



PRESS RELEASE: HOLD FOR MAY 17, 2019

# 3D Platform and TWWomer & Associates connect to bring a true extrusion system to large-format 3D printing.

Roscoe, Illinois, USA – May 17, 2019 – 3D Platform™ (3DP), a global leader in manufacturing large-format, industrial-strength 3D printers, is pleased to announce a partnership with Tim Womer of TWWomer & Associates. Mr. Womer is a widely recognized authority on plasticizing screws for extrusion, injection molding, and blow molding, and has developed thousands of related components over a 45-year career. 3DP is incorporating Mr. Womer's extensive expertise and innovation to bring a best-in-class, true extrusion system to large-format 3D printing. Companies seeking to find out more about this relationship and its benefits are invited to engage with Mr. Womer in person along with 3DP associates at booth #2047 at the RAPID+TCT show in Detroit, MI, May 21 – 22, 2019.

# A True Extrusion System

Mr. Womer is a Certified Plastics Technologist and has extensive knowledge with large format, pellet-to-part 3D printing. Over the last four years, he has been involved with the research team at Oak Ridge National Laboratory (ORNL) in the development of extra-large format, pellet-to-part printing equipment. This

collaboration has resulted in over twenty Ultra-Lite™ extruders destined for large-area additive manufacturing applications. An additional development includes the patent-pending TWW Micro™Extruder, which is currently in operation on the WorkCenter 500 from 3D Platform.

The TWW Micro™ Extruder uses a screw with a unique helical compressed channel that generates pressurized heat for faster and more efficient compression, melting, and mixing of pellets. While other 3D printing extruders can handle only micro pellets, this extruder can handle both extra-small through standard-sized pellets. The TWW Micro™Extruder has been carefully designed to handle the same materials used by ORNL and others on their extra-large format machine, including the popular general-purpose materials from TechmerPM HiFill®: ABS/CF, PP, HDPE, PC, VLDPE, PLA, and PLA/Wood Fiber.

Through future testing, engineering-grade materials will be available from TechmerPM's Electrafil® line: PA6/CF/Other, PSU/CF, PPSU/CF, PESU/CF, PPS/CF, PEI/CF, PEKK/CF, PEEK/CF. Additionally available will be THERMOCOMP™ AM compounds from SABIC: ABS, PC, PC/ABS, PC/PBT, PEI, PSU, PA11, PES, PPSU PEEK, PPS, PA6, PA66, PPA, PPE, PPE/NYLON (which are available with fillers like Carbon Fiber (CF), Glass Fiber (GF), minerals, flame retardants, UV agents, heat stabilizers, and thermally conductive fillers).

ElectraFill® and HiFill® are registered trademarks of TechmerPM. THERMOCOMP™ AM is a trademark of SABIC.

The TWW Micro™Extruder features multiple heat zones that act to customize the unique processing requirements of each material that is extruded. Also highlighted are several temperature sensors which feed back into the control and data logging system on the WorkCenter 500 machine. The ability to process a wide variety of materials in a standard pellet size combined with the ability to record metrics from the pellet dryer system gives operators and engineers exceptional control over their prints.

The addition of the Micro Extruder has helped make the WorkCenter 500 the perfect choice for companies that require strict, quality-assurance operations. This production-ready, additive manufacturing system stands to benefit applications within the aerospace, military, train, and automotive industries.

#### Meet Tim Womer and 3DP

Tim Womer of TWWomer & Associates will join 3DP at booth #2047 at the Rapid + TCT Trade show in Detroit, MI, USA on May 21-22, 2019. Along with his research and development on plasticizing screws and components, Mr. Womer holds 15 patents involving various aspects of polymer processing technology. He is a prolific author and lecturer, with many papers on injection molding, extrusion, heat transfer rolls, and component design. He has been extensively involved with industry associations and held a number of leadership positions. He has received a substantial number of prestigious honors, including SPE's Fellow of the Society Award, Distinguished Service Award, Honor Service Award, and the Bruce Maddock Award. He has been a member of the Plastic Pioneers Association since 2005, and was inducted into the Plastics Hall of Fame in 2012.

Meeting participants are invited to stop by the booth and talk to him in-person about their 3D printing projects. Mr. Womer can review each enquirer's unique application requirements to ensure that the correct extruder and screw are chosen for optimal production. Additionally, individuals can meet with 3D Platform representatives to discuss the line of 3DP printers and decide which one offers the best application solution. If a standard model is not ideal, a custom machine may be more beneficial. Participants interested in scheduling a meeting, can:

- Click here to schedule a meeting with TWWomer
- Click here to schedule a meeting with 3D Platform
- Click here to schedule a meeting with TWWomer and 3DP

# **About TWWomer & Associates**

After working for 35 years as an employee of various major suppliers of plasticating components such as New Castle Industries, NRM, Conair, Spirex Corporation and Xaloy, Mr. Womer decided it was time to step out and offer his years of knowledge to the plastics industry.

In 2008, Tim started TWWomer & Associates, LLC to offer custom designed screws to single screw extrusion, injection molding and blow molding applications. These screws have helped to maximize throughput capacities using optimum melt temperatures and mixing. Building on his 45-plus years of working within the international plastics industry, Tim's innovative processing techniques and equipment designs have maximized production for multiple companies.

TWWomer & Associates offers custom screw designs for extrusion, injection molding and blow molding. In addition, they offer new screws and barrels, plastics processing improvements, inhouse training seminars, equipment sizing and evaluations, and expert witnessing—domestic and international. TWWomer & Associates offers the Ultra-Lite™ Extruder and the TWW Micro™Extruder, which are both used for additive manufacturing and stand-alone testing.

### **About 3D Platform**<sup>™</sup>

3D Platform is the trusted global leader in industrial-strength, large-format 3D printers. Based in Roscoe, Illinois, USA, the entire 3D Platform team is focused on driving advancements in technology to innovate, design, and build next-generation equipment for additive manufacturing. Our global distribution network supported by Certified Service Providers has helped us deploy more large-format, open-market 3D printers than anyone else. To learn more about 3D Platform, visit www.3dplatform.com.

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