

**Application solutions for packaging technology:
Servo drive systems from SEW-EURODRIVE for
Printing presses**



SEW-EURODRIVE ensures highest print quality



Gray packaging with monochrome print is simply boring. Colorful, lively packages that create desires even prior to the purchase are much better. These multi-color prints are, of course, associated with more work for the printers. That is the reason why a cost-effective production is getting just as important as the quality of the print result. A global print specialist for cardboard packaging has now decided to automate existing production machines with servo drives supplied by SEW-EURODRIVE.

Application description

In a typical flexo sheet-fed printing press for cardboard printing, the sheets are fed by the feed mechanism to a vacuum suction belt. The individual sheets usually run through four presses and are then collected in an intermediate buffer. The quality of the print result depends to a large extent on the consistency of the feed mechanism and the synchronous operation of the printing cylinder.

Presses with mechanical line shafts will remain in operation to produce long-term standard products and in case the high flexibility and complexity of a shaft-less printing press does not increase output.



Criteria

- Constant print quality
- Existing blocks for old print orders can be reused
- High press output
- Simple, efficient press operation
- High uniformity of print image

Objective

Existing crank handles on a sheet-fed printing press with mechanical line shaft were to be automated through servo drives. The goal was to operate the presses independent from one another during block change so that the blocks on all presses can be replaced at the same time and not one after the other. A foot-operated button makes it possible to clean blocks at the same time. The presses automatically return to their register-set printing position at the beginning of the print job or after an error. Visualization and setting of the register offsets takes place at the press output via an operator panel that is also used to manage executed print jobs. The register offsets are continuous or can be altered in two increments.



Technological requirements

- Register-set synchronization at the beginning of every print job
- Independent free-running of presses to mount or clean blocks
- Interfacing with existing machine control
- Operation and diagnostics via operator panel
- Format management of previously generated print orders
- Remote access option via ETHERNET



System solutions from SEW-EURODRIVE and the support during project planning and programming ensure individual and fast solutions even when resetting existing printing presses.

SEW-EURODRIVE Solution

The crank handles for the longitudinal registers are replaced by synchronous servomotors with absolute encoder. The IPOS^{plus} integrated positioning and sequence control in the MOVIDRIVE[®] drive inverter takes over decentralized control of the motion sequences; the master PLC only sets the states "Jog foot-operated button", "Travel to print position" and "Travel to removal position." The main shaft encoder is read in by a MOVIDRIVE[®] unit and the information forwarded to the other axes via a system bus on CAN base. All axes are displayed on the DOP11A operator panel.

Success features

- Reduction of mechanical resetting time
- Reduction of cleaning time
- Reduction of time required for presetting of registers
- Reduction of time required for setting of new registers
- Download of data sets from the format management via push of button
- Moving of presses for push-button feed
- Global support by SEW-EURODRIVE service

How to drive the world

With people who think fast and develop the future with you.

With a service network that is always close at hand around the world.

With drives and controls that automatically improve your work performance.

With a comprehensive knowledge in the most important branches of industry today.

With uncompromising quality whose high standards will simplify daily operations.



SEW-EURODRIVE
Driving the world

With a global presence for quick and convincing solution. Anywhere.

With innovative ideas that offers a solution for future problems today.

With an Internet presence that is available around the clock and offers information as well as software updates.

SEW-EURODRIVE is right there for you:

Argentina
Tel. 03327 457284
Fax 03327 457221
sewar@sew-eurodrive.com.ar

Australia
Tel. 03 99331000
Fax 03 99331003
enquires@sew-eurodrive.com.au

Austria
Tel. 01 6175500-0
Fax 01 6175500-30
sew@sew-eurodrive.at

Belgium
Tel. 010 231311
Fax 010 231336
info@caron-vector.be

Brazil
Tel. 011 64899133
Fax 011 64803328
sew@sew.com.br

Canada
Tel. 905 791-1553
Fax 905 791-2999
sew@sew.eurodrive.ca

Chile
Tel. 02 7577000
Fax 02 7577001
sewsales@entelchile.net

China
Tel. 022 25322612
Fax 022 25322611
sa@sew.com.cn

Colombia
Tel. 0571 5475050
Fax 0571 5475044
sewcol@andinet.com.

Czech Republic
Tel. 02 2012123436
Fax 02 20121237
sew@sew-eurodrive.cz

Denmark
Tel. 043 958500
Fax 043 958509
sew@sew-eurodrive.dk

Finland
Tel. 3 589300
Fax 3 7806211
sew@sew-eurodrive.fi

France
Tel. 0388736700
Fax 0388736600
sew@usocome.com

Great Britain
Tel. 1924893855
Fax 1924893702
info@sew-eurodrive.co.uk

Hong Kong
Tel. 2-796-0477
Fax 2-795-9129
sew@sewhk.com

Hungary
Tel. 01 4370658
Fax 01 4370650
office@sew-eurodrive.hu

India
Tel. 0265 2831021
Fax 0265 2831087
mdoffice@seweurodriveindia.com

Italy
Tel. 02-96980-1
Fax 02-96799781
sewit@sew-eurodrive.it

Japan
Tel. 05383 73811-13
Fax 05383 73814
sewjapan@sew-eurodrive.co.jp

Malaysia
Tel. 07 3545707
Fax 07 3541404
kchtan@pd.jaring.my

Mexico
Tel. 5 8882976
Fax 5 8882977
scmexico@seweurodrive.com.mx

Netherlands
Tel. 010 4463700
Fax 010 4155552
info@vector.nu

New Zealand
Tel. 09 2745627
Fax 09 2740165
sales@sew-eurodrive.co.nz

Norway
Tel. 69 241020
Fax 69 241040
sew@sew-eurodrive.no

Peru
Tel. 511 349-5280
Fax 511 349-3002
sewperu@sew-eurodrive.com.pe

Poland
Tel. 042 6771090
Fax 042 6771099
sew@sew-eurodrive.pl

Portugal
Tel. 0231 209670
Fax 0231 203685
infosew@sew-eurodrive.pt

Russia
Tel. 812 5350430
Fax 812 5352287
sew@sew-eurodrive.ru

Singapore
Tel. 68621701-705
Fax 8612827
sales@sew-eurodrive.com.sg

South Africa
Tel. 011 2487000
Fax 011 4942311
dross@sew.co.za

South Korea
Tel. 031 492-8051
Fax 031 492-8056
master@sew-korea.co.kr

Spain
Tel. 944318470
Fax 944318471
sew.spain@sew-eurodrive.es

Sweden
Tel. 036 344200
Fax 036 344280
info@sew-eurodrive.se

Switzerland
Tel. 061 4171717
Fax 061 4171700
info@imhof-sew.ch

Thailand
Tel. 038 454281
Fax 038 454288
sewthailand@sew-eurodrive.co.th

Turkey
Tel. 216 4419163
Fax 216 3055867
seweurodrive@superonline.com.tr

USA
Tel. 864 439-737
Fax 864 439-7830
cslyman@seweurodrive.com

Venezuela
Tel. 241 8329804
Fax 241 8386275
sewventas@cantv.net

**SEW
EURODRIVE**

SEW-EURODRIVE GmbH & Co KG
P.O.Box 30 23 · D-76642 Bruchsal/Germany
Phone +49 7251 75-0 · Fax +49 7251 75-1970
sew@sew-eurodrive.com

→ www.sew-eurodrive.com