Products

Powerful torch welding fume extraction

The so-called “VAC-Cubes” (Fig. 1), with a pressure of 20,000 to 36,000 Pa, can remove an air volume of 210 to 1,050 m³/h. With their enormous extraction power, they meet the latest international standards of modern torch welding fume extraction. Due to its high pressure, the “VAC” series is predestined for continuous use in the high-vacuum range and is primarily suitable for extraction of fume from welding torches at welding workstations. In line with the new requirements on the European market, it combines maximum user safety, enormous extraction capacity and energy-saving operation. Depending on the requirements and work area, the various models of the series can be used as a single workplace solution or as a multi-user solution for up to ten workstations in single-shift or multi-shift operation. Therefore they are suitable for use in small and medium-sized companies. The “VAC” models are easy to install and to operate, are compact and can be combined with a large number of standard torch types. (Teka Absaug- und Entsorgungstechnologie GmbH, Industriestraße 13, 46342 Velen/Germany; www.teka.eu)

Central welding and robot data management

The new “Gateway C-Gate” (Fig. 2) allows the demand-oriented management of welding and robot data. This complete information and communication tool centrally records and processes all data. The user-specific display of information allows a detailed visualisation, evaluation and further treatment of the collected operating and welding process data. The system consists of the near-system hardware and the software modules “production”, “quality management” and “service”. With the “production” module, users can illustrate the performance and the efficiency of their robot systems, localise shortages and increase the efficiency. The module allows a comprehensive online monitoring of the robot systems with a detailed reporting about availability, capacity and quality. Thus, possible weak points in the production run are recognised early. Furthermore, system breakdowns or waiting times due to set-up and other downtimes are considerably reduced. The new “C-Gate” can be integrated into existing Industry 4.0 environments. Via standardised interfaces it is possible to transfer the data to superior IT-based solutions such as MES and cloud applications or other systems, for example. (Carl Cloos Schweißtechnik GmbH, Carl-Cloos-Straße 1, 35708 Haiger/Germany; www.cloos.de/de-en)

Free torque converter app

Worldwide manufacturer and provider of torque products and assembly solutions, ASG, Division of Jergens, Inc., is proud to release its first ever mobile application – the Torque Converter App (Fig. 3). It was designed to quickly and easily convert a single torque unit to another type of unit measurement. A user can type in a value in the proper units field, and the app will convert it instantly and accurately into 8 other torque units. These torque units include imperial and metric units. “My goal was to create an easy-to-use torque converter, simple and without any unnecessary clicks or drop down menus,” states ASG Web Developer Aldo Soraluz. “Not only is it a useful tool for our team internally, but is an excellent resource for all those in the torque industry.” The app was designed for Apple and Android users and can be found on the Apple and Google Play stores under ASG Torque Converter. The app is free to download. The torque converter tool can also be found on the ASG website at asg-jergens.com/torque_converter.html. (ASG, Division of Jergens, Inc., 15700 S. Waterloo Road, Cleveland, Ohio/USA 44110-4519; www.asg-jergens.com)

Weather resistant cored welding wires

The latest development of Böhler Welding within its premium “diamond-spark” line covers a range of weather resistant seamless cored wires with high welding performance and extreme toughness combined with a total resistance against
moisture absorption (Fig. 4). Since the product launch in September 2017 the range has grown to more than 70 seamless cored wires. With the latest addition the “diamondspark” range now also covers the segment of weather-resistant cored wires. Böhler Welding offers three seamless FCAW wires and one SAW-FCW in combination with two different fluxes for weather-resistant steel in this range. Weathering steel is a group of steel alloys which were developed to avoid painting. Named by a US company after its main benefits corrosion resistance and TEnsile strength, the steel is often called “COR-TEN” (or “CORTEN”) steel. That steel has a certain

number of alloying elements, such as P, Cu, Cr, Ni, Mo added in order to increase its resistance to atmospheric corrosion. This is reached by forming an auto-protective oxide layer on the base metal. Fields of application of weather resistant steels include the general steel construction of bridges, containers and tanks, chimneys and industrial filters as well as architecture. (voestalpine Böhler Welding Group GmbH, Peter-Müller-Str. 14-14a, 40468 Düsseldorf/Germany; www.voestalpine.com/welding/group/company/press)

Laser processing optics for the welding of hairpins

Scansonic introduces its new “RLW-S” laser processing optics for laser welding the copper hairpins used in electric motors (Fig. 5). This system’s integrated optical sensor precisely detects contours and reliably controls complex welding processes. A growing number of manufacturers are using copper hairpins instead of copper winding in the production of stators. The heads of these hairpin-shaped parts are inserted into the stator and welded together by a laser beam. Each stator has 160 to 220 hairpins that are processed in a time window ranging from 60 to 120 s. The “RLW-S” system uses laser scanners to precisely guide the laser beam to within 0.1 mm. This is made possible by an integrated camera that accurately detects the processing point and enables the welding to be completed according to a predetermined pattern. The camera also ensures continuous process monitoring and high process reliability. This gives customers maximum dependability with strong, pore-free seams at high reproduction rates. Existing laser beam sources can be fully integrated into the processing strategy. (Scansonic MI GmbH, Schwarze-Pumpe-Weg 16, 12681 Berlin/Germany; https://www.scansonic.de/en/)