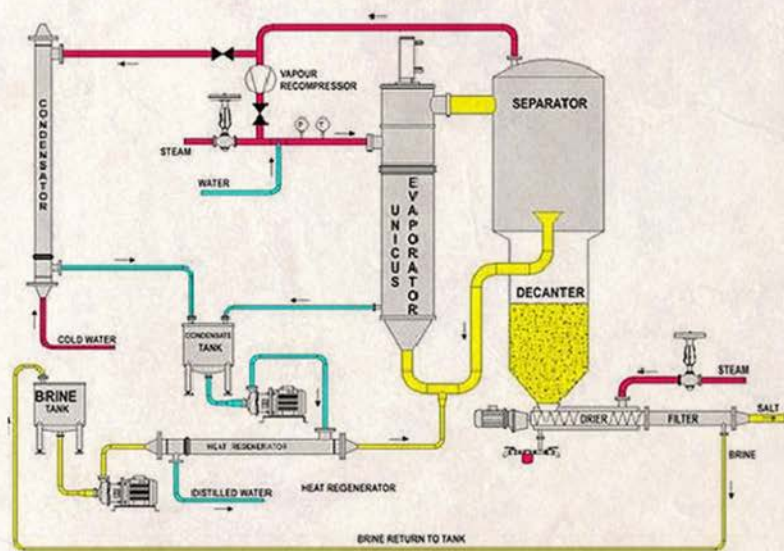
WASTE REDUCTION "A MORE SUSTAINABLE SOLUTION"



RSC currently produce 13,250 litres of contaminated water each month, which currently has to be transported away by tanker from the site. This is not only an expensive solution but long term, an unsustainable one which costs the business over £33k per annum and adds to our carbon footprint. As of February 2021, as part of our continued investment in new processes to support our internal manufacturing and external supply chains, we welcome the addition to RSC of an evaporator to treat and reduce the volume of our waste by-product. This new piece of equipment will make our treatment processing more sustainable by reducing our outflows of waste product to just 300/400 litres per month, and overall, our annual outflows will reduce by circa 155,000 litres. RSC sees this as another step on the road to reducing our carbon footprint and taking control of our social and environmental responsibilities. The total cost of the evaporator solution is £60k, but rest assured this is a great investment in our business and our environment.

Derek Smith - Site Lead FGP Systems & FGP Lufton

INDUSTRIAL WASTE MANAGEMENT



EVAPORATOR

BASIC WORKING PRINCIPLE

Derek Smith - Site Lead FGP Systems & FGP Lufton



The product to be distilled is drawn into the unit by the vacuum created by the vacuum group.

With the help of a heat pump cycle, the liquid in the boiler is evaporated at 35°C and the vapours are condensed. The distillate is drawn into the vacuum system by the vacuum pump and flows out through a pneumatic membrane valve.

The residue is unloaded at the end of the cycle by opening the bottom valve to allow the liquid residue to free flow from the boiler. A pneumatic diaphragm pump is available as an optional extra if the waste residue is to be collected in a tank.

The loading of the material is controlled by a level controller and pneumatic valve.

Yield

The unit WT 30 HP-R has an average yield of 720 litres of clean water in 24 hours and is designed to work continuously. The actual production depends on the kind of contaminant contained in the solution to be treated.



CURRENT VACANCIES

Cell Leaders → FGP Lufton → 4 Roles available

To apply please submit a CV and covering letter to hr@fgpltd.co.uk

SECRET SEVEN



Derek Smith

Operations
Director and
Site Lead RSC
& FGP Lufton.

Favourite 90's show?

Minder, the scriptwriter Tony Hoare gave Arthur Daley (George Cole) some great lines, "Terry, the world is your Lobster".

First Job?

Spraying milk floats, for the youngsters these were electric vehicles that used to deliver milk daily to your doorstep.

When you're not working, how do you spend your time?

Walking or Cycling, but most of all socialising, Yeovil Rugby Club is my passion.

Favourite subject at school?

Sport, I loved the camaraderie.

What is your hidden talent?

I was once a ventriloquist dummy in a double act.

Something you say you'll do, but never do?

Hows my hair! Comb or grow my hair.

What is the best fancy dress costume you've worn?

Boy George.

Congratulations!

Jordan Darby
and partner on
the arrival of
their baby boy



Bethany Cuff
and partner on
the arrival of
their baby girl

Well Done

John Lightbowne for
assisting Honeywell NDT
on the 28th December.



"Thank you for everyone's continued support during these challenging times".

FGPL SPECIAL PROCESSES

Derek Smith - Site Lead FGP Systems & FGP Lufton

Perhaps one of the greatest human innovations in the history of engineering is the ability to fly.

Studying and researching the properties of flight took many years of in-depth research, but building reliable aircraft took many more. Companies in our industry still rely on the earliest insights and discoveries about flight when designing the most complex space going machines and equipment.

Now more than ever it is essential engineers and designers understand the importance of every aspect of material strength and structure for overall performance.

Finished products must adhere to the specific standards that testing has approved them for, to ensure the aircraft is able to endure the hardships of flight.

Aerospace special processes include procedures that alter or change the mechanical, chemical, or physical parts of products within the operation or process. They require rigorous, standard specific practices, as well as qualified personnel to carry out.

FGP Lufton continue to excel with defined procedures to review and approve for both equipment and qualifications of employees.

All processes at FGP Lufton are accredited to NADCAP, a global accreditation required to process flying parts.

The importance of these special processes and process monitoring is critical as no visual examination or non-destructive test can verify its conformity.

FGP Lufton are currently offering the following processes.

- Heat Treatment Vacuum and Air
- Non-Destructive Testing (NDT)
- Pressure Testing
- Vickers Hardness testing
- Full Aerospace welding

Pressure Testing

At FGP Lufton, pressure testing of parts or assemblies that are subject to gas pressure is performed. Pressure

testing quickly identifies any failures in the items. Components are pressure tested with air and liquid to assess their conformity to meet the requirements of the customer's needs.

Typically, these tested pressures are 2-3 times the working pressures that they would be subject to.

The test fixtures are fully calibrated and capable of withstanding at least four times the maximum pressure requirements. All tests are carried out in a containment cell for safety purposes.

Aerospace Welding

FGP Lufton have many years' experience in Welding and Metal Fusion on all substrates used in aircraft manufacture including, Fusion welding / Titanium welding / Electron beam welding and Torch Brazing.

Electron beam welding is heavily used in the aerospace industry as a key manufacturing technology. Electron beam welded components are, for example used in aircraft engines, sensors, actuators, and turbines.



Developed and refined over decades Electron beam weld is a metal welding technique which takes place in a vacuum chamber using a beam of high energy electrons to heat the metal. This melts the metal creating a 'keyhole' which then solidifies as it fuses with another component. Electron beam weld is also known for its precision, it can be machine programmed using precise parameters to reproduce welds in quantities whilst maintaining accuracy. Electron beam weld is also seen as a cost-effective solution. FGP Lufton use no filler materials as the parent material is melted to create the join with a single pass of the electron beam.

Torch Brazing uses a hot gas torch to melt filler near or on the joint. The manual method requires a skilled craftsman's eye and is used for more specialised requirements.

TIG Welding is suitable for welding several substrates, the electrode is made of tungsten alloy which can tolerate a very high temp and allows low current welding to a thickness layer of 0.005" thick material. Filler material and welding wire is used externally and is consumed during the weld, care must be taken during the process to avoid the potential issue of contamination. Cleanliness of the base material and filler material is paramount to achieving a high-quality weld. AC is typically used during welding alloys to clean and prevent potential porosity and cracks.

FGP Lufton specialises in Titanium welding carried out in an inert atmosphere bubble.

Non-Destructive Testing (NDT) / Penetrant Flaw Detection

Safety is the single most critical aspect of aviation, Non-Destructive Testing is used throughout a products lifecycle from qualification of new materials and design of new aircraft, to in-service inspections of structures, parts, and engines.

Liquid penetrant flaw detect test is a method widely used in aerospace to detect surface defects and structural damage in non-porous materials. Test objects are coated with a highly viscous dye, this flows out to reveal any indication of flaws, porosity, and cracks under ultraviolet light.

FGP Lufton conform to all International standards including ASTM E 1417, on this process, and currently include supply to Honeywell Aerospace, Collins, Safran, MBDA, and Cobham Flight refuelling.

The process can be offered on various lead times to suit, and we offer AOG FastTrack.

Heat Treat Furnaces

FGP Lufton have 5 Heat Treat furnaces and carryout processes and procedures to most International standards, including AMS 2750 and AMS2769.

The process is carried out in vacuum and quenched by Nitrogen or Argon, treatment methods include annealing, magnetic annealing, brazing, precipitation, and stress relieving to name a few.

Vacuum Brazing does not melt the base metal of the joint, it also allows joining of dissimilar materials using capillary action, utilising brazing paste. Furnace controls accurately control every stage of the heating and cooling cycles, resulting in a reduction in residual stress.

Heat treatment is used throughout aerospace to improve the physical metallurgical properties of the base material.

FGP Lufton's working envelope has a maximum capacity of 600mm x 600mm x 900mm.

We have vast experience of all these processes and supply to the global community.

Hardness Conformity

One type of testing is hardness testing. The operator and mechanical engineers can get hands-on data concerning the materials found in their prototypes and final products.

Hardness testing is often performed before the material in question is used in a design, but since many construction processes use heat and additional chemicals, understanding if the hardness of the material has changed is also important.

FGP Lufton utilise hardness testing to verify the many heat treatment processes carried out on-site.

The Vickers Hardness test method consists of indenting test material with a diamond indenter, in the form of a right pyramid with a square base and an angle of 136 degrees between opposite faces subjected to a load of 5-30 KG, loaded for approx. 10-15 secs.





GROUP AUDIT RESULTS 2020



SYSTEMS

→ Thales	A+
→ SKF	A (97%)
→ Martin Baker	100%
→ AS9100	Zero findings

LUFTON

→ Honeywell (Airbus) audit	100%
→ AS9100	Zero findings
→ NDT Nadcap	Merit
→ Welding Nadcap	Merit

RSC

→ AS9100	Zero findings
→ Chemical processing Nadcap	Merit

NPI: NEW PRODUCT INTRODUCTION From a FGP Group Perspective

Ian Rowe - Commercial Director at FGP Systems, FGP Lufton, RSC

What does NPI entail?

If we take NPI New Product Introduction at the top level in Aerospace, i.e., a new Aircraft going into production, we are typically looking at a 7–8-year cycle. Although the F35 went through a feasibility study starting in 1993, a contract award in 2001 followed by the first production delivery in 2011 ~ total of 18 years! COVID has further exposed the fragility within Aerospace and the need to change, hence there will be numerous NPI opportunities as we revolutionize and challenge the traditional Aerospace concepts previously experienced.

Why does NPI take so long?

The Aircraft Manufacturer needs to be in full consultation with the potential customer, in this case the end user operators. Plus they need to consider and integrate any competitive advantages that will enhance marketing

of the end product. This can include Power Efficiency, Environmental Sustainability, Safety enhancements, Advanced Materials, Airport Logistics, Passenger experience refinements, Maintenance Repair & Overhaul and many more. The above considerations will generate a Concept Design followed by a Preliminary Design that meets the Customer Specification. This will then lead into Detail Design and Prototyping which once successful will result in approval at the Critical Design review. Before the Product then goes into full Production it will require Qualification & Certification. This can be at unit level or Aircraft System level and can be by physical test, by cross analysis or physical inspections. From an Aircraft perspective this is very involved and Qualification would include full System Testing, Environmental Testing (i.e. replicate flying over various terrains, Sea, Desert etc) , Altitude Testing, Vibration Testing, Fatigue Testing, Shock Testing, EMC, Functional Testing, Acoustics etc.



As you can see extremely involved, plus if it goes wrong when in service further down the line the ramifications can be extremely damaging and costly. We have all read about the prolonged pain that Boeing continue to endure around the 737 MAX situation.

What and Who does NPI Involve?

From our general FGP Customer perspective we are looking at Aircraft Systems and End Unit Assembly supply, who in turn look to FGP for the supply at Kit / Sub Assembly / Componentry level. These Customers would hold Design Authority on their products with FGP supplying on a Make to Print basis. They would own the Intellectual Property on the Design and FGP would create their own Intellectual Property on the physical manufacture of the product through collaboration and understanding the customers' requirements. This requires a team effort and will involve a cross functional team including: Commercial / Engineering / Manufacturing / Purchasing / Quality / HSE / FGP Supply Chain participation. In a nutshell, everybody has a part to play here.

How and When would FGP get involved in the NPI process.

The answer here is very simple, as early as possible, even at the Conceptual Design Stage. Design Engineers are extremely good at finding technical solutions, but FGP's real strength and proven influence is around design for manufacture. As you have read above the timescales and associated costs to qualify these products are immense, hence we need to be able to influence these designs as early as possible. Once qualified, any future design amendments can be very costly or unviable with lengthy approval loops through the customer and operator bases. FGP will collaborate and solicit its experience with the customer and suppliers to influence design for manufacture with inputs and advice

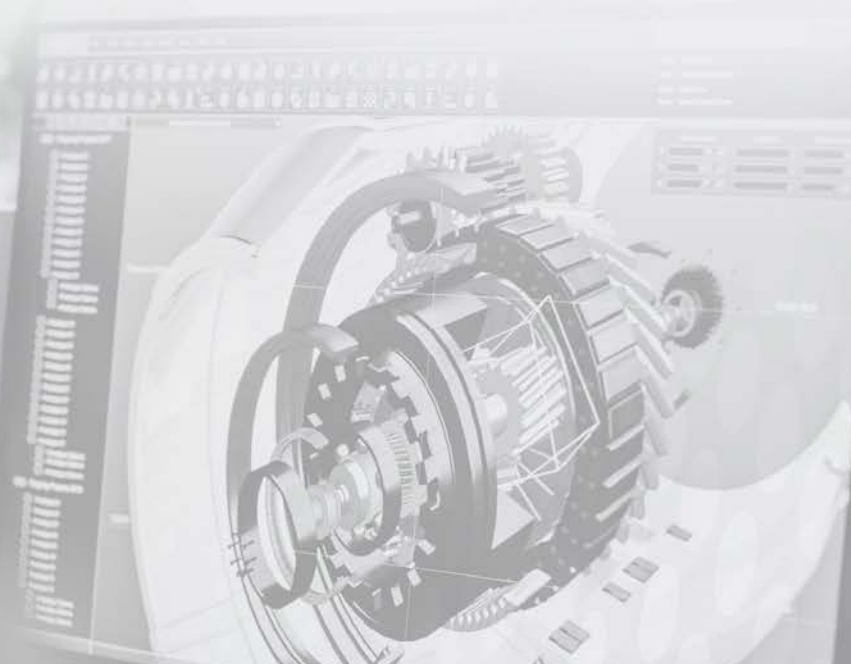
around the likes of material selection and availability, Standard Rads and Tool Packages, General Methodology, Tolerancing and Surface Treatments etc. This does not stop here as we would also continue with ongoing Product Development across the product lifecycle through further Innovation and available Technology advancements.

What volume of NPI is FGP currently involved with?

Despite the challenges faced in 2020, FGPS still managed to increase year over year Sales by £1.2m with 7 of its customers, of which 3 were new customers and operating in different markets. As you can see above our volume of NPI absorbed has quadrupled and this has involved the extension of previous capabilities and approvals, refining new techniques, training people, and collaborating with new customers & suppliers. Very onerous on resource, but also leaves the FGP Group in a strong place both pre and post COVID. Whereby besides congratulating ourselves

around the ongoing successes within the FGP Group, we should also take time to thank everybody involved in finding a Global way out of this last unprecedented 10 months, better times are coming!

We thank and salute you all and very much look forward to further success, plus a welcome return to the "Normal" with Corona becoming a beer again, Donald becoming a duck again, Tiers being only on a wedding cake and Bubbles only in Champagne. Stay Safe and let's look forward to shaping the Future.



LINE OF BALANCE

James Bishop - Head of Planning, FGP Systems & FGP Lufton

Throughout 2020 it was evident that FGP did not have a robust enough tool for managing customers forecasts and demands. With the pandemic taking hold and orders moving in and out, it was becoming laborious to manage change. To keep us in line with all the change was a constant fire fight. This has historically been managed by working through numerous spreadsheets and order books which up until the pandemic was not as big of a task to stay on top of.

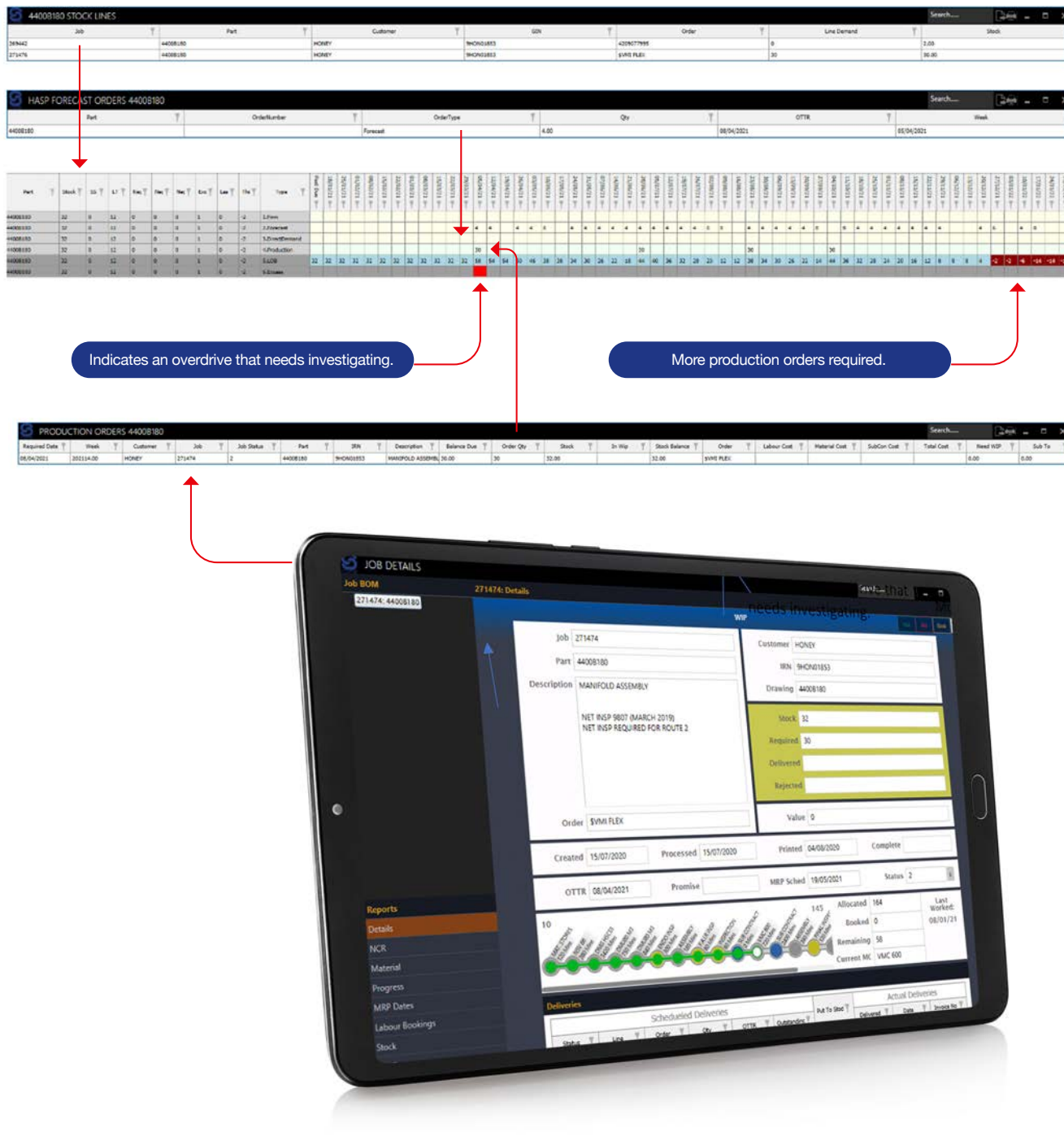
With the uncertainty around customer order books, we needed to make sure we were fully aligned with each of our customers' requirements. FGP Lufton already had a version of the Line of Balance, but this still involved a lot of manual intervention to collate all the necessary data. With the understanding that this was the perfect tool for the job, it was

quickly acted upon. Within a short period of time, we had the new Line of Balance created within the SCIP system, this links into individual customer portals, extracts the required data and puts it into a table called the Line of Balance. This shows us where a customer's firm requirements are and where they are forecasting future sales. From this information, FGP can then ensure

our live orders are in line with all the demand. By doing this we ensure that our capacities are in the right place and we are ordering material in the correct time to support each job.

At the click of a button, it is possible to navigate through the Line of Balance to see all the supporting information. Job cards, stock, orders, material etc.

Part	Stock	SS	LT	Neg	Neg	Neg	Ext	Las	Thi	Type	Part Date	14/12/20	21/12/20	28/12/20	04/01/21	11/01/21	18/01/21	25/01/21	01/02/21	08/02/21	15/02/21	22/02/21	01/03/21	08/03/21	15/03/21	22/03/21	29/03/21	05/04/21	12/04/21	19/04/21	26/04/21	03/05/21	10/05/21	17/05/21	24/05/21	31/05/21	07/06/21	14/06/21	21/06/21	28/06/21	05/07/21	12/07/21	19/07/21	26/07/21	02/08/21	09/08/21	16/08/21	23/08/21	30/08/21	06/09/21	13/09/21	20/09/21	27/09/21	04/10/21	11/10/21	18/10/21	25/10/21	01/11/21	08/11/21	15/11/21	22/11/21	29/11/21	06/12/21	13/12/21	20/12/21	27/12/21	03/01/22	10/01/22	17/01/22	24/01/22	31/01/22	07/02/22	14/02/22	21/02/22	28/02/22	06/03/22	13/03/22	20/03/22	27/03/22	03/04/22	10/04/22	17/04/22	24/04/22	31/04/22	07/05/22	14/05/22	21/05/22	28/05/22	04/06/22	11/06/22	18/06/22	25/06/22	02/07/22	09/07/22	16/07/22	23/07/22	30/07/22	06/08/22	13/08/22	20/08/22	27/08/22	03/09/22	10/09/22	17/09/22	24/09/22	01/10/22	08/10/22	15/10/22	22/10/22	29/10/22	05/11/22	12/11/22	19/11/22	26/11/22	03/12/22	10/12/22	17/12/22	24/12/22	31/12/22	07/01/23	14/01/23	21/01/23	28/01/23	04/02/23	11/02/23	18/02/23	25/02/23	03/03/23	10/03/23	17/03/23	24/03/23	31/03/23	07/04/23	14/04/23	21/04/23	28/04/23	05/05/23	12/05/23	19/05/23	26/05/23	02/06/23	09/06/23	16/06/23	23/06/23	30/06/23	07/07/23	14/07/23	21/07/23	28/07/23	04/08/23	11/08/23	18/08/23	25/08/23	01/09/23	08/09/23	15/09/23	22/09/23	29/09/23	06/10/23	13/10/23	20/10/23	27/10/23	03/11/23	10/11/23	17/11/23	24/11/23	01/12/23	08/12/23	15/12/23	22/12/23	29/12/23	05/01/24	12/01/24	19/01/24	26/01/24	02/02/24	09/02/24	16/02/24	23/02/24	01/03/24	08/03/24	15/03/24	22/03/24	29/03/24	05/04/24	12/04/24	19/04/24	26/04/24	03/05/24	10/05/24	17/05/24	24/05/24	31/05/24	07/06/24	14/06/24	21/06/24	28/06/24	05/07/24	12/07/24	19/07/24	26/07/24	02/08/24	09/08/24	16/08/24	23/08/24	30/08/24	06/09/24	13/09/24	20/09/24	27/09/24	04/10/24	11/10/24	18/10/24	25/10/24	01/11/24	08/11/24	15/11/24	22/11/24	29/11/24	06/12/24	13/12/24	20/12/24	27/12/24	03/01/25	10/01/25	17/01/25	24/01/25	31/01/25	07/02/25	14/02/25	21/02/25	28/02/25	06/03/25	13/03/25	20/03/25	27/03/25	03/04/25	10/04/25	17/04/25	24/04/25	31/04/25	07/05/25	14/05/25	21/05/25	28/05/25	04/06/25	11/06/25	18/06/25	25/06/25	02/07/25	09/07/25	16/07/25	23/07/25	30/07/25	06/08/25	13/08/25	20/08/25	27/08/25	03/09/25	10/09/25	17/09/25	24/09/25	01/10/25	08/10/25	15/10/25	22/10/25	29/10/25	05/11/25	12/11/25	19/11/25	26/11/25	03/12/25	10/12/25	17/12/25	24/12/25	31/12/25	07/01/26	14/01/26	21/01/26	28/01/26	04/02/26	11/02/26	18/02/26	25/02/26	03/03/26	10/03/26	17/03/26	24/03/26	31/03/26	07/04/26	14/04/26	21/04/26	28/04/26	05/05/26	12/05/26	19/05/26	26/05/26	02/06/26	09/06/26	16/06/26	23/06/26	30/06/26	07/07/26	14/07/26	21/07/26	28/07/26	04/08/26	11/08/26	18/08/26	25/08/26	01/09/26	08/09/26	15/09/26	22/09/26	29/09/26	06/10/26	13/10/26	20/10/26	27/10/26	03/11/26	10/11/26	17/11/26	24/11/26	01/12/26	08/12/26	15/12/26	22/12/26	29/12/26	05/01/27	12/01/27	19/01/27	26/01/27	02/02/27	09/02/27	16/02/27	23/02/27	01/03/27	08/03/27	15/03/27	22/03/27	29/03/27	05/04/27	12/04/27	19/04/27	26/04/27	03/05/27	10/05/27	17/05/27	24/05/27	31/05/27	07/06/27	14/06/27	21/06/27	28/06/27	05/07/27	12/07/27	19/07/27	26/07/27	02/08/27	09/08/27	16/08/27	23/08/27	30/08/27	06/09/27	13/09/27	20/09/27	27/09/27	04/10/27	11/10/27	18/10/27	25/10/27	01/11/27	08/11/27	15/11/27	22/11/27	29/11/27	06/12/27	13/12/27	20/12/27	27/12/27	03/01/28	10/01/28	17/01/28	24/01/28	31/01/28	07/02/28	14/02/28	21/02/28	28/02/28	06/03/28	13/03/28	20/03/28	27/03/28	03/04/28	10/04/28	17/04/28	24/04/28	31/04/28	07/05/28	14/05/28	21/05/28	28/05/28	04/06/28	11/06/28	18/06/28	25/06/28	02/07/28	09/07/28	16/07/28	23/07/28	30/07/28	06/08/28	13/08/28	20/08/28	27/08/28	03/09/28	10/09/28	17/09/28	24/09/28	01/10/28	08/10/28	15/10/28	22/10/28	29/10/28	05/11/28	12/11/28	19/11/28	26/11/28	03/12/28	10/12/28	17/12/28	24/12/28	31/12/28	07/01/29	14/01/29	21/01/29	28/01/29	04/02/29	11/02/29	18/02/29	25/02/29	03/03/29	10/03/29	17/03/29	24/03/29	31/03/29	07/04/29	14/04/29	21/04/29	28/04/29	05/05/29	12/05/29	19/05/29	26/05/29	02/06/29	09/06/29	16/06/29	23/06/29	30/06/29	07/07/29	14/07/29	21/07/29	28/07/29	04/08/29	11/08/29	18/08/29	25/08/29	01/09/29	08/09/29	15/09/29	22/09/29	29/09/29	06/10/29	13/10/29	20/10/29	27/10/29	03/11/29	10/11/29	17/11/29	24/11/29	01/12/29	08/12/29	15/12/29	22/12/29	29/12/29	05/01/30	12/01/30	19/01/30	26/01/30	02/02/30	09/02/30	16/02/30	23/02/30	01/03/30	08/03/30	15/03/30	22/03/30	29/03/30	05/04/30	12/04/30	19/04/30	26/04/30	03/05/30	10/05/30	17/05/30	24/05/30	31/05/30	07/06/30	14/06/30	21/06/30	28/06/30	05/07/30	12/07/30	19/07/30	26/07/30	02/08/30	09/08/30	16/08/30	23/08/30	30/08/30	06/09/30	13/09/30	20/09/30	27/09/30	04/10/30	11/10/30	18/10/30	25/10/30	01/11/30	08/11/30	15/11/30	22/11/30	29/11/30	06/12/30	13/12/30	20/12/30	27/12/30	03/01/31	10/01/31	17/01/31	24/01/31	31/01/31	07/02/31	14/02/31	21/02/31	28/02/31	06/03/31	13/03/31	20/03/31	27/03/31	03/04/31	10/04/31	17/04/31	24/04/31	31/04/31	07/05/31	14/05/31	21/05/31	28/05/31	04/06/31	11/06/31	18/06/31	25/06/31	02/07/31	09/07/31	16/07/31	23/07/31	30/07/31	06/08/31	13/08/31	20/08/31	27/08/31	03/09/31	10/09/31	17/09/31	24/09/31	01/10/31	08/10/31	15/10/31	22/10/31	29/10/31	05/11/31	12/11/31	19/11/31	26/11/31	03/12/31	10/12/31	17/12/31	24/12/31	31/12/31	07/01/32	14/01/32	21/01/32	28/01/32	04/02/32	11/02/32	18/02/32	25/02/32	03/03/32	10/03/32	17/03/32	24/03/32	31/03/32	07/04/32	14/04/32	21/04/32	28/04/32	05/05/32	12/05/32	19/05/32	26/05/32	02/06/32	09/06/32	16/06/32	23/06/32	30/06/32	07/07/32	14/07/32	21/07/32	28/07/32	04/08/32	11/08/32	18/08/32	25/08/32	01/09/32	08/09/32	15/09/32	22/09/32	29/09/32	06/10/32	13/10/32	20/10/32	27/10/32	03/11/32	10/11/32	17/11/32	24/11/32	01/12/32	08/12/32	15/12/32	22/12/32	29/12/32	05/01/33	12/01/33	19/01/33	26/01/33	02/02/33	09/02/33	16/02/33	23/02/33	01/03/33	08/03/33	15/03/33	22/03/33	29/03/33	05/04/33	12/04/33	19/04/33	26/04/33	03/05/33	10/05/33	17/05/33	24/05/33	31/05/33	07/06/33	14/06/33	21/06/33	28/06/33	05/07/33	12/07/33	19/07/33	26/07/33	02/08/33	09/08/33	16/08/33	23/08/33	30/08/33	06/09/33	13/09/33	20/09/33	27/09/33	04/10/33	11/10/33	18/10/33	25/10/33	01/11/33	08/11/33	15/11/33	22/11/33	29/11/33	06/12/33	13/12/33	20/12/33	27/12/33	03/01/34	10/01/34	17/01/34	24/01/34	31/01/34	07/02/34	14/02/34	21/02/34	28/02/34	06/03/34	13/03/34	20/03/34	27/03/34	03/04/34	10/04/34	17/04/34	24/04/34	31/04/34	07/05/34	14/05/34	21/05/34	28/05/34	04/06/34	11/06/34	18/06/34	25/06/34	02/07/34	09/07/34	16/07/34	23/07/34	30/07/34	06/08/34	13/08/34	20/08/34	27/08/34	03/09/34	10/09/34	17/09/34	24/09/34	01/10/34	08/10/34	15/10/34	22/10/34	29/10/34	05/11/34	12/11/34	19/11/34	26/11/34	03/12/34	10/12/34	17/12/34	24/12/34	31/12/34	07/01/35	14/01/35	21/01/35	28/01/35	04/02/35	11/02/35	18/02/35	25/02/35	03/03/35	10/03/35	17/03/35	24/03/35	31/03/35	07/04/35	14/04/35	21/04/35	28/04/35	05/05/35	12/05/35	19/05/35	26/05/35	02/06/35	09/06/35	16/06/35	23/06/35	30/06/35	07/07/35	14/07/35	21/07/35	28/07/35	04/08/35	11/08/35	18/08/35	25/08/35	01/09/35	08/09/35	15/09/35	22/09/35	29/09/35	06/10/35	13/10/35	20/10/35	27/10/35	03/11/35	10/11/35	17/11/35	24/11/35	01/12/35	08/12/35	15/12/35	22/12/35	29/12/35	05/01/36	12/01/36	19/01/36	26/01/36	02/02/36	09/02/36	16/02/36	23/02/36	01/03/36	08/03/36	15/03/36	22/03/36	29/03/36	05/04/36	12/04/36	19/04/36	26/04/36	03/05/36	10/05/36	17/05/36	24/05/36	31/05/36	07/06/36	14/06/36	21/06/36	28/06/36	05/07/36	12/07/36	19/07/36	26/07/36	02/08/36	09/08/36	16/08/36	23/08/36	30/08/36	06/09/36	13/09/36	20/09/36	27/09/36	04/10/36	11/10/36	18/10/36	25/10/36	01/11/36	08/11/36	15/11/36	22/11/36	29/11/36	06/12/36	13/12/36	20/12/36	27/12/36	03/01/37	10/01/37	17/01/37	24/01/37	31/01/37	07/02/37	14/02/37	21/02/37	28/02/37	06/03/37	13/03/37	20/03/37	27/03/37	03/04/37	10/04/37	17/04/37	24/04/37	31/04/37	07/05/37	14/05/37	21/05/37	28/05/37	04/06/37	11/06/37	18/06/37	25/06/37	02/07/37	09/07/37	16/07/37	23/07/37	30/07/37	06/08/37	13/08/37	20/08/37	27/08/37	03/09/37	10/09/37	17/09/37	24/09/37	01/10/37	08/10/37	15/10/37	22/10/37	29/10/37	05/11/37	12/11/37	19/11/37	26/11/37	03/12/37	10/12/37	17/12/37	24/12/37	31/12/37	07/01/38	14/01/38	21/01/38	28/01/38	04/02/38	11/02/38	18/02/38	25/02/38	03/03/38	10/03/38	17/03/38	24/03/38	31/03/38	07/04/38	14/04/38	21/04/38	28/04/38	05/05/38	12/05/38	19/05/38	26/05/38	02/06/38	09/06/38	16/06/38	23/06/38	30/06/38	07/07/38	14/07/38	21/07/38	28/07/38	04/08/38	11/08/38	18/08/38	25/08/38	01/09/38	08/09/38	15/09/38	22/09/38	29/09/38	06/10/38	13/10/38	20/10/38	27/10/38	03/11/38	10/11/38	17/11/38	24/11/38	01/12/38	08/12/38	15/12/38	22/12/38	29/12/38	05/01/39	12/01/3
------	-------	----	----	-----	-----	-----	-----	-----	-----	------	-----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	---------



Forecast – This is what is planned to be purchased but not within a firming window. For instance, VMI is firmed up 5 days before its required.

Direct Demand – These are the lower-level requirements for any assembly job card. The top level will hold the firm and forecast, and the direct demand will support this.

Production – This is for the live job cards on the system and shows where we are aligned or are not aligned.

Line of Balance (LOB) – This shows how many parts we will have in any one week to support.

The Line of Balance currently covers two of FGP's largest customers, covering 4 different countries, which makes it fantastic for maintaining their demand, but it will also be able to cover other customers in the future.

Future enhancements may include issue status, percentage completion of jobs, platforms of parts so we can monitor the movement of more than just the part number and more...

The new version has now been adopted by both FGP sites and is a great tool and asset.

Kaizen 改善

Gary Northway - Head of Quality, FGP Systems & FGP Lufton

We have had a superb uptake in the new Kaizen process since its re-release in Sept 2020. Here are just some of the great suggestions received from staff across the group:



CHANGE REQUEST FUNCTION TO OPERATION TEXT

- Anyone within the business can now request for job card operation text to change to reflect a more accurate representation of a operation using the online SCIPE software.
- Reduces the chance of 'Hidden Knowledge' not mentioned within the job card notes.
- Easy to manage requests back-end (simple work to list produced for planning)
- Drives improved conformance.

RAW MATERIAL STORAGE & CONTROL

- Full re-organisation of area, better use of space, multiple safety benefits.
- Implemented easy access route for forklifts to manoeuvre.
- Reduction in time taken to find and retrieve material from stores to the shopfloor.
- Implementation of visual aids for storemen to actively know the weight of stored material with a traffic light system to not overload shelves.

AWARDS THIS QUARTER:

Ryan Hope	Gold	
Alan Greening	Gold	
Mat Kench	Silver	
Andy Kench	Silver	
Lee Samways	Silver	
Matt Greening	Bronze	





TRAINING CENTRE NEWS

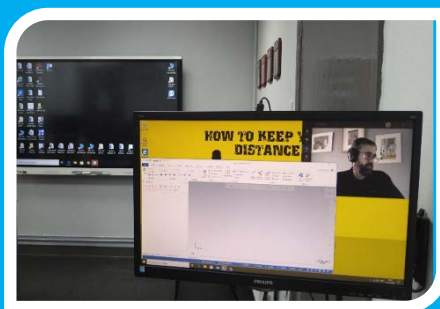
Andrew Johnson - Apprentice Supervisor

Home Study Continued...

As highlighted in November's issue of the Connector our 2nd year apprentices are receiving training from Yeovil College remotely. This is predominantly theory-based learning in the form of Mathematics, and Health and Safety mechanical principles.

Stephen Weldon (Stan) and I are very conscious that whilst the theory is being delivered the practical elements are not. To this end, Stan and I embarked on a training programme of our own, the main aim of which is for Stan to remotely deliver tutorials in Mastercam (our in-house computer aided manufacture software). This will be direct delivery, leading to unit qualifications in CAD Modelling and 3D Printing, both of which will be hugely important as the apprentices progress through their apprenticeship and beyond.

With the help of the IT department, we set Stan up in his home office to access remotely his FGP computer, gaining full use of all his software and learning materials. This allowed us to project onto our interactive white board.



We then use Microsoft teams to access the students PC's, this allowed Stan to see the students screens and for them to see him. We set out practicing our delivery with the help of 3rd year apprentice Matt Hall. During this training there was great value in the one-to-one element and Stan's ability to see Matt's screen. However, we wanted to expand this for

whole class teaching, using up to six stations at a time. Stan himself felt remote from us as he could not see our faces, to this end FGP set up a class webcam via a laptop, therefore allowing Stan to interact, and the students could respond.

Following this success, we took this one stage further and Stan was able to teach Matt via an earpiece and

mobile camera, a machine set up on the shop floor. This gave Matt one to one tuition, albeit remotely. This worked particularly well as Matt and Stan had worked together previously and Matt as a 3rd year has some experience.

We are now ready for our 2nd years and cannot wait to put into practice this new remote way of teaching and learning.

THE Connector



www.fgpltd.co.uk

T: 01305 773638 | sales@fgpltd.co.uk

FGP Systems Ltd. is a limited company registered in England and Wales | Company Registration No. 09794421
Registered Offices: FGP Systems Ltd, 20-22 Cumberland Drive, Granby Industrial Estate, Weymouth, Dorset, DT4 9TB