

Bielefeld,
22.03.2005

Dear Sirs,

based on our attached Conditions of Sales and Delivery, we herewith confirm your order, for which please accept our best thanks, as follows:

F&K COMMON IMPRESSION FLEXOGRAPHIC PRINTING PRESS

FLEXPRESS-16S

MATERIAL WIDTH 1.300 MM –PRINTING WIDTH 1.250 MM

Technical Data FLEXPRESS-165 NO. 3149:

Number of print units:	8
Printing width:	max. 1.250 mm
Material width:	min. 650 mm max. 1.300 mm
Print repeat:	min. 320 mm max. 800 mm

Print repeat variable from 320 mm up to 800 mm.

Basic press is equipped with integral plate sleeve mandrel of 89,243 mm diameter. The minimum mechanical repeat length is 320 mm. The repeat range of 320 mm up to the 1st intermediate mandrel to be realized by sleeves directly, upwards the use of F&K intermediate mandrels with respective sleeves is recommended.

Winding System:

automatic sequence („flying splice“)

Unwinding

Reel diameter:	max. 800 mm
Core inside diameter:	76 or 152 mm

Rewinding:

Reel diameter:	max. 800 mm
Core inside diameter:	76 or 152 mm

Web tension range:	min. 10 N max. 250 N
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Mechanical speed:	max. 360 m/min.
Printing speed:	Depending on inks, stereos, design and materials



Drying system:

Thermo oil

Materials to be printed:

**PET (min. 12 µm), PP, OPP, LDPE and laminates
with width and thickness in accordance with web
tension range**

Inks to be converted:

solvent based inks

**Basic machine configuration similar
to attached layout no.:**

16S-8 8139



Installation Data FLEXPRESS-165 NO. 3149:

Electra requirements:

- Press (without drying system): approx. 240 kVA

(Final figures to be evaluated based on the exact scope of supply.)

Chill water requirements:

- Temperature control unit approx. 2,0 m³/h
- Chilling cylinder approx. 1,0 m³/h
- Chill water temperature
 - inlet 12 - 15 °C
- chill water pressure 2,5 bar

Pressure air requirements:

- compressed air 6 bar (constantly)
- air consumption during printing approx. 150 NI/min. (during sleeve change the air consumption rises up to approx. 600 NI/min.)
- volume for AUTOCLEAN system (during printing or washing) approx. 2.800 NI/min.



Description of FLEXPRESS-16S

U035100	1 Automatic unwinding device type 11 AW With 2 pneumatic winding shafts 76 mm ø (Aluminium)
U102	1 Additional pressing and cutting device
U062	1 Roll Lifting Table at Unwind (on floor level)
G380	1 Complete rear stand
Z019F	1 Electro-mechanic Edge guide system
G302	1 Bridge for web guide to and from the C.I. stand With platform in front of the electric container and single side platform at the bridge, with removable ladder for free access around the machine, however, without stairways
XXX1	1 Spreader roller, installed in front of the CI nip (deeply grooved rubber roller)
S168	1 Central Impression Cylinder Flexographic Printing Press FLEXPRESS-16S-8 (without positioning carts, but 2 transport carts only)
C168	1 Chrome-Nickel-Plating
F168	8 Complete flexographic print units FLEXPRESS 16S (8 anilox roller sleeves APEX)
K170	3 set (1 set = 8 pieces) of carbon fibre print cylinder sleeve mandrels 440/540/640 Stork
F008168	1 Digital Print Control
F02880L	1 FLEXPRESS AUTO CLEAN
F018	1 Extension of the Auto-Clean system for handling a second ink system (with 2 fresh solvent containers only)
F000	2 Automatic filling of fresh solvent tanks
F000	2 Automatic emptying of waste solvent tanks
F0068L	1 Viscosity control unit for 8 measuring positions, Typ Viscolor 1300 (make Bloss)
XXX2	1 Additional viscosity fluid container for different viscosity solvent for second ink



T0030	1	Between-colour drying device in print unit stand (between-deck drying)
T0160	1	Nominal/Actual Value Control Unit for thermo oil
T010	7	Wide blow/exhaust nozzle
T4210	1	High capacity drying device
2008421	1	Drive of the guide rollers in the drying tunnel
T0160	1	Nominal/Actual Value Control Unit for thermo oil
2009421	1	Web threading device
T101	1	Chilling cylinder (460 mm diameter)
M201003K	1	Drive by AC servo drive
M001K	1	Different AC servo drive modes
2039	1	Connection parts for a web viewing/inspection system
2086	1	BST web Video system model BST Premium digital
XXX3	1	Bar code verification module
XXX4	1	Defect detection/inspection module
2024K	1	Back Lighting Equipment
2021	1	Electro-mechanic compact web guide control system
G305T	1	Separate stand
R035100	1	Automatic rewinding device type 12 AW With 2 pneumatic winding shafts 152 mm ø (Aluminium)
M202025	1	Main drive AC servo drive
M209	1	Electrical equipment of the whole line
M210	1	Operator Control System
L097	1	Length slitting device with 1 (razor blade) centre cut only
T005	2	Solvent ratio control
K150	3	Additional anilox roller (Apex)
R070	2	Additional pneumatically spanning winding shaft for 70 (76) mm



	core inside 0 (Aluminium)
XXX5	1 Thermo oil unit in container Total capacity - 1000 kW (for 3 machines) without external piping
XXX6	1 Separate delivery for the thermo oil unit (approx. 4 weeks before delivery of the machine)
M300	1 Installation and Operator Training
XXX9	1 DDU costs (without unloading and rigging)

Conditions of Sales and Delivery:

CE sign

Our machines are in accordance with the
CE guidelines edition 89/392 EEC,
low voltage guideline 73/23 94/26,
EMC (electromagnetic compatibility) guideline 89/336 EEC,
Ex-guideline 94/9 EG.
EN 1010 – Safety of machinery – safety requirements for the
design and construction of printing and paper converting machines
with EN 1010-2 and prEN 1010-1
"GS-sign" (Geprüfte Sicherheit / proven safety) for FLEXPRESS
type 16S/8 issued by "Deutsche Berufsgenossenschaft"
(German Health and Safety Organisation).

Wiring:

Our machines are supplied completely wired between control cabinets, machine terminals and electro container.

Paint:

RAL 7035 (light-grey).

FISCHER & KAECKE

- 8 -

For Printing and Converting

FISCHER & KRECKE

- 10 -



For Printing and Converting

Technical Description of FLEXPRESS-165

U035100

1 Automatic unwinding device type 11 AW
for flying splice,

for reels of max. 80 cm diameter, core inside diameter 76 (152) mm,

consisting of:

- solid frames with pivoting arms,
- special safety bearings, pneumatically, for taking
- 2 pneumatically spanning winding shafts for 76 mm core diameter (Aluminium),
- 1 motor for pivoting the arms, determination of final position of new reel by photo-electric eye according to new reel diameter, including
- 2 AC servo drives for retarded drive of the unwinding stations at constant web tension, tension control by pneumatically sensitively loadable, friction-free lever dancer, weight-compensated,
- 1 synchronisation device for synchronising speed of new reel and finishing reel,
- 1 pneumatic pasting and cutting device, actuated by push button,
- 1 computer controlled diameter calculator (add. to the control of the AC servo drives),

semi automatic reel change:

- preparation of joint,
- pivoting of new reel by actuating push button one time,
- push button "cut-off",

automatic reel change:

- preparation of joint,
- entering diameter for automatic cut-off,
- confirmation that cut-off is prepared,
- automatically generated cut-off when reel has reached the pre-selected diameter,

U102

- 1 Additional pressing and cutting device**
for both unwind directions of the reel, unwinding direction selected from the unwinder control panel,

U062

- 1 Roll Lifting Table at Unwind (on floor level)**
for lifting reels of full width and diameter. The roll is placed in a trough with a



traversing capability of +/- 40 mm (approx. 1,5 inch) across the web. The unit is interconnected with the press logic. After opening the unwind chucks and initiating the operation, the roll is automatically lifted and can be manually centred before loading into the unwind chucks.

The unit consists of:

- Solid side frames
- Traversing table with roll trough
- Lifting device via spindles and AC-motor
- Pneumatically operated shift into loading position

G380

1 Complete rear stand

consisting of:

solid side parts with traverses and guide rollers for web guide, prepared for the installation of the dancer roller for unwind control, the chilling cylinder as well as a web guide system,

Z019F

1 Electro-mechanic Edge guide system

designed as edge control as per choice (left or right edge), centre control, with ultrasonic scanning,

placed in front of the 1st print unit,

- 1 steering roller system, complete with steering frame and
- 2 dynamically balanced
 - aluminium steering rollers, entry roller spiral grooved,
 - delivery roller RCT covered, with D.C. linear drive,
 - with mounted signal amplifier and power pack,
 - servo centring system, power supply voltage 230 V / 50 Hz,
- 1 compact signal processor,
- 2 ultrasonic scanner heads with web guide fingers,
- 1 main operating unit, for approaching the functions
 - "Automatic-centring", with sensor choice "Left-Centre-Right",
 - push buttons "Right-Left",
- 1 scanner head adjusting device to control towards the left edge, the centre line or the right edge, each scanner head to be adjusted individually by motor,

the following adjustments of the scanner heads are possible:

- each scanner head individually towards right or left,
- both scanner heads together for web width adjustment
- both scanner heads for centre line adjustment,

including the electrical and mechanical connecting parts,



- G302**
- 1 Bridge for web guide to and from the C.I. stand**
with guide rollers with traverses, illumination,
web break detector for automatic machine stop,

with platform in front of the electric container connection to a single side
platform at the bridge, with removable ladder for free access around the
machine, however, without stairways,
- XXX1**
- 1 Spreader roller, installed in front of the CI nip (deeply grooved rubber
roller)**
- 5168**
- 1 F&K C.I. Cylinder Flexographic Rotary Printing Stand
FLEXPRESS-165-8**
- Features:
- 100 mm strong side parts,
Rigid distortion-free assembly using modular construction,

impression cylinder approx. 1.910 mm diameter, double-wall cylinder with
special bearings, precision of concentricity 5 µm,

pressureless temperature regulation of side frames of the printing stand and
the ink unit supports as well as the CI-drum by thermostat control for con-
stant cylinder temperature and consequently cylinder dimensions, constant
cylinder temperature 30°C, +/- 1°C,
- Rubber nip roll, in front of the first print unit,

prepared for the installation of max. 8 flexographic print units,
without positioning carts, but with 2 transport carts only.
- C168**
- 1 Chrome-Nickel-Plating**
of common impression cylinder, 1.910 mm diameter,
- F168**
- 8 Complete flexographic print units FLEXPRESS 16 S**
- each consisting of:
- Strong print unit consoles, integrated in the side parts, with strong connec-
tion traverse,

Complete plate cylinder sleeve system, designed for the use of air floatation



demountable sleeves, consisting of:

basic shaft with expanding rings for mounting either F&K print cylinder sleeve mandrels or sleeves directly,

side register motorised, +/- 5 mm

automatic on-off impression release of the plate cylinder,

Complete anilox roller sleeve system, consisting of:

anilox roller mandrel for the use of anilox roller sleeves,
anilox roller sleeve (approx. 162 mm outer diameter) with ceramic coating (Apex, please name us required specification),

with automatic move-off sequence for printing the stereos clean at machine stop,

idle drive of the anilox roller at machine stop by motorised individual drive,

chamber doctor blade device,

aluminium ink duet,

motorized print deck adjustment,

individual servo drive for print cylinder as well as for anilox roller,

K170

- 3 set (1set = 8 pieces) of carbon fibre print cylinder sleeve mandrels**
Stork 440/540/640 to cover each print repeat range starting with 460/560/660 mm

F008168

1 Digital Print Control

Including automatic register preadjustment for all print units.

Print unit adjustments are made through precise ball screw rotating spindles and positioning drives with integrated multi turn encoders. Data input on the F&K Operator Control System for the following information:

Print unit selection
Selection of repeat size
Material thickness
Known plate thickness variations

All data input is visible on the screen. Additionally, there are internal self-diagnostics for operation safety and, in addition, a detailed error notification program displayed on the CRT. A collision safety system protects the press by immediately fast racking back the inking and printing units in case a plate

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cylinder is too large compared to the computer input. In case of overload, the print unit motors are automatically switched off.

Three pivoting print unit control consolettes are incorporated for operator convenience including impulse hand wheels for print unit fast and fine adjustments and LCD-display. These are located on each side of the press and one at the web viewing area. The adjustment possibilities from these panels are as follows:

- Selection of the print unit to be adjusted
- Circumferential register adjustment advance and retard
- Side register adjustment to drive or operator's side
- Independent ink unit adjustments for both drive and operator's sides toward or away from the plate cylinder to the web

Accuracy of the print unit adjustments are:

- 1.) Circumferential and Side Register:
 - One full hand wheel rotation equals 1 mm
 - One hand wheel impulse equals 0,01 mm
- 2.) Ink Roller and Print Unit Adjustment:
 - One full hand wheel rotation equals 0,1 mm
 - One hand wheel impulse equals 0,001 mm

Numerical detection of position of all input data via multi turn encoders with electronic backlash compensation. All input rates stored can be recalled.

Procedure for print unit adjustment:

- 1.) Fast racking a print unit off impression
 - Driving print units, parallel, into zero position via 4 positioning drives
 - Driving circumferential and lateral register into center positions
- 2.) Fast racking a print unit on impression
 - Quick forward moving of print cylinders and anilox rollers in position pre print.

For external data storage a floppy disc unit is included into the F&K Operator Control System including a printer for the documentation of all input data with sheet print out.

The F&K Modem Link allows the press PLC to be connected via modem directly with Fischer & Krecke's Engineering and Service Departments. This enables fast and convenient access of the PLC by service engineers for troubleshooting, via modem, without the downtime or expense of plant visits.



F02880L

1 FLEXPRESS AUTO CLEAN (ACA)

This system is designed for the rapid automated wash up of individual print stations, providing the fastest easiest change over of the printing press.

The system quoted includes appropriate equipment for 8 colour stations. This particular system is designed for solvent based inks and comprises the following devices:

- closed system preventing air inclusions for optimized ink distribution
- corrosion resistant chamber doctor blade in special design for automatically inking or cleaning or drain
- doctor blade knife clamping is opened pneumatically (no tools necessary)
- chamber doctor blade with sensitive pneumatic pressure adjustment
- one set of end seals (wear item) consisting of two lip seals per set for each doctor blade housing
- air pressure membrane pump for each print unit
- one stainless steel container, contents approx. 30 liters, for ink circulation

The equipment features stands that incorporate pneumatic controls, pneumatic valve manifolds, pumps and ink containers for the print units, capable of connection with suitable viscosity control systems and all appropriate valving.

Operation from the Auto Clean cabinets, integration of the PLC control into the electric container.

including

Compressed air conditioning unit
working as a refrigerator air dryer,

consisting of:

- preliminary filter for separation of coarse contaminations
- electronic level-controlled condensate diverter for safe carry-off of oil containing condensate without pressure loss of compressed air
- fine filter for separation of smallest contaminations (bigger than 0,01 micron)
- oil-water separator for fully automatic processing of oil containing, non-emulsified compressed air condensate, with sampling device and removable contamination collecting basin,

F018

1 Extension of the Auto-Clean system

for handling a second ink system (with 2 fresh solvent containers only)



- F000 2 Automatic filling/control device for 1 fresh solvent tank
- F000 2 Automatic emptying/control of (2) waste solvent tanks
- F0068L 1 Viscosity control unit for 8 measuring positions,
 type Viscolor 1300 (make Bloss)
- for solvent based inks,
- each unit consisting of:
- unit of measurement with drop weight,
 pilot valve
- CC control with software,
- PC with floppy disk drive and hard disk, operating system,
 as well as with colour monitor 14",
- 1 cabinet for the installation of the monitor
- XXX2 1 Additional viscosity fluid container
 for different viscosity solvent for second ink system
- T0030 1 Between-colour drying device in print unit stand
 (between-deck drying)
- consisting of:
- 1 fan-/exhauster unit with heat exchanger with temperature indicator, for
 unpressurized high temperature oil circulation, but without thermo-oil gen-
 erator and without thermo-oil control,
- 1 fan with electric equipment,
- 1 exhauster with electric equipment to exhaust the solvent vapours,
 with streng dimensioned outgoing air pipes, integrated into the print unit
 stand, distributor with throttle valves to regulate the blowing air, distributor to
 exhaust the air,
- 1 complete gas warning device, consisting of:
- measuring detector for measuring and evaluation of solvent concen-
 tration in the outgoing air in the ex-area measuring principle: heat tone
 measuring region: 0 - 100% L.E.L. Lower Explosion Limit



evaluation unit for voltage supply of measuring detector as well as indication and supervision of the gas concentration transferred by the measuring detector

adjustment of measuring detector to the exhaust gas emission when reaching limit value adjusted, machine speed will automatically be reduced accordingly to avoid exceeding the limit value

signal horn to alarm acoustically when exceeding 25% lower limit of explosion while using open systems or 50 % lower limit of explosion while using closed systems

T0160

1 Nominal/actual value control unit

complete, for the connection to the high temperature oil circulation unit

T010

7 Wide blow/exhaust nozzle

with covers, reflector plates and connecting tubes,
air escape velocity at the nozzles approx. 50 m/sec.,

T4210

1 High capacity drying device

placed on the bridge

consisting of:

1 fan with electric equipment,

1 exhaustor with electric equipment for exhausting the solvent vapours,

heat exchanger with temperature indicator for unpressurized high temperature oil circulation, but without thermo-oil generator,

1 drying oven (tunnel) approx. 4 m long, with double-wall Sandwich-covers for heat and noise protection and hinged-type doors, for easy access to the aluminium cast blower nozzles, which can be easily cleaned and exchanged,

air escape velocity approx. 50 m/sec.

basic frame with easy-running guide rollers for guiding the material web,

with connection openings for a gas warning device, provided for the connection to an incinerator,

1 complete gas warning device, consisting of:

measuring detector for measuring and evaluation of solvent concentration in the outgoing air in the ex-area, measuring principle: heat tone, measuring range: 0-100 % L.E.L. Lower Explosion Limit



evaluation unit for voltage supply of measuring detector as well as indication and supervision of the gas concentration transferred by the measuring detector,
adjustment of measuring detector to the exhaust gas emission, when reaching limit value adjusted, machine speed will automatically be reduced accordingly to avoid exceeding the limit value
signal horn to alarm acoustically when exceeding 25 % lower limit of explosion while using open systems or 50 % lower limit of explosion while using closed systems,

- | | |
|-----------------|---|
| 2008421 | 1 Drive of the guide rollers
in the drying tunnel, |
| T0160 | 1 Nominal/actual value control unit
complete, for the connection to the high temperature oil circulation unit |
| 2009421 | 1 Web threading device
for the drying tunnel on the bridge, |
| T101 | 1 Chilling cylinder (460 mm diameter)
for recooling the material web by cold water circulation, |
| M201003K | 1 Drive by AC servo drive
for the chilling cylinder, indication of the traction force in Newton at the main switch desk, control by special force measuring bearing, |
| M001K | 1 Different AC servo drive modes
at the chilling cylinder,

to be changed from analog to digital drive mode for three modes of drive control:
1. analog for tension related control of the drive unit,
2. digital for a digitally speed related control of the drive unit,
3. automatic for digital control of the drive in a tension window. If the tension of the web is out of the tension window, the machine automatically switches to analog mode until the tension is back in the tension window, |
| 2039 | 1 Connection parts
for the installation of the web viewing/inspection system, including guide rollers, |



- 2086**
- 1 BSTVideo Web Inspection System model BST Premium digital**
- emphasizing the major features
- RGB Digital Technology with a high resolution Progressive Scan Digital camera (PSD) for instant high-speed frame processing
 - digital pixel-synchronous image transmission
 - insensitiveness against extraneous light
 - fully automatic high-speed camera positioning at web speeds up to 1000 m/min.
 - TFT-Touch-screen operating surface with clearly arranged colour coded key symbols for quick access to demanded operating functions
 - complete overview of all memorized images and camera positions in a micro- image-inventory for instant recall by thumb-nail for full-scale display on the viewing monitor
 - Two-Touch camera navigation with Auto Center function for quick camera positioning
 - Split-Screen facility to be memorized with every image for direct comparison of live to reference images
 - automatic constant scan (ACS) for sequential inspection of the entire print repeat
 - quick access to the memory of 100 stored images per running job inclusive of individual programmed parameters
- XXX3**
- 1 Bar code verification module**
- XXX4**
- 1 Defect detection/inspection module**
- 2024K**
- 1 Back Lighting Equipment**
- for the transillumination of transparent materials (reverse-print) across the whole web width, consisting of a closed aluminium-profile housing with clear prism acryl glass and fluorescent light tubes
- including additional guide rollers as well as connection parts for reverse print,
- 2021**
- 1 Electro-mechanic compact web guide control system**
- designed as guide control as per choice (left or right guide), centre control, with ultrasonic scanning,
- placed at the bottom in front of the rewind system, installed into a bottom connection,
- consisting of:



- 1 steering roll system with cover plate on top (walk-in platform), complete with steering frame and
- 2 dynamically balanced aluminium steering rollers, entry roller spiral grooved, delivery roller RCT covered, with DC linear drive and servo-centering system, power supply voltage 230 V / 50 Hz,
- 1 compact signal processor,
- 2 ultrasonic scanner heads with web guide fingers,
- 1 main operating unit, for approaching the functions "Automatic-centering", with sensor choice "Left-Centre-Right", press buttons "Right-Left",
- 1 scanner head adjusting device to control towards the left edge, the centre line or the right edge, each scanner head to be adjusted individually by motor,

the following adjustments of the scanner heads are possible:

- each scanner head individually towards right or left,
- both scanner heads together for web width adjustment
- both scanner heads for center line adjustment,

including the electrical and mechanical connecting parts,

G305T

- 1 **Separate stand**
with strong side parts and all necessary guide parts and traverses, for the installation of the dancer system for rewind control,

R035100

- 1 **Automatic rewinding device type 12 AW**
for flying splice,

for reels of max. 80 cm diameter,
core inside diameter 152 (76) mm,

with taper tension function,

consisting of:
solid frames with pivoting arms,
special safety bearings, pneumatically, for taking
2 pneumatically spanning winding shafts, 152 mm $\varnothing$ (Aluminium),
1 motor for pivoting the arms, determination of final position of new core will be reached by limit-switch,
2 AC serve drives for the drive of the rewinding stations at constant web tension, tension control by pneumatically loadable friction-free lever dancer,
1 synchronisation device for synchronising speed of new core and web,



- 1 step-less adjustment of different core diameters,
- 1 pneumatic pasting and cutting device for both winding directions of the reel, change of the winding direction by a push button and by pivoting the cut-off arm,
- 1 device for initiating the reel change either when reaching a pre-adjusted figure of meters or a predetermined number of print repeats, or for reel to reel splice,
- 1 computer controlled diameter calculator (add. to the control of the AC servo drives),

Reel change:

preparation of core,
actuation of push button , the reel runs into changing position,
push button "cut-off",

M202025

- 1 **Main drive AC servodrive**
mounted at the machine frame, steplessly variable, with attached ventilation and brake, drive connection and guards,

M209

- 1 **Electrical equipment of the whole line**

consisting of:

complete electric pre-wiring
within the machine and to the container switch cabinet,

Compact CONTAINER switch cabinet
for the installation of all switch and control units as well as all power output and check electronics, placed on the machine bridge above the winding systems, access from the bridge platform, air-conditioned, dust-free and perfectly lighted inside,

PLC-machine control
with SIMATIC 57/400
for all main machine functions, with balancing battery for the protection of stored data in case of power failure, luminous diodes function checking,

inching-device
for easy adjustment of the machine,

emergency switches
on the whole line for immediate machine stop,

M210

- 1 **Operator Control System (OCS with the newest WinCC-Software)**



Computerized Command Centre for control of all press systems and functions.

The Computerized Command Centre offers the convenience of full press control in a Windows-like program environment offering complete control of all areas of the press while supplying extensive process control information back to the operator. The operator has full press control from a keyboard, while viewing a CRT's complete display of all press data such as: web tension in all zones, dryer temperatures in all zones, which print units are operational and what mode they are in, reel diameters at the winders, etc... The system also includes an active, on-line, error message display providing the operator with a complete display of faults occurred on the press.

As a centralized operating and controlling tool all the important functions of the printing press are properly supervised and displayed on the CRT. The Operator Control System also prevents false inputs. All inputs are checked by the computer and false inputs are intercepted and displayed in a window on the main panel screen.

Detailed information is provided for all positions of the press such as the unwind, rewind, dryer system, viscosity controls, etc.

Job parameters such as tension settings, speed, position of the print units, etc. can be stored and reloaded when the job is rerun at a later date, for the most rapid and accurate set-ups possible.

The Operator Control System provides additional menus for the service personnel. This allows for quick, easy and accurate troubleshooting, for less downtime and greater productivity.

The Operator Control System is also an operator assistance for easy training and press operation with an extensive array of help menus, in all areas of the machine operation. This insures that operators are quickly, easily and thoroughly trained and that the equipment is operated properly for highest productivity.

L097

1 Length slitting device

placed on the separate stand in front of the rewinding device,

for center cut,

prepared for the installation of 1 razor blade unit only (without trim), including side parts, traverses, guide rollers and a manually operated lateral adjustment,



with slitting device for plastic films with groove roller, distance of the grooves 2 mm,

including separate device as adjustable rotary stretcher, driven by AC motor,

T005

2 Solvent ratio control

consisting of:

- 2 control cards
- 2 pneumatic drives for flap adjustment
- 1 pressure transmitter for low pressure range
- 1 power supply for the pressure transmitter

K150

3 Additional anilox roller (Apex - please name us required specification)

R070

**2 Additional pneumatically spanning winding shaft
for 70 (76) mm core inside diameter (Aluminium)**

XXX5

1 Thermo oil unit in container
Total capacity - 1000 kW (for 3 machines)
Without external piping

XXX6

**1 Separate delivery of the thermo oil unit,
(approx. 4 weeks before delivery of the machine)**

M300

1 Supervision installation and operator training

Installation of the machine in purchaser's premises by F&K selected engineers. Duration of the installation is approx. three to four weeks.

(Unloading of the machine and rigging is not included in the price.)

Training is given directly after the installation of the machine is finished. Duration of the training is one week.

XXX9

1



Training is given directly after the installation of the machine is finished.
Duration of the training is one week.

XXX9