

CFA+ on bench top presses

Optimized crimp force analysis now also on bt presses



After the big success of CFA+ on Komax mci presses, the new technology is now being introduced on bench top presses. The new CFA+ crimp force analysis is easy to understand and so simple to use. It helps the operator prevent set-up errors and independently calculates optimum parameters to combine quality with a high production output. CFA+ is a reliable means of production monitoring. It saves time and money and is the ideal tool for quality-conscious users. The reject rate can be reduced by as much as 50 percent.

Tobias Holenstein Product Manager

Major gain for production

CFA+ crimp force analysis is based on the CFA monitoring that has been well-established in Komax presses for many years. The same piezo-ceramic sensor is also responsible for recording the force curve. CFA+ is installed in all Komax mci and bt presses.

Advantages:

- > Automatic calculation of optimum setting parameters
- > Functions with absolute reliability, also for tiny cross sections
- > Easy to understand and operate

In further refining the CFA+, Komax met all of the latest requirements and the most recent standards from automakers. For instance, limits in the monitoring of cut-off strand can be entered directly as a percent of the wire cross section.



Komax bt 712

New patented analysis of the crimp force curve

A new patented analysis algorithm is the feature that makes the CFA+ different from the original and allows it to analyze the crimping process in detail. Special attention was paid to the crimp-to-compression ratio, a key criterion for a good crimp connection.

Same easy work procedure in production as always

There is only a minor change in the work procedure for the operator in production. As always, he has to verify a new article and record the reference crimp force curve. Now, however, this curve is automatically compared on the bench top press with the signatures calculated earlier. If the two match, the article is released for production. In the event of a new article,

the signatures are each recorded in advance by the process specialist on a self-defined master machine. An automated procedure then runs through the necessary steps until the best possible settings are found. Extensive statistics indicate the process capability and distribution of the set-up process.

Parameter	Current	Recommended	
Bad Limit for RDC(BLDC) [%]	5.0	4.8	
Bad Limit for RDC(BLDC) [%]	200	170	
Zone 1 Sensivity (S1)	0.5	0.2	
Zone 2 Sensivity (S2)	0.5	0.4	
Zone 3 Sensivity (S3)	0.4	0.3	
Statistik values			
Pj(BLDC detection) [%]	99	100	
Cp(Capability index)	1.1	1.1	
RDC-Std.Dev. (normal) [%]	1.6	1.5	✘
RDI-Std.Dev. (normal) [%]	31.0	30.0	✔

View of CFA+ TCI screen

On the Komax bench top presses, the customer can define for himself whether to produce with the conventional CFA or to use the new CFA+. Another new feature with CFA+ is that mci and bt presses can now exchange parameters between each other.

YOUR BENEFITS

- > Automatic calculation of optimum set-up parameters
- > Help in detecting setup errors
- > Reduction in the rejection rate
- > Can switch between CFA and CFA+ on each machine without hardware adaption
- > Easy to understand and use thanks to reduced parameters and results