PT Engineering company has been designing and developing the program of electro-hydraulic systems in metallurgy ever since 1976, practically since its founding. Since then, until the present day, the company has been constantly improving its design solutions in order to bring them into line with the latest requirements of technology, quality and reliability. Manufacturing of electro-hydraulic systems for process equipment for production of coke in metallurgical plants is the most important segment of PT Engineering’s presence in metallurgy. Electro-hydraulic systems for coke machines are designed to provide sequential movement of mechanisms on pertaining machines during one work cycle on a coke battery. The task is accurate positioning of cylinders as actuation elements of mechanisms, which are designed for large external loads. The specific feature of electro-hydraulic systems for coke equipment is 20 to 25 individual actuation systems on one machine with central hydraulic supply, whereby the desired flow and pressure, being the basic parameters of actuation systems, are provided for each mechanism. Electro-hydraulic systems are installed in the following plants:

- In cold and hot rolling mills for production and transport of sheet metal, profiles, wire, rods, beams, pipes, elbows etc. (furnaces, traction benches for pipes, winders, shears, presses...)
- For blast furnace serving (drilling machine, manipulator and hydrostatic clay gun)
- For serving in coke ovens (dosing coaches, coke pusher cars, door extractors, coke guide cars and coke quenching cars and locomotive for hauling wagons for coke quenching)

Some of the most important references are:

- Manufacturing of hydraulic blocks for Dave McKay company, for the requirements of Železara (Ironworks) Smederevo
- Manufacturing of complete hydraulic system for roll stand no. 6 of Železara Smederevo, according to the documentation of the SMS company from Germany and under its supervision.

The latest reference of PT Engineering in the field of metallurgy is for the buyer in Germany, DHMS from Dortmund, where PT Engineering designed and manufactured electro-hydraulic drive and control systems for the drilling machine, hydrostatic clay gun and manipulator, the end user of the equipment is the Ironworks Ilva in Taranto, Italy. The equipment was designed and manufactured in the period 2015–2016.
MP Zapsib, Novokuznjeck, Russia

Metallurgical plant (MP) Zapsib

Buyer: Gos FOM, Serbia
Commissioned:
1998 – 2 pusher cars and a door extractor
2000 – Hydraulic systems for handling mechanisms on Coke Pusher Car, Coke Transfer Car and - 2 machine sets and 2 locomotives with hydrostatic drive
MMP Arcelor Mittal, Krivi rog, Ukraine

Mining-metallurgical plant (MMP) Arcelor Mittal

Buyer: Gosa FOM, Serbia
Commissioned: 2009
Hydraulic systems for handling mechanisms on Coke Pusher Car, Coke Transfer Car and Coke Charging Car, locomotive with hydrostatic drive - 3 machine sets and locomotive

Locomotive hydrostatic drive

Mining-metallurgical plant Arcelor Mittal

Hydraulic equipment cabin

Mining-metallurgical plant Arcelor Mittal
Ilva Ironworks, Taranto, Italy

Buyer: DHMS, Dortmund, Germany
Delivered: 2017
Electro-hydraulic drive and control systems for drilling machine, hydrostatic clay gun and manipulator

MP Izdemir, Iskanderun, Turkey

Metallurgical plant Izdemir
Buyer: Concord, Ukraine
Commissioned: 2010
Hydraulic systems for handling mechanisms on Coke Pusher Car, Coke Transfer Car and Coke Charging Car
Metallurgical plant Severstalj

Buyer: Goša FOM, Serbia
Commissioned: 2007 – 2 machine sets, 2010 – 1 machine set
Delivered: 2016 – one machine set, capacity 21.6 tons and a guide car capacity 30.3 tons
Hydraulic systems for handling mechanisms on Coke Pusher Car, Coke Transfer Car and Coke Charging Car (machine set)

Hydraulic equipment cabin

MP Severstalj, Cherepovec, Russia

NLMK, Novolipeck, Russia

Buyer: Goša FOM, Serbia
Commissioned: 2000 – 2 machine sets and a coke quenching car
2010 – 1 machine set
2016 – tilter
Hydraulic systems for handling mechanisms on Coke Pusher Car, Coke Transfer Car and Coke Charging Car