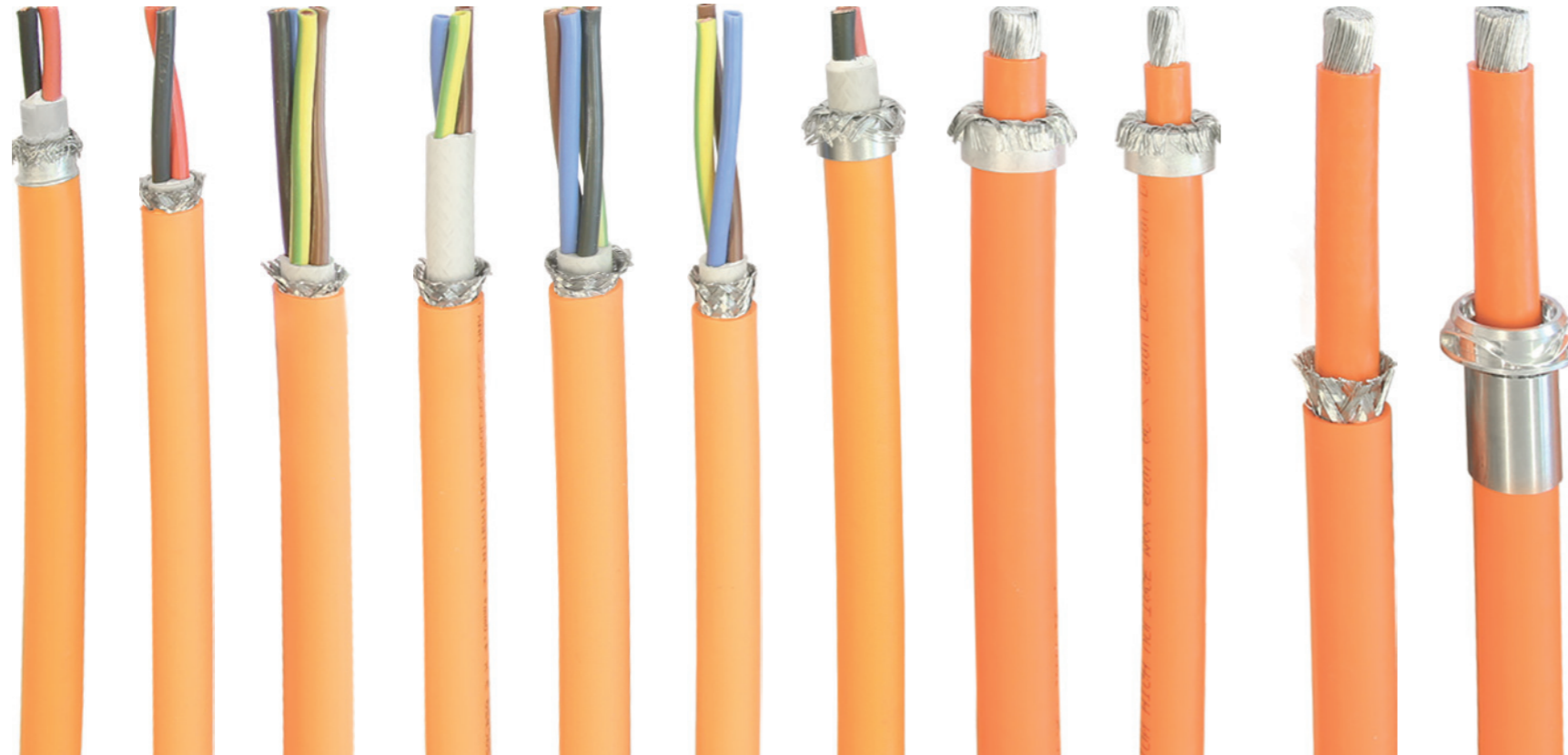


METZNER E-MOBILITY

HIGH-VOLTAGE CABLE PROCESSING FOR THE E-MOBILITY



HIGH-VOLTAGE CABLE PROCESSING

In the automobile industry a fundamental change is taking place – from the combustion engine to hybrid and electric drives. Metzner has for years been pioneer in new developments which enable the automatic processing of these special cables.

Validation by numerous manufacturers as well as patents granted are for us the proof of our work and underline the innovative culture of our teams. Metzner's portfolio for the working of high-voltage cables embraces the following processes. As well as semi-automatic machines, Metzner also develops solutions with high degrees of automation right up to fully automatic transfer lines for high volumes and cycle times of a few seconds.

METZNER E-MOBILITY CABLE PROCESSING

PATENTED PROCESS FOR AUTOMATIC CABLE SHIELD PROCESSING



EM 401

Metzner offers for the first time a mechanical solution for the removal of the cable foil without interference with the cable screen.

EM 402

Automatic processing of high-voltage cables also requires the attachment of different components of the plug system. The Metzner EM 402 takes care of this part.

EM 403

This model performs opening and cutting of the cable screen with a patented process which ensures that there is absolutely no contact with the interior insulation.

EM 101

The EM 101 offers the functionality of the established EM 403 for the requirements of smaller cables up to 8 mm diameter.

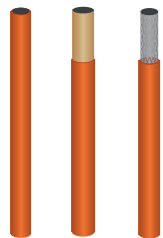
METZNER E-MOBILITY PORTFOLIO

CABLE PREPARATION		PRE ASSEMBLY OF OUTER CONTACTOR COMPONENTS				CABLE SHIELD PROCESSING					ASSEMBLY OF INNER CONDUCTOR COMPONENTS			TESTING			
AM RANGE	EM 401/403/101	EM 401					EM 402	EM 403/101	EM 403/101	EM 403	EM 403/101						
Cable cutting to length	Outer jacket removal	Shielding foil removal	Cover cap	Seal	Outer housing / locking device	Additional components (subject to connector system)	Carrying tube / stress relief assembly	Cable shield cutting	Cable shield folding	Cable filling removal (subject to cable type)	Inner conductor stripping	Cable shield sleeve assembly	Terminal assembly to inner conductor (crimping / welding)	Insulator insertion	Inner conductor housing assembly	Closing housing for outer and inner conductor	

METZNER EM 401

FOIL PROCESSING STATION

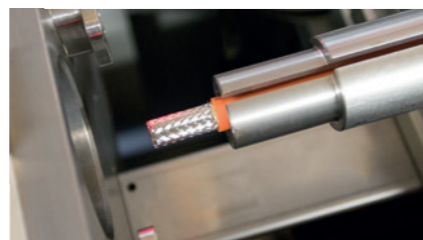
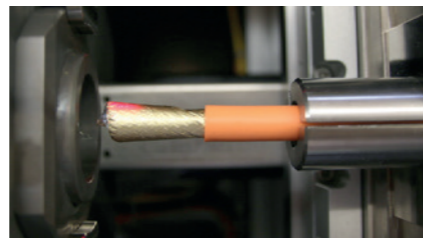
CABLE PROCESSING STEPS



REMOVAL OF OUTER JACKET



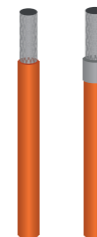
REMOVAL OF CABLE FOIL



METZNER EM 402

ASSEMBLY STATION

CABLE PROCESSING STEPS



AUTOMATIC FEEDING OF COMPONENTS VIA VIBRATION FEEDER



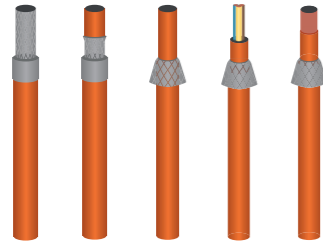
CARRYING TUBE ASSEMBLY



METZNER EM 403

CABLE SHIELD PROCESSING STATION

CABLE PROCESSING STEPS



INNER CONDUCTOR STRIPPING



OUTER JACKET REMOVAL

CABLE SHIELD CUTTING & FOLDING

CABLE FILLING REMOVAL



METZNER EM 101

CABLE SHIELD PROCESSING STATION FOR SMALL CABLES

CABLE PROCESSING STEPS



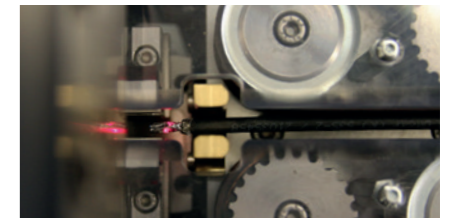
O-RING ATTACHMENT



OUTER JACKET REMOVAL

CABLE SHIELD CUTTING & FOLDING

INNER CONDUCTOR STRIPPING



FOUR OPERATIONS ONE AUTOMATIC PROCESS

STRIPPING OUTER JACKET



FERRULE ASSEMBLY



CABLE SHIELD
UNBRAIDING & FOLDING



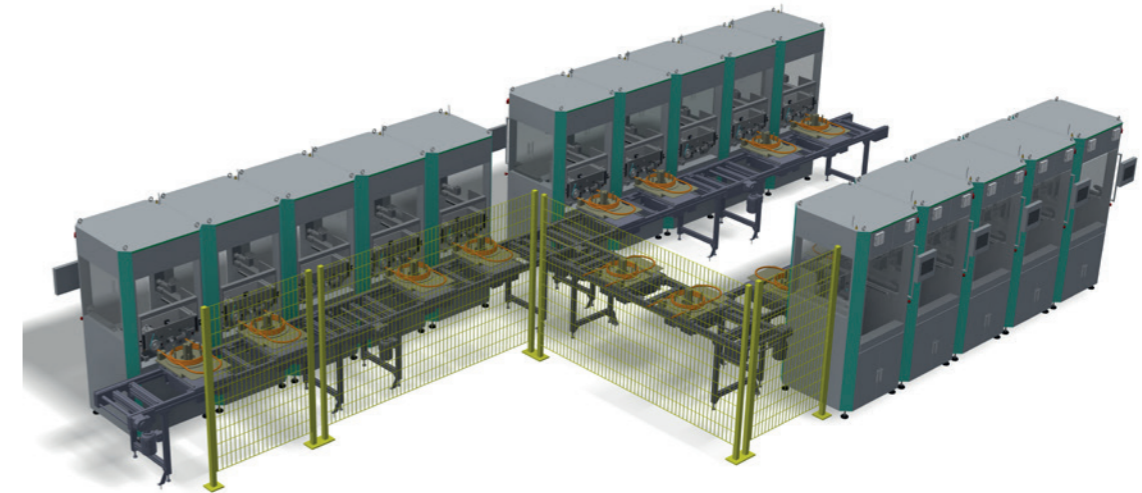
FILLING REMOVAL

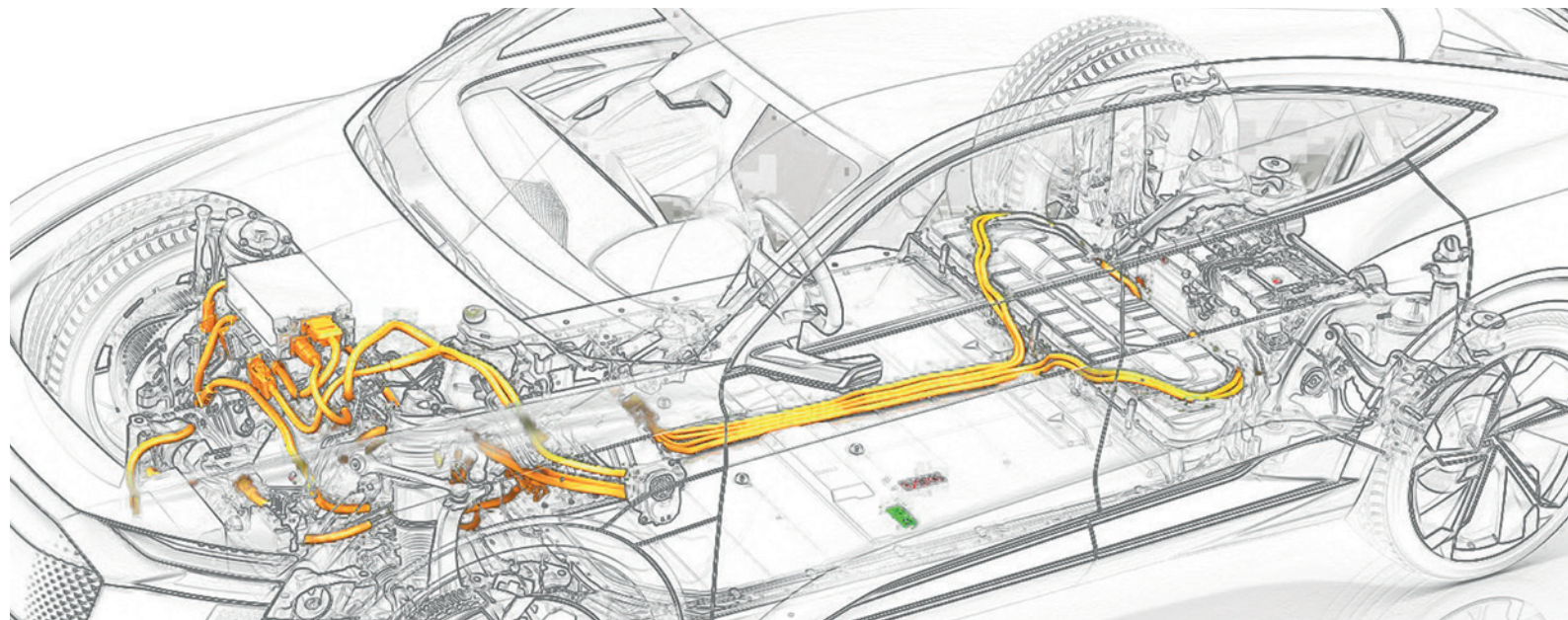


FULL AUTOMATION

Metzner understands the future and converts existing processes into fully automatic system solutions. Working stations, which up to now have been separately operated will be brought together in completely automated production lines.

The starting point of an automatic processing line is the cable, coiled onto a drum and the end result is the delivery of a completely processed cable, with a fitted plug system.





Metzner Maschinenbau GmbH

Messerschmittstraße 30

89231 Neu-Ulm | Germany

Phone: +49 731 40199-0

Fax: +49 731 40199-33

www.metzner.com