



# Introduction to 2-component technology

## Bolt-on injection units for CX and EX series machines

*Engineering Passion*

***Krauss Maffei***

## Your fast track to multi-component technology – professional and carefully coordinated

Multi-component injection molding delivers attractive color and material combinations—as well as added functionality—in a single-cycle process. Fewer process steps and high quality keep unit costs down, improve profit margins and give you a competitive advantage.

### 2-component technology has a huge range of applications:

- Functional integration through different material combinations
- Eliminates assembly steps
- High bonding quality



Injection molding machine EX 160-750 with vertical bolt-on injection unit SP380 and lateral bolt-on injection unit SP380.



Functional haptics: 2C systems produce non-slip handlebar grips in a one-step process



Key features of power tool handles are a firm grip and brilliant looks, which can be achieved with multi-component technology, including insertion technology upon request.



2-component technology makes it profitable to mass produce disposable razors in eye-catching designs.

# Your successful introduction to 2-component technology

KraussMaffei's modular bolt-on injection units are a sure and cost-effective way to add an extra plasticizing unit and make more use of an injection molding machine you already have. Your bolt-on injection unit can be customized to suit your production projects and your existing molds.

## Positioning options

- V position – second injection unit mounted vertically on the fixed mold platen
- L position – ancillary injection unit mounted horizontally on the non-operator side

## Drive concept

- Hydraulic with separate drive unit
- All-electric for extreme precision and lower emissions to the production environment

## Flexibility and mobility

- Steplessly adjustable in the machines' longitudinal axis
- Steplessly adjustable height
- Simple mold changing, because the bolt-on unit can be moved completely out of the clamp zone
- Wide choice of plasticizing units based on our range of standard screws
- Separate control technology for complete process control and optimal settings
- Large choice of add-ons for non-standard processes or special requirements

## More options on request

- Injection unit sizes up to SP4300
- Different configurations, such as Z position or parallel position



Vertical (V) configuration is ideal when space between installed injection molding machines is limited.



Having the bolt-on unit at right angles to the injection molding machine (L) is a good solution for most applications. The independent bolt-on units are simply docked onto the injection molding machines.

The all-electric version meets demand for extreme shot weight consistency for high-precision applications.



## A wide choice of variant configurations for KraussMaffei hydraulic and all-electric bolt-on injection units

Injection unit	Screw Ø	Stroke volume cm <sup>3</sup>	Model CX	EX
SP 55	15 / 18 / 20 / 22	14 – 30	L / V	L
SP 180	25 / 28 / 30 / 35	59 – 115	L / V	L
SP 380	30 / 35 / 40 / 45	113 – 254	L / V	L
SP 750	40 / 45 / 50 / 55	251 – 475	L	L

## Easy introduction Bolt-on injection units for CX and EX series machines

Bolt-on injection units are a quick and easy, low-cost way to expand into 2-component molding. KraussMaffei supplies custom bolt-on units configured from our extensive, modular portfolio. Our bolt-on units can be docked onto any machine, irrespective of tonnage, manufacturer, type or drive system.

KraussMaffei bolt-on technology features at a glance:

- Autonomous bolt-on injection units make upgrades easy
- Complete control of the process thanks to separate control system and energy supply
- Hydraulic and all-electric variants available
- Plasticizing unit configured to suit your individual applications
- Adjustable mechanical systems for easy adaptation to injection molding machines and molds
- Defined interfaces for electrical and mechanical systems
- Expandable concepts thanks to modular engineering and special control options for high-spec applications