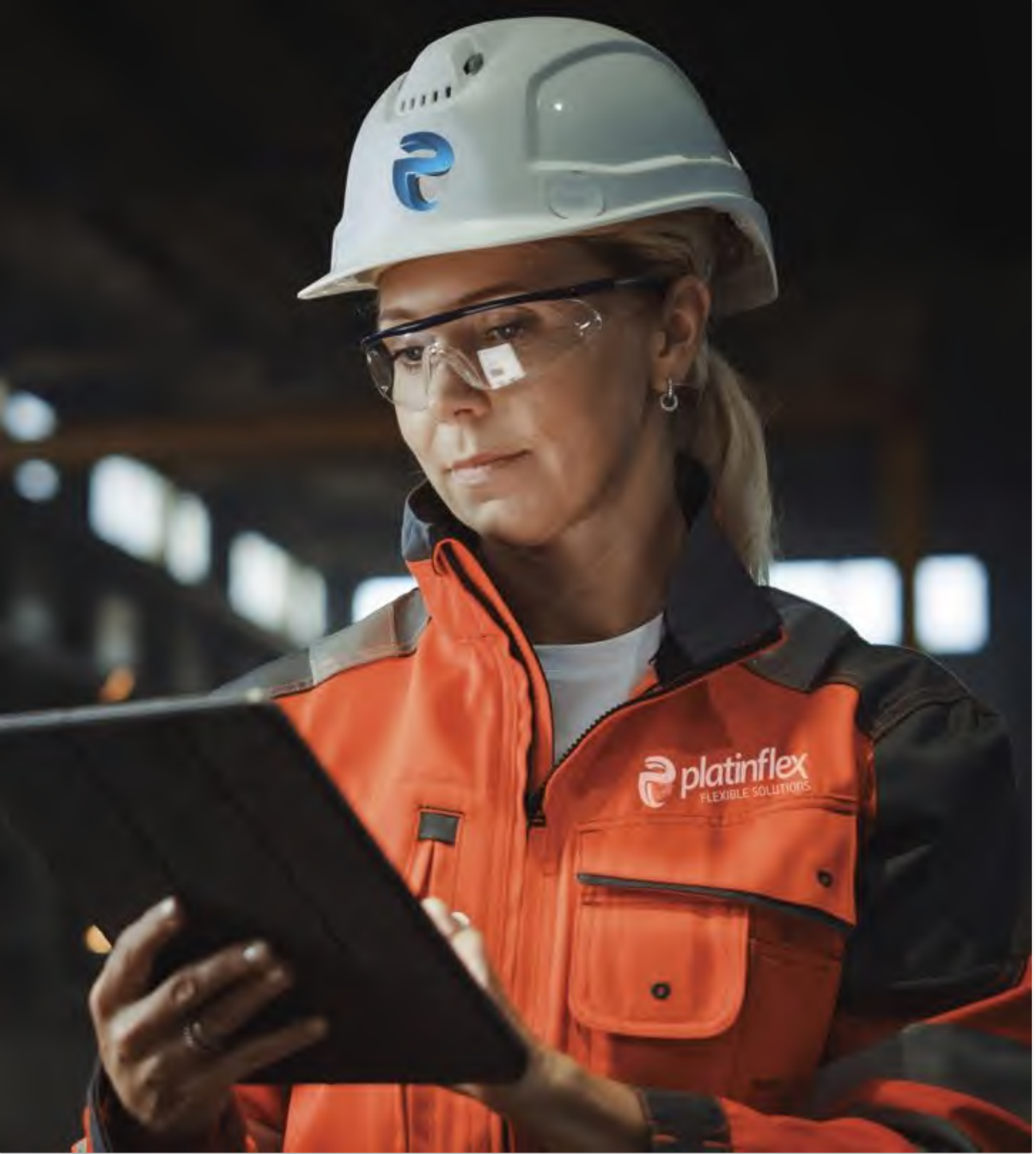

QUALITY AND QUALITY ASSURANCE

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WE ADD MORE THAN 20 DIFFERENT INTERNATIONAL STANDARDS AND CERTIFICATES & KEEP INCREASING.

- ISO 9001: 2015 TÜV RHEINLAND
- DVGW
- DNV-GL
- RINA
- SAI
- EMSD
- ENERGAS
- IMQ
- SBSC – Sweden
- LR (Lloyd Register)
- GAS BE

Occupational health and safety management systems

- ISO 45001:2018

Environmental management

- ISO 14001:2015

In our production processes, including **forming, braiding, welding & soldering, testing, packaging, and process development**, we adhere to international standards for conducting tests. The tests we perform include

- Flow Rate Test
- Leak Tightness Test
- Pressure Resistance Test
- U Bending Test
- Structural Strength Test
- Flexing Test
- Fire Resistance Test
- Flame Resistance Test
- Hydrochloric Acid Test
- ATEQ High Sensitivity Leakage Test
- Durability of Marking Test
- Electrical Continuity Test
- Impact Resistance Test
- Burst Pressure Test
- Torsion Test
- Elongation Test
- Vacuum-Helium Test
- Penetration Test
- Drop/Crush/Torque Test
- Elasticity Test
- Resistance to Repeated Bending Test
- Pliability Test
- Fatigue Test

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TRACEABLE MATERIALS

RAW MATERIAL SELECTION AND INCOMING QUALITY PROCESSES

The foundation of our metal hoses starts with the highest quality raw materials. By using only materials sourced from leading suppliers, (Samsung, Posco,Hyundai etc.) we ensure that our products are long-lasting and durable.

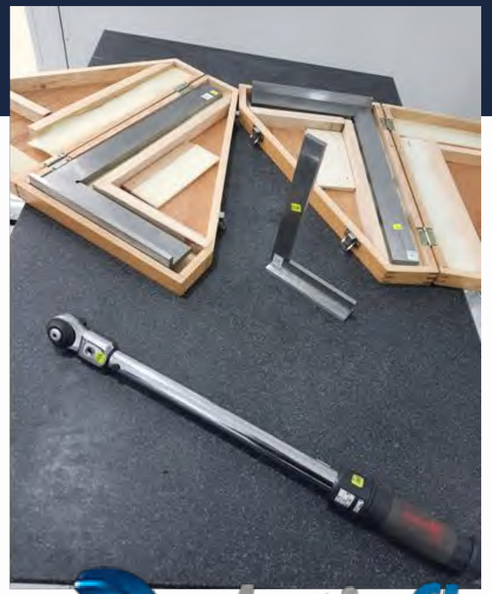
We are using acc. Customer requests in our Hoses st.steel AISI316L,AISI316TI, AISI304L,AISI321 , and in Fittings Cooper,Brass,St.Steel, Steel

When a shipment arrives from the supplier at the IQP station in our ERP program, our meticulous control process begins. We employ a dual-pronged approach, utilizing both material chemical analysis and precise dimension measurements through our cutting-edge XRF device.

Upon successful completion of these rigorous controls, the material receives its well-deserved approval. At this juncture, a unique lot number is assigned to facilitate seamless integration into our manufacturing processes. This pivotal information is seamlessly transferred within our ERP system."

When it comes to the fitting parts for IQP, we seamlessly integrate them into our ERP system, much like we do with sheet metal components. Our quality assurance process involves a series of meticulous checks and tests, in accordance with our product specifications and checkpoints.

These checks include XRF analysis, material dimension verification within specified tolerances, gauge assessments, and thickness inspections for coatings, if applicable. Additionally, we conduct destructive inspections using a torque meter to ensure fixer resistance, rigorously upholding our commitment to product excellence.



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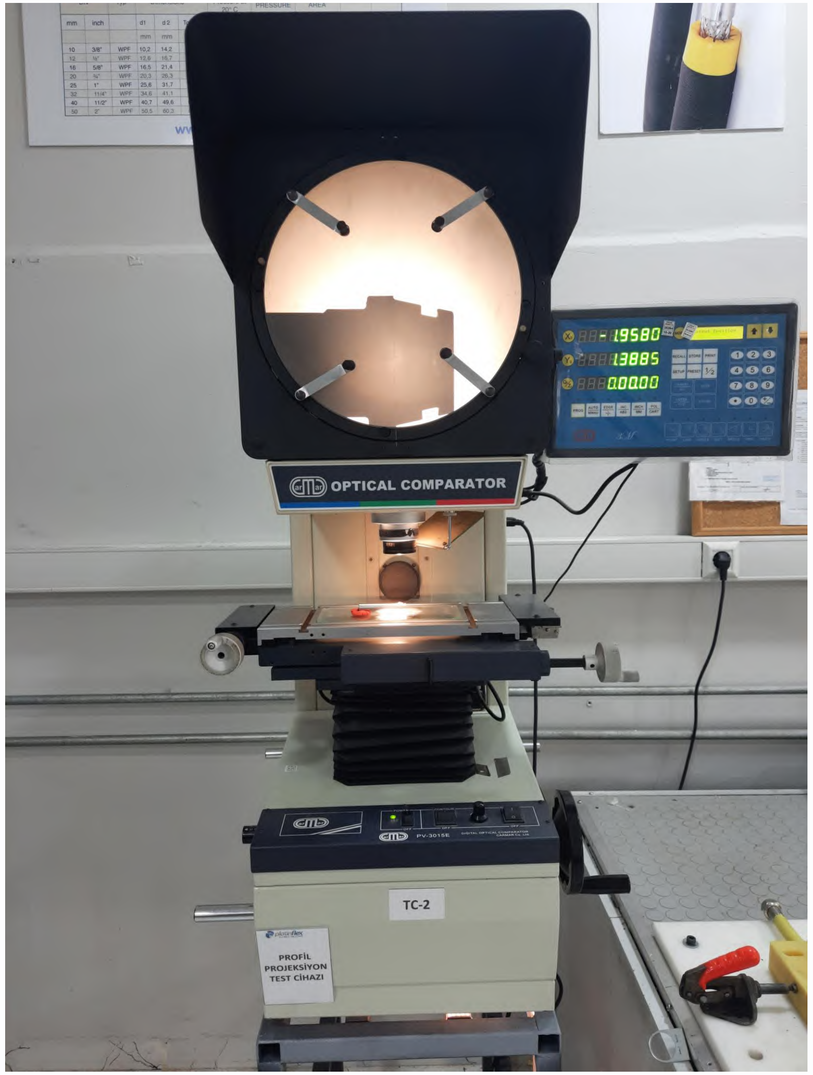
"Our products, known for their precision, undergo meticulous measurements utilizing advanced technology. For items with intricate channel designs and angled features, we rely on our **Optical Comparator.**

Furthermore, as part of our rigorous approval and random control processes for hoses, we ensure the utmost accuracy by conducting pitch and knot measurements, all of which are seamlessly executed using the **Optical Comparator.**

This commitment to precision is integral to our quality assurance standards.



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100% Leakage Test With 6 Bars Under Water

After completing the input quality control for the sheet, it proceeds through our mechanical forming machine, emerging as a high-quality hose. The very first step in our testing process involves subjecting the newly formed hose to a rigorous **100% inspection at 6 bars of pressure,** thereby ensuring the completion of the initial leakage test.

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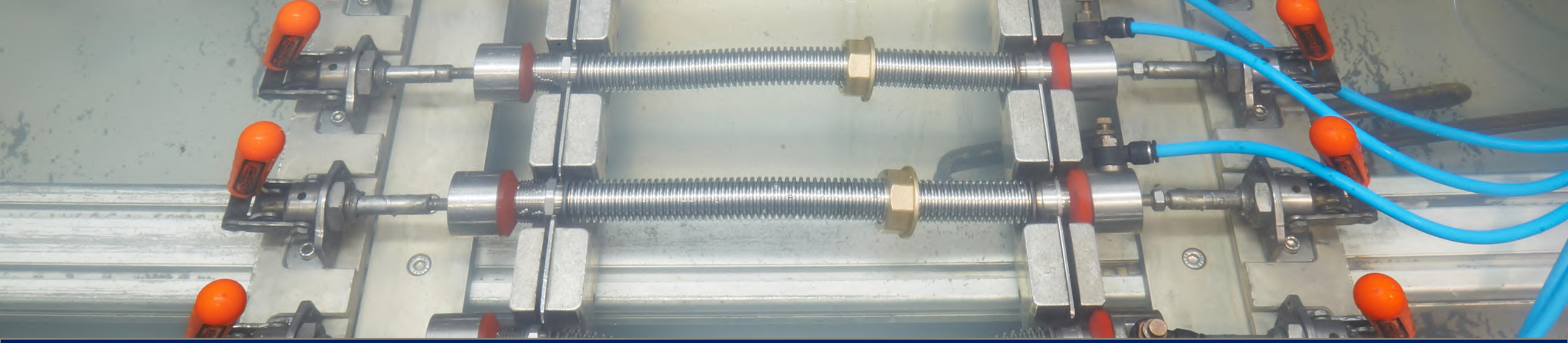

Once the hose, tailored to meet the customer's specific order, is cut and its fitting parts are expertly welded, it undergoes our second testing phase—an underwater leak test utilizing air pressure. This rigorous process ensures the integrity of the welded connection points, providing an additional layer of security.

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Leakage Test For High Pressure Hoses

Likewise, we employ our high-pressure test machine to meticulously assess the integrity of our high-pressure hoses. With a capacity of up to **650 bar,** we closely monitor the entire testing process to ensure the tightness and reliability of each high-pressure hose

At Platinflex, we conduct highly sensitive leakage tests using

ATEQ brand test equipment."

ATEQ test devices, known for their sensitivity and accuracy in detecting leakagess, are widely used in various industries.

High Sensitivity Levels: ATEQ leakage testers are designed to detect very small leaks, often measuring leakage rates in the range of microliters per minute. And **sensibility is 10^{-9}cm³/h**

Advanced Sensor Technology: ATEQ devices use advanced sensor technologies, including pressure decay, mass flow, helium or hydrogen sniffing, and more

Customizable Testing Parameters: ATEQ leakage testers often allow for customizable testing parameters, meaning that sensitivity can be adjusted based on the specific requirements of the test. This flexibility ensures that the devices can be tuned for optimal sensitivity in different testing environments.

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We conduct precise leakage testing using our advanced **Helium-Vacuum test device**, meticulously adhering to customer requests and industry standards

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OUR LABORATORY TESTS

Our comprehensive salt-corrosion test adheres to industry standards. In this test, a saline mist with full surface penetration is meticulously applied to the product under controlled cabin temperature and duration conditions. Following the test, a thorough examination is conducted to identify any signs of aging, such as rust and corrosion, on the material

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OUR LABORATORY TESTS

In the relevant pressure fluctuation test, the product is subjected to fatigue testing. With the help of water between **1 and 25 bars**. **10000** repetitions are achieved with a frequency of 30 per minute.

The fatigued hose is then subjected to leakage test.

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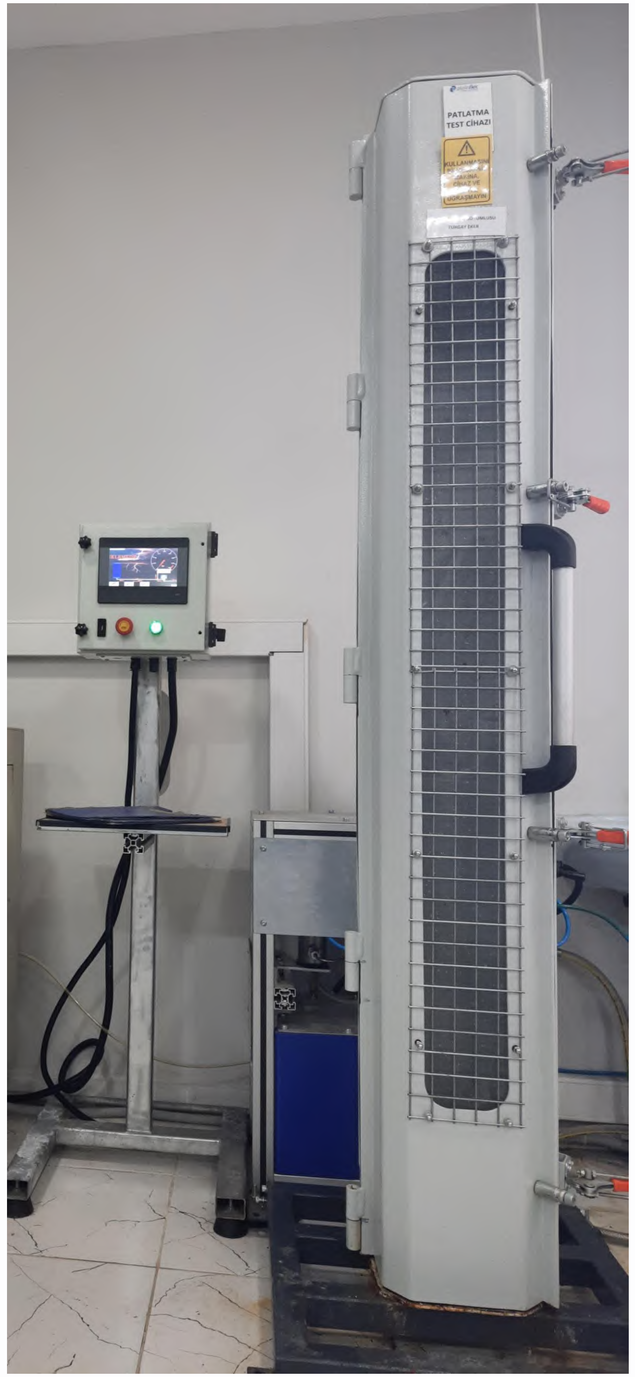

OUR LABORATORY TESTS

Our testing procedures commence in our state-of-the-art laboratory, adhering to international standards and norms. For high-pressure hoses, we perform a rigorous burst pressure test. This involves the use of our specialized machine with a **remarkable 2500 bar capacity**, facilitating precise and destructive testing. All test results are meticulously recorded in a digital format for comprehensive analysis.

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OUR LABORATORY TESTS

In the bending strength test, we follow strict standards by adjusting the hose's bending angle, the number of repetitions per minute, and the weight connected to the hose end. This rigorous test consists of **10.000 repetitions**, with the hose bending **30 degrees to the right** and **30 degrees to the left**. Following this, we subject the hose to a comprehensive leak test.

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OUR LABORATORY TESTS

In our torsion test, we adhere to industry standards by securing the hose at both ends and subjecting it to a **90-degree twist to the right and left**. We ensure continuity in line with standard repetitions per minute. This demanding test involves **10.000 repetitions** of twisting. Following this rigorous process, we conduct a thorough leak test on the product

OUR LABORATORY TESTS

We meticulously track and maintain records of calibration for all our measuring devices, gauges, and machinery, including items such as pressure gauges, that require calibration and are integral to our tests and quality control processes. This comprehensive calibration management is **seamlessly integrated into our ERP system.**

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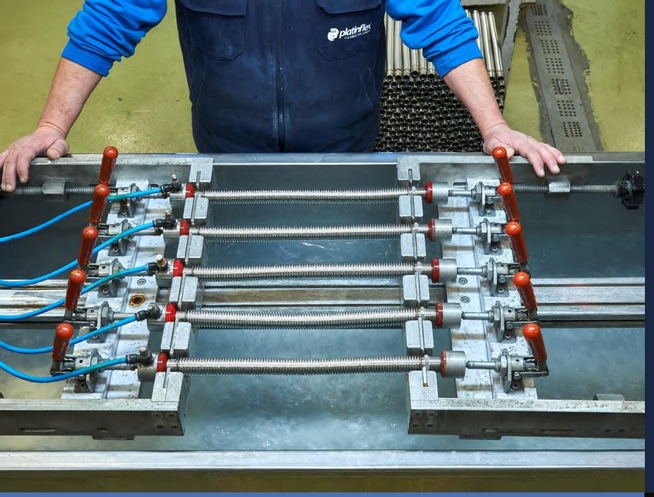

Thanks

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