

# Four new machines to aid oil extraction

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The Center for Engineering and Industrial Development (CIDESI), located in Mexico, designed "tailored suits" for the oil industry. These are various machines that are used in the oil extraction processes and are essential to achieve a final product quality.

The tools developed by this center, which is part of the National Council of Science and Technology (Conacyt), are used in the [tubes](#) with which oil is extracted, for example. These tubes have a PIN side and a BOX side; the former has an external thread that requires an oil coating to inhibit moisture, so researchers at CIDESI designed a machine to apply the substance.

The machines designed are four: one that applies oil, another applies grease, a third one tightens the protector, and the last is in conceptual design and will grease the BOX side.

Jose Luis Gonzalez, who participated in the realization of the machines, said that these are necessary for [oil extraction](#); applying oil is important because the substance has the function to inhibit the moisture in the threads of the pin of the tube, and the machine that applies grease is needed to prevent corrosion.

"One of the problems faced frequently in the [oil industry](#) is that the tubes were returned because the threads were damaged by the management itself. Then these machines were requested, and we began to make custom suits," says González.



Six years ago, CIDESI designed the first machines for the company. Now, they were approached again with their problems for manually applying grease and oil in the tubes.

The tubes have a length of about nine to 12 meters, with a diameter of 2 inches and 3/8 to 9 inches, and are seamless tubes, especially made for the oil industry.

These tubes work like straws, assembled together, and they get inside the oil wells to reach the oil strata.

The engineer explains that a company in the field manufactures the tubes, and CIDESI placed the protectors and the machines that apply [oil](#) and grease, so they reach the platform in good condition and with the

best quality.



The protector is like a hard plastic plug that enters both PIN and BOX soides, and protects the threads that measure from 2 inches to 3/8 to 9 inches, with a length of about 150 mm.

In the design of these machines four engineers and two students at CIDESI were involved.

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