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For Immediate Release:

## Join the best at TUBE from April 16 – 20, 2018, in Düsseldorf

## Excellence in Technology: Discover Coherent | ROFIN's endless possibilities for fiber laser welding

Hamburg. Germany. April 13, 2018: From April 16 - 20, 2018, TUBE in Düsseldorf, one of the most important trade fairs for the tube and tube processing industry, will open its gates to offer insights into the latest manufacturing technologies. In Hall 6/C31, Coherent|ROFIN will present its state-of-the-art laser welding solutions for tubes and profiles. With its extensive laser and process technology know-how, Coherent is the perfect partner for those applications. Whether for heat exchanger tubes made of stainless steel, composite tubes, underwater lines or guides – endless kilometers of tubes and profiles are welded with Coherent|ROFIN lasers every day. Here is one of the innovative solution the company will showcase at this year's TUBE:

## The Coherent | ROFIN turnkey solution for tube and profile welding

The **PROFILE WELDING SYSTEM (PWS)** is a complete state-of-the-art tube and profile laser welding system. The PWS is equipped with an integrated process sensor for welding with gap detection and tracking. The weld sensor, in conjunction with the integrated controller, simultaneously corrects the welding position automatically. Real-time feedback and fast and precise linear actuators ensure the highest production quality by positioning the laser beam within a few µm of the seam gap while achieving welding speeds of up to 60 m/min. The operator control panel allows for easy operation of all system parameters and settings, like laser power, moving axes or gap monitoring at the work piece. The new motorized axes (X/Y/Z) feature ensures user-friendly operation and, depending on customer requirements, a connection to product databases.

The integration of a seam inspection or a laser beam and process analysis tool is an option. The standardized interfaces allow easy integration with existing systems. The PWS is low maintenance and insensitive to oil, dirt, dust, moisture or electrical disturbance, enabling its use in the most rugged industrial environments.



Fig. 1: Coherent | ROFIN Profile Welding System: Set up with CO<sub>2</sub> laser





The PWS can be combined with different laser beam sources such as the **DC Series** diffusion-cooled  $CO_2$  lasers or **HighLight**<sup> $\mathbb{M}$ </sup> **FL Series** fiber lasers, to match customers' specific requirements.

CO<sub>2</sub> laser technology is the method of choice if the utmost weld quality is an important process criteria. However, recent developments have shown that similar results can now be realized with HighLight fiber lasers, achieving state-of-the-art process quality, reliability and yield with the high wall plug efficiency of fiber laser technology. In addition, fiber lasers offer process advantages with non-ferrous metals such as composite pipes or thin-walled steel materials.

At the exhibition, the company will demonstrate an innovative tube processing system using a HighLight fiber laser in conjunction with a standard weld roll table for stainless steel tube welding.

## Broadest technology spectrum. In-depth process know-how. Superior support.

With over 5,000 employees in more than 100 locations, Coherent serves more than 20,000 customers globally. There is no other company that can offer customers a comparable breadth of capabilities or a wider range of products. Whatever the application demands, Coherent offers the most comprehensive set of solutions from laser sources to systems, backed by outstanding applications, process and service support.



Fig. 2: Coherent | ROFIN CO<sub>2</sub> Slab laser of the DC Series



Fig. 3: Coherent | ROFIN fiber laser of the HighLight FL Series

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Founded in 1966, Coherent, Inc. is one of the world's leading providers of lasers and laser-based technology for scientific, commercial and industrial customers. Our common stock is listed on the Nasdaq Global Select Market and is part of the Russell 1000 and Standard & Poor's MidCap 400 Index. For more information about Coherent, visit the company's website at http://www.coherent.com for product and financial updates.