



SERVICE & MAINTENANCE PROGRAM PRESENTATION

Dynagraph



manroland

Service & Maintenance Program

SERVICE IS THE KEY TO SUCCESS

- Dynagraph accompanies you beyond your investment in new equipments.
- Dynagraph offers you the means to remain strong in an unforgiving market place.
- Dynagraph offers you specific solutions for the complete life cycle of the equipment.
- Dynagraph offers maximum up time and higher productivity on your equipment

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Individual Service Requirements

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Care & Maintenance

The machine and its external equipment will be cleaned by factory trained engineers based on manroland's factory instructions. The cleaning extent/intervals will be co-ordinated based on your requirements.

Inspection

The condition of your printing machine will be determined, evaluated and documented at regular intervals. Extent/frequency of these inspections will be co-ordinated with you dependant on the machines' requirements. Shortly after the end of the inspection we will provide you with a detailed report regarding the condition of the machine and will make recommendations for immediate and preventive measures.

Safety Check

In order to protect the operators the safety devices in the machines will also be checked.



Individual Service Requirements

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Supervision

A regular customer visit through a Dynagraph engineer complements the scheduled maintenance work carried out by the operators. Possible production problems can also be discussed and measures can be introduced.

Thermographic measurements

Using thermography we can point out defect components during production.

Participation in innovations

This service will keep you informed about the latest status regarding possible modifications and further developments of our product – and service range.

Repair

In case of any machine failures we will be on site to assist with technical defects.



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Cost optimization

Less downtime with your individual Preventive Maintenance Agreement

Costs through equipment downtime



Maintenance costs



Repair costs



Loss of profit through suboptimal productivity



Cost of equipment service



■ Reactive service ■ Preventive service (Reduction in Total Cost of Ownership)

Dynagraph Preventive Maintenance Programs

Individual Service and Maintenance Packages

Basic	Basic plus	Comfort	Comfort plus	Supreme	Benefits of the programs
<ul style="list-style-type: none"> • Safety check • Inspection • Ink roller strip down 	<ul style="list-style-type: none"> • Safety check • Inspection • Ink roller strip down • Periodic Preventive Maintenance 	<p style="text-align: center;">Basic plus +</p> <ul style="list-style-type: none"> • Response time promise • Prioritized deployment 	<p style="text-align: center;">Basic plus +</p> <ul style="list-style-type: none"> • Response time promise • Prioritized deployment • Planned Preventive Maintenance • Thermograph 	<p style="text-align: center;">Basic plus +</p> <ul style="list-style-type: none"> • Response time promise • Prioritized deployment • Planned Preventive maintenance • Ink roller strip down • Thermograph 	<ul style="list-style-type: none"> • Reduction of the life cycle cost • Higher Performance • Higher productivity • Higher print quality • Longer life time • Prevent downtimes

Service Program: Basic

To maintain the quality of the equipment including aggregates

Basic

- Safety check
- Inspection
- Ink roller strip down

The program

- Detailed analysis about the current condition of the equipment, aggregates and the safety devices
- Detailed information about the technical condition of the equipment
- Factory trained engineers recommendations
- Enhanced safety for the operator working on the machine
- Once a year complete inspection, safety check
- Once a year complete ink roller strip down

Service Program: Basic plus

Highest reliability of the equipment including aggregates

Basic plus

- Safety check
- Inspection
- Ink roller strip down
- Periodic Preventive Maintenance

The program

- Detailed analysis about the current condition of the equipment, aggregates and the safety devices.
- Highest productivity, reliability and quality through regular maintenance, following equipment lube charts and schedules
- Factory trained engineer recommendations for the equipment
- Enhanced safety for the operator working at an equipment checked for safety
- Three Periodic Preventive Maintenance visits per year
- Once in a year inspection, safety check
- Once a year complete ink roller strip down

Service Program: Comfort

Highest reliability of the equipment including aggregates

Comfort

Basic plus +

- Response time promise
- Prioritized deployment

The program

- Detailed analysis about the current condition of the equipment, aggregates and the safety devices.
- Highest productivity, reliability and quality through regular maintenance, following equipment lube charts and schedules
- Factory trained engineer recommendations for the equipment
- Enhanced safety for the operator working at an equipment checked for safety
- Three Periodic Preventive Maintenance visits per year
- Once in a year inspection, safety check
- Once a year complete ink roller strip down
- 24 On-call visits per year

Service Program: Comfort plus

Insurance Policy for your Print Quality

Comfort plus

Basic plus +

- Response time promise
- Prioritized deployment
- Planned Preventive Maintenance
- Thermograph

The program

- One Planned Preventive maintenance visit per month
- Once a year complete ink roller strip down
- Once in a year inspection and safety check
- 24 On-call visits per year
- Detailed information about the technical condition of the equipment through thermographic camera during production

Service Program: Supreme

Your Life Insurance Policy for the Equipment

Supreme

Basic plus +

- Response time promise
- Prioritized deployment
- Planned Preventive maintenance
- Ink roller strip down
- Thermograph

The program

- Inspection, safety check with ink roller strip down maintenance once in a year
- Once a year complete ink roller strip down
- One Planned Preventive maintenance visit per month
- 36 On-call visits per year
- Detailed information about the technical condition of the equipment through thermographic camera during production

Individual Service performance: Thermography

Normal Operating Temperature

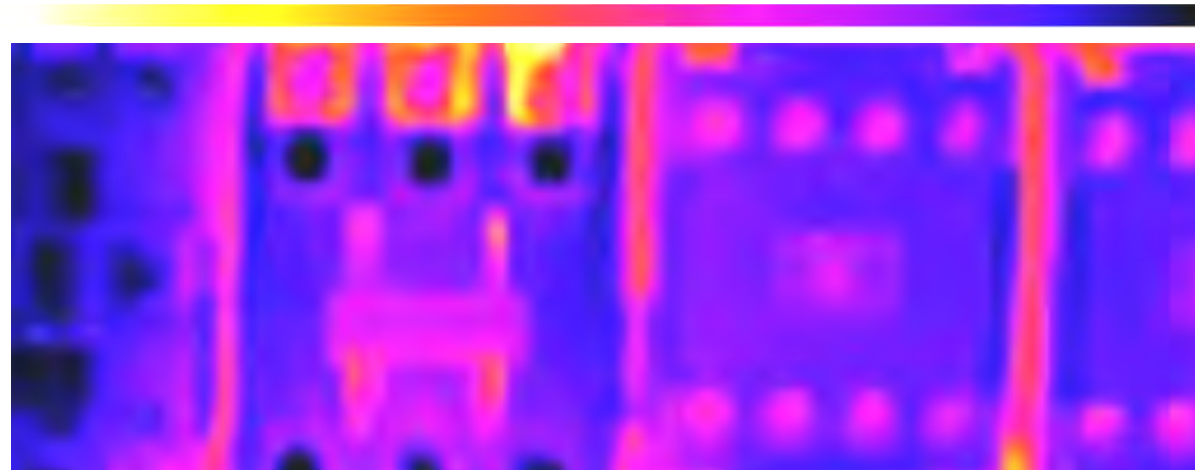
72.1

Fault Temperature

53.1

(Degrees Celsius)

33.0



Thermal image



Picture as seen by the naked eye

Mechanism

- Weak spots can be identified early by using a thermographic inspection camera
- Preventive exchange of weak parts
- Increase uptime of the press
- Inspection will be done during the production
- Thermography inspection list with reference value will be submitted
- Once a year complete ink roller strip down

Service Program Modules

Your Life Insurance Policy for the Equipment

Modules	Basic	Basic plus	Comfort	Comfort plus	Supreme
Annual inspection	■	■	■	■	■
Safety-check	■	■	■	■	■
Annual maintenance	■	■	■	■	■
Remote diagnostics	■	■	■	■	■
Remote check up	■	■	■	■	■
Central back-up	■	■	■	■	■
Response time promise	■	■	■	■	■
Prioritized deployment	■	■	■	■	■
Spare parts & repairs	■	■	■	■	■
Machine service	■	■	■	■	■
Thermography	■	■	■	■	■
Enhanced inspection	■	■	■	■	■
Ink roller strip down	■	■	■	■	■
Periodic maintenance	■	■	■	■	■
Maintenance - supervision	■	■	■	■	■
PreAct (production analysis)	■	■	■	■	■
24 hours hotline	■	■	■	■	■
24 hours service	■	■	■	■	■
Training	■	■	■	■	■

Benefits of the programs

- Customers may choose from a number of modules to suite their needs
- Alternatives modules not mentioned in this table can be made available at customers' request

■ Included ■ Not included
 ■ Not available



Service contract

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- The choice of a service program will be summarized in a contract between the customer and Dynagraph
- General Terms and Conditions will set the rules and regulations which will govern the proper implementation of the chosen service program



Inspection list

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- Detailed information about the technical condition of the machines are the basis for the planning of repair work measures
- Professional recommendations for the machine improve its productivity
- Enhanced safety for the operator working at a machine checked for safety
- Regular maintenance guarantees optimal printing quality
- Your repair cost can be calculated more



Service program:
Comfort plus

Service program: Certificate

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- A Certificate will be handed over after the complete inspection of the equipment
- The Certificate will confirm the proper inspection of the equipment by manroland trained engineers



Contact us

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For more information visit our new website www.dynagraph.net or contact us at:

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