



## MoMAS ®

Has been created to achieve the main goal of automation of an extruder, viz. to Achieve highest possible productivity and simultaneously ensure top product quality, without trespassing limits.

MoMAS ®已成功达到挤压工厂自动控制的主要目标，即达到尽可能高的产能，以及同时保证生产高质量的没有缺陷的产品。

Productivity and product quality in metal extrusions are not mutually independent. The productivity is dependent from the extrusion rate and the death cycle time.

在铝挤压工艺中，产能和产品质量并不是没有相互约束的。产能是根据挤压速度和 death 周期时间决定的。

The Quality is dependent from the billet temperature, the pressure of material on the die, the produced friction energy in the extrusion channel in the die, the extrusion rate, and the profile temperature.

产品质量是根据铝棒温度、模具原料压力、模具内挤压槽产生的磨擦能量、挤压速度、和型材温度决定的。

Limiting factors are: Maximum extrusion force of press, geometric stiffness of the die, Maximum billet temperature as well prescribed ranges of process parameters.

受限制的因素有：挤压机最大挤压力、模具几何硬度、最大铝棒温度、以及指定的工艺参数。

MoMAS ® offers optimal iso-thermal extrusion; with a furnace or quenching system which can control billet temperature taper, you can get optimal iso-thermal and iso-speed extrusion.

MoMAS ® 提供最佳的等温挤压；配备炉子或淬火系统，控制铝棒温度逐渐下降，这样您能获得最佳的等温和等速挤压。

MoMAS ® fulfils on the whole following tasks:

MoMAS ® 能完成以下所有的任务：

1.) It optimizes extrusion by calculating optimal process inputs between successive cycles and transferring these to the PLC.

通过计算连贯的循环输入最理想的工艺参数和传送到 PLC 中。

2.) It measures and displays profile temperature, extrusion force, ram velocity etc. during every cycle and the time per billet, standard deviation and the mean temperature over the cycles:

在每个循环中计算和显示型材温度、挤压力、柱塞速度等，以及每根铝棒挤压时间、标准偏差和循环结束后预定的温度。

3.) It archives and retrieves best process inputs for an order; it automatically retrieves best inputs if the order repeats. This feature makes it possible to optimize extrusion, even with short orders (three to five billets).

对于一个订单，存档和重新取出最佳的工艺参数；如果是重复订单，即会自动重新取出最佳的参数。这项特性，使得即使是小订单（3~5 根铝棒）也能最优化挤压工艺。

Furthermore:

而且：

MoMAS ® provides the extruder managers and engineers with a versatile data base for logging and analyzing the process data and keeping a watch over the extruder (machine and man) and product .

# 3T AST

**Accurate Sensors  
True Temperature Technologies**

MoMAS® 为挤压车间管理员和工程师提供多功能的数据库，记录和分析工艺数据，以及监察整个挤压车间（机器和人员）和产品。

Production statistics in an industrial press comprising over 50 000 extrusions showed that the mean extrusion rate With MoMAS® was 6% higher than without.

工业挤压机的生产数据包含超过 50,000 次挤压，显示出预定的挤压速度，使用 MoMAS® 比没有使用高出 6%。

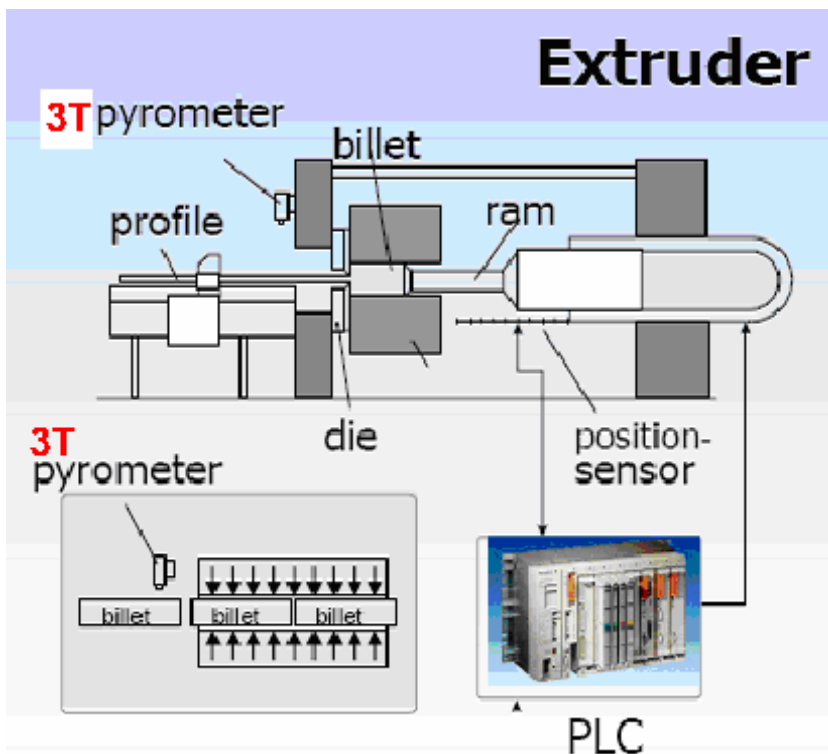
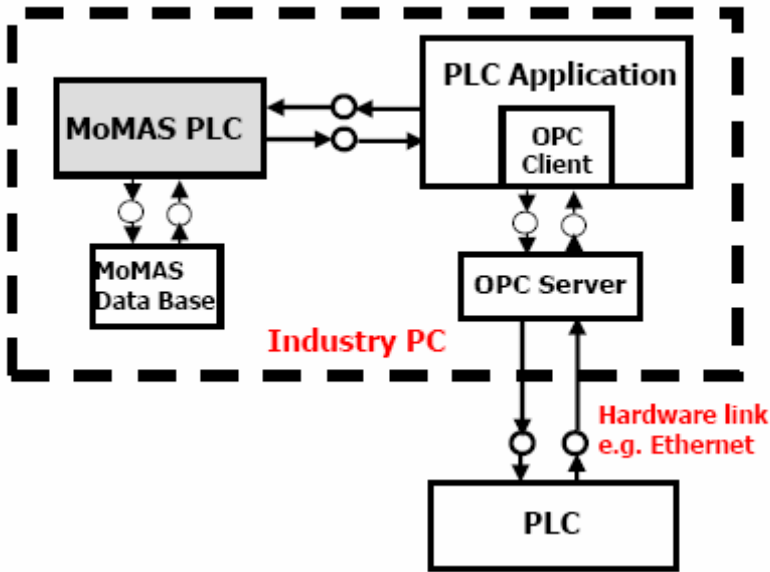
MoMAS® found until now in following countries, (at worldwide well known big companies of aluminum extrusion) content user: Germany, USA, Sweden, Italy, Australia and Russia.

直到目前为止，已有多个国家的挤压厂应用了 MoMAS®，世界范围的知名铝挤压厂的用户包括：德国、美国、瑞典、意大利、澳大利亚和俄罗斯。



Display as the operator see it  
操作员看到的显示屏

MoMAS ® PLC Application  
MoMAS ® PLC 应用图



MoMAS ® and 3T Pyrometer The Ideally mutual completion powerful tools  
MoMAS ® 和 3T 测温度，最佳的互助有效工具